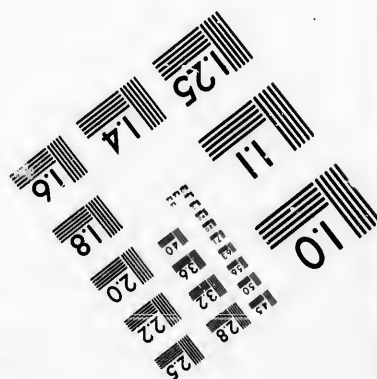
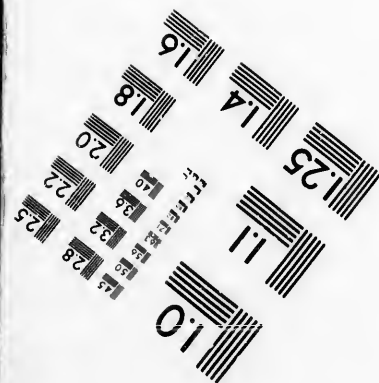
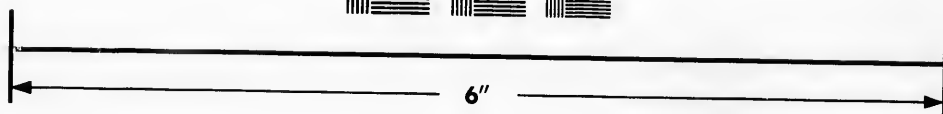
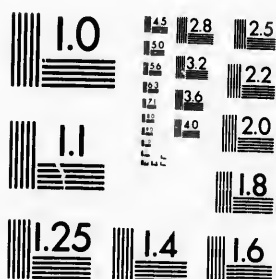


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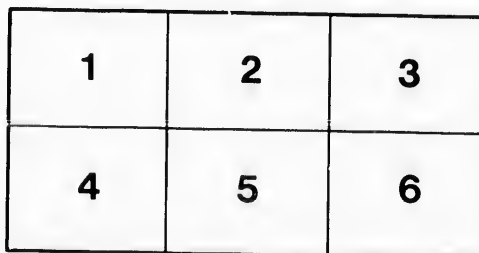
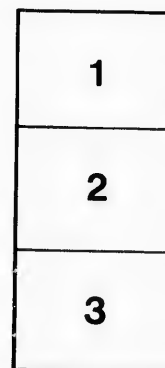
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EUROPE AND AMERICA;

A SPECIAL REPORT

ON

THE RATES OF WAGES, THE COST OF SUBSISTENCE, AND THE
CONDITION OF THE WORKING CLASSES, IN GREAT
BRITAIN, FRANCE, BELGIUM, GERMANY,
AND OTHER COUNTRIES OF EUROPE,

ALSO IN

THE UNITED STATES AND BRITISH AMERICA.

BY

EDWARD YOUNG, F.S.S., Ph. D.,

LATE CHIEF OF THE UNITED STATES BUREAU OF STATISTICS; AUTHOR OF A "SPECIAL REPORT ON
IMMIGRATION," "A SPECIAL REPORT ON THE CUSTOMS-TARIFF LEGISLATION
OF THE UNITED STATES," ETC., ETC.

Homo sum; humani nihil a me alienum puto.—TERENCE.

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PREFACE TO CANADIAN EDITION.

The gratifying manner in which an edition of this work, published in the United States, was received by eminent economists and statesmen, as well as by the press, in the various countries of Europe and in America, induces the issue of an edition in the native land of the author.

As the information in regard to Europe was chiefly obtained in 1872, (when the author visited Europe as a delegate to the International Statistical Congress at St. Petersburg,) and through correspondence brought down to 1875, the rates of wages given in the following pages are somewhat higher than those which now rule. The decline has, however, extended to all the leading countries of Europe as well as to America, and the relative prices of labor at the present time are not essentially different from those herein presented. The prices of provisions have, however, declined less in Europe than in America, thus rendering the condition of the workpeople of the Old World less favorable than that of their fellow-toilers in the New.

It is scarcely necessary to refer to the difficulties which obstructed the prosecution of the inquiry into the rates of wages, the cost of living, and the condition of the working classes in European countries. These difficulties were numerous and formidable, but the success of the work undertaken demanded that they should be met and surmounted. The disinclination of many employers of labor to make known the rates of wages paid by them in the different branches of their work, was overcome in some cases by a judicious presentation of the subject, and a due exercise of tact; but there were instances in which it was necessary to exercise no small amount of determination and persistence in order to obtain the information desired.

The readers of this report will probably notice the omission of any formal comparison between the conditions of labor in the various countries of Europe and corresponding industries in America, or of any conclusions as to the relative advantages possessed by the Old World and the New for the prosecution of manufacturing industry. This omission is intentional; because it would be difficult if not impossible to avoid discussing the effects which Customs-tariffs have had upon the United States, or may have upon Canada. Although such a course might with entire propriety have been pursued, yet it is probable that the advantage thus gained in logical completeness would be more than neutralized by the loss of confidence which a work of this character would necessarily sustain, if affected by a partisan bias. It was as much the inclination as the duty of the author impartially to gather, collate, and publish FACTS, leaving it to others to deduce therefrom such conclusions as from their respective points of view may seem legitimate.

He does not profess, however, to be without opinions on economic matters, or fail to take a lively interest in any governmental policy whereby the prosperity of his native country might be affected.

Ottawa, April, 1879.

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LABOR IN EUROPE AND AMERICA.

Since the day when our primal progenitor was expelled from Eden, and the doom pronounced, "In the sweat of thy face shalt thou eat bread," the subject of labor has been one of absorbing interest. To trace it from the earliest historic period to the present time, through all the vicissitudes which our race has experienced, would be a difficult if not an impossible task; and yet the subject has of late assumed such gigantic proportions as to demand the most careful consideration.

It may be well, in the outset, to accurately define the word "labor." It is generally, but we believe incorrectly, used as a synonym for "work." The latter word denotes occupation or employment, but not necessarily of a toilsome or fatiguing character, while the former, as Worcester's first definition properly expresses it, implies "exertion attended with pain or fatigue, hard work, task, toil, &c." Work may be performed not only without pain or fatigue, but with positive pleasure.

Notwithstanding this difference of signification, the words "work" and "workmen" will, in the following pages, be regarded as synonymous with "labor" and "laborers," partly as a concession to popular use, but chiefly to avoid the frequent repetition of those words.

ORIGIN OF SLAVERY, AND DEVELOPMENT OF WAGE LABOR.

From the earliest times of which there exists any authentic record, the performance of the labor necessary to sustain life has been an occasion of contention and struggle in human society. The desire to escape from this necessary toil, or the ambition to possess more than their own labor could produce, has always impelled men to seek in some way to control the services of their fellows. "The simple wish," says Maine in his *Ancient Law*, "to use the bodily powers of another person as a means of ministering to one's own ease or pleasure is doubtless the foundation of slavery, and as old as human nature." In the more advanced portions of the modern world slavery is forbidden, and it is only through the intervention of those subtle forces known as the "laws of trade" that one man can derive profit from the labor of another. In a more primitive state of society this process was far more simple and direct. There "the wish to use the bodily powers of another," if accompanied by adequate power, went straight to its object by reducing to bondage the person whose services were desired. Thus, born of the rude impulses of men at a stage of social development when the right of the stronger was the prevailing law, slavery is everywhere found as an already established fact in the very infancy of civilization. Among the nations of antiquity, the most polished as well as the rudest, slavery was universal; and it is only within a comparatively recent period that it has disappeared even from the most enlightened nations of modern times. In our own country less than a decade has elapsed since its final abolition by the adoption of the thirteenth amendment to the Constitution, and it was but a few years earlier that Alexander II issued the edict which terminated serfdom in Russia. The Spanish republic, falling in with the spirit of the age, has but just done what the Spanish monarchy so long refused to do, by adopting legislation looking to the abolition of slavery in the Antilles; while in Brazil the process of emancipation, inaugurated by the law of September 28, 1871, will prob-

ably not be completed for many years to come. Under most if not all of the native governments of Asia, slavery, in some form, still remains undisturbed; in Egypt it flourishes under the reign of the present khedive, notwithstanding the efforts of that potentate to cultivate the friendship and good opinion of western rulers; and on certain portions of the African coast, as well as among the islands of Polynesia, some of the most revolting features of the slave-trade appear to have been recently revived.

It thus appears that slavery is one of the most conspicuous facts of human history; and its universal prevalence in former times has undoubtedly had a potent influence in the genesis of the labor question of the present day. Cassagnae, in his *History of the Working and Burgher Classes*, takes the position that the classes of which he treats are universally the descendants of former slaves. The theories of this writer were grossly warped by his own aristocratic pride and prejudice; yet there is no lack of historical evidence that slavery preceded wage labor in the process of social evolution, and that hired laborers, who have only appeared to any considerable extent in communities which had made some progress in civilization and in the diversification of industry, were chiefly drawn at first from a class which had been previously enslaved.

Forages the process of enshvment and that of gradual elevation out of slavery went on side by side. The ways by which persons fell into slavery were various. Cassagnae maintains that this system, or rather this thing—for it doubtless existed as a fact long before the relations it involved were defined in any code of law—had its origin in the absolute authority of the father over his children. That this was one of its early sources there is good reason to believe, for history affords many instances of the sale of children by their fathers. Laban bargained away his daughter Rachel to Jacob for seven years' service; and though he sold her for a wife, and not for a slave, the principle of possession and of the right of exchange for a pecuniary equivalent is clearly recognized in the transaction. Xenophon, in his *Anabasis*, mentions a Thracian king who offered to give him his daughter, and proposed to buy his if he had one; and in Athens, as late as the time of Solon, there was, according to Plutarch, no law to forbid the sale of children. It is said, too, that Athenian fathers not unfrequently availed themselves of their prerogative in this respect. It often happens that the customs of certain existing communities, who are now at a stage of social development corresponding to that of other communities at a remote period in the past, serve to illustrate the customs of the latter. Thus, as Maine expresses it in his *Village Communities*, "direct observation comes to the aid of historical inquiry." An instance of this kind is furnished by the Georgians and Circassians in the notorious practice which prevails among them of selling their daughters to become the wives or concubines of wealthy Turks. It is not difficult to believe that in semi-civilized, polygamous societies the children born of wives or concubines for whom a price had been paid would often be regarded by the father in the light of property. A few would be treated as favorites, but toward the greater number paternal affection would have but little force, and such as were objects of dislike would occasionally be sold; while others, less bright, energetic and ambitious than their brothers and sisters, would be assigned to servile tasks, and, through prolonged drudgery, finally sink into veritable slavery, in which condition their children would find themselves from infancy. If it be remembered that in such communities families were often very numerous, and composed

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of the offspring of several different mothers, it will not seem improbable that dull or uncomely children, especially those of concubines, or of unloved wives, were in many instances thus treated.

The sale of Joseph to the Midianites, by his brethren, was an instance of the exercise of the right of the stronger, to which there have doubtless been many analogous cases.

Another source of slavery at a later period was debt, and the power which in many countries law and custom have given to the creditor over the body of the debtor. Tacitus states that among the ancient Germans the love of gambling was such that when everything else was gone, a player would often stake his liberty on the last throw, and, if he lost, would quietly suffer himself to be bound and sold. St. Ambrose mentions a similar custom as having prevailed among the Huns. In some instances, men pursued by their enemies or by the law, bartered their liberty for the privilege of asylum.

But beyond doubt the chief source of slavery was subjugation in war. In some cases a conquered territory was seized by the victors and the great mass of its former inhabitants reduced to a state of servitude. In others vast numbers of prisoners were carried into captivity and reduced to slavery in the country of their conquerors. According to Josephus the Israelites enslaved the Amalekites, whom they conquered in battle during their journey through the wilderness; and they subsequently spared the Gibeonites on condition of their becoming "hewers of wood and drawers of water" for all time. The biblical record affords numerous instances of conquering armies carrying the conquered into captivity, and the same custom is illustrated in the sculptures of Egypt, Chaldea, and Assyria. The Egyptian king Sesostris,* returning from a successful expedition through many nations, extending as far as Syria and Thrace, is described as bringing back vast numbers of captives, whom, according to Herodotus, he employed "in collecting the immense stones used in the construction of the temple of Vulcan," and in digging "those vast and numerous canals by which Egypt is intersected." An inscription on one of the winged bulls found among the ruins of Nineveh states that 208,000 Arameans were carried into captivity by the Assyrian king Sennacherib in a single raid; and according to the inscription on the Bellino cylinder, the aggregate number of prisoners of war carried into Assyria by the same monarch in three other expeditions exceeded 600,000. Of the vast number of people reduced to slavery under this monarchy alone some conception may be formed when it is remembered that the reigns of many of the Assyrian kings were almost an uninterrupted succession of sanguinary campaigns. Thus Esarhaddon, who, according to Rawlinson, reigned from 680 to 667 B. C., made, during that period of thirteen years, no less than ten or twelve great military expeditions, including one into Egypt and one into the interior of the Arabian peninsula.

The Medo-Persian monarchs appear to have followed the same custom to a considerable extent in the wars by which they attained the hegemony of Asia. Herodotus tells us that, on the capture of Eretria, its inhabitants were made slaves under the orders of Darius (Hystaspes,) which orders appear to have extended to all other prisoners of Greek nationality. The women and children of Miletus were also carried into slavery by the Persians during the reign of the same ruler.† Among

* Two or more kings are confounded by the Greek writers under this name.

† It was so, also, with the dynasty to whose most conspicuous representative the Persians, a little later, surrendered the rod of empire. Thus Philip, having conquered the Thebans, sold his captives; and his son, the great Alexander, subsequently destroyed their city and sold the inhabitants, irrespective of age or sex, into slavery.

smaller potentates similar practices prevailed. Thus Polyocrates, King of Samos, puts into chains the Lesbians captured by him in a naval engagement, and compels them to dig a trench round the walls of his capital. What became of them subsequently we are not informed. In short, during the period under consideration, the practice in question was all but universal. In some instances a turn in the fortunes of war liberated and restored to their homes and possessions the people thus carried into captivity; but in a majority of cases they must have sunk permanently into the slave population.

The multiplication of slaves in this way at certain epochs must have been immense; nor was this phenomenon confined exclusively to ancient times, for Sir John Chardin states that when the Tartars made an incursion into Poland, and carried away as many captives as they could, finding that they would not be redeemed, they sold them for a crown a head; and Menjan, in his History of Algiers, represents a Mohammedan as saying scornfully to a Christian, "What! have you forgotten the time when a Christian at Algiers was scarce worth an onion?" Of the extent which the slave population of the western portion of Asia Minor had attained at the period of the reign of Darius (Hystaspes,) an incidental proof is furnished in the account which Herodotus gives of the visit of Aristagoras, prince of Miletus, to the Spartan king Cleomenes, whom he wished to persuade to attempt the liberation of the Ionian Greeks from Persian rule; for among other inducements to invade Asia Minor for this purpose, he mentions the "prodigious number of slaves" which the inhabitants of that region possessed, and which would be at the disposal of the conqueror.

But there was always a limit to the extent of the servile population that could be maintained compatibly with the security of the ruling class. In one instance the slaves of Argos, largely outnumbering the citizens, of whom many had been killed in war, took possession of the government, and held it for a number of years. Another case, familiar to the reader of Grecian history, is that of the revolting Helots of Sparta, who at the time of the great earthquake (470 B. C.) nearly succeeded in overthrowing that state. Another instance is furnished in connection with the irruption of the Scythians into Southwestern Asia in the seventh century before Christ. When these barbarian hordes, after a protracted career of conquest and destruction, were returning to their country, they were met, and for some time successfully resisted, by an army of their former slaves, who, during their prolonged absence, had married their wives and installed themselves at the head of their households as well as of public affairs. Herodotus naively relates that one of the Scythians proposed to his comrades that they throw aside their arrows and their darts, and rush upon their opponents without any weapons save the whips which they used for their horses. "Whilst they see us with arms," said he, "they think themselves our equals in birth and importance; but as soon as they shall see us with the whip in our hands, they will be impressed with a sense of their servile condition and resist no longer." He adds that the plan was successful. In incidentally this account serves to illustrate the similarity of spirit between the ancient and modern slaveholder; for whether the story be true in its details or not, it doubtless harmonized with what the historian knew in regard to the general feeling of masters toward their slaves.

The serious danger involved in too great a preponderance of the ser-

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vile class must often have led to the emancipation of considerable numbers of those who composed it. In other cases it may have induced an insensible relaxation in the rigors of their servitude, gradually leading up to their complete liberation; for there is reason to believe that some of the principal nations of antiquity passed through some such phase of social development as that which witnessed the gradual loosening of the bonds of the villeins of feudal Europe, of which latter event there will be occasion to speak more fully hereafter. Occasionally considerable bodies of slaves were emancipated at once by some ruler or military leader, who found it important to secure them as trusty allies; as when Augustus, during the campaign of Sicilius against Sextus Pompeius, liberated 20,000 of this class to make sailors of them.*

There must also have been frequent cases of individual manumission—sometimes as the result of gratitude, or attachment, on the part of the master; sometimes in fulfillment of agreements entered into with the slave to inspire him with zeal in the exercise, for his master's benefit, of some valuable faculty; while many doubtless worked their way to freedom through sheer force of character and strength of intellect. In these and various other ways the emancipated class must have received continuous accessions throughout the course of history; but in the ancient world, as has just been seen, the class of bondmen was constantly re-enforced by the enslavement of the vast numbers of prisoners taken in war; so that however frequent or extensive may have been the emancipations, slavery never approached extinction, as it did in Europe after the practice of enslaving prisoners had been abandoned.

The effect of this continued process of enslavement on the one hand and emancipation on the other must have been to build up a numerous proletariat occupying a position but little superior, at least as regards physical comfort, to that of the slaves themselves. For slavery stripped its victim of whatever possessions he enjoyed previous to his enslavement; and when he, or perhaps his remote descendant, emerged from that condition, it was to find himself destitute, dependent, and obliged to procure his daily bread by working for such wages as he could obtain in competition with the slave labor by which he was surrounded.

Here then, in brief, is the great central fact in respect to labor in the ancient world, namely, the supremacy of military power in industrial as well as in political relations.† For if the whip was the symbol of industrial masterhood, the sword was unceasingly employed in providing fresh shoulders for its blows; and the sword, too, as has been seen, was chiefly instrumental in preparing available material out of which to form the class of hired laborers.‡

*Ptolemy Philadelphus liberated and restored to their homes 120,000 Jewish captives, who, at the close of the war in which they were taken, had been sold by the government as slaves to such of the inhabitants as chose to purchase them. On their emancipation, the owners were reimbursed out of the royal treasury. The motive for this unusual act of generosity was quite unique, being no other than the desire to add to the famous Alexandrian library the Hebrew Scriptures, to accomplish which the king deemed it necessary to secure the co-operation of the Jewish authorities, and took this method of gaining their good will.

†It would be too much to say that this supremacy of the sword in industry has wholly disappeared, even now, in countries where a strike for increased wages is liable to be treated as an offense against the state, and suppressed by military power.

‡This effect was often produced by the vast destruction of property which occurred in war, leaving tens of thousands not absolutely enslaved, but so destitute as to have no resource but hired labor. Modern times furnish an instance of the reduction of large numbers of people, who were carrying on some small productive business for themselves, to the position of wage laborers through the agency of a revolution in industrial methods. To this there will be occasion to refer again when treating of the introduction of machinery as an industrial agent.

As to the actual life of the working-classes in ancient times something may be inferred from such fundamental conditions as that which has just been pointed out. For the rest it will be necessary to depend on the casual glimpses which ancient history affords. Doubtless there were communities of greater or less extent which had for generations escaped the terrors of war; whose social arrangements, if not founded upon absolute equity, were at least comparatively free from the effects of violence and injustice; and whose condition, under the favoring smiles of nature, was at certain fortunate periods sufficiently happy to suggest to the imagination the poetic picture of *Areadia*. Both in sacred and profane history there are indications of a social state in which wealth and rank did not carry with them a contempt for labor. Thus Abraham's servant, when sent into Mesopotamia in quest of a wife for Isaac, stationed himself at a well near the city of Nahor, apparently not doubting that among the damsels who came thither to draw water he would find a suitable companion for the son and prospective heir of his wealthy master. It was under similar circumstances that Moses encountered the daughters of Jethro, priest of Midian, who had come to the well to fill the troughs for their father's flocks. Herodotus (viii, 137) says that "in remoter times the families even of kings had but little money, and it was the business of the queen herself to cook for her husband"—a state of primitive simplicity to which a fair counterpart is found in Volney's description of the life of the family of a modern Arab chief. "A sheik," says he, "who has the command of five hundred horse, does not disdain to saddle and bridle his own, nor to give him barley and chopped straw. In his tent his wife makes the coffee, kneads the dough, and superintends the dressing of his victuals. His daughters and kinswomen wash the linen, and go with pitehers in their hands and veils over their faces to draw water from fountains."* In the earlier days of Rome, it is said, it was not uncommon for senators to live in the country cultivating their land with their own hands; while consuls and dictators were often taken from the plow. "In those happy days," says Pliny, "the earth, glorious in seeing herself cultivated by the hands of triumphant victors, seemed to make new efforts and to put forth her fruits in greater abundance."

But if at certain times, and for longer or shorter periods, there have been communities in which the nobility of labor was proclaimed by the examples of the great and influential—communities in which the toil necessary to human sustenance was shared by all, and general comfort went hand in hand with general industry—such, unhappily, has not been the ordinary experience of the human race, and such, certainly, was not the usual condition of affairs among those nations of antiquity whose histories have come down to our day.

LABOR IN EGYPT.

Among the earliest of these nations, that which has the chief claim upon our attention is Egypt. The remains of her colossal architecture and sculpture which have endured to our day in the time-defying pyramids, the ruins of magnificent temples, the obelisks, colossi, and sphinxes, the labyrinth, the catacombs, and the splendid tombs of the kings, reveal to us a people of remarkable genius and skill, and invest them with a strange and fascinating interest. Far beyond the classic days of Rome and Greece there rises into view a second and remoter antiquity in which this Egyptian civilization stands, like one of the pyramids, outlined in imposing majesty upon the very horizon of time.

* Travels in Egypt and Syria.

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According to Manetho, the Egyptian historian, who wrote in the time of Ptolemy Philadelphus, no less than thirty dynasties had ruled in Egypt previous to the overthrow of her last native king. Assuming all these dynasties to have been successive, the duration of the Egyptian monarchy up to that time must have exceeded five thousand years; but accepting the received opinion that the first seventeen of them consisted of several contemporary lines, each embracing one or more dynasties, and adopting the order of contemporaneity established by Lane, the history of Egypt stretches back to the year 2717 B. C. It should be said here that Bunsen and Lepsius, both high authorities, while accepting the theory of the contemporaneity of the earlier dynasties, assign to Menes, the first king mentioned in Manetho's lists, a date much earlier than the one just given. The preponderance of evidence, however, appears to favor the latter, and accepting that as approximately correct, the time which elapsed between the accession of Menes and the overthrow of Nectanebo by Artaxerxes Ochus, about 350 B. C., was no less than 2,367 years. If to these thirty dynasties be added that of the Ptolemies, which, although of foreign origin, ruled in an Egyptian capital and identified itself more or less closely with Egyptian interests, the history of Egypt as a nation will extend from 2717 to 31 B. C., a period of 2,686 years. But the origin of Egyptian civilization must be assigned to a period even more remote than that of Menes, for in the time of the fourth dynasty, which began about 2440 and ended about 2200 B. C., there were constructed monuments which could only have been the work of a people who had enjoyed the advantage of several centuries of progress.*

The early advance of Egypt in civilization, as well as her great material prosperity, had its physical basis in the rare fertility of the valley of the Nile and the remarkable security of its situation. The former, by attracting the people to a regular agricultural life, induced fixity of residence and the desire for those comforts and embellishments with which men naturally seek to surround themselves when established in permanent homes. The latter, by protecting them from the predatory incursions of nomad tribes, enabled them to accumulate in peace and safety the means by which this desire might be gratified. Hence gradually arose a demand for mechanical and artistic pursuits to supply agricultural implements, dwellings, household furniture and utensils, improved apparel, and ultimately great public buildings and works of art. Hence, also, arose the desire for protection in the pursuit of a regular industry and in the enjoyment of its products, creating a demand for government and social organization, and rendering it possible to unite a large body of people into a single state. Thus were developed in Egypt the needful conditions for an advancing civilization long before the peoples around them had abandoned the rude and stereotyped usages of an unprogressive pastoral life.

The security of situation above referred to was due to the singular isolation of the country; for the valley of the Lower Nile, which owed its fertility solely to its annual overflow by the great river, and which

*During the joint reign of two kings of this dynasty was erected the great pyramid of Abou-seer, commonly known as the pyramid of Cheops; and many other works of the same period attest at once the wealth of the Egyptians and the skill in art and industry to which they had attained even at that early day. These two kings were the two Sôphises of Manetho, (the Shufu or Khufu and Nani-Shufu or Nam-Khufu of the monuments,) of whom the former is believed to be identical with the Cheops of the Greeks, after whom the pyramid has been popularly named. The date, 2552 B. C., is believed, upon astronomical evidence, to have fallen within the period during which these two kings reigned.

constituted the "land of Egypt," was situated in the midst of a desert region of vast extent, affording little subsistence for predatory and hostile tribes, and interposing a formidable barrier of trackless sand between the Egyptians and the nearest habitable tracts on which any considerable population could have found a home. Thus carefully did nature guard the tender infancy of Egyptian civilization; and even in later times, when assailed by rival nations, grown powerful through the arts which they probably owed in great measure to herself, Egypt often found in her surrounding deserts most potent allies, and more than one great army was reduced to impotence through hunger, thirst, and weariness endured in attempting to cross them. In relation to the industry and wealth of the Egyptians, no circumstance connected with their natural situation was equal in importance to the annual inundation, on which depended the productiveness of the entire area of their cultivable land. In consequence of this regular overflow of the fertilizing waters, there was usually "corn in Egypt" when surrounding nations were consumed with famine. Yet even there the agriculturist was by no means wholly exempt from the vicissitudes which beset his calling elsewhere; for a variation of a few feet either way in the rise of the river was attended with serious loss. In modern times a rise of less than eighteen or twenty feet at the nilometer of El Rodah, near Cairo, is considered scanty, leaving a considerable area of land outside the limits of the inundation. A rise of less than twenty-four feet is not entirely sufficient, while a rise of more than twenty-seven feet ranks as a destructive flood. In the great French work, the Description of Egypt, there is a table of sixty-six inundations, taken from the official records, and comprehending those of the years 1737 to 1800 inclusive, of which eleven were very high, thirty good, sixteen feeble, and nine insufficient. Similar variations must have occurred in ancient times, and occasionally, though it would seem very rarely, the rise was so scanty as to produce famine. That which occurred in the time of Joseph (probably about 1876 B. C.) has been made familiar by the Scripture narrative; another appears to have occurred a century or two earlier, under one of the sovereigns of the twelfth dynasty; and one of seven years' duration is recorded as having happened in the reign of El Mustansir, about the middle of the eleventh century of the Christian era. So great was the distress at this time in certain portions of Egypt that cannibalism was resorted to, and organized bands kidnapped unwary passengers in the streets of El Káhíreh, (Cairo.) At this period, however, the evils resulting from the failure of the inundation were aggravated by those of war.

In the prosperous times of ancient Egypt art and industry had done much to extend the benefits of the inundation. The great canal (or, rather, continuous series of canals) now known as the Bahr-Yoosuf, (River of Joseph,) which runs parallel with the Nile from a little below Cairo to Farshoot, a distance of about three hundred and fifty miles, is believed to have been first constructed under the Pharaohs, and it may even be full as old as the Arab tradition attributing it to the patriarch Joseph would indicate. In a passage heretofore cited Herodotus attributes to Sesostris the construction of a large number of canals by means of the involuntary labors of his captives, and remarks that, in consequence of these works, "Egypt, which was before conveniently adapted to those who traveled on horseback or in carriages, became unfit for both. The canals," says he, "occur so frequently and in so many winding directions that to journey on horseback is disagreeable; in carriages impossible. The prince, however, was influenced by a patriotic

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motive: before his time those who inhabited the inland parts of the country, at a distance from the river, on the ebbing of the Nile suffered great distress from the want of water, of which they had none but from muddy wells." The Sesostris of the Greek and Roman writers is supposed to have been Rameses II, whose reign of sixty-six years appears to have occupied the latter part of the fourteenth and the earlier part of the thirteenth centuries, B. C.; but it is believed that they also confounded under the same name two kings of the twelfth dynasty who ruled about seven centuries earlier, namely, Sesertesen I and Sesertesen III, the latter of whom is called Sesôstris by Manetho. It is not unlikely that one of these kings, rather than Rameses II, was the author of the system of canals referred to by Herodotus, especially as the celebrated Lake Mœris, one of the greatest of the works connected with the system of irrigation, is satisfactorily shown to have been excavated under Amenemha III, who reigned in the twentieth century before Christ, and is believed to be identical with the Mœris of the Greek historians.*

The importance attached to agriculture by the ancient Egyptians is sufficiently indicated by the construction of such enormous works as those just referred to, for the purpose of facilitating its processes and increasing its products. As early as the days of Abraham their country appears to have been well known to surrounding nations for the regularity and abundance of its food-supply; for when pressed by famine in Canaan the patriarch is represented (Genesis xii) as going to Egypt in quest of subsistence for himself, his numerous dependents, and his flocks and herds. According to the Hebrew version of the Old Testament Scriptures his was about 1920 B. C., and, according to the Septuagint, 2551 B. C. About two centuries later, Jacob, with his household, and probably from one thousand to twelve hundred retainers, resorted to the same source of supplies; and it appears from Genesis xxvi, 2, that Isaac, under stress of famine, was once upon the point of going thither, but was directed elsewhere. Under the despotic rule of the Persians, which commenced about 525 B. C., and, with some interruptions, continued about two centuries, agriculture, like all the other interests of the country, was seriously depressed; but it revived again under the Ptolemies, and, under the Romans, Egypt was regarded as the granary of the empire.

The various operations of agriculture are represented with considerable minuteness in the sculptures and paintings on the walls of tombs, on some of which, dating as far back as the fourth and fifth dynasties, appear the plow and various other implements employed in farming. The first essential in connection with agriculture was to secure to the land the full benefits of the inundation, and great pains was taken to accomplish this end by means of ditches and skillful mechanical appliances, as well as by dikes and dams to retain the water upon the land.

The contrivances for irrigating lands lying above the level of the inundation appear in early times to have been confined to buckets carried by hand, and a simple machine constructed on the principle of the well-sweep, and known in modern Egypt as the shâdoof. At a later day a contrivance somewhat similar to the modern chain-pump, though on a larger scale, appears to have been used for the same purpose. After the inundation had subsided the land was plowed, or broken up by the hoe, and sown; goats, and, according to Herodotus, swine, being sometimes driven over the field for the purpose of treading in the seed. The principal

* The prenominal of this king, Ra-en-ma, or Ma-en-ra, is probably the name which the Greeks converted into Mœris.

crop appears to have been wheat,* which, when ripe, was usually cut near the top of the stalk, the ears being carried in nets or baskets, by men or asses, to the thrashing-floor, where the grain was trodden out by oxen or cows. Sometimes, however, the wheat was bound in sheaves. These several processes of plowing, sowing, harvesting, and thrashing in reference to wheat and other kinds of grain, are portrayed in the tombs, in which are also found curious representations of gardens and vineyards. The former were often extensive, and contained tanks for fish, and for the purpose of irrigation. Those represented are doubtless the gardens of the rich, who alone could have had their tombs so elaborately decorated. The proprietors of land are represented as constantly supervising the labor of their workmen, and paying the closest attention to the cultivation of their estates; and Diodorus informs us that agriculture had been carried to a higher degree of perfection by the Egyptians than by any other people. The rare productiveness of their country is demonstrated by the large population it supported, which, according to the historian just named, amounted, in his day, about the commencement of the Christian era, to three millions, and had once been as high as seven millions. There is no doubt that at the time of Diodorus the population of Egypt had, by war and misgovernment, been reduced very far below its ancient limit; and, if we assume that limit to have been the higher number mentioned above, the number of inhabitants to each square mile of cultivable land averaged upward of 650, a population considerably more dense than that of any country in modern Europe.†

The skill of the Egyptians in the mechanical arts is strikingly attested by the remains of their magnificent temples and other specimens of their architecture. In connection with the monumental remains of the fourth dynasty (2440 to 2200 B. C.) are found opaque glass and glazed pottery, or porcelain, the potter's wheel, and the kiln, together with evidences of a general knowledge of metallurgy.‡

Under the fifth dynasty (which commenced simultaneously with the fourth) appear the saw, adze, chisel, lever, balance, and press, and the blow-pipe, used as a bellows. The sculptures exhibit a great variety of

* It is believed by some writers that the *zea* mentioned by Herodotus as the principal grain of the Egyptians, although usually translated *spelt*, was really a species of bearded wheat.

† According to Colonel Jacotin, one of the best authorities on the subject, the space which the Nile does or can water and fertilize, north of the first cataract, including its own bed, is only 9,582,336 geographical square miles, or about 12,457 English square miles. The space actually under cultivation was found by M. Estève, according to Colonel Jacotin, to be 5,469,868 geographical square miles; but the latter gentleman calculates that in ancient times 2,735,078 more may have been cultivable, making a total of 8,205,947 geographical, or about 10,666 English square miles, and it is upon this area that the density of population is calculated above.

From a list of all the towns and villages of Egypt, with the extent of cultivated land belonging to each, made about A. D. 1375, Mr. E. W. Lane, in his work on the Modern Egyptians, has calculated the aggregate amount of cultivated land at that time at 5,500 geographical square miles, or about 7,150 English square miles.

‡ The following paragraph bearing on this subject is copied from a recent article in an English scientific journal, contributed by Mr. Charles Vincent:

"In the sepulchres of Thebes may be found delineations of butchers sharpening their knives on round bars of iron attached to their aprons. The blades of the knives are painted blue, which fact proves that they were of steel, for in the tomb of Rameses III this color is used to indicate steel, bronze being represented by red. An English gentleman has recently discovered near the wells of Moses, by the Red Sea, the remains of iron-works so vast that they must have employed thousands of workmen. Near the works are to be found the ruins of a temple and a barrack for the soldiers protecting or keeping in order the workmen. The works are supposed to be at least 3,600 years old."

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musical instruments, elegant vases, and articles of household furniture; vessels of metal, alabaster, and other materials; arms and domestic implements, the production of which gives evidence of equal taste and skill; while in weaving, and in the various processes of the manufacture of linen, the Egyptians are said to have excelled.

Diodorus Siculus divided the ancient Egyptians into three classes, as follows: 1. Persons of rank, and priests, who shared between them the chief honors and powers of the state. 2. Soldiers, who were also husbandmen. 3. Artisans and laborers. Herodotus enumerates seven classes, namely, priests, soldiers, herdsmen (of sheep and cattle,) swine-herds, tradesmen, interpreters, and pilots. Plato mentions hunters as a separate class, and some have added fishermen and boatmen. These various occupations are but subdivisions of the third class mentioned by Diodorus, and are comprehended under the general terms "artisans" and "laborers." The impression has commonly prevailed that these classes were castes like those of India, separated from each other, from one generation to another, by a barrier which law and custom forbade any of their members to cross; but the testimony of the monuments, as first pointed out by M. Ampère, shows that this opinion was incorrect. Members of the priestly and military classes not only intermarried, but in some instances performed indifferently the functions of the priest or soldier. That intermarriages between members of the privileged classes and the common people were extremely rare, may naturally be supposed, for this is the case in all countries where privileged classes exist; but there can be no doubt that between most of the different classes of working-people intermarriages were common. Indeed, this is implied in the statement of Herodotus (ii, 47) in reference to swine-herds, whose case he mentions as if it were entirely exceptional. Nor does he say that even they were forbidden to intermarry with members of other classes, but that marriage with them was "studiously avoided," and that they were thus "reduced to the necessity of intermarrying among those of their own profession." This prejudice arose from their connection with an animal regarded as unclean, and for the same reason they were excluded from the temples. But although there were among the Egyptians no castes, properly so called, it was probably the common practice in most occupations for the son to be brought up to the employment pursued by his father, and it also appears that different occupations were held in different degrees of esteem. The swine-herds, as already indicated, stood lowest in the social scale. The herdsmen of sheep and cattle were regarded with dislike, if not with contempt, a fact which Joseph adroitly turned to the advantage of his kinsmen, by using it as a means of securing for them a residence by themselves in the land of Goshen, (Genesis xli, 33 and 34.)*

* The antipathy to persons engaged in pastoral pursuits, implied in the statement of Joseph, that every shepherd was "an abomination unto the Egyptians," probably grew out of the invasion of Egypt by a pastoral people, and the establishment therein of the "shepherd-kings." Of these, according to Africanus's version of Manetho, there were three dynasties, the fifteenth, sixteenth, and seventeenth, whose rule commenced about 2080 B. C., and lasted somewhat more than five hundred years, during which period, however, there were some contemporary dynasties of native kings. According to Manetho, the first of these three foreign dynasties was Phœnician, while the other two are believed to have included Arabs and Assyrians; and there is reason to believe that between some of those and the kings of the fifteenth dynasty there existed a bitter hostility. The Pharaoh who elevated Joseph to the post of prime minister is believed to have been Assis (or Assa) of the fifteenth dynasty, and being himself one of the shepherd-kings, he naturally would not share, though from policy he might respect, the prejudices of the Egyptians. The later Pharaoh, "who knew not Joseph," and oppressed the Israelites, is supposed to have been of Assyrian origin, and was probably of the sixteenth dynasty.

Agricultural laborers are said to have been a despised class, and boatmen were held in low esteem, while even mechanics were regarded with contempt by the military class, who disdained to follow mechanical pursuits, considering them mean and unmanly.*

The divisions of Egyptian society above mentioned appear to have no relation to the distinction between freemen and slaves. From a remark of Herodotus, that "the Egyptians did not confine the exercise of trades to slaves, as the Spartans did," it may be inferred that persons of this class were employed, to some extent, in the various common occupations, but not exclusively in any. It is probable, however, that slaves were chiefly held by members of the privileged classes, who would be most likely to have the means of purchasing them. It will be recollected that it was a member of the upper class, Potiphar, a captain of the king's guard, who purchased Joseph from the Midianite merchants who carried him into Egypt. It may be remarked here that this transaction affords incidental evidence that at the time when it occurred (about 1800 B. C.) Egypt was known to traders as a market in which slaves were in regular demand. In successful military expeditions immense numbers of captives were often brought back and reduced to slavery; and there are indications in the sculptures of Thebes that slaves sometimes formed a part of the annual tribute paid by conquered nations to the Egyptian kings. The slaves taken in war, and probably also those received as tribute, were sometimes employed in large numbers on the public works; but it is likely that a considerable number of the former class were distributed among the soldiers and military commanders, and that a portion of them were also assigned to the priests, while others were sold under the authority of the government to any private individuals who chose to purchase them. The slaves acquired in these various ways were, of course, of many nationalities, and the representations of them on Egyptian bas-reliefs show that persons of the negro type were included among them. Besides the above mentioned there was another class of involuntary laborers, composed of criminals, a term which probably embraced many who by political or other offenses had incurred the displeasure of the monarch or of the local authorities. The origin of the custom of employing this class upon public works is attributed to Sabacus, the Ethiopian, who invaded Egypt about the middle of the eighth century before Christ. "While he retained his authority," says Herodotus, "he made it a rule not to punish any crime with death, but, according to the magnitude of the offense, he condemned the criminal to raise the ground near the place to which he belonged, by which means the situation of the different cities became more and more elevated." The employment of captives by Sesostris in digging the canals has already been referred to. The labor exacted by the taskmasters of the government in the execution of public works appears usually to have been very severe, the laborers being treated as mere beasts of burden. Those condemned to work in the mines are said to have been driven with blows to continue their labors until they sometimes fell lifeless from exhaustion. The practice of inflicting corporal punishment to hasten the performance of work appears

* Herodotus (ii. 167) states that he had observed the same custom in various parts of Thrace, Scythia, Persia, and Lydia. "It seems, indeed," says he, "to be an established prejudice, even among nations the least refined, to consider mechanics and their descendants in the lowest rank of citizens, and to esteem those as the most noble who were of no profession, annexing the highest degree of honor to the exercise of arms. This idea prevails throughout Greece, but more particularly at Lacedæmonia; the Corinthians, however, do not hold mechanics in disesteem."

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to have prevailed under the Pharaohs, for we are told (Exodus v, 14) that "the officers of the children of Israel which Pharaoh's taskmasters had set over them were beaten, and demanded, 'Wherefore have ye not fulfilled your task in making brick, both yesterday and to-day, as heretofore?'" It is not difficult to conceive the hardships to which laborers were sometimes subjected by taskmasters eager to win the favor of a monarch whose vanity and ambition demanded the early completion of a temple, a pyramid, or some other great work, by which he sought to transmit his fame to posterity.

The treatment of slaves by private owners would of course vary according to circumstances and the disposition of the masters. In occasional instances, when recommended by marked capacity and fidelity, they appear to have been assigned to positions of trust and responsibility, as in the case of Joseph, of whom we are told that Potiphar "made him overseer over his house, and all that he had put he into his hand." But such cases, of course, throw no light upon the ordinary treatment of the mass of persons of this class. In agriculture a part of their employment consisted in turning the wheels by means of which water was pumped from the river or canals for the purpose of irrigating the soil; in the mechanical occupations, and in commerce, they doubtless performed much of the heavy and disagreeable work, and in the household, female slaves ground corn in the hand-mills then in use, washed the feet of guests, and performed various menial offices. But in regard to their general condition and treatment little is definitely known. Not the slaves alone, but the entire mass of the laboring people, appear to have been entirely devoid of political power, and to have had scarcely an idea of such a thing as the rights of citizenship. Their demeanor in the presence of their superiors in rank was marked by great humility; and their habit of prostrating themselves before those in authority affords presumptive evidence that the latter possessed, and occasionally exercised, the power of inflicting severe punishment upon the objects of their displeasure. Yet there is reason to believe that the laws of Egypt were characterized by more humanity and a greater regard for justice than those of most other nations of ancient times, not excepting some of the greatest of those states which flourished at a period much later than that to which the larger and more prosperous portion of Egyptian history must be assigned.*

Imprisonment for debt, which has disgraced the codes even of modern nations, was not practiced among the Egyptians; while the murder of a slave, like that of a freeman, was punished with death. In these and other particulars the laws appear to have been framed with more regard to the rights of the poor and humble than might have been expected in a country where this class had so little influence in public affairs. It would appear, however, that at one period, at least, idleness or vagrancy was punished with great severity; for Herodotus mentions a law instituted by Amasis, which required every Egyptian once a year to explain to the chief magistrate of his district the means by which he obtained his subsistence, and states that a failure to comply with this ordinance, or to prove that a livelihood was procured by honest means, was a capital offense.

The political subjection of this class appears to have been founded in their gross superstition, or perhaps it would be more accurate to say

*An indication of the efficiency with which the laws were administered may be seen in the fact, attested by sculptures of a very ancient date, that it was the custom in practice of persons of all classes to go abroad unarmed.

that it was founded in the general ignorance out of which this superstition grew. Their belief in a multitude of divinities, of whose will the priests were supposed to be the authorized interpreters, induced them to accord to this class an authority which, at one period of their history, appears to have been paramount in some respects to that of the king himself, and this authority was probably the original basis of the monarch's power. It is quite possible that on this account the government was milder than if it had been founded purely on military power. It is evident, however, that the military forces of the nation, called into existence, perhaps, to repel invasion or to prosecute foreign wars, soon became one of the main supports of the monarchy; and the fidelity of these forces to the government, as well as their zeal in the defense of the country, was stimulated by especial privileges, of which the most substantial was the possession of allotments of land, exempt from all rent or taxation, which, together with the duty of military service, appears to have descended from father to son through successive generations.*

In its bearing on the economical condition of the working-classes, the subject of land-tenure, incidentally referred to above, is sufficiently important to require a passing notice. In Genesis xlvii may be found the well-known scriptural account of Joseph's purchase of the lands of the Egyptians for Pharaoh at the time of the great famine, in consequence of which they had previously exhausted their money and their cattle in purchasing from the king the food which he had gathered into the royal store-houses during the seven years of plenty. In permitting the people to continue the occupancy and cultivation of their land, Joseph exacted for Pharaoh a fifth part of the produce, and in the twenty-sixth verse we are told that he "made it a law over the land of Egypt unto this day that Pharaoh should have the fifth part." It appears, however, that the land of the priests was not included in this purchase, for, according to verse 22, "the priests had a portion of food assigned them of Pharaoh, and did eat their portion which Pharaoh gave them; wherefore they sold not their lands." As near as can be determined this event occurred about 1865 B. C.†

At a later period the land is found divided between the king, the priests, and the soldiers. According to Herodotus the priests and soldiers had each a tract of land, which, expressed in our measurement, would be a little over six acres, free from all taxation. This was probably the quantity held by the common soldiers and the lower order of priests, for it seems likely that both in the military and priestly professions the quantity of land held varied to some extent with the rank of the holder. Sesostris (which name in this instance probably applies to Rameses II) is represented as having made a regular distribution of the lands of Egypt, assigning "to each Egyptian a square piece of ground," (Herodotus ii, 109.) and deriving his revenues "from the rent which every individual annually paid him." "Whoever was a sufferer by the inundation of the Nile was permitted to make the king acquainted with his loss;" and "certain officers were appointed to in-

* It appears that Psammetichus, who came to the throne about 661 B. C., after overthrowing a despotism of which he had been a member, commenced the practice of employing foreign mercenaries. The native Egyptian troops, being agriculturists in peace as well as soldiers in war, had had a strong interest in the safety of the country, whose independence did not long survive the general substitution of mercenary foreigners for the native soldiers.

† It will be understood that in respect to the dates of most events of the earlier portion of Egyptian history, there is great diversity of opinion among chronologists.

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* Herodotus treated the king, which, by this principle, about 725 B. C. The latter monarch, in his reign, the king with came from by the king

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quire into the particulars of the injury, that no man might be taxed beyond his ability." This statement probably refers only to that portion of the land which belonged to the king. The privileged tenure of the priests certainly dated much farther back than the time of Rameses II, and the same is probably true in regard to that of the soldiers; and both of these classes were in possession of their lands, as above stated, at a time long after the reign of that monarch. It is quite probable, however, that both before and after that period there were changes of greater or less extent in the distribution of land, both among individuals and classes. Such changes have been common in the history of the world, and would be peculiarly favored in Egypt, by the fact that the whole country had to be resurveyed after each annual inundation, in order to re-establish the boundaries between the different tracts, an operation which would bring the subject of land-tenure under the constant attention of the public, and make it a matter of regular supervision on the part of the authorities. Of the importance attached to the division of the soil in Egypt, an indication is found in the fact that the topography of the country formed the theme of one of the sacred books; and it is in the care of the Egyptians in securing exact surveys that the science of geometry is supposed to have had its origin. If Herodotus may be relied on as to the amount of land assigned to the priests and soldiers, and as to the number of the latter, his statements, in conjunction with other data, will afford the basis for an approximate calculation as to the aggregate amount of land held by each class. According to this historian the number of soldiers, when the population of the military nomes was at its maximum, was 410,000; and, taking six acres as the amount assigned to each, the aggregate amount of land held by the military class would be 3,843 $\frac{1}{2}$ square miles, or a little over thirty-six per cent. of the entire cultivable area (10,666 square miles) as estimated by Colonel Jacotin. But Diodorus (i, 73) states that the priests held the largest share in the threefold division of the soil; and so great was the number of persons of this class, that at some points in Egyptian history this may well have been true. But, taking as the basis of calculation the ordinary number of priests and soldiers, instead of the maximum number, it seems probable that the division of the land between these two classes and the king was originally such as to give exactly one-third of the total area to each of the three parties, an arrangement which probably remained in force, without any very material variation, for several centuries.*

It is worthy of note in this connection that the maximum number of soldiers, as given by Herodotus, (410,000,) would make the military class, including women, children, and old men, about one-third of the maximum population as given by Diodorus, (7,000,000;) for this supposition gives one soldier to every 5 $\frac{1}{3}$ of the military population, which is a reasonable estimate. The maintaining of so large an army would scarcely have been possible, but for the fact that the soldiers, in times of peace, were husbandmen, and so were, in a great measure, self-supporting.

* Herodotus (ii, 141) states that Sethes, a priest of Vulcan, on attaining the throne, treated the military with great contempt and deprived them of their *aroura*, or fields, which, by way of reward, his predecessors had given to each soldier. Chronologically this prince appears to coincide with the Tirlakah of Scripture, whose reign commenced about 723 B. C., but the character ascribed to him hardly corresponds with that of the latter monarch. The statement of Herodotus is chiefly valuable as showing the existence in Egypt of some record or tradition of such an interference on the part of the king with the land of the military class. After the employment of mercenaries became common, the land of the Egyptian soldiers was probably appropriated gradually by the kings, and their descendants put upon the same footing as other cultivators.

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The statement that Sesostris, (or Rameses II.) in his distribution of the land, "assigned to each Egyptian a square piece of ground," can hardly be taken as literally true in any case, since a considerable portion of the population must have been engaged in mechanical pursuits; but it seems clear that the soil in the main was divided into small holdings and that *la petite culture* was the prevailing form of the far-famed agriculture of Egypt. The sculptures of a remoter period, however, for example those on the walls of tombs of the fourth dynasty, indicate the conduct of agricultural operations on a scale implying larger proprietorships; and, indeed, it is not improbable that during her long history Egypt passed through some phase of land-tenure bearing more or less resemblance to that which prevailed under the feudal system in Europe. But it is not to be supposed that even under the system of small holdings subsequently established each holder personally cultivated his own land. In this labor slaves were doubtless employed to a large extent, especially by the soldiers and priests; while many of the latter probably rented their land to others, and subsisted, in whole or in part, upon the revenues derived from it in this way.*

The king's portion of the land was probably rented, for the most part, in tracts not larger, and possibly even smaller, than those allotted to the priests and soldiers. The amount of rent exacted undoubtedly varied with the condition of the country, the demands upon the royal exchequer, and the personal character of the monarch. Had the annual charge never exceeded one-fifth of the produce, (at which it is said to have been fixed by Joseph,) the condition of the tenants would have been more favorable than that of tenants in most countries where competition rents are paid to private land-owners; but many of the kings, in order to carry out their own ambitious schemes, extended their exactions to such a degree as barely to leave the cultivators the meanest subsistence.

If the system of land-tenure was such as has been indicated above, there could scarcely have been in Egypt a landed aristocracy. Indeed, there was no hereditary aristocracy whatever, in the ordinary sense of that term. The priests and soldiers were privileged classes, but the majority of these must have been persons of very moderate means, as is implied in the extent of their allotments of land. In both of these classes there were, doubtless, many gradations of rank, to the highest of which, as well as to high government offices, were annexed very large incomes. The power of an Egyptian king to reward a favorite official is illustrated by the honors and emoluments showered upon Joseph. In later times, especially under the Ptolemies, commerce must have been the source of many large private fortunes. But in all periods there appear to have been great inequalities among the people in respect to wealth and social position. The great affluence of a portion of the community, probably a small portion, is indicated by the representations of their furniture, household utensils, and dress, and by the great quantity of jewels and other objects of embellishment and luxury in use among them, as well as by the magnificent tombs which they prepared for the reception of their remains; while the splendor of the palaces of Thebes, still evident even amid their ruins, sufficiently indicates the magnificence and pomp which surrounded the monarch. The indolence and luxury of the few had their natural counterpart in the arduous toil

* The produce of their land was certainly not their only source of revenue. Herodotus (ii. 57) says that they were not obliged to consume any part of their domestic property, each of them having "a moiety of the sacred viands, ready dressed, assigned him, besides a large and daily allowance of beef and geese."

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and poverty of the many. Such was the fertility of the soil, however, that in favorable periods even the poor probably enjoyed a certain rude abundance of coarse food. Of this an incidental evidence is found in the murmurings of the Israelites in the wilderness, for, notwithstanding that the Egyptians had "made their lives bitter with hard bondage in mortar and brick and in all manner of service in the field," (Exodus i, 14) they sighed for the days when they "sat by the flesh-pots and did eat bread to the full." (Exodus xvi, 3.) But during the period when the population of the country was at or near its maximum, every deficient or excessive inundation must have entailed a deficiency in the food-supply, and the poorer classes must at times have suffered very serious privations from this cause. As to their clothing, it appears to have been of the simplest description, usually consisting of a single garment, a sort of tunic, with a girdle, and the men, especially when engaged in heavy work, frequently went naked. Their dwellings were slight and temporary structures, in marked contrast with the temples and tombs, which seemed to have been built to endure for eternity. The climate, however, was so mild that scant clothing and poor dwellings rarely involved any serious physical discomfort. In respect to education, the Egyptian working-classes appear to have had no advantages. With the great majority of them life was a mere physical existence, more or less painful, and rarely cheered with any hope of amelioration in their condition.

Among the causes of their poverty, one of the most obvious was the support of an immense body of non-producers, particularly the priests, who were more numerous, enjoyed ampler revenues, and exercised greater social and political power in Egypt than anywhere else in the ancient world. Another cause equally conspicuous was the exercise of the arbitrary and irresponsible power of the monarchs in the erection of vast and costly structures, such as temples and pyramids, thus forcibly diverting the labor of the people into unnatural channels, wherein it contributed nothing to their physical comfort, and in no adequate degree promoted even their artistic and esthetic development.

From the account which Herodotus gives of the construction of the great pyramid (which was doubtless the account current among the Egyptians in his day) it would appear that the king arbitrarily impressed the people into his service. "Some he compelled," says the historian, "to hew stones in the quarries of the Arabian mountains, and drag them to the banks of the Nile; others were appointed to receive them in vessels, and transport them to a mountain of Libya. For this service a hundred thousand men were employed, who were relieved every three months. Ten years were consumed in the hard labor of forming the road through which these stones were to be drawn. * * * * The pyramid itself was a work of twenty years. Upon the outside were inscribed in Egyptian characters the various sums of money expended in the progress of the work for the radishes, onions, and garlic consumed by the artificers. This, as I well remember, my interpreter informed me, amounted to no less than one thousand six hundred talents, [in round numbers about \$1,600,000.] If this be true, how much more must it necessarily have cost for iron tools, food, and clothes for the workmen, particularly when we consider the length of time they were employed in the building itself, adding what was spent in the hewing and conveyance of the stones, and the construction of the subterranean apartments." Herodotus adds that for the memory of this monarch and his successor (who also built a pyramid) the Egyptians had so extreme an aversion that they were "not very willing to mention their names."

But it was not alone in the erection of such colossal structures as the pyramids that vast amounts of labor were expended. One hundred and twenty thousand men are said to have been employed in hewing the obelisks of Thebes; and Herodotus mentions an edifice formed out of a single immense stone, which appears to have been used as the portico of a temple, the transportation of which from Elephantine to Sais employed two thousand men for three years. Yet this was only one out of many similar works executed by a single king; and there was scarcely a monarch of any note who did not leave numerous monuments of his ambition to perpetuate his fame, or his solicitude to obtain the favor of the gods by erecting costly temples for their worship.

Thus the industrial servitude of the people resulted in a great measure from that absolute political subjection which enabled a monarch to tax them at his own pleasure, or to command their labor in the service of the most grotesque ambition, the most reckless extravagance, or the wildest caprice. Scarcely anything in history could give one a more exalted conception of the economic value of political liberty to the working-classes of modern times than is conveyed by the spectacle of the hardships to which the working-people of Egypt were subjected in consequence of the irresponsible power possessed by their rulers.

LABOR AMONG THE JEWS.

Adjacent to the Egyptians, geographically, and connected with them by strong historical links, were the Jews, or Israelites, who, after their exodus from Egypt, (which probably took place about 1652 B. C.,*) settled in the southern portion of the belt of fertile country which bordered the eastern end of the Mediterranean Sea. Their ancient writings, embraced in the books of the Old Testament, in Josephus, and in the Talmud, and other traditional records, not only throw a comparatively full light upon their own life and history, but incidentally afford many important glimpses at those of the nations by which they were surrounded. In their origin the Israelites were a pastoral people; but during their residence in Egypt many of them must have acquired considerable mechanical and artistic skill, as is indicated in the fact that they built for Pharaoh treasure-cities, (Exodus, i, 11,) and by the works they executed during the journey through the wilderness in the construction of the tabernacle and its elaborate furniture, including the ark, the golden candlesticks, the cherubim of beaten gold, the "curtains of fine-twined linen, and blue and purple and scarlet, the vessels of gold and silver, and the ephod, inlaid with precious stones." During the earlier centuries of their residence in Canaan their frequent wars with the former inhabitants of the country and with the neighboring nations must have been highly unfavorable to their progress in the arts and in mechanical industry; and, moreover, the Philistines, under whose power the Israelites repeatedly fell, appear to have pursued so jealous a policy toward them that in the early portion of the reign of Saul "there was no smith found through all the land of Israel, for the Philistines said, 'Lest the Hebrews make them swords or spears;' but all the Israelites went down to the Philistines to sharpen every man his share, and his coulter, and his ax, and his mattock." (1 Samuel xiii, 19 and 20.) The period of power and independence enjoyed under Saul and under David were favorable to their progress in the industrial arts, and they also profited by their intercourse with the Phœnicians, whose great

* On this subject there is considerable difference of opinion among chronologists.

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cities, Tyre and Sidon, were already flourishing places. In the building of the Temple at Jerusalem Solomon appears to have availed himself extensively of the skill of these neighbors, whose workmen were associated with those of the Hebrews* in dressing stones for the foundation of that structure, hewing timber in the mountains of Lebanon, and probably in many other portions of the work.

In his message to Hiram, King of Tyre, asking assistance in this work, Solomon says, "Send me now, therefore, a man cunning to work in gold, and in silver, and in brass, and in iron, and in purple and crimson, and blue, and that can skill to grave with the cunning men that are with me in Judah, and in Jerusalem, whom David, my father, did provide." (2 Chronicles, ii, 7.) Hiram complies with this request by sending "a cunning man endued with understanding," whose mother was "of the daughters of Dan, and his father a man of Tyre." Among the works in metal executed by this artificer† was an immense vessel of brass, of which the following account is given in 1 Kings, vii, 23 to 26: "And he made a molten sea, ten cubits from the one brim to the other; it was round all about, and its height was five cubits,‡ and a line of thirty cubits did compass it round about. And under the brim of it round about there were knops compassing it, *ten* in a cubit, compassing the sea round about; the knops were cast in two rows when it was cast. It stood upon twelve oxen (three looking toward each of the cardinal points.) * * * And it was a hand-breadth thick, and the brim thereof was wrought like the brim of a cup with flowers of lilies. It contained two thousand baths."§ This and numerous other vessels enumerated in the same chapter, and more or less minutely described, are said to have been "of bright brass," and to have been cast in the plain of Jordan, "in the clay ground between Succoth and Zarthan." Further on are enumerated candlesticks, snuffers, lamps, basins, spoons, censers, and various other articles "of pure gold" which were made as a portion of the furniture of the temple. The making of the various vessels and other articles, some of them cast and others wrought, indicates considerable skill in the various processes of metallurgy; but, as this work was directed by an artificer brought from Tyre expressly for that purpose, it would appear that the knowledge of this art possessed by the Israelites at the time in question was quite limited. It may reasonably be presumed, however, that they profited by the lessons received in the execution of these and other works connected with the temple, and that the erection of this building really inaugurated a new era in the development of the mechanic arts among them.

One thing especially noticeable in connection with the building of the Temple is the manner in which the labor was employed. In the seventeenth and eighteenth verses of the second chapter of second Chronicles, we are told that "Solomon numbered all the strangers that were in the land of Israel, * * * and they were found an hundred and fifty thousand and three thousand and six hundred;" and that of these "he set three score and ten thousand to be bearers of burdens, and four score thousand

* 1 Kings, v, 6, 13, 14, and 18.

† In 1 Kings, vii, 13 and 14, the artificer who executed the works in question is spoken of as Hiram, whose mother was a widow of the tribe of Naphtali, and his father a man of Tyre, a worker in brass. It is probable, however, that this is the same person elsewhere spoken of as the son of a woman of the daughters of Dan, for Dan, the ancient Luz, was a city in Naphtali, these two tribes having probably intermingled to such an extent that the distinction between them was in a measure lost.

‡ The Jewish cubit was equal to about twenty-one inches of our measurement.

§ In 2 Chronicles, iv, 5, its capacity is stated at three thousand baths. The bath was a liquid measure of a fraction more than 10½ gallons.

to be hewers in the mountains, and three thousand and six hundred overseers to set the people a work." These strangers were probably descendants of the ancient Canaanites, and as they were a subject people, the King appears to have had no scruple in impressing them into his service. In addition to the "strangers" it appears that Solomon raised thirty thousand men by a levy upon all Israel. These were sent to work in the mountains of Lebanon, "ten thousand a month by courses; a month they were in Lebanon, and two months at home." (1 Kings, v, 13 and 14.) The arrangements to secure the aid of Phœnician workmen in cutting timber in Lebanon were made with the King of Tyre, to whom Solomon says, "And unto thee will I give hire for thy servants according to all that thou shalt appoint; for thou knowest that there is not among us any that can skill to hew timber like unto the Sidonians." King Hiram promises that his servants shall do as Solomon has desired "concerning timber of cedar and concerning timber of fir;" and he further engages to bring them down from Lebanon unto the sea, "and convey them by sea in floats" to the place that Solomon may appoint; which place appears to have been Joppa. In return for these services he tells Solomon, "Thou shalt accomplish my desire in giving food for my household."

The amount of the supplies which Solomon furnished under this arrangement is stated at twenty thousand measures of wheat and twenty measures of pure oil. (1 Kings v, 6, 8, 9, and 11.)*

It will be observed that the "strangers" impressed by Solomon into his service, as well as the thirty thousand men raised by a "levy" upon all Israel, appear to have been assigned to unskilled labor, and except in the case of Hiram of Tyre, no account is given of the manner in which artisans were obtained for the execution of such work as required a higher degree of mechanical and artistic skill. It is probable, however, that these were mainly free laborers, Jewish and Phœnician, who received regular wages for their services. In later times skilled mechanics were held in high esteem among the Jews, and in some cases, like that of St. Paul, men of learning and of superior talents thought it no dishonor to earn their subsistence by a mechanical occupation. Indeed, the head of every Jewish family was required to have his sons instructed in some trade.

In respect to slavery, the Jews presented no exception to the general practice of the age; but the law, while permitting them to purchase slaves of the heathen around them, or of the strangers sojourning among them, forbade them to reduce a Hebrew to perpetual servitude, except with his own consent in one case mentioned below. In Leviticus, xxv, 39, 40, and 41, it was provided that if a Hebrew were impoverished and sold to another person of his own race, he should not be compelled to serve as a bondservant, but "as a hired servant and as a sojourner," and this only until the year of jubilee, when he should depart, and his children with him, and return to his own family and to the possessions of his fathers. In Exodus, xxi, it was provided that if a Hebrew were purchased as a servant, he should serve six years, and in the seventh year should "go out free for nothing"; that if he were married on coming into servitude, his wife should go out with him; but if his master had given him a wife, and she had borne him sons or daughters, she and her

* This account differs somewhat from that given in 2 Chronicles, ii, 10, in which Solomon is represented as saying to Hiram, "And behold I will give to thy servants, the hewers that cut timber, twenty thousand measures of beaten wheat, and twenty thousand measures of barley, and twenty thousand baths of wine, and twenty thousand baths of oil." The Jewish "measure" was the ephœnix, containing nearly a quart.

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The laws of the Israelites with reference to property exhibit a peculiar regard for the interests of the poor. On taking possession of Canaan they divided the land among them; and although it is not explicitly so stated, the presumption is, that the division was, as nearly as practicable, an equal one, except that Joshua, and probably some other leaders, received shares which were larger than the average allotment. To counteract the tendency of land to accumulate in a few hands, a year of jubilee had been instituted in the law of Moses, which was to occur once in every fifty years, and at this time every man was to return to his possessions.

The land was not to be sold in perpetuity,* but only its usufruct until the year of jubilee. This usufructuary title is clearly indicated in the sixteenth verse of the twenty-fifth chapter of Leviticus, which reads as follows: "According to the multitude of years (until the jubilee) thou shalt increase the price thereof, and according to the fewness of the years thou shalt diminish the price of it; for according to the number of the years of the fruits doth he sell unto thee." If an Israelite were compelled by poverty to sell the land he had inherited, his kinsmen had the right to redeem it for him by simply paying its usufructuary value until the year of jubilee; or if he, himself, were able to do so, he might redeem it upon the same terms; but if neither he, nor his kinsmen for him, could redeem it, he received it back in the year of jubilee.†

A house in a walled city might be redeemed within one year after its sale, but not later; nor was it restored in the jubilee; but houses in the unwallled villages were regarded as the fields of the country; they might be redeemed at any time upon the same terms, and were restored in the year of jubilee. It should be said, too, that this rule applied to the houses of the Levites, even in walled cities, at least in the cities assigned to them; "for the houses of the cities of the Levites were their possession among the children of Israel." (Leviticus, xxv, 33.)

The year of jubilee had the same relation to personal liberty as to

* "The land shall not be sold forever; for the land is mine; for ye are strangers and sojourners with me."—Leviticus, xxv, 23.

† Idem., verses 25-28. This rule undoubtedly applied also to his children if he himself should die before the jubilee arrived.

possessions.* If a Hebrew, under stress of poverty, sold himself to a rich stranger sojourning in the land of Israel, his near kinsmen might redeem him by paying for the years to elapse before the jubilee; or if able, he might redeem himself upon the same terms; and in the jubilee he went free without redemption. Of course, all contracts, whether for land or services, must have been made with this understanding; so that the law inflicted no injustice upon purchasers. Its effect was to put it out of the power of a man to sell himself, for some present indulgence, into a perpetual servitude which would involve the servitude of his children, or to alienate permanently, for the gratification of his own extravagance or indolence, a title to landed property, in which he could justly have only a life estate; in other words, it put it out of his power to reduce his children to beggary by selling for his own advantage their natural right to a portion of the land which had been given to the nation as their common inheritance.

The following injunctions from the twenty-third and twenty-fourth chapters of Deuteronomy are in keeping with many others that may be found in the laws of Moses and in other portions of the Old Testament: "Thou shalt not lend upon usury to thy brother, (*i. e.*, to a Hebrew.) * * * Unto a stranger thou mayest lend upon usury; but unto thy brother thou shalt not lend upon usury." * * * "When thou dost lend thy brother anything, thou shalt not go into his house to fetch his pledge. Thou shalt stand abroad, (*outside*,) and the man to whom thou dost lend shall bring out the pledge abroad unto thee; and if the man be poor, thou shalt not sleep with his pledge. In any case thou shalt deliver him the pledge again when the sun goeth down." * * * "Thou shalt not pervert the judgment of the stranger, nor of the fatherless, nor take a widow's raiment to pledge." * * * "When thou cuttest down thine harvest in thy field, and hast forgot a sheaf in the field, thou shalt not go again to fetch it; it shall be for the stranger, for the fatherless, and for the widow." * * * "When thou beatest thine olive-tree, thou shalt not go over the boughs again." * * * "When thou gatherest the grapes of thy vineyard, thou shalt not glean it afterward; it shall be for the stranger, and the fatherless, and the widow." That these and other humane laws were frequently disregarded, and even flagrantly disobeyed, is evident from the repeated denunciations of the prophets against usury and other oppressive practices. In Nehemiah we read that "there was a great cry of the people, and of their wives, against their brethren, the Jews." Some are represented as saying, "We have mortgaged our lands, vineyards, and houses, that we might buy corn, because of the dearth." Others complained that they had borrowed money upon their lands and vineyards for the king's tribute. "And, lo, we bring into bondage our sons and our daughters to be servants," said they, "and some of our daughters are brought into bondage already: neither is it in our power to redeem them, for other men have our lands and vineyards." Thereupon Nehemiah rebukes "the nobles and the rulers," saying, "Ye exact usury every one of his brother," and calls upon them to restore to their impoverished brethren "their lands, their vineyards, their olive-yards, and their houses," as well as "the hundredth part of the money, and of the corn, the wine and the oil" that they have exacted from them. To this they consent, and he calls the priests to witness their oath that they will do "according to this promise." This appears to have occurred subsequent to

* "And ye shall hallow the fiftieth year, and proclaim liberty throughout all the land, unto all the inhabitants thereof."—Leviticus, xxv, 10.

† All interest was formerly denominated "usury."

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445 B. C., when Nehemiah had obtained authority from Artaxerxes to proceed to Judea and rebuild Jerusalem. The captivity of the Jews in Babylon, and the domination of the Persians, Syrians, and Romans must have interfered to a considerable extent with the operation of their own laws; and the oppressive tribute to which they were at times subjected, as well the frequent wars between greater powers in which they were more or less involved, must have reduced them, at times, to a condition of severe suffering.

LABOR IN CHALDEA AND ASSYRIA.

These two countries, the former occupying the lower and the latter the upper portion of the valleys of the Euphrates and Tigris with the intermediate region, may be considered as having formed one nation for a period of several centuries, comprising the best known portion of their history. Their people differed in race and language, and the civilization of Chaldea was of much earlier origin than that of Assyria; but of the history of the old Chaldean empire little is known that could throw any light upon the subject of the present inquiry, beyond the bare fact that there existed great cities and other results of an industry that involved mechanical skill of no mean order. After the fall of Assyria under the power of the Medes, Chaldea (sometimes called Babylonia, after the name of its celebrated capital) again flourished for something less than a century as an imperial power; and during this period occurred the reign of the great Nebuchadnezzar of Scripture. In this later period, as also during the period of Assyrian supremacy,* and probably for centuries before that period commenced, Babylonia was celebrated for many of the products of its industry, among which may be mentioned textile fabrics of remarkable fineness, and exquisite dye. The city itself, characterized by Isaiah as "the glory of kingdoms, the beauty of the Chaldees' excellency," is described as one of whose grandeur the greatest cities of modern Europe give but a faint conception. According to Herodotus, it formed a perfect square, each side of which measured about fifteen miles in length, giving a total area of two hundred and twenty-five square miles. Its walls (according to the same authority) were two hundred cubits, about three hundred feet, in height, and fifty cubits, or seventy-five feet, in width. In them were one hundred massive gates of brass. "Its internal beauty and magnificence," says Herodotus, "exceed whatever has come within my knowledge." The Assyrian capital, Nineveh, was scarcely inferior to Babylon in extent and magnificence; and these were but two out of many great cities, of which the extensive region embraced in Chaldea and Assyria still bears numerous traces. The ruins of ancient palaces and temples, as well as accounts and representations in the inscriptions and sculptures found among such ruins, indicate clearly enough the colossal scale and elaborate ornamentation of those structures. Each king appears to have endeavored to eclipse his predecessors in the number, extent, and magnificence of the architectural works executed during his reign; and many of these works apparently had no other use than to gratify the ambition and vanity of the monarchs. Occasionally, however, other works of a more useful character were undertaken. Thus Sennacherib, besides building himself a splendid palace, covering an area of more than eight acres, at Nineveh, and repairing the ancient residence of the kings at the same place, confined the Tigris to its bed

*A supremacy not without occasional interruptions.

by an embankment of bricks, constructed a number of aqueducts for the purpose of bringing good water to the capital, and improved the defenses of the latter by erecting towers of vast size at some of the gates. Of the extent of the burdens imposed upon their subjects by the Assyrian kings for the gratification of their mania for great buildings, especially those of the class intended as royal residences, an indication is afforded in the fact recorded by Essarhaddon, one of the monarchs of this line, that twenty-two kings, of whom he gives a list, furnished him with materials for his great palace at Nineveh. In the construction of such works the Assyrians were accustomed to employ the labor of captives taken in war. Among these the skilled workmen were in request to assist in the ornamentation of shrines and palaces, while the great mass of the unskilled were employed in quarrying stone, raising mounds, making bricks, and similar occupations. It has already been stated that Sennacherib brought back to Assyria upwards of six hundred thousand prisoners in three campaigns, and the number of captives made in other successful expeditions was probably on the same scale. In the inscription on the Belino cylinder this king states that he employed Chaldeans, Arameans, Armenians, Cilicians, and Qulu (Coans) in the construction of his great works; and to these may probably be added Egyptians, Ethiopians, Elamites, and Jews. Their work consisted, among other things, in raising the vast mounds upon which important edifices were to be erected, in the transport and elevation of colossal bulls, in the molding of bricks, the quarrying of stone, the erection of walls, the excavation of canals, and the construction of embankments. They worked in gangs, each gang having a costume peculiar to it, which probably marked the nationality of its members. Over each of these gangs was placed a number of task-masters, armed with staves, who urged on the work with blows, and severely punished any neglect or remissness. Assyrian foremen had the general supervision of the works and were intrusted with such portions as required great skill or judgment. The captives often worked in fetters, which were sometimes supported by a bar fastened to the waist, while sometimes they consisted merely of shackles.*

The bas-reliefs on the walls of the Assyrian palaces and other public buildings exhibit a minute and rigid adherence to reality, which makes them a source of much valuable information as to the life of the people. Rawlinson gives us the following description of a series of sculptures, in which are minutely represented the several processes connected with the carving and transportation of a colossal bull, "from the first removal of the huge stone in its rough state from the quarry to its final elevation on a palace mound as part of the great gateway of a royal residence." The sculpture in question is found on the walls of Sennacherib's palace, and may doubtless be regarded as a veritable portion of the history of the erection of that or some other structure of that monarch's reign. "We see," says Rawlinson, "the trackers dragging the rough block, supported on a low flat-bottomed boat, along the course of a river, disposed in gangs, and working under task-masters, who use their rods upon the slightest provocation. * * * We then observe the block transferred to land, and carved into the rough semblance of a bull, in which form it is placed upon a rude sledge and conveyed along level ground by gangs of laborers, arranged nearly as before, to the foot of the mound at whose top it has to be placed. The construction of the mound is most elaborately represented. Brick-makers are seen molding the bricks at its

* Rawlinson's Ancient Monarchies.

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base, while workmen with baskets at their backs, full of earth, bricks, stones, or rubbish, toil up the ascent—for the mound is already half raised—and empty their burdens out upon the summit. The bull, still lying on its sledge, is then drawn up an inclined plane to the top by four gangs of laborers, in the presence of the monarch and his attendants. After this the carving is completed, and the colossus, having been raised into an upright position, is conveyed along the surface of the platform to the exact site which it is to occupy."

The absence of labor-saving appliances indicated in the processes represented in this series of sculptures, shows how vast must have been the expenditure of sheer muscular force in the construction of the great buildings of this period. Gangs of laborers take the place of horses to haul the immense stone, not only by water, but also by land; and for the latter portion of the distance a sledge is used instead of a wheeled vehicle. To raise such a structure as Sennacherib's palace at Nineveh, by methods so primitive in their character, must have required a number of workmen which it can be no exaggeration to speak of as a great army. And though this army of laborers may have been composed of captives, the expense of maintaining them while engaged on these unproductive works must have occasioned heavy drafts upon the resources of the Assyrian people, and of the nations under their sway.

The constant and ferocious wars in which the Assyrian kings engaged must have been a source of frightful impoverishment to their own people, and of inconceivable sufferings to the nations against which they waged successful war. It appears to have been their distinct aim in many cases to spread utter ruin and desolation in the countries they had conquered, even to the extent of cutting down the fruit-trees, and thus depriving their victims, as far as possible, of the means of subsistence for the future. According to his own account, as given in one of the inscriptions exhumed at Nineveh, Sennacherib, in the third year of his reign, invaded Chaldea, (which had previously revolted,) and plundered seventy-six large towns, and four hundred and sixty villages; while Sargon, his predecessor, not content with plundering the people he conquered, removed entire populations *en masse* to distant localities.*

It scarcely needs explicit information to convince one that, under such rulers, the condition of the working-classes must have been, in the main, one of extreme wretchedness. Among the Assyrians themselves the ordinary dress of this class and of the common people generally appears to have been a mere plain tunic, with very short sleeves, and confined round the waist by a broad belt or girdle. Nothing was worn by this class either on the head or on the feet. As to their dwellings and fare, these were doubtless in keeping with the scantiness of their apparel.

In agriculture the Assyrians and Chaldeans depended largely upon artificial methods of irrigation; and the elaborate system of canals, reservoirs, conduits, dikes, and pumps, by which they spread the waters of their rivers over the soil, indicates that this branch of industry was carried on with considerable energy and skill. Among a people so war-like as the Assyrians, and especially a people who carried to such an extent as they did the practice of enslaving their prisoners of war, the operations of agriculture, and, indeed, the common and heavy labor in most of their industries, must, to a great extent, have been performed by slaves; but upon this point, as upon most others connected with the daily life of the people, we are obliged to rely mainly upon inference. The important discoveries recently made of inscribed clay tablets and

* This was the king who colonized the cities of Samaria with an alien race.

with its vast grape clusters, imitated both in size and color by the most precious gems, which formed a canopy over the royal couch; or that golden platane tree, and other vine, which rising from behind the throne stretched its branches, tendrils, and leaves of gold aloft over the monarch as he sat in state to give audience to his people.*

The washing and plating of the inferior metals with gold and silver were well understood, and there were many ingenious devices for coloring and frosting the surface, and for inlaying and flowering one metal with another. The cutting, engraving, and polishing of precious stones were carried to a high state of perfection by the Greeks, who in these processes appear to have employed all the finer tools in use at the present day, including the diamond point and the lapidary's wheel. It is at least certain that they engraved figures which for beauty and delicacy have never been excelled. There is reason to believe that they were acquainted with the microscope, or at least that they used magnifying glasses of great power, since their engravings were sometimes so fine that the naked eye could not distinguish their lines. Indeed we find mention of burning glasses as early as the age of Socrates, and very powerful lenses have been discovered among the ruins of Herculaneum.

In the earliest ages of Greece the metal used for arms and for tools of various kinds was brass; but iron and steel were in use in the days of Homer, who speaks of axes and other implements made of iron, steeled at the edge, and describes the process of hardening by immersion in cold water. Swords made of steel thus hardened appear to have been extremely brittle, since they are represented as having been frequently shivered to pieces by a blow on a shield or helmet. When greater tenacity was required oil was subsequently used for cooling instead of water. At a later day the manufacture of swords was an object of special attention. They were formed of the finest steel, highly polished and elaborately ornamented. The manufacture of arms and armor of all descriptions was at all times, among the Greeks, one of the most important pursuits, and was carried to a high state of perfection. In the production of cutlery the Delphians appear to have attained celebrity, and that of the Athenians was, undoubtedly, remarkable for its elegance, if not also for its quality.

The workshop and tools of the smith seem to have had a close resemblance to those of the present day. There were the anvil mounted on a high block; the bellows, formed of thin boards, connected by flaps of cowhide, and expelling the air through an iron nozzle; the hammer, the tongs, the vise, and other familiar implements.

The metals used by the Greeks were obtained partly by commerce, partly from their own mines. Those at Laurion, in Attica, were important and extensive, but there is little attainable information as to the methods of mining. It is known, however, that the Athenians used both shafts and adits, and that in chambering they employed much timber. To prevent the falling in of the superincumbent mountain, there were left at intervals vast pillars, the cutting away of which was prohibited on pain of death. Among the Greeks, as well as in our own country at the present day, the miner was exposed to great perils from fire-damp and malaria; at least, this is known to have been the case at Laurion, but whether there were any means of protection against such gases is a matter of uncertainty. The quarrying of marble, granite, freestone, and tufa, for building purposes, was a flourishing industry. The last-mentioned material, in a powdered state, was often used in conjunc-

* St. John: Manners and Customs of Ancient Greece.

tion with clay, in the manufacture of bricks. Great ingenuity was displayed in the manufacture of cement, of which one variety was so durable as frequently to outlast the materials it was used to unite.

The house-painters of Greece appear to have shared in the artistic tendencies which characterized the nation. They were frequently employed in producing upon the polished surface of one stone the colors and veining of another, while frescoing appears to have been considerably practiced in the ornamentation of the interior of private houses as well as of public buildings. The walls of apartments were sometimes covered with historical subjects, landscapes or the figures of animals, and in the later ages ceilings were painted or inlaid with colored stones, so as to imitate the feathers and hues of a peacock's tail.

In house-building timber appears to have been used to a considerable extent, thus bringing into prominence the trade of the carpenter, whose tools comprised most of those used by the carpenters of the present day, such as saws of various sizes, the plane, the ax, the chisel, the square, the auger, the gimlet, the compass, and various other articles. The timber employed in the construction of houses appears to have been regulated by law, and comprised a number of varieties, such as the silver fir, the elm, cypress, cedar and juniper, the Arcadian and Idaean yew, the Euboean walnut, and the beech.

The descriptions of the household furniture in use among wealthy Greeks prove that the trade of the cabinet-maker must have been carried to a high state of perfection, while the craft of the turner yielded them many articles of great elegance. The manufacture of musical instruments was another industry in which the Greeks excelled.

The potters of Greece, especially those of Athens, Rhodes, and Samos, were famous for the beauty and excellence of their productions. The earthenware made at Kolias in Attica from the clay found at that place, and richly painted with figures in miniature, appears to have been the most beautiful known to the ancient world. Great skill and taste were displayed in the production of vases, whose light and graceful contour, as well as the exquisite beauty of their decorations, showed that the Grecian potters had cultivated to a high degree the art of design, in which the natural artistic aptitude of the race found fitting opportunities for its development. Among the figures usually painted on such articles were representations of the gods or genii, wreaths of oak leaves and garlands and festoons of flowers. The manufacture of lamps was an important branch of the business of the potter, who also produced artificial representations of fruits, and images of gods, men or animals, which were sold about the streets as plaster of Paris images sometimes are at the present day. An idea of the prices of these images is obtained from the fact that a figure of Eros sold for a drachma, or about 19 cents.

The manufacture of glass was carried to a high degree of perfection by the ancients, who were familiar with the processes of blowing, cutting, engraving, and staining it. In the latter process they could imitate the colors and the brilliancy of the most precious gems, from the ruby and the amethyst, to the turquoise and the beryl.

Of this material, it is said, they also fashioned "jars, bowls, and vases, exhibiting all the various hues of the peacock's train, which like shot silks and the breast of the dove, displayed fresh tints in every different light—fading, quivering, and melting into each other as the eye changed its point of view."

In the quality of their textile fabrics the Greeks, as well as various other nations of antiquity, appear to have been fully equal to the manufacturers of modern times; but owing to the absence of labor-saving

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machinery these fabrics, especially the finer ones, could only be produced in comparatively insignificant quantities, and the clothing worn by the masses of the people was not to be compared with that which they are able to wear at the present day.

To the Greeks is attributed the invention of the upright and horizontal loom, though these appliances were probably improvements upon somewhat ruder machines used elsewhere for the same purpose. The Achaean city of Patrae was celebrated for the fineness of its fabrics, the spinning and weaving of which appear to have been chiefly carried on by the women, who in that city were twice as numerous as the men. The supply of flax used in the finer linens manufactured there was obtained from the plains of Elis, where the plant attained a perfection which made it, in respect to fineness, the rival of the best grown in India, and for whiteness its superior. The finest linens made from it were considered worth their weight in gold. The island of Amorgos was also celebrated for a species of fine flax, cultivated there, as well as for the exquisite texture and beautiful purple dye of the linens which the inhabitants of the island manufactured therefrom. Very superior cloths were also manufactured from hemp, and a variety of garments, including a sort of mantle for ladies, were made of hair, either woven or plaited. The rearing of silk-worms and the weaving of silk were practiced at an early age in the island of Cos, the fabrics of which were universally admired. Their fineness and transparency were such as to allow the entire form and color of the body to be distinguished through them. The silk-worms of Cos were fed on the leaves of the pine, ash, and oak, and the silk obtained from them was quite different from that produced by worms fed on the leaves of the mulberry. Another kind of silk was procured from the floss-like beard of the *pinna marina*, or silk-worm of the sea, which was found on the coasts of Asia Minor, Sicily, and the Balearic Isles.

In the manufacture of carpets the Greeks displayed their usual taste and skill, both in respect to their quality and the elegance of their patterns, in which were represented trees, flowers, the figures of animals, and other objects.

The trade of the shoe-maker appears to have been a thriving one at every period of Grecian history, and the work-shops of this class of artisans were neatly furnished, their lasts, paste-pots, pincers, awls, and other implements being kept in a sort of cabinet, sometimes furnished with double folding-doors and four or five deep shelves, and extremely elegant in form.

In the art of dyeing the Greeks not merely equaled, but probably excelled, the people of the present age. Their purple, a color also produced with great success by the Phoenicians and other ancient peoples, was often spoken of by Greek and Roman authors with an admiration bordering on rapture. This dye was obtained from several kinds of shell-fish found in the Mediterranean, the best being those taken near the island on which was built New Tyre. According to Aristotle there were several varieties of the purple fish, varying in size as well as in the color of the liquid they produced. This liquid was contained in a white vein about the neck, the only part of the fish that was of any value. The coloring matter having been carefully collected and macerated in salt for three days, was then mixed with a certain quantity of water, and boiled for ten days in leaden boilers over a slow fire, when the wool, previously well washed, was dipped in the dye and left to soak for five hours. It was then taken out to be dried and carded, after which it was thrown back in the dye and left there until it absorbed the

whole of the liquid. Several varieties of the fish were usually mixed together, differences of shade being obtained by altering the proportions, as well as by the introduction of other ingredients, among which was a kind of moss, found in abundance on the rocky shores of Crete. Three distinct colors seem to have been included under the general name of purple, viz, a deep violet, with a black or dusky tinge, which was the amethystine shade which Pliny describes as so magnificent; the purple of Tyre and Tarentum, which was of a deep scarlet or crimson; and a tint resembling the dark blue of the Mediterranean Sea, when it begins to be ruffled by the winds.

A brilliant scarlet dye, which was greatly admired, was made of kermes, or cochineal. This was found in various parts of Greece, and appears to have been in use there from the remotest antiquity. Many other colors were produced in great perfection by the Greek dyers, such as bright flame and saffron color; pink, green, and russet gray; deep and sky blue, produced by woad, and red produced by madder.

In respect to the number of persons employed, and the value of their products, the fisheries of Greece ranked among the most important of her industries, while their effect in training a skilled and hardy race of seamen contributed greatly to the superiority of the Greeks in naval warfare.

The importance of agriculture, and the high esteem in which it was held among the Greeks, will give interest to a few particulars in regard to it. In Attica many of the owners of estates resided in the city, but rode out to their farms every day to superintend the labors of their workmen, who were usually slaves. Agricultural labor commenced with daylight. The meals were generally cooked and eaten in the open air, and the labor was often carried on amid rustic songs, especially during the harvest and the vintage, which were seasons of universal rejoicing, and were followed by joyous festivities in honor of the rural gods.

In order to procure the necessary implements and utensils of the farm at a cheap rate, smiths, carpenters, and potters were kept upon the land, or in its immediate neighborhood, by which means the master avoided the necessity of sending the farm-servants too frequently to the neighboring town, where they were supposed to be liable to contract bad habits. Wagons, carts, plows, and harrows were, therefore, constructed on the farm. Among other implements used by the Greek farmers may be mentioned winnowing-fans, scythes, sickles, pruning-hooks, fern or bracken scythes, hand-saws, (used in pruning or grafting,) spades, shovels, rakes, pick-axes, hoes, mattocks, and grubbing-axes. When engaged in cutting down thickets, or clearing away underbrush, the rustics wore hooded skin cloaks, leather gaiters, and long leather gloves or mittens. In choosing a plowman it was customary to take care that he should be tall and muscular, in order that he might be able to thrust the share deeper into the ground, and wield it with greater facility. It was also preferred that he should not be under forty years of age, since it was desired that he should be very steady and attentive to his work. When in particular haste to complete his task, the plowman often carried a long loaf under his arm, which, like the French peasants, he ate as he went along. In breaking sod oxen were commonly employed, but in other plowing the preference was given to mules.

In Athens it was the custom for such persons as desired employment in harvesting to range themselves in bands in the Agora, or market-place, whither the farmers resorted to secure such help as they needed for the busy harvest season. Arrived in the field with sickle in hand, it

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was common for the reapers to commence at opposite ends of the piece of grain to be cut, the members of each party striving to reach the middle of the field before their rivals. On other occasions they took advantage of the wind, moving in the same direction with it, and thus having the straw conveniently bent to their hand. In many parts of Greece the women joined in this labor, though the custom was not general. In cutting wheat the sickle appears to have been always used, but barley and other inferior grains were usually cut with the scythe. There were a variety of ways of separating the grain from the straw, of which the most common appears to have been to arrange the sheaves in a circular form to be trampled by oxen, horses, or mules, whose movements were directed by a driver standing in the center. A species of harrow, or toothed sledge, was sometimes used for the same purpose, and the flail was occasionally employed, especially in the case of grain which was laid up in the barn to be thrashed during the winter.

After these brief notices of a few of the leading industries pursued among the Greeks, it may not be amiss to reproduce an alphabetical enumeration of occupations which is given by Fosbroke in his "Treatise on the Arts, Manufactures, Manners, and Institutions of the Greeks and Romans." Omitting a few unimportant details, the list is as follows: Bottle-makers, (or makers of leathern bottles;) bankers, (money-changers or usurers;) barbers, some of them females, and barber-surgeons; basket-makers, blacksmiths and brasiers, butchers, of whom there appear to have been none at the time of the Trojan war, since the heroes of Homer are represented as cutting up their own meat; capon cutters, carpenters, and cooks—the latter being men, who were sometimes hired by the day at a high price; coppersmiths, cotton manufacturers and dealers in cotton goods, couriers, dyers, enamellers, factors, farmers, felt-makers, fishermen, fish-mongers, flax-dressers, founders, fresco-painters, fullers, gilders, glass-manufacturers and globe-makers, the globes being made of glass; glue-makers, goldsmiths, and gardeners, the latter understanding the art of grafting; grooms, hair-cloth manufacturers, horse-breakers, joiners, market-clerks, (who attended to the weights, measures, and qualities of the goods,) midwives, mountebanks, oilmen, painters, paper and parchment makers, pastry-cooks, perfumers, pilots, (a profession held in high esteem,) porters, potters, poulterers, prison-keepers, quack doctors, readers, (whose office was to read to their masters during dinner, at night when they could not sleep, and at other times,) shepherds, tanners, tutors, watchmen upon towers, wax-candlers, and weavers.

In respect to the condition and mode of life of the people by whose labor the various industries were carried on, the information afforded by the ancient writers is comparatively scanty. There were doubtless many freemen of the poorer class who worked with their own hands in carrying on mechanical and other industries in a small way on their own account, as did the spinners and weavers of Lancashire, England, and the shoe-makers of Massachusetts, before the application of machinery to their respective industries. In the agricultural districts there were also peasants, such as the Thetes of Attica, who cultivated small tracts of land, for the use of which they paid the proprietors a share—according to Bock, one-sixth—of the produce. These peasants, as well as many of those who carried on small mechanical industries on their own account, probably often worked for wages. Indeed, the Thetes are sometimes referred to as a class of hired laborers. In many cities, and especially in Athens, there were a considerable number of resident aliens who worked for hire, chiefly perhaps in the mechanical trades;

and after the Peloponnesian war Athenian citizens who had previously enjoyed comparative affluence were obliged to support themselves by working at any sort of manual labor for daily wages.

It appears to have been a special object of the polity of Solon, whose archonship commenced in 594 B. C., to increase the number of artisans and the amount of the manufactures of Athens. For this purpose he prohibited the exportation of any of the products of the soil, with the single exception of olive oil, which was extremely plentiful. He also forbade the granting of citizenship to immigrants unless they had forever abandoned their former abodes, and came to Athens for the purpose of carrying on some industrial occupation. The senate of Areopagus was directed to keep watch over the lives of citizens generally, and punish all who had no regular occupation to support them; and if a son had not been taught some art or profession by his father the laws of Solon relieved him from the obligation of supporting that father in his old age. It was the wish of this lawgiver that the exports of Athens should consist of the products of artisan labor rather than the produce of the land. This policy probably had much influence in promoting the success of Athens in manufactures and increasing the number of her free artisans.

Respecting the rates of wages it is necessary to depend mainly upon occasional indications, such as the incidental mention of wages paid in particular occupations. Lucian states that in the age of Timon (about 420 B. C.) the daily wages for garden or field labor was 4 oboli, or about 13 cents; but Beek appears to think it probable that this author refers to earlier what really belongs to later times. The same sum is mentioned by Aristophanes as the wages of a porter, and also as that of a day-laborer, who carried manure. The philosophers Menedemus and Asclepiades are said to have earned 2 drachmas (about 39 cents) a night by grinding corn in a mill; but this appears to be quite an exceptional rate of pay. The crew of the *Páralos*, one of the two sacred triremes belonging to the Athenian state, always received 4 oboli (13 cents) a day, although this vessel was usually kept in port. It may be remarked that the members of the crew were all freemen. The pay of the soldiers varied between 2 oboli and 2 drachmas a day, but the larger amount included the allowance for subsistence to a hoplite (a heavy armed soldier) and his attendant. The pay of a hoplite was never less than 2 oboli per diem, with an equal amount for subsistence. This was the customary rate in the time of Demosthenes, who calculates the cost of the subsistence of a hoplite at 10 drachmas, (60 oboli,) and that of a cavalryman at 30 drachmas (about \$5.85) a month. At the beginning of the Peloponnesian war each of the hoplites engaged in the siege of Potidea received 2 drachmas a day for himself and his attendant; and the same pay is mentioned by Aristophanes as having been asked by certain Thracian mercenaries, subsistence in each case being included in the sum named. The troops of the Athenian army operating in Sicily received 1 drachma a day, of which one-half was for subsistence, and the archers who formed the civic guard of Athens were paid at the same rate. After the destruction of Mantinea, the cities in alliance with Sparta furnished money in lieu of troops at the rate of 3 Eginetan oboli* per diem for each foot-soldier, and 12 for each cavalryman. From the instances given it will be seen that the pay of the cavalry was twice, thrice, or even four times as much as that of the infantry. Among the Athenians it was usually three times as high, and the same rule held good among the Romans.

It is said that a soldier could maintain himself sufficiently well for 2 or 3 oboli ($6\frac{1}{2}$ to 9 $\frac{1}{2}$ cents) a day, especially as living in many places

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where he had to serve was much cheaper than in Athens. The allowance for subsistence was usually equal to the pay. Out of the latter the soldier had to provide clothing and arms, and after doing this he commonly had a surplus left, which, when opportunity favored him, he frequently augmented by plunder. In this way a soldier would often amass quite a little fortune. Theopompus says that with a daily pay of 2 oboli a soldier could maintain a wife, and that with 4 oboli his fortune was complete, by which he evidently means so much pay independent of the allowance for subsistence.

The earnings of professional men, including musicians and actors, in Athens were, at least in some instances, very large. The celebrated physician, Democedes of Croton, being invited to Athens, received from the state a salary of 100 minas, or a little less than \$2,000 in gold, which for that age (540 B. C.) was a large amount. Flute-players sometimes obtained almost incredible prices for their services, and distinguished actors equally large amounts. Thus Palus, or Aristodemus, is said to have earned a talent (nearly \$1,200 in gold) in one or two days. The teachers of philosophy and rhetoric, or sophists, were also a well-paid class. Protagoras, of Abdera, the first who taught for money, charged a pupil 100 minas for his complete course of instruction, and Georgias exacted the same amount; but in later times, when the number of these teachers had multiplied, the rates of tuition were considerably reduced.

The cost of the necessities of life in ancient Greece was comparatively low, especially in the early period of Grecian history. In the time of Solon, (that is in the early part of the sixth century before the commencement of the Christian era,) the medimnus of grain (about a bushel and a half) was sold at Athens for a drachma, or about 19 cents. From that time to the time of Demosthenes there was a gradual rise in breadstuffs, as well as in most other commodities. In the days of Socrates barley-meal was worth an obolus for 4 cheenices, or 2 drachmas the medimnus. Diogenes, the cynic, mentions about the same rate as having prevailed in his day, though, in the opinion of Baek, this could only have been true in regard to the years when the price was lowest. The author just named infers from a passage in Aristophanes that about the ninety-sixth and ninety-seventh Olympiads (396-392 B. C.) wheat was worth about 3 drachmas a medimnus, which corresponds very well with the price of barley as just quoted; but in the time of Demosthenes, at least during periods of scarcity, 5 drachmas the medimnus, or about 65 cents a bushel for wheat, was considered a moderate price. Even barley must have sold as high as 6 drachmas the medimnus for a considerable period, as 18 drachmas, an extravagantly high rate, are referred to in the speech against Phœnixippus, as being three times the former price. In other Grecian states the prices do not appear to have differed very much from those which prevailed at Athens. For example, it is stated in the second book of the *Œconomies*, attributed to Aristotle, that barley-meal at Lampsacus sold at 4 drachmas the medimnus, or about 52 cents a bushel; but that the state on one occasion fixed the price at 6 drachmas, in order to make a profit on the difference. During the siege of Athens by Sulla wheat was sold as high as 1,000 drachmas the medimnus, the inhabitants being reduced to the necessity of subsisting on shoes and leathern bottles. The price of bread among the Greeks appears to be unknown. Indeed, it is probable that this commodity was usually, if not always, made at home by the women of the family or the female slaves; for though Greece, or at least Athens,

was noted for the excellence of her bread, it is not clear that there were any professional bakers who manufactured that commodity for sale.

In early times the price of meat in Greece must have been very low, as in the days of Solon an ox, probably one selected for a sacrifice, was sold at Athens for 5 drachmas, or about 97½ cents. A sheep at the same period was worth only a drachma, or about 19½ cents. During the Peloponnesian war, a sucking-pig sold at Athens for 3 drachmas, or about 58½ cents. A small sheep selected for a sacrifice is estimated in Menander at 10 drachmas, or about \$1.95; and in one instance a lot of fifty-five sheep seem to have been estimated at a value of 1,000 drachmas, or about \$3.90 per capita. If these two rates be assumed to indicate that the price of sheep in the flourishing period of Athens ranged from 10 to 20 drachmas, the price of oxen may be supposed to have ranged from 50 to 100 drachmas, or from \$9.75 to \$19.50.

The price of wine in Greece was extremely low. At Athens common wine sold at 4 drachmas the metretes, which is at the rate of about 7½ cents a gallon; and an agreement is mentioned in Demosthenes in which 3,000 casks of Mendean wine supposed to have contained a metretes each were valued at 6,000 drachmas, or at the rate of only 2 drachmas the metretes, which is less than 4 cents a gallon; yet Mendean wine (of which, however, there may have been various qualities) was used by the Macedonians in their most sumptuous entertainments. But even in those days some wines were quite expensive. Thus the Chian wine, in the days of Socrates, sold for a mina the metretes, or nearly \$2 a gallon.

At Athens, and probably in most of the Greek cities, fish, especially the smaller kinds, were abundant and very cheap, and were a favorite article of food. Ofaphnas, which were very small, a great quantity could be bought for an obolus, or 3¼ cents. The larger varieties brought a better price, and such as were scarce and were sought for by the rich as delicacies were quite high. Thus a copaic eel in the time of Aristophanes cost 3 drachmas, or about 58½ cents. At Athens salted provisions, more particularly fish, were imported in large quantities, and could be bought cheap, but they were chiefly consumed by the poorer people of the country. Vegetables, such as cabbage, are said to have been cheap. A chœnix of olives, about a quart, sold for a quarter obolus, or ¾ of a cent. The best honey cost as much as 5 drachmas the cotyla, or nearly a dollar a pint, probably an exceptional price. The warm beverage which the ancients used instead of tea cost a chalens, or ¼ of an obolus a cup, and a piece of dressed meat, prepared for eating, could be bought, according to Aristophanes, for half an obolus.

Judging by the price of houses, rents among the Greeks must have been quite moderate. The orator Isæus mentions a small house, the value of which he estimates at 3 minas, or about \$59; another at Eleusis worth 5 minas, (about \$97,) and a dwelling-house at Athens worth 13 minas, or somewhat over \$250. Demosthenes mentions a house belonging to poor people, which was pledged for 10 minas, (\$194,) and a lodging-house in the country valued at 16 minas, or about \$311. A house behind the Acropolis at Athens was valued at 20 minas, and others respectively worth 30, 44, 50, 100, and 120 minas are mentioned by various writers. The mina being equal to about \$19.44, gold, the reader can easily reduce these amounts to their equivalents in United States money. The highest price mentioned is only \$2,332.80; but as the Greek writers only mention the value of houses in an incidental way, it would not by any means be safe to infer that this sum was really the price of a house of the most expensive class. It is well

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known that the Athenian houses generally were of a very inferior kind, as might naturally be inferred from their values as given above. The only precise statement on the subject of house-rent occurs in Isæus, according to whom a house at Melite worth 30 minas, and one at Eleusis worth 5 minas, together produced 3 minas a year, or $8\frac{1}{2}$ per cent.; but, in the opinion of Boeck, this must have been below the general average, as it is considerably below the ordinary rate of interest.

In this connection it may not be amiss to refer to the value of land, which in Attica is estimated by Boeck at 50 drachmas the plethron, or about \$43 an acre. But of course prices must have varied greatly according to locality, and must also have undergone frequent changes in the course of history, increasing with prosperity and a rapid increase of population, and diminishing when war depopulated the country, or rendered the operations of agriculture insecure.

Fuel in Athens appears to have commanded a comparatively high price, 2 drachmas, or 39 cents, being in one case mentioned as the ordinary price of such a load of wood as could be brought into the city on the back of an ass. Charcoal was extensively used, and being lighter than wood, would cost proportionately less for transportation.

Of the price of clothing only an imperfect idea can be obtained. Socrates, according to Plutarch, considered an exomis cheap at 10 drachmas, or \$1.95. This was an upper garment worn by the common people, and had only one sleeve, the arm on the other side being left bare. The same philosopher mentions purple as selling at Athens for 3 minas, or a little less than \$60, and by this he is supposed to have meant an expensive upper garment of that color. Garments made of the byssus, which grew in Achaia, were sold for their weight in gold. A pair of Sicynic women's shoes could be bought for 2 drachmas, or 39 cents. Eight drachmas, or \$1.56, is once mentioned as the price of a pair of men's shoes; but this is supposed to refer to some ornamental kind much dearer than those commonly in use.

In regard to the aggregate cost of living, Boeck estimates that at Athens the poorest family, comprising as many as four free adults, if they did not live on bread and water, must have spent, upon an average, from 390 to 400 drachmas, or from \$77 to \$79 a year; and he thinks that "if, in the time of Socrates, four persons could live upon 440 drachmas a year, they must have passed a very wretched existence." Elsewhere he says that "in the flourishing times of the state one person could live but moderately upon 2 or even 3 oboli a day;" so that a workingman, who had to support a family on 4 oboli a day, must have earned but a scanty subsistence. Allowing two hundred and fifty working days to the year, 4 oboli a day would amount to only 166 $\frac{2}{3}$ drachmas a year, which is less than half the sum which Boeck thinks necessary even to "a very wretched existence."*

But the number of wage-laborers in Greece was comparatively small, a great majority of the working people being in the condition of slaves or serfs. In war the life of the prisoner was considered as forfeited, and if the captor spared him it was usually to devote him to a life of servitude, a fate which often befell persons who, in their own country,

* In this connection it may not be amiss to notice the conclusion of the able French author, Dureau de la Malle, who, after a review of the prices of commodities, the rates of wages, and the pay of troops in Greece and in Asia, remarks that the value of the precious metals in ancient times, as compared with military service, labor, and subsistence, was much smaller than has generally been supposed. "For example," says he, "the 3 oboli allowed for the subsistence of a hoplite are within 4 centimes (four-fifths of a cent) of the amount now allowed for the subsistence of a terrace-maker, a mason, or a carpenter in two-thirds of the departments of France."

had occupied stations of honor and influence. Many persons were also sold into slavery by kidnappers, who practiced their nefarious trade along the shores of the Mediterranean, as similar miscreants in modern times have done on certain portions of the African coast. As luxury increased among the Greeks the demand for slaves was such that a regular commerce in these unfortunate beings was kept up, the enterprise of the slave-traders leading them to distant parts, particularly to the southern shores of the Black Sea, where slaves could be had in great numbers. The first Greeks who engaged in this trade are said to have been the Chians, who also pursued the infamous business of making eunuchs for the eastern market. A just retribution ultimately fell upon them, when Mithridates, of Cappadocia, having conquered the island, delivered them up to their own slaves to be carried away captive into Colchis.

In Sparta the Helots outnumbered the citizens by about five to one, and Bœck estimates the ratio of slaves to citizens in Attica at very nearly four to one.*

According to an enumeration made during the archonship of Demetrius Phalerus, about 309 B. C., there were 21,000 citizens, 10,000 resident aliens, and 400,000 slaves. Bœck, however, supposes, apparently with very good reason, that this number of slaves includes women and children, whereas the number of citizens and of resident aliens includes only adult males. "This number of slaves," says the author just cited, "cannot appear too large, if the political circumstances of Attica are taken into consideration. Even among the poorer citizens it was common to have a slave for the care of household affairs. In every moderate establishment many were employed, such as grinders, bakers, cooks, tailors, errand-boys, or to accompany the master and mistress, who seldom went out without an attendant. Any one who was expensive and wished to attract attention took perhaps three attendants with him. We even hear of philosophers who kept ten slaves. Slaves were also let out as hired servants. They performed all the labor connected with the care of cattle and agriculture; they were employed in the working of the mines and furnaces; all manual labor and the lower branches of trade were in a great measure carried on by them; large gangs were employed in the numerous workshops for which Athens was celebrated; and a considerable number labored in merchant-vessels and in the fleet. Not to enumerate many instances of persons who had a smaller number of slaves, Timarchus kept in his workshop 11 or 12; Demosthenes' father 52 or 53, besides the female slaves in his house, and Lysias and Polemarchus, 120 each. Plato expressly remarks that the free inhabitants had frequently 50 slaves, and the rich even more. Philémonides had 300, Hipponienus 600, and Nicias 1,000 slaves in the mines alone. These facts prove the existence of an immense number of slaves."

It is stated by Timæus that Corinth once had 460,000 slaves, and Aristotle is authority for the assertion that the small island of Ægina had contained as many as 475,000. That the Corinthians really possessed a very large number of slaves is indicated by the fact that they were sarcastically called "chenix-measurers"—an appellation based on the common practice of measuring out grain to the slaves by the chenix, which contained a fraction less than one quart.

Among the Loerians and Phocians it is said slavery did not exist in early times, but at a later day Mnason, a Phocian, and a friend of Aristotle, is reported as having purchased a thousand slaves for his own

* Public Economy of Athens, book i, chap. vii., p. 36.

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service. His course, however, did not meet the approbation of his countrymen, who accused him of lavishing upon his slaves what would have supported an equal number of free persons.

In Sparta the citizens were forbidden to practice any trade, and, indeed, the discipline imposed by the laws of Lycurgus would have left them little time for any other occupation had they been permitted to follow it. There were, however, several classes of free inhabitants who could carry on commerce or industry, but the agricultural labor in the country throughout Laconia, as well as the menial service in the households of the city of Sparta, was left to the Helots, whose ancestors were probably Achaian Greeks who occupied the Laconian territory previous to its conquest by the Spartans, by whom they were reduced to servitude.

The following sketch of this class is taken from Grote's History of Greece:

The Helots of Laconia were coloni, or serfs, bound to the soil, who tilled it for the benefit of the Spartan proprietors certainly—probably of Perieki* proprietors also. They were the rustic population of the country, who dwelt not in towns, but either in small villages or in detached farms, both in the district immediately surrounding Sparta, and around the Perieki Laconian towns also. Of course, there were also Helots who lived in Sparta and other towns, and did the work of domestic slaves, but such was not the general character of the class. We cannot doubt that the Dorian conquest of Sparta found this class in the condition of villagers and detached rustics; but whether they were dependent upon pre-existing achaian proprietors, or independent, like much of the Arcadian village population, is a question which we cannot answer.

The distinction between a town and a village population seems the main ground of the different treatment of Helots and Perieki in Laconia. A considerable proportion of the Helots were of genuine Dorian race, being the Dorian-Messenians, west of Mount Taygetos, subsequently conquered and aggregated to this class of dependent cultivators, who, as a class, must have begun to exist from the very first establishment of the invading Dorians in the district around Sparta.

The Helots lived in the rural villages as *descripti glebe*, cultivating their lands, and paying over their rent to the master at Sparta, but enjoying their homes, wives, families, and mutual neighborly feelings apart from the master's view. They were never sold out of the country, and probably never sold at all; belonging not so much to the master as to the state, which constantly called upon them for military service, and recompensed their bravery or activity with a grant of freedom. Meno, the Thessalian of Pharsalus, took out three hundred Penestae of his own to aid the Athenians against Amphipolis. These Thessalian Penestae were in many points analogous to the Helots, but no individual Spartan possessed the like power over the latter. The Helots were, thus a part of the state, having their domestic and social sympathies developed, a certain power of acquiring property,† and the consciousness of Grecian lineage and relation of Athens or Chios. They seem to have been no way inferior to any village population of Greece; while the Grecian observer sympathized with them more strongly than with the bought slaves of other states; not to mention that their homogeneous aspect, their numbers, and their employment in military service, rendered them more conspicuous to the eye.

The service in the Spartan house was all performed by members of the Helot class; for there seem to have been few, if any, other slaves in the country. The various anecdotes which are told respecting their treatment at Sparta, betoken less of cruelty than of ostentatious scorn;‡ a sentiment which we are no way surprised to discover among the citizens at the mess-table.

The well-known hatred and fear entertained by the Spartans towards their Helots, has probably colored Plutarch's description of the Krypteia, so as to exaggerate those unpunished murders which occasionally happened into a constant phenomenon with

* "Perieki" literally means "dwellers around," and appears to have been used to designate the free proprietors residing in the Laconian towns outside of the city of Sparta.

† Kleomenes the Third offered manumission to every Helot who could pay down five Attic minae; he was in great immediate want of money, and he raised by this means five hundred talents. Six thousand Helots must have been in a condition to find five minae each, which was a very considerable sum.

‡ Such is the statement, that Helots were compelled to appear in a state of drunkenness in order to excite in the youths a sentiment of repugnance against intoxication.

express design. A similar deduction is to be made from the statement of Myron of Priene, who alleged that they were beaten every year without any special fault, in order to put them in mind of their slavery; and that those Helots whose superior beauty or stature placed them above the visible stamp of their condition, were put to death; while such masters as neglected to keep down the spirit of their vigorous Helots were punished.

The manumitted Helots did not pass into the class of Periæci—for this purpose a special grant of the freedom of some Periæciæ township would probably be required—but constituted a class apart, known at the time of the Peloponnesian war by the name of Neodamodes. Being persons who had earned their liberty by signal bravery, they were, of course, regarded by the ephors with peculiar apprehension, and, if possible, employed on foreign service, or planted on some foreign soil as settlers. In what manner these freedmen employed themselves we find no distinct information; but we can hardly doubt that they quitted the Helot village and field, together with the rural costume (the leather cap and sheepskin) which the Helot commonly wore, and the change of which exposed him to suspicion if not punishment, from his jealous masters. Probably they, as well as the disfranchised Spartan citizens, from his jealous masters, (inferiors) became congregated at Sparta, and found employment either in various trades or in the service of the government.

In making the statement that Helots were the property of the state, and were never sold out of the country, Grote is at variance with some other authors, who, on this point at least, appear to have been equally well informed. St. John, in his *Manners and Customs of Ancient Greece*, vol. iii, p. 39, says:

They [meaning the Helots] were the property of individuals, but the state reserved to itself the right of enfranchising them and preventing their emancipation, lest persons should be found who, like Marcus Porcius Cato, and the Dutch at the Cape, would sell or give them their liberty when too old to labor. But to sell them out of the country, says Mr. Müller, "was not in the power even of the state." It is true there was an ancient law prohibiting the exportation of the Helots, but the same authority which enacted that law could have abrogated it. Had Sparta then chosen to convert her Helots into an article of traffic, who or what was to prevent her? Since she arrogated to herself the right of beating, maiming, and putting them to death, though completely innocent, is it to be supposed that, had it suited her policy, she would have hesitated to sell them? And after all, are we quite certain that these unhappy people were not frequently sold into foreign lands? On the contrary, we find that a regular trade was carried on in female Helots, who were exported into all the neighboring countries for nurses. Thus it appears that the state both had and exercised the power to convert its serfs into merchandise.

That the males also were not exported like cattle, than which they were far worse treated, was owing simply to the calculation that it would be more profitable to retain them; for as the Spartans possessed estates which personally they never cultivated, the Helots, who equally belonged to them, were stationed throughout the country upon those estates, which it was their business to till for the owners. To live it was of course necessary that they should eat, and therefore a portion of the produce was abandoned to them—according to Tyrtæos, the half, a division which must have borne very hard upon them, since their numbers were five times greater than those of the Spartans.

The following is a portion of Plutarch's passage in relation to the Crypteia, to which Mr. Grote alludes with an appearance of incredulity: According to this ordinance the rulers, selecting from among the youths those most distinguished for ability, sent them forth armed with daggers, and furnished with the necessary provisions to scour the country, separating and concealing themselves in unfrequented places by day, but issuing out at night and slaughtering all such of the Helots as they found abroad. Sometimes, indeed, they fell upon them while engaged in their rural labors in the fields, and there cut off the best and bravest of the race. In "The Laws" of Plato a Spartan is reported as saying, "There is also among us what is called the Crypteia, the pain of undergoing which is scarcely credible. It consists of going barefoot in storms, in enduring the privations of the camp, performing menial offices without a servant, and wandering night and day through the whole country." The omission to mention here the slaughter of Helots as the object

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of these wanderings and their attendant privations, affords no reason to doubt the accuracy of Plutarch's statement, since a Spartan, speaking on this subject, would naturally look at it from a Spartan stand-point, and would be very likely to keep the more odious features of the *Crypteia* in the background. The extreme jealousy, and even barbarity, of the Spartans toward the Helots is attested by a number of the Greek writers, including Plato, Isocrates, and Aristotle, as well as Plutarch. Myron of Priene, in a work preserved by Athenæus, says: "The Helots perform for the Spartans every ignominious service. They are compelled to wear a cap of dog-skin, to bear a covering of sheepskin, and are severely beaten every year without having committed any fault, in order that they may never forget they are slaves. In addition to this, those among them who either by their stature or their beauty raise themselves above the condition of a slave are condemned to death, and the masters who do not destroy the most manly of them are liable to punishment." Grote himself, while throwing doubt upon Plutarch's account of the *Crypteia*, gives, without questioning its accuracy, the account of the infamous massacre which occurred in the eighth year of the Peloponnesian war, when upward of two thousand of these bondmen fell victims to the same jealous policy to which the *Crypteia* is attributed. In order to select from the ranks of the Helots those whose bravery might render them most dangerous to the state, a proclamation was issued offering emancipation to such as had most distinguished themselves in battle, and calling upon those who thought themselves entitled to it to come forward and claim the promised boon. Upward of two thousand presented themselves, were crowned with garlands, and escorted to the temples as if to complete the ceremony which was to make them free; but they never emerged, nor has the fate which overtook them ever been revealed.

Among the Athenians the treatment of slaves appears to have been comparatively humane. There was a law under which a slave could indict his master for assault and battery. Demosthenes has preserved a law which empowered any Athenian not laboring under legal disability to denounce to the *Thesmothete* the person who offered violence to man, woman, or child, whether slave or free; and there are numerous examples of men who suffered death for crimes against bondmen. Athenian slaves, moreover, enjoyed the privilege of purchasing their own freedom, whenever they could save enough out of the *peculium*, allowed them by law, to offer their owners an equivalent for their services. Yet even in Attica the slaves were at best subjected to many petty tyrannies and humiliations. Thus they were not allowed to wear long hair, or a garment with two sleeves; to drink wine except at the festival of *Pithegia*; to anoint themselves, as in the *gymnasia*, or to be present at certain religious ceremonies in which freemen could participate. The Athenian slaves were also liable to corporal punishment, sometimes in the form of whipping at the cart tail by order of a magistrate, but often also at the discretion of their owners. The slaves in the mines are said to have worked in fetters, but this may have been a temporary punishment consequent upon a revolt. The right of asylum in the temples of *Theseus* and the *Eumenides* was one of the defenses which the Athenian slave enjoyed as against the tyranny of a cruel master. This right, however, is supposed to have extended only from the time of the slave's flight until the next new moon, when the slave auction was held and the refugee had the chance of being purchased by a more humane master.

In regard to the price of slaves, there is a passage in the *Memorabilia*

of Xenophon, from which it appears that some were hardly worth half a mina, (\$9.87;) others would bring as much as 2 minas, while others sold for 5 or 10 minas; and Nicias, the son of Niceratus, is said to have paid a talent (\$1,184.62½ in gold) for an overseer of the mines. The slaves employed as laborers in the mines and those who worked in the mills had the lowest value, ranging from a mina to a mina and a half, or approximately in our money from \$20 to \$30. The price of ordinary house slaves was but little higher. Demosthenes mentions a valuation of two such slaves at 2½ minas each as being too high, and in one place alludes to the sale of a slave of this kind for 2 minas. The father of this orator had thirty-two or thirty-three iron-workers, or sword-cutters, the poorest of whom were worth over 3 minas, and the best from 5 to 6 minas. He had also twenty chair-makers, whose aggregate value was 40 minas, or an average of 2 minas each.

The difference of value between slaves who could perform only common labor and those who were skilled in some trade, probably corresponded in the main with the difference between the amounts which these classes respectively could earn for their owners. A slave in the mines yielded a profit of only one obolus (about 3 cents) a day; a workman in leather yielded 2 oboli, and a foreman of a workshop, 3 oboli per diem. The thirty-two or thirty-three iron-workers or sword-cutters of Demosthenes' father were worth an aggregate sum of 190 minas, and annually yielded a net profit of 33 minas, or 15½ per cent. on their value; while the twenty chair-makers, worth 40 minas, are said to have yielded a net profit of twelve minas, or 30 per cent. per annum. It is probable, however, that this disparity was exceptionally large, and was due to temporary causes affecting the relative activity of the two trades in question. Speaking generally, the profit on the labor of a slave must have reached a high percentage on his value, because the owner would expect to be compensated for his capital at the customary high rates of interest, and moreover would require indemnity for the danger of loss by the death, decrepitude, or superannuation of the slave, or of his escape from servitude. Of this last there was especial risk in time of war, particularly in the case of slaves that were with the armies; and this led to the institution of an insurance system first established by a Macedonian grandee named Antigones, who, for a yearly contribution of 8 drachmas, undertook to guarantee to the owner the price of any slave who was in the army, in case he should escape.

There were at Athens two classes of slaves, those belonging to the state and those of private individuals. The former were employed as vergers, messengers, apparitors, scribes, clerks of public works, inferior servants of the gods, and in other services considered unworthy of freemen. Most of the temples of Greece, like the ecclesiastical establishments of Europe in the early part of the Middle Ages, possessed a great number of slaves or serfs, who cultivated the sacred domains, performed various humbler offices of religion, and generally executed the bidding of the priests. Among the Athenians, the slaves of the republic, who were generally captives taken in war, received a careful education, and were sometimes intrusted with important duties. Out of their number were selected the secretaries who in time of war accompanied the generals and treasurers of the army, and made exact minutes of their expenditure, in order that when on their return these officers should come to render an account of their proceedings, their books might be compared with those of the secretaries.

The vocabulary of servile relations among the Greeks was very copious. There was a special name for a slave bought with money, one for a male

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slave born in the house, and another for a female; one for a slave born of a slave, and another for a slave born free. Besides these there were many names denoting the particular employment to which a slave was assigned.

When a newly-purchased slave was first brought into the house he was placed before the hearth, where his future master, mistress, and fellow-servants poured baskets of ripe fruit, dates, figs, filberts, walnuts, &c., upon his head to intimate that he was come into the abode of plenty. He then joined with his fellow-slaves in feasting on the bounties thus showered upon him, and the occasion was converted into a general merry-making.

The food of slaves, as might be expected, was usually of an inferior quality. Thus the dates grown in Greece, which ripened but imperfectly, were appropriated to their use, and if wine was given them, it was a kind made of the husks of grapes, which after they had been pressed were laid to soak in water and then pressed again. The indignities to which slaves were sometimes subjected is indicated by the practice of some parsimonious masters, who compelled them, while employed at the kneading-trough, to wear a broad collar like a wheel, which prevented them from eating the dough by rendering it impossible for them to bring their hands to their mouths.

Among the employments of female slaves were included the turning of the mills, carrying water, and sometimes the still more laborious work of cutting wood, besides the ordinary domestic occupations. A male slave usually attended his master upon a journey to carry his baggage, both traveling on foot. Some masters went accompanied by two such slaves, but this was considered a mark of luxurious habits.

There are some instances of communities, by express stipulation, entering formally into a state of slavery, but with the reservation of certain rights. Thus the Maryandinians submitted to the citizens of Heraclea, to be their perpetual serfs, stipulating only that they should always be furnished with the necessaries of life, and never be sold out of the country. The penestæ of the Thessalians also appear to have assumed their servile status by a formal compact which reserved to them important privileges, among which was that of owning property. Many of them attained considerable wealth, and, according to *Æmipides*, they were sometimes of very ancient families.

In Crete the serfs or slaves were divided into several classes. Those of the cities were called *Chrysonetæ*, or "bought with gold;" those of the country were called *Aphamiotæ*, from their being bound to the *Aphamie*, or estates of the landed proprietors. The latter are supposed to have been the descendants of the aboriginal inhabitants of the island, whom the Dorian invaders had reduced to servitude, and were sometimes called *Clarotæ*, either from the fact that they had been divided among the conquerors by lot, or else from being located on the lots of the citizens, which were called *Claroî*. The *Mnoi* or *Mnoa* were bondsmen belonging to the state, and cultivated the public lands. They were compelled to furnish the body of the citizens a certain sum of money, as well as a portion of their flocks and herds and agricultural produce. They were prohibited from carrying arms, and excluded from the gymnasia.

In the Cretan city of *Cydonia*, during certain festivals of *Hermes*, the slaves were left masters of the place, and had the right to chastise with whips any free citizen who intruded himself among them. In other parts of Crete customs prevailed similar to those of the Roman saturnalia, the masters waiting upon the slaves as domestics, while the

latter caroused and took their ease in the enjoyment of the Hermæan festival. On the whole, it seems probable that the treatment of slaves in Crete was milder than in any other Doric state.

The serfs of the Syracusans were called *Killieyrii*, and were so numerous that the expression "more in number than the *Killieyrii*" passed into a proverb. They appear to have lived in the country, cultivating the land like the Cretan *Muoa*, until at last their numbers inspired them with courage, when they assaulted and drove out their masters, retaining possession of Syracuse.

The *Katanocophori* were kept in bondage by the people of *Sieyon*, who compelled them to assume a mean and squalid appearance, and to wear sheepskin cloaks, in order that they might be deterred from entering the city by the ridicule of the rabble, to which this uncomely covering might expose them.

The serfs of the Arcadians were called *Prospelatæ*, and are said to have numbered about three hundred thousand. Their treatment appears to have been more lenient than that of persons of the same class in many other parts of Greece, since they are found at public festivals sitting at table with their masters, eating of the same food and drinking from the same cup.

Speaking in general terms, the life of a slave in Greece would appear to have formed no exception to the general experience of mankind as to the condition of a servile class. Sir William Gell's account of the residence of a wealthy Greek, "surrounded by the stable and ranges of low buildings, occupied by the servants and cattle," recalls to mind the rows or clusters of negro shanties near the spacious mansions of the wealthy southern planter; and the practice of measuring out to the slaves a daily or weekly allowance of food, which was followed upon many southern plantations, had its counterpart among the Greeks, whose white slaves were probably less liberally fed than the colored slaves of the South. According to Bœck, their diet consisted almost wholly of grain, (chiefly barley,) of which the usual allowance was a *chœnix*, or a little less than one quart per diem. Aristophanes says that the male domestics of a Greek household had one common sleeping apartment, called the *koiton*, and the beds of servants generally consisted of mats made of rushes, broom, and the down of reeds. As in our own Southern States, so in Greece, slaves occasionally lived apart from their masters, working on their own account, and paying to their master a portion of their earnings, and sometimes they were able to save enough to purchase their freedom. The aggregate number of freedmen in Greece was probably much greater in proportion to the population than in the South, where the barrier of race distinction was added to the ordinary obstacles to the elevation of the subject class.

One of the most remarkable events in the history of the working classes of Greece is the memorable measure of Solon, known as the *Seisachtheia*. When the great Athenian lawgiver came to the archonship in the year 594 B. C., he found the majority of the rural population of Attica weighed down with debt and despondency. The rich were proprietors of the greater part of the soil, which the *Thetes* cultivated as dependent tenants, paying the proprietors a stipulated part of the produce. In these payments they had fallen greatly in arrears, and thus, as well as through loans of money, had sunk so deep in debt that it was not possible for them to extricate themselves. The law gave the creditor power over the body of the debtor, as well as those of his minor sons and daughters, and thus large numbers of the *Thetes* were falling from freedom into slavery. At the same time a great number of the smaller

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properties of Attica were heavily mortgaged, and marked by stone pillars, inscribed with the name of the lender and the amount of the loan. These mortgages were in many instances foreclosed, and not only were the mortgaged lands taken from their proprietors, but the latter themselves, together with their families, were frequently reduced to slavery. On some this unhappy lot had fallen through the unjust decisions of corrupt judges, and the conduct of the rich in all their dealings with this class of people is described as having been thoroughly unprincipled and rapacious. To such a pitch had this evil arisen just before Solon became archon, that the law could no longer be enforced. It was under such circumstances that the celebrated lawgiver resorted to the measure above named. "The relief which it afforded," says Grote, "was complete and immediate. It canceled at once all those contracts in which the debtor had borrowed on the security of either his person or of his land; it forbade all future loans or contracts in which the person of the debtor was pledged as security; it deprived the creditor in future of all power to imprison or enslave or extort work from his debtor, and confined him to an effective judgment at law authorizing the seizure of the property of the latter; it swept off all the numerous marked pillars from the landed properties in Attica, and left the land free from all past claims; it liberated and restored to their full rights all those debtors who were actually in slavery under previous legal adjudication, and it even provided the means—we do not know how—of repurchasing in foreign lands, and bringing back to a renewed life of liberty in Attica, many insolvents who had been sold for exportation. And while Solon forbade every Athenian to pledge or sell his own person into slavery, he took a step further in the same direction, by forbidding him to pledge or sell his son, his daughter, or an unmarried sister under his tutelage—excepting only the case in which either of the latter might be detected in unchastity."

One of the most beneficent provisions of the above law was that which forbade all future loans or contracts in which the person of the debtor was pledged as security; but although this remained in force in Attica, the lending of money upon the body of the debtor continued to be practiced in other Grecian states; while even the pledging of agricultural implements was forbidden.

An interesting subject to treat in this connection would be the provision made for the poor in the Grecian states. It will be sufficient, however, to say that in Athens, at least, the habit of depending on the state for assistance appears to have been one of the first decided symptoms of the decay of the commonwealth; while there, as well as elsewhere, and particularly in Sparta, the concentration of wealth in few hands, and a great increase in the number of the dependent poor, were quickly followed by a decline in the old manly qualities of the people, and diminished at once their ability and their disposition to defend their civil liberty and their national independence.

LABOR IN ROME.

What has been said as to the condition of the industrial arts in Greece will apply in the main to their condition in Italy during the history of ancient Rome. From the rude state in which they are found in the early days of the city, they progressed in the course of centuries to a high development; and if the Romans themselves possessed in a very inferior degree the artistic faculty for which the Greeks were so distin-

guished, they enjoyed in industry and art, no less than in philosophy and letters, the assistance of Hellenic genius.

It is impossible to treat of labor and the condition of the working-classes among the Romans, without referring to the political status of the plebeians, the history of whose struggles for a humane law of debtor and creditor, for a fair division of the public lands, and for the prerogatives of citizenship, is virtually the history of the early struggles of the working-people of Rome for the rights of men.

The members of this class probably comprised the descendants of conquered tribes originally inhabiting the district in which Rome was founded, as well as those in the surrounding region, who at a somewhat later date voluntarily placed themselves under the powerful protection of that city; and in early times, particularly under the kings, they were doubtless subjected to severe oppression. They were admitted to no share in the government, or in the social and religious rights which belonged to the privileged order; but, from the earliest times of which we have any account, they were distinguished from the slaves of a Roman household by the possession of personal freedom, the right to hold property, and the liberty (which was denied to the aristocratic order) to exercise handicraft trades for their own benefit. Their immunities, however, were at first secured to them, not by law, but by the protection of the patricians, toward whom they occupied, individually, the position of clients. Thus every plebeian was originally the client or dependent of some patrician; but gradually they acquired recognized civic rights, and the status of "client" was transferred to subjects of more recent acquisition, to whom no rights of citizenship had as yet been accorded.

The sixth of the kings, Servius Tullius, is said to have divided the lands which he had won from the Veians and Etruscans among the plebeians, whom he also sought to elevate politically by the creation of a new general assembly—that of the *centuries*, in which both classes should be comprehended. The plebeians, however, do not appear to have acquired any material increase of political power from this measure. In the early years of the republic the patricians generally figure as men of family and civic honors, residing in the city, but holding domains in the territory belonging to the state, which at this period appears to have been monopolized by the patrician order. The plebeians at the same time appear to have been small farmers and tradesmen, mechanics, &c., while they also, as in earlier times, contributed their full quota to the armies of the state. Their poverty often reduced them to the necessity of borrowing from their patrician superiors, whose incomes were in many cases largely derived from usury. The creditor had the power to enslave, imprison, scourge, starve, or even take the life of the debtor who failed to meet his obligations; and if there were several creditors of one person, they could, if they chose, divide his body among them. Instances of extreme cruelty, such as beating, imprisonment in loathsome dungeons, and slow starvation, were not infrequent, while many unfortunate debtors were sold into slavery or reduced to servitude under their creditors. The harshness of the law, and of the manner in which it was enforced, seemed all the more outrageous in view of the fact that the inability of the debtor to meet his engagements often arose from his having to neglect his own affairs while performing military service for the state in wars which the patricians had provoked. It was a case of this kind which formed the immediate occasion for the secession of the plebeians to the Mons Sacer, sixteen years after the expulsion of the kings; that is, A. U. C. 260. A veteran who had served his country with honor and lost his property in the wars, having been scourged by

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his creditor, exhibited his gory back to the populace, whose indignation first found vent in the summary release of those who were enslaved for debt, and then in the manner above indicated. At the point mentioned, which was distant two miles from Rome, at the confluence of the Tiber and the Anio, the plebeians, who had chosen themselves generals, and marched out under arms, threatened to settle and found a new city. The patricians were at first disposed to set them at defiance, but in the end listened to wiser counsels, and decided to make terms with them rather than allow the commonwealth to be split asunder. It is believed that on this occasion was founded the *Tribunate of the Plebs*, the people acquiring the right of nominating two tribunes annually, who were to have a veto upon the decrees of the senate and to protect the personal liberty of the commons, for which purpose they were to keep their houses open day and night to receive every application for assistance.

According to Livy and Cicero, this secession did not result in a remission of debts or in a change of the law of insolvency; yet it is noticeable that the relation of debtor and creditor no longer forms the chief subject of contention between the two orders, from which it seems probable that some amelioration in the condition of the former class was secured. Nearly half a century later a law of the Twelve Tables provided that the debtor should be allowed thirty days within which he might, through the help of his friends, or the pity of the populace, acquire the means of meeting his obligations. At the end of this period, if he had not succeeded in obtaining the required amount, he was delivered to the creditor, who put him in chains and brought him before the praetor on three consecutive market days, the amount of his debt being published, in the hope that some rich spectator would take pity on him and discharge his debt. In the absence of such relief he was sold into slavery, or his head might be exacted as the forfeit of his poverty. Gradually, however, the extreme severity of the law was relaxed, and in the year of the city 424 it was decreed that in future the person of no Roman citizen should be liable to slavery, but that his property alone should be subject to seizure. The debtor might, however, be committed to prison, and to avert this fate many voluntarily became the slaves of their creditors, though, probably, with certain reserved rights obtained by special stipulation.

The distribution of land, which in all past times has had the most intimate relation to the well-being of the working classes, was long the subject of fierce contention between the patricians and plebeians at Rome; and the members of the former class did not scruple to resort to the most extreme measures in defense of their monopoly. As the republic extended her dominions a portion of the territory of each conquered tribe was colonized by Roman citizens, who were thus bound by their interests, as well as inclined by sentiment, to defend the new acquisition. Considering how circumscribed was the original territory of Rome, this mode of disposing of her surplus population must have contributed much to the industrial prosperity of her people, at the same time that it formed a most important element in the polity by which she consolidated her growing power. The following account of the manner in which the Romans disposed of the lands acquired from the conquered is taken from Fosbrooke's "*Treatise on the Arts, Manufactures, Manners, and Institutions of the Greeks and Romans*:"

These lands were not gratuitous; if the colonist had not sufficient money to purchase the portion which fell to him he farmed it for the benefit of the commonwealth, or of some superior tenant. But this regulation regarded the cultivated lands; those which were waste, or which lay on an exposed frontier, were generally gratuitously

conferred; yet like the rest they were subject to the burdens of the state; thus they annually yielded one-fifth of the produce of the trees, one-tenth of the grain, and a certain tax for cattle. The quantity of this public land in each colony varied according to the conditions on which the colony was originally secured. If the natives had voluntarily submitted, two-thirds of the territory were generally left to them, one-third only being divided among the victors. In no case, however, do the people appear to have possessed more than seven jugera each;* where the territory was much circumscribed, only two; the surplus remained at the disposal of the state, and was either farmed for its benefit, or, if more defenders were necessary, it was assigned to new settlers. In general, however, there was always a considerable portion unassigned. For what follows, the reader will be prepared. This surplus was soon engrossed by the patricians, who farmed the revenues arising from it, viz. who offered so much for the produce of the soil for five years, the period for which the public lands were invariably let; at the end of the five, they had only to renew the contract. If to this we add that by judicial forfeiture, in default of issue, and through other causes, the portions of many among the resident coloni would devolve to the state, we shall not be surprised that the territory which the patricians took such care to engross was greatly augmented. In the same degree we shall be prepared to expect the diminution of the allotments originally made to the *coloni*. As the members of each family multiplied, as the children were admitted to co-inheritance, the portion originally held by each (it was two jugera in the immediate vicinity of Rome, and seven in the more distant colonies) would be split until the multiplied portions would be inadequate to the support, not merely of a family, but of an individual. We cannot, therefore, wonder at the complaints which, from the third century after the foundation of Rome, were so loudly uttered, that the patricians held most of the public land, while the plebeians were generally reduced to utter destitution. Nor was this the worst. The patricians, as the heads of government, showed a shameful partiality to their own order by exempting their lands from the burden of the one-tenth to which they were liable, while those of the plebeians remained subject to it. * * * Among the *agri* (public lands) there were many distinctions corresponding to their nature and uses. The *ager campescens* was the common or pasture land to which we have alluded; the *ager decumanus* was the tillable land, that is, the public land subject to the annual tenth of produce required by the state. All Sicily was in this predicament. "*Omnis ager Siciliæ decumanus est*," says Cicero. The *ager affatus* was the place where the Angurs unfolded the fates. The *ager occupatorius*, which was vacant, whether in virtue of default by inheritance or by revocation, or by judicial forfeiture, might be occupied by any one who farmed it from the state, or to whom the state conceded it. In fact the highest bidder was generally preferred at the end of a *lustrum*, and would indeed always have been preferred had not the more powerful nobles combined to intimidate other bidders, and, consequently, to obtain it on their own terms. The *ager vestigialis* was the land which paid money-rent, on the condition of receiving the produce in kind; the tenth of the corn, the fifth of the orchards, flocks, cattle, wool, &c. Any one who offered at a public auction the highest price during five consecutive years for the produce of a district comprised in the limits of the agrarian law, was, under ordinary circumstances, the successful bidder. He paid in money for the produce yielded by the land, and for the privilege of disposing of it at pleasure; and he always gave sureties for the punctual fulfilment of his engagement.

In the year of the city 269, the first agrarian law was proposed and carried by Spurius Cassius, but its execution was thwarted by the patricians, who ultimately wreaked their vengeance on its author by an accusation that during his consulship he had made too favorable terms with the national enemies, and had sought to make himself tyrant of his native city, upon which charges he was declared guilty, scourged, and beheaded. The tribune Cenucius (A. U. C. 286) made an effort to secure the same end—a more equitable distribution of the public lands—and presented an impeachment against the consuls for having frustrated the provisions of the law; but he, too, appears to have fallen a victim to patrician malice, being suddenly found dead in his bed. In the account which Livy gives of the agrarian agitation of this period, he represents the tribunes as proposing a series of laws, all of which were successfully resisted by the patricians, whereas Dionysius of Halicarnassus states that during the consulship of Spurius Cassius the senate passed a general law for the division of the public lands, but that the

*The jugerum was 28,000 square feet, or about $\frac{1}{16}$ of an acre.

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successive consuls would never carry it into effect. He represents that a solemn compact between the senate and the plebeians was broken, and that the efforts of the tribunes were exclusively directed toward procuring the execution of the existing law. It is evident, however, that the plebeians continued to gain strength, and in the year of the city 377, (B. C. 377,) the tribunes, Licinius and Sextius, were able to carry an agrarian law by which it was provided that no citizen should hold (or farm the revenues of) more than 500 *jugera* (about 320 acres) of the public lands. From those who held more than this quantity the aediles were to take the surplus and divide it among the plebeians at the rate of seven *jugera* to each family. The same law limited the number of slaves who might be employed on the lands so divided, and enjoined on the holders of land the employment of Italians and free-men. It also enacted that no citizen should turn into the common pasture more than one hundred head of cattle, or five hundred of sheep, &c., each to be subject to a certain tax payable to the public treasury.

It was during the same year that the plebeians achieved the great charter of their liberties in the decree that one of the consuls should always be a member of their order; but it was not until the year 388 that a plebeian consul was formally appointed, Sextius himself being the first to hold the office. The triumph of the plebeians became still more complete in the year 415, when the plebeian dictator, Publilius Philo, carried enactments making the decrees of the popular assemblies (comitia of the tribes) obligatory on the whole people,* permitting both of the consuls as well as the praetors to be plebeians, and requiring that the censors should be chosen, one from each class.

From this time the two orders were substantially merged into one; but as the dominion of the republic was extended over adjacent states, the newly-conquered Italians fell into a position somewhat analogous to that which the plebeians had formerly occupied, though distinguished from the latter by very marked differences. Indeed the military necessities of the state dictated a policy calculated to consolidate the inhabitants of the peninsula into one nation, and inclined the Romans to advance them gradually to a participation in civic rights.

The three centuries intervening between the secession of the Plebs to the Mons Sacer, (A. U. 260,) and the entrance of the legions into Asia eleven years after the close of the second Punic war, embrace the finest portions of Roman history, when considered with reference to the virtues of the people. During this period there were, indeed, instances of luxury and extravagance, but labor was held in honor, and poverty was often dignified with the highest stations. "If, on the one hand," says Duruy, (*Histoire des Romains*), "a Rufinus must be degraded from the senate, (B. C. 275,) notwithstanding his two consulships, a dictatorship, and a triumph, for possessing ten pounds of silver plate when he was allowed no more than eight ounces; if the consul Posthumus compelled 2,000 legionaries to reap his corn, or to clean his woods; Atilius Serranus, on the other, received the consular purple behind his plow; Regulus, though twice consul, possessed no more than one little field in the barren district of Pupinia; and Curius, like Fabricius and Æmilius Papus, prepared his simple meal with his own hands, in wooden vessels. The same Curius refused the gold of the Samnites; Fabricius that of Pyrrhus; and Cineas, (the ambassador of the latter,) introduced in the

* It is held by some authorities that these decrees or *plebiscita* did not acquire the full force of laws until the adoption of the *Lex Hortensia*, in the year 406, or B. C. 284; and it is at least evident that this measure either gave to the *plebiscita* increased weight, or enlarged the number of objects with reference to which they might be adopted.

senate, imagined that he saw before him an assembly of kings. * * * There was union because there was equality; because an aristocracy of blood was no longer recognized, nor was more honor paid to that of fortune." Cincinnatus, once consul and twice called to the dictatorship, after delivering his country from her enemies, retired to his little tract of land, (only four *jugera* in extent,) upon which he maintained himself by the labor of his own hands. Fabricius, consul and victorious general, cultivated his one little field without the assistance of slaves; and Manius Curius, the conqueror of Pyrrhus, refused the share of booty and the fifty *jugera* of land offered by the people in gratitude for his great services, deeming such liberality excessive. He thought it a reproach to a senator, an ex-consul, or even a victorious general to whom a public triumph had been accorded, to possess more than fifty *jugera* of land, and regarded as dangerous to the state that citizen for whom even seven *jugera* would not suffice. Accordingly the latter quantity was all he would himself accept, this being the amount of land then assigned to each plebeian family. In the year of the city 496, Regulus, then commanding the army in Africa, wrote to the senate, asking for his recall, on the ground that the manager of his seven *jugera* at Pupinia was dead; that the hired man had run away, carrying the farming-implements with him, and that unless his farm was cultivated he would be unable to support his wife and children. The senate ordered his land to be tilled, and his farming implements to be replaced at the expense of the state, which also assumed the responsibility of providing for his family, leaving him in Africa to conquer a peace with Carthage. "In those happy times," says Pliny, "the earth, exulting to see herself cultivated by the hands of triumphant victors, seemed to make new efforts, and to produce her fruits in greater abundance."

From such instances as have just been given, coupled with the minute division of the soil which is known to have prevailed during the period under consideration, it may be inferred that although there were slaves and hired laborers among the Romans at that time, the labor of the country (especially in agriculture) was mainly performed by free citizens working on their own account. Their labor may have been severe and their mode of living far from luxurious, but in their enjoyment of personal independence the men among whom the conquering legions of Rome were recruited must have occupied a position vastly superior to that of the proletariat of modern times. As late as the year of the city 575, the cultivation of the soil was almost exclusively performed by proprietors and free laborers. This is positively stated by Cato the elder, who in the same connection, says: "Our fathers, when they wished to designate a good citizen, were accustomed to refer to him as a good colonist (one settled on the public lands) and a good farmer; for these are the laborers who furnish the bravest and most robust soldiers. The profit which is derived from the cultivation of the earth is the most honorable, the most durable, and the least calculated to give cause for censure or excite envy." Cato himself is represented as having worked in the fields with his men, with whom he also sat at table, eating of the same food and drinking of the same wine.

But in the later years of his life (which terminated A. U. 605) the simple habits of Cato were a protest against the incoming tide of luxury and corruption rather than an indication of the manners of the period. The severe and protracted struggle with Carthage, (the second Punic war,) which closed A. U. 553, was quickly followed by the wars with Philip, Antiochus, and Perseus. Greece, Asia Minor, and Syria were

speedily brought under her lap. The fields were the moneyed former time by victorious extensive domain all but composed of the great thousands of found profit crafts, by thousands, of bread occasionally.

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speedily brought under the sway of Rome, and poured their wealth into her lap. The small homesteads whose proprietors had fallen on distant fields were rapidly merged into larger properties and monopolized by the moneyed aristocracy of Rome, who replaced the free cultivators of former times with slaves purchased in foreign markets, or brought in by victorious commanders as a part of the spoils of war. Throughout extensive districts, particularly in Southern Italy, this substitution was all but complete; while in other sections of the country the competition of the great landholders and their hordes of servile laborers drove thousands of small proprietors from an occupation which they no longer found profitable to seek a subsistence by "petty merchandise and handicrafts, by the sportula,* or by the distributions, wholly or in part gratuitous, of bread, wine, and oil, made regularly by the state, and enhanced occasionally by magistrates, or candidates for the magistracy."

It was under such circumstances that Tiberius Gracchus, traversing the plains of Etruria, and observing with dismay the decline of agriculture, the substitution of pasture for arable land, and the frequent abandonment of fields and farms, conceived the idea of obtaining the passage of a new agrarian law. Elected tribune in the year of the city 621, he succeeded in this design, but was killed, together with three hundred of his adherents, in the tumults precipitated by the effort to carry the law into execution. His younger brother, Caius, was for a time the successful leader of the popular party, and succeeded in obtaining important reformatory legislation; but he, too, fell a victim to the vengeance of the Roman plutocracy, and in the course of fifteen years the measures of the Gracchi were formally repealed.

That the lapse of the half century ending about this time witnessed a very great change in the industrial organization and social condition of the Roman people admits of no doubt. The splendid military organization of the republic still remained, but it was destined soon to become the master rather than the servant of the people. Within a century and a half from the entrance of the legions into Asia, Rome received her first emperor, and thenceforward the ascendancy of the military over the civil power became only the more firmly established as time wore on. More than once in the course of succeeding centuries the senate, which in the eyes of the ambassador of Pyrrhus had seemed an assembly of kings, meekly accepted the ruler selected by the praetorian cohorts,† while at a later day armies recruited from distant provinces, and serving perhaps on the remotest frontiers of the empire, competed for the honor of dictating to the "mistress of the world" the wearer of her imperial purple. Under Augustus and Tiberius the empire was indeed great, prosperous, and in the main well governed. After a long eclipse its glory was restored under Vespasian and Titus, to be again obscured

*This was a gift of victuals made daily, usually in the morning, by the rich to a certain number of dependents. In one of the satires of Juvenal may be found a lively description of a great man's vestibule crowded with dependents, each attended by a slave bearing a portable kitchen to receive the viands and keep them hot while they were carried home. If the sketches of the satirist are not too highly colored, we must conclude that in his time great numbers of the lower classes derived their whole subsistence from this source, while even the high-born did not scruple to increase their income by taking advantage of the ostentatious profusion of the rich and vain.—(Anton's Dictionary of Greek and Roman Antiquities.)

†The praetorians were a body of troops instituted by Augustus to protect his person, and called by that name in imitation of the *praetoria cohors*, or select troop, which attended the person of the *praetor* or general of the Roman army. Their original number was nine or ten thousand, which was subsequently increased to sixteen thousand. Their favor was courted even by the most powerful of the emperors, many of whom were their own creatures, and liable to be deposed or put to death at their pleasure.

under Domitian, shine out anew under Nerva, and remain undimmed throughout the long and illustrious reigns of Trajan, Hadrian, Antoninus, and Aurelius. But the ancient freedom of the people existed no longer, and the character of the government depended mainly on the personal qualities of the sovereign.

SLAVERY IN ROME.

That this great change in the political condition of the Roman people was largely promoted by the increase of slavery and the concentration of wealth there is no room for doubt. It is probable, however, that the number of slaves was never so large as the language of a majority of writers on Roman history would lead one to infer. In the earlier centuries of the republic the number was comparatively small, as has already been indicated. It is estimated by Dureau de la Malle, in his "Political Economy of the Romans," that in the year of the city 529 the free population of that portion of Italy corresponding to the duchies of Modena and Lucca, the grand duchy of Tuscany, the States of the Church, and the late kingdom of Naples, (exclusive of Sicily,) was to the slaves, freemen, and *peregrini** combined as 26 is to 23. Varro, writing fully a century later, and after the number of slaves had been largely increased, states that "all the lands are cultivated by freemen, or slaves, or a mixture of these two classes. The freemen cultivate their lands either with their own labor or that of their children, (as is the case with most of the small proprietors,) or by the employment of hired men and day-laborers during the busy seasons, such as haying, harvest, and the vintage, or by using the labor of *operarii*, (persons who sold their services for a stipulated time in payment of debt.) * * I say of all the lands in general," continues Varro, "that it is more profitable to cultivate the unhealthy districts with paid workmen than with slaves, and that even in healthy localities the heavier labors of the country, such as the harvest, the gathering of fruits, and the vintage should be committed to wage-laborers." A law of Julius Caesar required stock-raisers to employ free inhabitants of the country to the number of one-third of their sheep-herds and herdsmen, the object being to arrest the decline of the free population, which was probably more rapid and more noticeable in the grazing districts than in other portions of the country. It has already been said that the substitution of slaves for free laborers and small proprietors was at first most extensive in the southern part of the peninsula; and it appears from the testimony of the younger Pliny that in cisalpine Gaul, at least in that portion adjacent to Lake Como, slave-labor was not commonly employed, even in the time of Trajan. Indeed, the statement of Pliny is that the use of slaves in agriculture was absolutely unknown in that part of the country. In the towns and cities they were largely employed by capitalists in carrying on trades and manufactures, one citizen of Rome having had as many as five hundred employed in the various trades connected with the erection of buildings. The domestic service in Roman households, as well as in those of the other cities of the peninsula, was performed almost exclusively by persons of this class, from the *ancille* or personal attendants of a wealthy mistress to those engaged in the coarsest drudgery. In thrifty families the domestic work included a large amount of spinning and weaving, as well as the making of garments—labors which were superintended, and to some extent shared, by the mistress herself.

*The *peregrini* embraced those classes of free residents who were not Roman citizens.

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Among a people who, at one period of their history, gave to the creditor the power to imprison, starve, scourge, or even take the life of his debtor, it was not to be expected that the laws would afford any systematic protection to the slaves. Cases there were in abundance where slaves were treated with kindness, and even pampered in luxury, but the class, as a rule, were subject to severe oppression and hardship. We read of their working in the field in chains, guarded by armed retainers of the great proprietors, their owners, while at night they were huddled in crowds into buildings which were at once dormitories and prisons. This close guard was, perhaps, most common in the cases of large gangs of slaves who had been recently imported. Speaking of the general treatment of this class, Dureau de la Malle says: "The masters imposed on their slaves a rigorous celibacy, and they were never permitted to enter into matrimonial relations with the free classes. The moderate price of adult slaves made it more profitable to buy them than to bring them up. Considered as beasts of burden or of draught, they were either used or abused at the pleasure of their masters. The inhuman calculation of avarice found profit in destroying, by excessive labor, an animated machine, which it was sure of being able to replace at a small cost. Very often (horrible thing to contemplate!) they were profitable to their masters in proportion to the pitiless severity of their servitude." In the same connection he describes them as being "ill clad, ill lodged, ill fed, and condemned to work in the mines, to grind wheat and other grains, (by hand,) and to perform the severest and most unhealthy labors, in the marine, in manufactures, and in the various processes of industry." In the time of Varro the custom of forbidding marriage among the slaves appears to have been somewhat modified. "As to those who tend the flocks in the mountains and in the woods," says this author, "many proprietors have thought it advantageous to assign them wives, who follow the flocks, prepare the meals of the shepherds, and render them more attentive to their duties. But it is necessary that these women should be robust, of good constitutions, and equal to men in their power of enduring labor."

Among the Romans, as well as in more recent times, the prices of slaves of course varied according to the relation of demand and supply, and according to the age, sex, health, strength, beauty, intelligence, and disposition of the slave; but the medium price of a slave adapted to agricultural labor, or the practice of one of the common mechanical trades, is all that need be here considered. In the following sentence Pliny indicates the usual price of slaves in his time, and also that of a slave valet of a soldier of the Legion of Honor. "So, then," says he, "they sell a bird at the price of a slave, and even for more than the price of a valet, for a white nightingale is sold at 6,000 sesterces," (about \$227.) Plutarch states the average price of a slave employed in agricultural labor in the sixth century of Rome at 1,500 drachmas, or about \$296. Pretronus and Fortunatianus mention 1,000 denari, or say \$150, as the reward offered at Rome for the return of a fugitive slave; but this only shows that the value of the slave, for whom the reward was offered, was considerably in excess of \$150, and is all the more indicative from the fact that the occupation of the slave is not mentioned. The price of a slave in the time of Antoninus and Commodus is indicated by the following expression of Sævola: "Si debeas decem millia (H.S.) aut hominem;" which implies that 10,000 sesterces, or, say, \$380, was about equal to the price of a man. Juvenal appraises a fisherman at 6,000 sesterces, and Horace estimates the value of a burnisher at Tibur at 8,000 sesterces. A law of Honorius and Theodosius, dated in

the year 409, provided that Romans sold as slaves who desired to recover their liberty, should either pay to the purchaser the price he had given for them, or else should give five years' labor. From this Dureau de la Malle infers that the price of a slave was then equal to five years' labor; but as the purchase of a slave ordinarily implied the purchase of all his labor to the end of his life, the law in question must have been intended to prevent the perpetual enslavement of the class of persons referred to. Such a law would necessarily limit the price of slaves entitled to its benefits to the equivalent of five years' labor; but the inference that this was the ordinary market price at the time the law was enacted, is contrary to probability.

Allusion has already been made to the enfranchisement of slaves, which frequently took place in the ancient world. In Rome, during the first three centuries of the republic, the number of enfranchisements appears, however, to have been somewhat limited. Dureau de la Malle estimates the number of freed people in the year 529, in a total population of nearly 5,000,000, at 50,000; but with the increase in the number of slaves there came an increase in the number of enfranchisements; and in the latter days of the empire, especially after the adoption of Christianity, the number of freed-people was very large.

FREE LABOR.

It has already been shown that in the best days of the republic the labor of agriculture was in great part performed by small proprietors, working on their own account, many of whom were among the most eminent citizens of the state. In the mechanical trades the case was different, such occupations being forbidden to those who enjoyed full citizenship, and left to the slaves, freedmen, and *peregrini*.

The data from which to determine the wages of free labor in the earlier period of Roman history are very meager; but some idea of the prevailing rates may be gathered from what is known as to wages among the Greeks, and in the Greek colonies of Southern Italy at this time. M. Dureau de la Malle reaches the conclusion that from the close of the Peloponnesian war, (B. C. 404 and A. U. C. 350,) the price of a day's work for a hod-carrier, farm-hand, gardener, miller, carpenter, or mason, was scarcely one-third less than the average price of the same kind of work in France at the time he wrote, or, say, between 1830 and 1840. The wages of miners in the year of Rome 710 have been estimated at about 9½ cents a day; this estimate being based upon a passage of Polybius, in which that author states the product of the labor of 40,000 men employed in the silver-mines of Carthagea, in Spain, at 25,000 drachmas a day. An inscription found at Eskihiissar, in Asiatic Turkey, (supposed to be the ancient Stratoniceia,) preserves an edict* issued by the Emperor Diocletian in A. D. 301, or, according to some authorities, in A. D. 303, which established a schedule of prices for a large number of articles, as well as for various kinds of labor, and forbade any person to charge more than the fixed rates on pain of death. The denomination of the money in which the various prices are stated is expressed by the sign ✕, which has been decided to represent the denarius. It is evident, however, that this cannot be the denarius of silver, which between A. U. C. 485 and 707 varied from 3½ to 15 cents; and Dureau de la Malle, agreeing with the learned Italian antiquarian, Count Borghesi, is undoubtedly correct in believing it to be the denarius

* A portion of the same edict was found by Mr. L. Vescovoli, of Rome, on a stone in the possession of a gentleman residing at Aix, in Savoy.

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of copper, of which the first mention occurs in the works of Flavius Vopiscus, who lived at Rome at the time of Diocletian and Constantine Chlorus. The value of this coin was about half a cent in our money, and it is at this rate that the prices of labor fixed in the edict referred to are converted in the following table :

To the agricultural laborer, per diem.....	\$0 12½
To the stone-mason.....	25
To the laborer on inside work in houses.....	25
To the maker of mortar.....	25
To the worker in marble.....	20
To the worker in mosaic.....	20
To the wall-painter.....	25
To the figure-painter, per diem.....	25
To the coach-maker.....	75
To the ironsmith.....	25
To the baker.....	25
To the shipwright on sea-vessels.....	25
To the shipwright on river-vessels.....	30
To the driver of a camel, an ass, or a mule of burden, with food.....	25
To the shepherd, with food.....	10
To the sheep-shearer, with food, per head.....	10
To the brazier for work on hard brass, by the pound.....	01
To the brazier for work in copper, by the pound.....	01
To the maker of plastic images, with food, per diem.....	03
To the water-carrier, with food, per diem.....	25
To the scavenger, with food, per diem.....	12½
To the armorer for restoring the edge to a sword.....	12½
To the armorer for polishing a helmet.....	12½
To the armorer for repairing an ax.....	12½
To the tailor for lining a fine vest.....	05
To the master for an edging on a coarser vest.....	03
To the master appointed to teach letters, for each boy, per month.....	62
To the arithmetician, for each boy, per month.....	25
To the librarian or antiquary, for each scholar, per month.....	37½
To the Greek or Latin grammarian, and to the geometrician, for each scholar, per month.....	25
To the orator or sophist, for each scholar, per month.....	1 60
To the advocate or lawyer for an application to the court.....	1 60
To the same at the hearing of the cause.....	1 25
To the servant attending at the public baths and taking care of the clothing of the bathers, for each bath.....	10 00
	01

A passage of Plautus indicates that previous to A. U. C. 536, the pay of an infantry-man in the Roman army was three *ases* per diem; but it is believed that the real amount was $3\frac{1}{2}$ *ases*, or 100 *ases* per month. The *as* originally contained a Roman pound of copper, (about .72 of a pound avoirdupois;) but for thirty or forty years prior to A. U. C. 536, its weight had been two ounces, and hence it is probably the *as* of this weight to which the author above-named refers. This coin was subsequently reduced to an ounce, and still later to half an ounce, but the pay of the soldier was maintained at one-third of a *denarius*, or about 5 cents per diem. Polybius, who wrote his history in the early part of the seventh century of Rome, (thirty or forty years before the Papirian law reduced the weight of the *as* to half an ounce,) states that the daily pay of the Roman soldier was then 5 *ases*. This would be five-sixteenths of a *denarius*, but the actual pay was probably one-third of a *denarius*, or $5\frac{1}{2}$ *ases*, the writer having fallen into the common practice of neglecting to give the fraction. Suetonius makes the statement that Julius Caesar doubled the pay of the troops, and the rate fixed by this ruler appears to have been maintained at least until the death of Augustus, when, according to Tacitus, the pay of infantry-men was 10 *ases* or five-eighths of a *denarius* per diem. Their pay was further raised

under Domitian to $13\frac{1}{2}$ *ases* or five-sixths of a *denarius* a day, which was equal to 25 *denarii*, or about \$3.75 per month.

These successive augmentations of pay were due to various causes, among which may be mentioned the depreciation of money in consequence of its increased abundance, the decay of agriculture, and the falling-off in the free population. In the latter days of the empire the increasing disinclination of the citizens to engage in the military service made it necessary to pay still higher rates, but as these rates had little relation to the wages of labor it is not necessary to inquire into them.

In regard to the cost of the chief necessities of life, the information afforded by Roman authors is scarcely more abundant or satisfactory than that which relates to wages. The price of wheat, however, is given for various epochs. Thus Pliny states that in A. U. C. 298, 327, 345, and 501 wheat was furnished to the people by the authorities at 1 *as* per modius; but up to the year of the city 485, if not later, the *as* was one Roman pound of copper, or about .72 pound avoirdupois, whereas between that date and A. U. C. 665 it was gradually reduced to half an ounce, or one twenty-fourth of its original weight. From this it results that the prices sometimes mentioned as having prevailed in early times seem much lower than they really were. The modius being a measure of very nearly one peck, the cost of a bushel of wheat would be about 2.88 pounds of copper, which is equivalent in weight to about 120 of the copper cents of the United States, such as were coined under the act of January 18, 1837; its value in silver or gold could only be determined by ascertaining the relative values of the three metals at the dates mentioned.

In the *Oratio Frumentaria* Cicero states that the price of wheat in Sicily, in the times of Verres, fluctuated between 15 and 18 sesterces the medimnus, or from $37\frac{1}{2}$ to 45 cents a bushel; the sesterce then being equivalent to about $3\frac{1}{2}$ cents, and the medimnus to $1\frac{1}{2}$ bushels. In the next century (A. U. C. 818) the rate of three sesterces the modius, or, say 45 cents a bushel, is referred to as a very poor price. Adopting an average price of 4 sesterces the modius, or about 60 cents a bushel, as the basis of calculation, M. Ducreux de la Malle estimates that in the later days of the Roman republic the ratio of a given weight of wheat to the quantity of silver, which was its equivalent in value, was 1704 to 1.

Under the emperors the price of grain was greatly augmented, and famines were not infrequent. Of these public calamities several occurred during the reign of Augustus, and that of the year 759 was especially severe; while under Tiberius the dearth of breadstuffs was almost continuous, and their prices very high. Tacitus states that in the year of Rome, 772, this emperor fixed a maximum price upon wheat sold to the poorer classes, and re-imbursed the merchants for their loss by adding 2 sesterces the modius, or about 30 cents a bushel, to be paid out of the imperial exchequer. After the burning of Rome under Nero, at a time when public charity appeared to be the only means of averting insurrection, the price of wheat was put down to 3 sesterces the modius, or 45 cents a bushel. Tacitus refers to this as an act of extraordinary munificence, showing that the rate in question was probably very far below that of the market. From figures furnished by Pliny the elder, who died in A. D. 79, it appears that in his day common unbolted wheat flour or meal was worth at the rate of about $4\frac{1}{2}$ cents, coarse bolted flour about 5 cents, and flour of the finest quality about 10 cents per pound. These figures appear to warrant the conclusion of Mr. Jacob that "the price of bread in Rome when Pliny lived seems to have been nearly the same or a little lower than it usually is in our day in London."

Reference

Diocletian, as
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Second-rate river
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Oysters, per 100
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Green onions, the
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Garden asparagus

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Reference has already been made to the prices fixed by the edict of Diocletian, as preserved in the inscription of Eskihissar, (or Stratoniceia.) The edict sets forth that the prices of commodities have exceeded all bounds; that the frenzied desire for gain is not moderated by plentiful harvests, or an abundance of provisions; that in towns and cities, and even upon the highways, the spirit of pillage everywhere pursues the armies of the empire, and that the soldier is sometimes deprived of his entire pay, as well as of the imperial largesses, by the engrossing of a single article. "Moved by these considerations," continues the edict, "we have deemed it our duty to fix for our entire empire a scale of prices, which in years of scarcity may restrain avarice within proper limits."

The inscription contains a long list of articles, of which the most important are embraced in the following table, the Roman measures being converted into their nearest American equivalents, and *denarii* reduced to our currency at the rate of half a cent to the *denarius*:

Vinegar, per gallon.....	\$0 21
Salt, per bushel.....	1 36
Pork, per pound.....	08½
Beef, per pound.....	05½
Goat's flesh, or mutton, per pound.....	07½
Lard, best quality, per pound.....	11½
The best bacon-ham of Westphalia, or the Cerdagne.....	13½
Fresh sausages of beef, per pound.....	06½
Seasoned and smoked sausages of pork, per pound.....	11½
Seasoned and smoked sausages of beef, per pound.....	05½
A fatted cock pheasant.....	1 25
A fatted hen pheasant.....	1 00
A wild cock pheasant.....	62½
A fat goose.....	1 00
Chickens.....	30
Ducks.....	20
Hare.....	75
Rabbit.....	20
Flesh of the wild bear, per pound.....	11½
Flesh of the stag, roe or doe, per pound.....	08½
Suckling pig, per pound.....	11½
Lamb or kid, per pound.....	07½
Butter, per pound.....	11½
Sea-fish of the best quality, per pound.....	10½
Second-rate sea-fish, per pound.....	11½
Best river-fish, per pound.....	08½
Second-rate river-fish, per pound.....	05½
Salt fish, per pound.....	01½
Oysters, per 100.....	50
Dry cheese, per pound.....	08½
Lettuces, the best, 5 for.....	02
Lettuce s, second rate, 10 for.....	02
Cauliflowers, the best, 5 for.....	02
Cauliflowers, second rate, 10 for.....	02
Beet-roots, the largest, 5 for.....	02
Beet-roots, second rate, 10 for.....	02
Green onions, the best, 25 for.....	02
Green onions, second rate, 50 for.....	02
Cucumbers, the best, 10 for.....	02
Cucumbers, second rate, 20 for.....	02
Melons, large, 2 for.....	02
Melons, second rate, 4 for.....	02
Watermelons, 4 for.....	02
Kidney-beans, (in the shell,) 25 pods for.....	02
Garden asparagus, per bundle of 25.....	03

* The quantity in this case is denoted by the sign P. M., which is believed to represent a modius and a half, P being substituted for I through an error of the engraver.

† The quantity used in the inscription is the Italian pound, which has been proved by Piero Secchi to be the same as the Roman pound and is, therefore, equal to about .72 pound avoirdupois.

Eggs, 4 for.....	30 02
Parsnips (largest size) per bushel of 25.....	03
Apples, the best Mattian, or * * *	02
Apples, second rate, 20 for.....	02
Smaller apples, 40 for.....	02
Yellow plums, the largest, 30 for.....	02
Yellow plums, second rate, 40 for.....	02
Pomegranates, the largest, 10 for.....	04
Pomegranates, second-rate, 20 for.....	04
Figs, the best, 25 for.....	02
Figs, second-rate, 40 for.....	02
Dates, the best, 5 for.....	02
Dates, second-rate, 16 for.....	02
Palmda, (smaller dates,) 25 for.....	02
Dried figs, 25 for.....	02
A quilt made of eight goat-skins.....	3 00
A pillow of the softest and largest kind.....	3 00
Caliga (boots) for muleteers or field-laborers, of the best fashion, without nails.....	60
Shoes for patricians, called <i>calcei</i>	75
A senator's <i>caliga</i>	50
A pair of women's <i>caliga</i>	50
A pair of rustic double-soled <i>gallica</i> , (Gallic shoes) for men.....	40
A pair of single-soled ditto.....	25
<i>Gallica</i> , for women, with double ox-hide sole.....	25
<i>Gallica</i> , for women, with single ox-hide sole.....	15
A military saddle.....	2 50
A bridle for a horse.....	50
A bridle for a mule.....	60
A pack-saddle for a mule.....	1 75
A pack-saddle for an ass.....	1 25
A pack-saddle for a camel.....	1 75
Wheat, (inscription partly defaced.).....	
Rye, (inscription partly defaced.).....	
Brusied millet, per bushel.....	1 02 ¹ / ₂
Whole millet, per bushel.....	51 ¹ / ₂
Panic, per bushel.....	51 ¹ / ₂
Fine spelt, per bushel.....	1 02 ¹ / ₂
Inferior spelt, called <i>scandula</i> , per bushel.....	30 ¹ / ₂
Brusied beans, per bushel.....	1 02 ¹ / ₂
Whole beans, per bushel.....	61 ¹ / ₂
Lentils, per bushel.....	1 02 ¹ / ₂
Brusied peas, per bushel.....	1 02 ¹ / ₂
Whole peas, per bushel.....	61 ¹ / ₂
Oats, per bushel.....	30 ¹ / ₂
Kidney beans, dry, per bushel.....	1 02 ¹ / ₂
Linseed, per bushel.....	1 53 ¹ / ₂
Sesamum, per bushel.....	2 04 ¹ / ₂
Hemp-seed, per bushel.....	51 ¹ / ₂
Falerian wine, per gallon.....	1 05
Old wine of the best quality, per gallon.....	81
Old wine of secondary quality, per gallon.....	56
Rustic wine.....	23
Barley wine of Attica.....	81
Beer called <i>cannus</i>	11
Zythus, (Egyptian beer).....	07

While these figures afford some indication of the actual market price of the commodities named, it is well known that the rates fixed by Diocletian were as a rule much too low. The result, as might have been anticipated, was to check production and produce scarcity; and after many persons had suffered capital punishment for violations of the edict, it was ultimately found necessary to abandon the effort to enforce it.

It is unfortunate that the inscription in relation to wheat, barley, and rye is partly effaced, but their probable price may be approximately in-

* The inscription here, as in many parts, is imperfect.

† The *modius castrensis*, which was double the ordinary *modius*, was equal to about .49 of a bushel.

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ferred from that of spelt, a bearded grain sometimes ranked as a variety of wheat, but of a rather inferior quality.

The average price of wheat under the reigns of Constantine, Constantius, Julian, and Valentinian, A. D. 306 to 375, was fixed at one *solidus* of gold per ten *modii*, or from \$1.23 to \$1.20 per bushel, according to the value of the *solidus*. This price was an average derived from data covering a considerable number of years.

THE ROMAN TRADES UNIONS.

Among the most interesting of the facts which tend to throw light upon the condition of the working classes of Rome must be included those which relate to the trade-unions. The "History of the working and burgher classes," by M. Adolphe Granier de Cassagnac, contains an interesting sketch of these organizations, of which the following is a condensation:

It is related by Plutarch, in his life of Numa, that this king established at Rome the corps of craftsmen. From that epoch the corporations in question passed through three successive periods, of which the first ended about the time of Vespasian, the second about the time of Constantine, and the third with the overthrow of the empire. The first of these periods comprises the formation of the trade-unions, which originally was spontaneous, and not the result of authority. Workmen of the same craft came together, agreed upon certain fixed points to regulate their relations, and elected officers to judge and decide in regard to cases arising under their rules. It was one of the enactments of the Twelve Tables that these rules should conform to the general laws of the state, with which they had sometimes been found to conflict. This enactment, however, to a certain extent created a monopoly in their favor, by prohibiting an unrestrained competition, and enriching the existing unions at the expense of all those who could not organize such associations.

As the number of slaves and the concentration of property increased, the work of private citizens came to be chiefly performed by mechanics of that class, and the trade-unions depended more and more on the employment furnished them by the government in the execution of its enormous public works, such as temples and other public buildings, aqueducts, and those admirable roads, bridges, and other works which, not only in Italy and the East, but throughout Spain, Gaul, Germany, England, and the north of Africa, remained as indestructible monuments of Roman civilization. The trade-unions were thus drawn into closer relations with the state, were subjected more and more to its regulation, and finally became its regular functionaries—not merely executing its works, but also collecting its revenues, or at least that part of them which was paid in kind.

It was by the aid of the trade-unions that the government organized its administrative service. There were trade-unions charged with the collection of the revenues, others supplied Rome with provisions, others took care of the edifices, others clothed the soldiers, others armed them, others supplied the interior and domestic wants of a city full of riches and devoted to all kinds of pleasures. The trade-unions then were the framework of bone that supported the great Roman body.

The Roman trade-unions were of two sorts, the commercial and industrial unions, and bore the name of corporations. The principal commercial corporations of the empire were the sailors' union, the bakers', butchers', limeburners', weavers' and tailors' unions, the shell-fish gath

ers', silk-dyers', carriers', wine-merchants', and lumbermen's unions, and many others, including the respectable corps of sworn measurers of grain at the warehouses of the port of Ostia, (*Mensores portuenses*.) The port of Ostia was the great *entrepôt* of Rome. Hither the corporations of watermen were required to bring the revenues of the lands of the public domain, which were immense. Moreover, there is reason to believe that each commercial union collected the tax in kind which appertained to its specialty; that is to say, the bakers received from the lands of the domain the rent in grain; the wine-merchants the rent in wine; and so of the rest. The butchers, by agents, collected the rents in hogs and cattle from the farmers of certain provinces. The sailors' union, for a fixed charge for freight, transported the revenues in kind to the warehouses of the port of Ostia. The bakers' union located at Rome became, in a measure, responsible for the grain as soon as it was in the warehouses. They had it measured before admitting it into the warehouses by the experts of the measurers' union, and they had it transported to Rome by another union, that of the coasters' of the Tiber.

The interior organization of the Roman trade-unions appears to have been very simple. Those of the same trade, for example, the bakers, who were scattered throughout the empire, were divided into groups in the different provinces and cities. A law of Honorius and Theodosius fixes the maximum of each of these local unions at 563 members. Each of these unions elected annually officers who bore the name of *patrons*. These patrons were also called *syndics* in most of the unions, and there were at least four for each local union. One of these patrons or syndics was named for five years, by the entire corporation, administrator-general of the interests of the society. This officer bore the title of *prior*, and had charge of all the property of the association, movable and immovable.

The industrial unions, in relation to which the documents are not always so clear or so abundant, were formed upon the same general model. A law of Constantine, of the year 337, mentions the following, some of which it is not easy to recognize, either because the text has been altered, or because the specialties of these organizations have perished in the wreck of ancient civilization: Architects; carvers in plaster; a kind of roofers called *albarii*; carpenters; doctors; lapidaries; chasers in silver; masous; veterinary surgeons; stone-cutters; furbishers; *seutores*, (believed to be pavers;) painters; sculptors; pearl-dressers; joiners; statuaries; decorative painters; gravers on copper; blacksmiths; marble-cutters; gilders; founders; dyers in purple; pavers in mosaic; goldsmiths; looking-glass makers; wheelwrights; water-carriers; glaziers; workers in ivory; fullers; potters; plumbers; furriers. Besides these thirty-five unions there were a number of others, including one of fortune-tellers, mentioned in a law of Honorius and Arcadius of the year 412 as *corpus nemesiacorum*.

It has been said that the Roman trade-unions passed through three periods. During the first of these periods, which terminated about the time of Vespasian, they possessed the right to organize at their own pleasure, though subject to being suppressed if they violated the general laws of the state. This freedom of initiative they appear to have possessed for more than seven centuries. The precise time when it was taken from them is not known, but they possessed it as late as the reign of Nero, whereas, thirty years after the death of that tyrant it had been taken away from them, and it was then necessary to obtain the permission of the government before a union could be organized. A

case in point. Pliny the younger in Nicomedia; therefore, that about the time issued author masters, but and of not importance, but of the fourth

Up to this solutely dependent Africa they were in Italy, of the East, of the provinces, they were bakers' union and wagoners sufficient number corps of emulation, and, in But thus far liberty to enter in all cases to carrying it with and retaining stated in a law union. This p 11, and of Valer grandsons; and forbade the all unions.

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case in point is found in the request made to the Emperor Trajan by Pliny the younger, for permission to establish a union of blacksmiths in Nicomedia, a request which this emperor refused. It seems probable, therefore, that the first period terminated, as has already been stated, about the time of Vespasian. During the reign of Severus edicts were issued authorizing slaves to form associations with the consent of their masters, but on condition of having a curator who should act for them, and of not meeting oftener than once a month. Nothing of especial importance, however, in relation to the unions, occurred until the middle of the fourth century or a little later.

Up to this time the different corps of craftsmen had indeed been absolutely dependent on, and under the direction of, the government. In Africa they were subject to the jurisdiction of the vicar of the province; in Italy, of the prefect of subsistence, or of the prefect of Rome; in the East, of the proconsul or other dignitary of the palace. As to their duties, they were subject entirely to the will of the emperors. The bakers' union was required to furnish bread to the cities; the carriers and wagoners to furnish transportation; the masons to furnish a sufficient number of hands for the public works; in a word, the corps of craftsmen were strictly instruments of the administration, and, in many respects, even a part of the administration itself. But thus far the different members of these corps were perfectly at liberty to enter or leave them, to pass from one to the other at will, and in all cases to keep their patrimony entirely free, separate, and personal, carrying it with them into any union with which they might affiliate, and retaining the power to sell, give, or bequeath it. This is expressly stated in a law of Constantine of A. D. 319, relative to the bakers' union. This power, however, was taken away by a law of Valentinian II, and of Valens, (A. D. 364.) which only permitted gifts to sons and grandsons; and five years later another law of Valentinian II absolutely forbade the alienation of any of the property of the members of the unions.

Thus was inaugurated the third period in the history of these organizations. The relations of the unions to the government remained as before, but the individuals composing them contracted new and unheard-of obligations. In fact, from this epoch no member of a union could leave it and enter another upon any pretext whatever. More than this, the son was obliged to enter into the union to which his father belonged, and so also was the legatee obliged to enter the union of the legator. The same rule was subsequently extended to sons-in-law, who, if not already members of other unions, were obliged to enter the union to which the father-in-law belonged. In short, the trade-unions imperatively claimed all who, either by gift, purchase, or inheritance, were found in possession of property that had belonged to one of their members; and they also claimed a *pro-rata* share of the property itself. To the stringency of this rule there was an exception in the case of priests, who could sever their connection with a union by surrendering to it their patrimony, as provided in a law of Honorius and Arcadius, A. D. 412. There was also another exception in favor of those who could find acceptable substitutes; but this, of course, left the member dependent on the assent of the union for the sundering of the ties by which he was bound to it.

These regulations, oppressive as they apparently were, were not entirely without their compensations, chief among which was the guarantee of obtaining subsistence in case of need out of the social funds of the union. These social funds, derived from immense domains which were

inalienable and constantly augmented, served for the support of the members, as the property of the monasteries in the Middle Ages served for the support of the monks. The wealth of the unions was derived from several sources, the chief of which were endowments received from the government, the profits obtained from the state and from individuals in the prosecution of their specialties, and, lastly, the property of their members who died intestate.

So long as the prosperity of the trade-unions lasted there was no lack of candidates for admission to them; but there came a time when it was necessary to bring back their fugitive members by force, and to seek recruits among those, who, at an earlier period, would have been excluded from their ranks.

The misfortunes of the unions were mainly traceable to the causes by which the empire itself was undermined. The commercial unions were responsible for the public revenues, and when the rents which they collected from the public domain were inadequate, the government seized upon their own property to make good the deficiency. Again, in the latter days of the empire there were frequent dearths of provisions, owing, in a great measure, to the insecurity of industry. Indeed, it is impossible to recount the passages in Saint Ambrose, Symmachus, Libanius, and even in the laws of the emperors, in which it is related that the magistrates repeatedly drove off without pity the fugitive slaves and beggars who flocked to Rome from all parts of the empire, when famine invaded Italy and snrprised the capital of the world in the midst of the ruinous luxury, feasts, and fancies of her emperors. It may readily be conceived that before resorting to these terrible extremes the treasuries of the unions were exhausted, and that when senators had one plate less at their tables the members of the trade-unions did not dine at all. It was, however, the unbounded luxury of the emperors which probably contributed most to the ruin of the trade-unions. The extravagance of these masters of the world was simply incredible. On a banter made to him, Caligula constructed a bridge 3,600 paces in length, and having the width of the Appian way, from the port of Baia to the mole of Puteoli. On this costly structure he made two triumphal marches, after which it was permitted to fall into decay, since it was absolutely without use. Claudius, curious to see the bottom of Lake Fucinus, had its waters drawn off by means of a canal cut through a mountain, the excavation of which is said to have cost the labor of 30,000 men for eleven years. Nero assigned to a pet monkey a palace in Rome, and a castle and lands in the country. The two thousand mules which drew him and his cortege when he went to contend for the prize in the Olympic games were shod with silver, while his three or four thousand lackeys and coachmen were clad in the finest stuffs of Italy. Heliogabalus, who died at eighteen, probably spent in one day more than all the others in paving the court of his palace with all the diamonds, emeralds, and other precious stones that could be found in Italy.

By such excesses was brought about that state of exhaustion which so crippled the empire in its latter days, and in great part these excesses were paid for by the trade-unions. On these, in great measure, fell the expense of the mistresses, the eunuchs, minions, and lackeys, the lions, panthers, parrots, and monkeys of the emperors, for it was they who were called upon to replenish the imperial treasury. Their task grew more and more difficult of performance, and from the middle of the fifth century they were completely disorganized, their members seeking to escape by flight or voluntary exile the burdens which weighed them down. In short, step by step, with the empire, they fell to pieces.

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CONDITION OF THE PEASANTRY.

In regard to the condition of the agricultural laborers in the latter days of the empire, an idea may be formed from the state of the Gallic peasantry of that era, as described by M. J. Benoit in his "*Histoire des Paysans et de leur condition à travers les siècles.*" This author states that they were confined to the fields in company with the animals, and their implements of toil, and prohibited from leaving the estates on which they were employed, approaching the cities, or bearing arms. At this period the proprietors of the soil, and of its cultivators, did not reside in the country, but in Rome, or in the great cities of Gaul, and had no personal relations with their peasants, who were superintended by overseers, such as were formerly employed on large plantations in the South to superintend the labors of negro slaves. Previous to the grave events which took place about the fifth century, by which the Roman laws and institutions were overthrown, the masters of the soil were—

- 1st. The great Roman and Gallic families.
- 2d. Chiefs of native tribes to whom the Roman government had made concessions of land.
- 3d. The fiscal officers of the state.
- 4th. The clergy.
- 5th. The small proprietors.

The entire body of peasants, excepting those of the class last mentioned, who were not numerous, were in a state of slavery.

All the historians agree in describing the country, at this period, as presenting a picture of the greatest desolation, the immense domains of the clergy and of the wealthy proprietors being almost wholly uncultivated, and yielding the most meager returns in spite of the oppression to which the slaves were subjected.

The peasants were divided into two classes: Those belonging absolutely to the proprietor, who could sell or exchange them, like his oxen or horses, and those appertaining to the land, who could only be sold or exchanged with it.

Those of the first class were on the same level as the domestic animals, whose companions they were, being considered inferior to all other men, not excepting the slaves in the cities, who were legally subject to the same conditions as themselves; for the latter, living with their masters, of whose families they formed a part, could not fail to acquire a certain amount of intelligence and culture through their daily intercourse with persons of superior condition. The other class, on the contrary, were unknown to the master, who required nothing from them but physical strength, good health, and abundance of work.

The peasant who was attached to the soil might own the tatters in which he was clad, and the animals which formed a part of his family. The other could possess nothing whatever. The great agricultural estates to which persons of this class were confined, were provided with all that was deemed necessary to life, in order to take away from them every pretext for absenting themselves therefrom.

The overseer, who filled the place of the master, provided for all their necessities, as well as for the cultivation of the domain. The food was of the coarsest and most simple kind, consisting chiefly of barley reduced to a pulp by boiling. Each estate was also provided with a prison, and all the facilities for the infliction of punishment upon the slaves. The overseer was the supreme authority in everything which concerned their discipline and punishment. When at work they were commonly

divided into groups more or less numerous, each of which had a superintendent who made use of the whip at his pleasure. When the work was finished on an estate the laborers were often hired out to other proprietors, who provided them with food and paid to the master such compensation as might be agreed upon. Their clothing was simply of a character to protect them from cold or rain, consisting chiefly of skins and a sort of hooded cloak. To this they had no recognized right, and if furnished it was only because the master considered it his interest to keep his human property in good condition.

The peasants who were attached to the soil could never be legally removed from the land to which they belonged even for an instant, and in no case could they obtain their liberty. The children of this class belonged to the estates on which they were born, and formed a part of the inventory of the effects connected therewith, except when it happened that the father and mother belonged to different estates, in which case the children were divided between the proprietors, who could, at their own pleasure, separate wives from their husbands, and children from their father or mother.

It will readily be seen that under such a state of things the family could have no existence. The proprietors did not consider marriage to have been intended for this kind of people, regarding their peasants as they did their cattle, and looking upon the reproduction of their kind simply as a means of increasing their own wealth. In the eyes of the master the peasant was a species of enemy, and was treated with all the rigor of a state of hostility.

The oppression of the master was aggravated by the exactions of the government; for, beside the price which the peasant had to pay to the former for the land which he occupied, he had also to pay the land-tax, a tax for pastures, a capitation tax, and various exceptional assessments. Moreover, he was obliged to work on the roads, to furnish horses to postal agents, to pay octroi duties in the cities, and to bear his quota of the expense connected with replenishing the ranks of the army.

In collecting these taxes and enforcing these various dues, the fiscal agents of the government proceeded with such unheard-of rigor that even the small proprietors, as well as the slaves and the peasants who were attached to the soil, were reduced to the necessity of abandoning the lands they cultivated and flying to the forests, in order to escape at the same time from the masters and the tax-collectors, who were robbing them of all their resources.

A priest of this epoch, named Salvien, has left us a terrible picture of the miseries and sufferings which the peasants endured, and by which they were driven to rise in insurrection against the ruling class.

"What else," says this historian, "but to give themselves up to brigandage, could be done by these unhappy people, ruined, as they were, by incessant public exactions; menaced continually by crushing and unremitting proscriptions; compelled to abandon their homes to escape torture, and to exile themselves in order to avoid punishment? The enemies of the country were less terrible to them than the tax-collectors, and they sought refuge among the barbarians to escape the violence inflicted or threatened by these officials. Their condition, hard and inhuman as it was, would have been less cruel if all had suffered equally in common. But what rendered it more intolerable was that the burden was not equally distributed; that the tribute of the rich was shifted to the shoulders of the poor, and that the feeble bore the burdens of the strong. Thus oppressed and impoverished, nothing was left to these

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LABOR

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people but to choose between brigandage and refuge among the enemies of their country. Thus," says Salvien, "they emigrated, pell-mell, to the Goths, the Bagaudi, or other barbarians, preferring to live free, under the appearance of captivity, to leading the life of slaves with the appearance of liberty. For this reason the name of Roman citizen, which was formerly held in so high estimation, is to-day voluntarily repudiated."

Such injustice and cruelty naturally and inevitably led to acts of insubordination and insurrection. The malcontents organized themselves into a league, and their number being rapidly augmented by new recruits, they gave themselves up to brigandage and to insurrection against the Romans.

"Despoiled by bad and cruel judges," says Salvien, "tortured or put to death, after having lost the liberty guaranteed by their Roman citizenship, they renounced the honor of this name; and yet, after this, we are so unreasonable as to impute their misfortune to them as a crime, and stigmatize them with the name of Bagaudi, which we have compelled them to assume. We call them rebels and brigands, when it is ourselves who have driven them to revolution. Is it not our injustice, the sentences of iniquitous judges, their proscription, their robberies; those who divert to their own profit the product of the taxes; those who, like voracious beasts, have devoured the people whose interests have been given them to protect; those, less humane than brigands, who are not contented with despoiling their victims, but tear the flesh and regale themselves with their blood? Who can wonder that men thus treated should become barbarians, when they were no longer permitted to remain Romans? Having completely lost their liberty, nothing was left them but to defend their lives."

Thus, according to Salvien, who lived at this period, it was only indolence and a lack of courage which could induce the peasants to continue their agricultural labors, and prevent them from joining their companions in revolt under the name of Bagaudi. Their headquarters and center of operations was the confluence of the Seine and the Marne, near Paris, in a place which they had strongly fortified, and whence they could defy the Roman power. From this point they spread themselves over all the other portions of Gaul, appealing to all the peasants of the country to enroll themselves under the flag of independence, and strike for their liberty. Their first revolt occurred about A. D. 270, under the lead of one Victoria, who was called by the soldiers the mother of legions. They besieged and captured Autun. They were temporarily quelled by Claudius and Aurelian, who, by remission of the taxes in arrears, and, by granting them a general amnesty, made peace with them.

Under Diocletian they again rose in insurrection about A. D. 280, massacred their masters, and ravaged with fire and sword multitudes of cities and villages. The emperor sent a force against them under Maximian, who prosecuted his warlike operations with so much vigor that, although the Bagaudi were superior in numbers, they were soon compelled to capitulate. Two of their leaders, Ælianus and Amandus, who had assumed the title of emperor, were killed in battle.

From this period they existed chiefly as small bands of brigands, infesting the forests and fastnesses of Gaul until the end of the western empire.

LABOR IN EUROPE UNDER THE FEUDAL SYSTEM.

The overthrow of the Roman power in Italy and Western Europe by the northern barbarians was followed by the institution of a new order

of society, an order which grew out of the relations of the conquered to the conquerors, out of the character and habits of the latter, and out of the turbulent state of society which marked the times. In Gaul and Italy the barbarian conquerors found the soil, for the most part, in the hands of large proprietors and cultivated by slaves. In some districts they seized the entire territory, and divided it among them according to their humor and their interests. In other cases they divided the land, in proportions arbitrarily fixed according to their own will, between themselves and the former proprietors. But in all cases the peasants were excluded from a share in the possession of the soil, and compelled to labor for the new masters just as they had done for their predecessors. The system of slavery had existed among the barbarians as well as under the Romans, but in a somewhat milder form, owing to the family and tribal organization under which the former lived. Among them the slaves belonging to the domain of a chief formed a part of his family; and as they were always under the master's eye there grew up between them and him a certain sympathy which was conducive to their well-being. Among the Romans, on the contrary, as well as in the Roman provinces of Western Europe, the landed proprietors were addicted to living in the cities and towns, and were rarely, if ever, seen by the slaves who tilled their fields. The new masters, bringing with them into the Roman provinces the manners of their own country, took up their abode on their domains in the midst of their peasants. The Roman *villa* gave way to the less elegant but more formidable castle of the rural chief, which was a fortress as well as a dwelling. The rude tastes of the conquerors, coupled with the waste and destruction incident to a long struggle for mastery and a constant necessity for defense against aggressive neighbors, almost destroyed the demand for the products of the more advanced industrial arts, led to a steady decline in the population of the cities and towns, and made the castellated dwellings of the nobles the centers of industrial life and the nuclei of social organization. It was a state of society established at the point of the sword, and the same weapon was for several centuries the principal source of law. Violence and depredation were the order of the day, and there could be no security for any one save as a member of some considerable community capable of united action in mutual defense. In such a state of things it was impossible for small landed proprietors to maintain their independence; and they generally gave in their allegiance to some powerful noble or placed themselves under the protection of the church, in either case surrendering their land and paying certain rent or service-dues in consideration of its usufruct. Everything else was sacrificed to military organization and efficient leadership, and isolated independence became impossible. Hence, outside of the walled towns, which in those days were few and feeble, all the detached elements of society necessarily gravitated to the seignorial castle, and there grew up, rather than was instituted, that form of society known as the feudal system, with its gradations of vassalage, its vassals, and its serfs.

It has been remarked that in this new form of society, and in the transition state by which it was preceded, it was found impossible for the small proprietors to maintain their independence. It should be said, however, that efforts were made by the kings to protect them from the aggressions of the nobles and the dignitaries of the church.

On this subject a statute of Charlemagne, the master of an empire which embraced the whole of France, a portion of Spain, more than one-half of Italy, and nearly all of Germany, contains the following:

The poor allege that they have been despoiled of their property, and they complain equally of the bishops, the abbots, and their patrons, and of the nobles and their subordi-

ate military commingling to give up his official, these persons and never fail to seek them his property.

This statute

At a later date, he, "which should devolved upon magistrates, just the possessions, wishing to purchase court days before. Any such contrivance void."

Notwithstanding regard to the other members, they did not completely stripped condition of serfs.

Of the serfs bound to the soil of their servitude.

Thus among the three classes, the superior, which consisted of other stated, reap for the bishop and 40 feet wide gather the hay.

There were also contributions in

The ecclesiastics three days in themselves, and various kinds of

If, on the contrary, he could exact services also, and a distance of the church, and the peasant's rent.

These two classes the great dignity consideration to the great military belonged to the contested by the heavy, their nobility.

In other respect

ate military commanders. They also say that when a poor freeman shows himself unwilling to give up his heritage to the bishop, the abbe, the count, the judge, or the military official, these persons avail themselves of every occasion to treat him with harshness, and never fail to send him to the army, so that when completely ruined he may sell them his property on their own terms.

This statute bears date A. D. 811.

At a later day one of the sons of Charlemagne was constrained to come to the defense of the same class. "As to the precautions," says he, "which should be taken in favor of the poor, the care of whom is devolved upon us, it has pleased us to forbid the bishops, abbés, counts, magistrates, judges, and all other persons to purchase or take by force the possessions of the poor and the feeble. For this reason, any one wishing to purchase anything from them is required to do so publicly on court days before two credible witnesses and upon equitable terms. Any such contract made under other circumstances shall be null and void."

Notwithstanding the good sentiments expressed by various kings in regard to the small proprietors, the cupidity of the bishops, abbés, and other members of the ruling classes, was stronger than the edicts, and they did not pause in their career of spoliation until they had completely stripped the poor of their heritage, and reduced them to the condition of serfs.

Of the serfs there were three principal classes. They were all alike bound to the soil, but there were certain differences in the degree of their servitude. And this was also the case with respect to subdivisions of the three classes.

Thus among the ecclesiastical serfs there were two distinct degrees, involving different services. Those of the first degree, who were everywhere superior to the serfs of the laity, had to pay certain dues in labor which consisted in the cultivation of a definite extent of ground, and in other stated work. Each serf was required to sow and fence in and reap for the bishop, or for the convent, a piece of ground 400 feet long and 40 feet wide, to assist in getting in the harvest, and to mow and gather the hay from an acre of meadow-land.

There were also other dues for the fields and pastures, and certain contributions in poultry and eggs.

The ecclesiastical serfs of the second class were required to work three days in the week for the bishop or the abbe, and three days for themselves, and to furnish the teams and implements necessary for various kinds of farm-work.

If, on the contrary, the master furnished the oxen and implements, he could exact so much the greater amount of personal labor. Their services also comprised the furnishing of work-horses, hauling produce, &c. a distance of fifty leagues,* carting in the hay, grain, and wine of the estate, and various other duties, a failure in which exposed them to punishment.

These two classes of ecclesiastical serfs belonged more especially to the great dignitaries of the church, who enjoyed sufficient power and consideration to enable them to contend successfully with the kings and the great military chiefs of that warlike epoch. As to those who belonged to the less powerful ecclesiastics, whose authority was always contested by the secular lords, and whose expenses were comparatively heavy, their condition resembled that of the serfs belonging to the nobility.

In other respects there was, in those rude times, nothing definitely

* The French postal league is a little less than 2½ miles.

settled, the arbitrary will of the master alone deciding the degree of servitude to be exacted from the serf.

There were, however, certain general rules established in assemblies of the nobles which were held at intervals, and these rules were accepted as laws by those who took part in the framing of them. But it must be remembered that only one of the parties interested was present in these assemblies.

In distributing lands among the peasants the more extended and fruitful domains lying nearest to the seignorial dwelling were usually assigned to the most robust and active of the serfs, and to those having large families, to assist them in their labors; while to such as from physical feebleness, or any other cause, lacked the requisite conditions for the advantageous working of their allotments, it was the custom to assign lands of inferior quality and of smaller extent.

From the former class were exacted prestations in money and grain, war taxes, or tribute, a large amount of tanning, and many feudal tasks. The burdens imposed on the latter class were lighter in appearance, but in reality more oppressive; for, if instead of wheat and timber they were only required to contribute small grains and faggots; if, instead of the work of the plow, they were only required to give that of their hands, it must be added that in lieu of the more valuable services which they were unable to render, they were required to perform the humblest and most menial drudgery, such as to grind the corn, perform guard duty around the castle, load and unload manure, &c. In short, one may gain an adequate idea of the services that they were obliged to render to the lord from the fact that they were required to give him five days' work per week.

The imposts levied by the church, and known as tithes, unknown under the Romans, had been introduced by the priests, and in the ninth century were regularly enforced by the laws and sanctioned by the habits of the country. A formal decree of Louis the Pious contains the following provision: "As to him who has neglected to cultivate the dominical lands, in order to avoid the payment of the ninth and the tenth part of its fruits, and who, with this object in view, has taken the lands of others to cultivate, it is our will that he pay, according to law, the ninth part for three years." To invest this impost with still greater sacredness, the clergy excommunicated and anathematized such as failed to pay it. The tithes were levied not only upon all the products of the field, but upon farm animals. For a drove of mares every tenth colt was exacted; or if there were only a few, a penny was charged for each colt. It was the same in respect to cows and calves. Every tenth cheese was also exacted, or else the milk of the cows for every tenth day. It was the same with butter, eggs, and all other products. To enforce these various dues it was often necessary for the ecclesiastical authorities to resort to vigorous punishments.

The exactions to which the peasantry were subjected, however, did not stop here; for, besides the dues already mentioned, they were required to render military services, and to pay a mill-tax, a tax for mast in the forests, and tolls on the highways, the *passages*, and in the cities. Each feudal chieftain was required to contribute to the army in war one-tenth part of his peasants under pain of heavy penalties, and sometimes even of confiscation.

The tolls on the highways, &c., were not only heavy but inconvenient and irritating in their character, being levied according to the number of the wheels of the vehicle, the load which it carried, and other conditions imposed by cities and by powerful nobles. The peasants were not

permitted to take any of the land of the lord, and if he was found doing so, he was punished. The peasant was also prohibited from taking any of the lord's land for his own use, and if he was found doing so, he was punished. The peasant was also prohibited from taking any of the lord's land for his own use, and if he was found doing so, he was punished.

The punishment for the peasant who was found taking any of the lord's land for his own use was death. The peasant was also prohibited from taking any of the lord's land for his own use, and if he was found doing so, he was punished. The peasant was also prohibited from taking any of the lord's land for his own use, and if he was found doing so, he was punished.

It is not necessary to say that the peasant was also prohibited from taking any of the lord's land for his own use, and if he was found doing so, he was punished. The peasant was also prohibited from taking any of the lord's land for his own use, and if he was found doing so, he was punished. The peasant was also prohibited from taking any of the lord's land for his own use, and if he was found doing so, he was punished.

The oppression of the peasant was also increased by the fact that the peasant was also prohibited from taking any of the lord's land for his own use, and if he was found doing so, he was punished. The peasant was also prohibited from taking any of the lord's land for his own use, and if he was found doing so, he was punished.

These associations were also known as *guilds*, and they were also known as *guilds*.

An idea of the extent of the oppression of the peasant may be obtained from a study of the statutes, published by the emperor Charlemagne, which were intended to exist.

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The peasants of Normandy, adopted the same system of labor as the peasants of the other parts of the country.

permitted to testify in courts of justice; and if a man murdered one of them, he was not prosecuted for the crime itself, but simply for the damage occasioned to the proprietor. For this reason the life of a free peasant was considered of no value, while that of a serf attached to the soil was estimated at 45 sous. The Ripuanian law inflicted the same penalty upon him who had murdered a free man as upon him who had stolen a dozen mares, or one she-ass, six sows, or one boar.

The punishments inflicted on the serfs varied according to locality, and the disposition of the proprietor; thus, the code of the Visigoths prohibited the killing or the mutilating of a serf, and established the terms upon which a settlement might be made for a wound inflicted upon one of them by another than the proprietor. In the case of the latter it was considered that the injury he inflicted fell upon himself, and therefore he was not held to account. The bishops and their agents could cause peasants guilty of any misdemeanor to be punished without trial, and the number of blows which they inflicted was determined by their own estimate of the gravity of the offense.

It is not necessary here to speak of the mutilations and other cruelties to which fugitive peasants were subjected; suffice it to say that they were at the mercy of their masters, who very often abused their power. And the choice which the masters had of selling or exchanging their serfs, shows that the ties which bound the latter to the glebe had been relaxed for the benefit of their masters rather than their own advantage. All the serfs, even those who cultivated land on shares, were considered as belonging to the soil, from which they could not be detached except by the will of the proprietor. The latter had always the right to oppose the marriage of the serf, when it was to be contracted with one not living on the estate. And the children of such unions, being the property of two masters, were liable to be divided between them without reference to their own wishes or those of their parents.

The oppressions which have been narrated did not fail to produce resistance. Associations were formed, known in history by the name of the *Guildes*, which quickly extended their ramifications over a large territory, though it was in Normandy and the Isle of France that they chiefly flourished.

These associations had a triple object: 1st, conviviality; 2d, mutual assistance; 3d, political and civil reform.

An idea of the rules which governed them may be obtained from the penalties that were pronounced against them, as well as from their own statutes, published at a later day in the districts where they were permitted to exist. As early as A. D. 779 they were prohibited by a statute of Charlemagne, and another statute of the same monarch ordained certain penalties proportioned to the gravity of the case. "First," says this statute, "any one who shall commit an offense in consequence of his membership in a guild shall be put to death. In the second place his accomplices shall be compelled to flog each other, and cut each other's nostrils; and, thirdly, members who are not guilty of any specific crime shall scourge each other, and cut each other's hair."

These associations, whose efforts were principally directed against the tyranny of the nobles, were never able to organize themselves into an army as the *Bagaudi* had done. But toward the end of the tenth century the peasants attempted to assemble and unite their efforts for common action. Upon this important fact in the history of labor, *Guilherme de Jumièges* makes the following statement:

The peasants forming themselves into secret societies in the different counties of Normandy, adopted resolutions to the effect that they would live according to their

own pleasure, and submit to no established laws in regard to the use of the forests and of the waters, except such as they chose to make for themselves. From each local assembly two men were chosen to carry these resolutions to an assembly convoked at a central point in the interior, in order to have them confirmed. When the duke (of Normandy) became aware of this movement, he sent a body of troops under the conduct of Count Rodolphe to chastise the boldness of the peasants and disperse the central assembly above mentioned. The count at once seized all the deputies and some others who were found in their company, and having cut off their hands and feet, sent them back thus mutilated to the local assemblies whence they came. The peasants, overawed by this summary treatment, quickly abandoned their assemblies, and thus for the time being ended their efforts at organization and their projected struggle for independence.

During the period extending from the tenth to the fourteenth century the class of serfs who belonged personally to the lord almost entirely disappeared, and the serfs attached to the soil made slow but steady progress toward personal liberty, although they were still the victims of most onerous exactions on the part of both the lords and the church. In conceding lands to the peasants, the feudal proprietors weighed the advantages and disadvantages of serfdom, and they gradually found that free labor yielded them the larger revenue from their estates. Under this system the implements of husbandry, the cattle, and the teams were at the account and risk of the peasant, who was thus stimulated to use them with proper care. The lord ceded his land in consideration of certain dues and services, and gave himself no further trouble except to see that the dues were paid and the services performed.

The dues attached to the occupation of land were paid by the tenants in several forms: First, in money; secondly, in grain and wine; thirdly, in cattle and poultry; fourthly, in articles of consumption; fifthly, in timber and fire-wood; sixthly, in various prestations and tasks. The dues in money were of two kinds, the one fixed and the other contingent, and known respectively as the "censes" and the "ventes." The "cense" was the tax which was paid in money at a specified time, usually at the festival of some saint. It was most frequently the price paid for the use of the meadows. There was also another "cense," which was paid either at the death of the lord or at that of the tenant. The "ventes" consisted of a tax paid to the seigneur for the alienation of lands dependent upon the "seigniorie," or estate, and varied considerably in its form. The heaviest of the dues paid by the peasants was undoubtedly that which was levied upon grain, for this was the one in respect to which the lords could most readily enforce their exactions. The sheaves could be counted in the fields, or the grain measured on the thrashing-floor or in the barn, preparatory to hauling away the share which belonged to the lord.

The exactions of dues for oxen, cows, and horses having been recognized as injurious to the working of the land, was abandoned; but instead of these, there were assessments upon hogs, sheep, lambs, goats, and calves, which served for the consumption of the lord's family and that of his numerous retainers. Certain payments in poultry were exacted from each family as a mark of dependence, and, in addition to these, it was customary to require large contributions of cocks, capons, pullets, geese, &c.—a custom which was not entirely discontinued in France until after the revolution of 1789. There were also dues paid in cheese, butter, oil, wax, soap, &c., Easter and Christmas presents to the lord, the obligation to furnish faggots, vine-poles, staves, hoops, &c. There were still other exactions equally burdensome and vexatious, such as the requirement to furnish lodging for the seigneur and his suite, to feed him and his dogs, and to furnish hay and grass for his horses. It is true that the right of lodging was purchased, but in many localities

the seigneurs imposed a tax on marriage collected in part by his son, gave him was taken prisoner her demands with tainment of the try. In this time owed their means the capacity of in repair the forced cessitated by the and in times of security of the distinction between this distinction owing power of veritable prison not dispose of the the seigneur was in his fief. With property, whether and even at this his permission. duties, and ruin penalty, some a The seigneurs to them, and that save in a price eighty was so given up to all under whose justice was nothing

A troubadour Ron," a statement times. "Peasant people of the families to the number in obscure places would never with church. 'The se not obtain from take everything, suffering. So many bailiffs that we such oppression members, the same courage. Let us front in defence there are thirty clean to conquer shall then be able rivers, and to use

Such were the From the eleventh broke out in France

the seigneurs imposed a special tax for their dogs. They also imposed a tax on marriages, another on deaths, and a capitation-tax, which was collected in particular cases, most frequently when the seigneur knighted his son, gave his daughter in marriage, departed for the Holy Land, or was taken prisoner. The same usage was followed by the church, only her demands were for the Pope, for religious services, and for the entertainment of the king and his retinue when traveling through the country. In this time of continual strife between rival nobles, the peasants owed their masters military services, and accompanied them to war in the capacity of infantry. It was they also who constructed and kept in repair the fortifications of the castle and performed the tanning necessitated by this work. Lastly, they were required on certain days and in times of danger to perform guard duty around the castle for the security of the seigneur and his suite. Although at this period the distinction between the free man and the serf was beginning to be observed, this distinction really amounted to little in the presence of the overshadowing power of the seigneurs. "Each estate," says Mably, "was a veritable prison for its inhabitants, and these pretended free men could not dispose of their property, either by will or by their own act, while the seigneur was regarded as their heir in default of children domiciled in his fief. Within this limit he did not permit them to dispose of their property, whether movable or immovable, except to a small amount; and even at this time they could not marry without having purchased his permission. Burdened everywhere with fatiguing tasks, humiliating duties, and ruinous contributions, they were constantly in fear of some penalty, some arbitrary tax, or the total confiscation of their goods. The seigneurs tenaciously clung to the idea that everything belonged to them, and that the laborer did not possess even his own habitation save in a precarious manner, dependent on their liberality." Sovereignty was so united to property that the peasants were practically given up to all the haughty and fantastic caprices of the proprietors under whose jurisdiction they lived; and it might truly be said that justice was nothing more than the will of the baron.

A troubadour of the twelfth century has left us, in the "Roman de Rou," a statement of the wants and aspirations of the laborers of the times. "Peasants and the inhabitants of the cities," says he, "the people of the forest as well as the people of the plain, have held assemblies to the number of twenty, thirty, or one hundred persons, meeting in obscure places, many of them having sworn to each other that they would never willingly tolerate either a seigneur or a patron of the church. 'The seigneurs,' say they, 'do us nothing but injury, and we cannot obtain from them either right or justice. They possess everything, take everything, eat everything, and compel us to live in poverty and suffering. So many are the services, the taxes, the provosts, and the bailiffs that we have not a single day of peace. Why do we submit to such oppression? Are we less men than they? We have the same members, the same stature, the same power of endurance; all we lack is courage. Let us bind ourselves together by oath, and present a united front in defence of our possessions. It is not so very difficult to fight; there are thirty or forty able-bodied peasants to each noble. Let us learn to conquer, and no one will then exercise dominion over us. We shall then be able to cut trees, catch game in the forests, and fish in the rivers, and to use, at our own pleasure, the meadows and the waters.'" Such were the thoughts which agitated the peasants of that day.

From the eleventh to the fourteenth century terrible insurrections broke out in France and in other parts of Europe, the peasants organ-

izing themselves into army corps, and declaring war against the nobles, and other possessors of the soil. In the thirteenth century, hundreds of thousands of them took up arms; and from Flanders, where the organization had its birth, they threw themselves into other provinces of France, gaining new recruits each day in their progress through the country. They were ultimately vanquished by the discipline and union of the nobles, but for more than two hundred years the *débris* of these organizations infested the country, and unhappily their depredations were not confined to the castles of their oppressors, but often extended to the villages and defenseless cities.

In 1358 occurred the revolt known as the Jacquerie riots. After the disastrous defeat of the French at Poitiers there was, for a short time, such anarchy that all the ties which bound the vassal to his fief were broken, each man obtaining almost complete independence. The nobility, whose merciless oppression had already driven the peasantry to desperation, now gave themselves up to the most fearful acts of cruelty. Assembling their troops, they fell suddenly upon the cities and villages, which they pillaged and burned, after slaughtering all who offered them resistance. When they captured any of the peasants they burned off their feet, and subjected them to the most horrible tortures, in order to compel them to disclose such treasures as they were supposed to have concealed. "The peasants," says Michelet, "could no longer sleep. Those who lived on the banks of the Loire passed their nights on the islands in the stream or in boats anchored in the middle of the river. In Picardy the population dug themselves holes in the ground, in which women and children rotted for weeks and months, while the men timidly crept to the tops of the steeples to survey the country and see if the neighborhood was clear of armed bands. Despair armed the population; there was no longer anything to eat, save in the castles, and to the castles the peasants made their way. Thus began that terrible war known as the Jacquerie riots. Each peasant, inspired by vengeance and by want, as much as by hatred, attacked the castles as the finished wolf attacks a sheep-fold. This insurrection, like that of the Bagauds, took its rise in the Isle of France, and spread over the northeastern provinces. For six weeks, say the historians, the peasants pillaged and ravaged the chateaux, committed the greatest cruelties, and gave themselves up to the most fearful excesses. In this, however, they only imitated the example of the seigneurs, and even their worst excesses could not exceed the limits of a just retribution. Their very frenzy, however, was one of the chief causes of their defeat; for, being without discipline or unity of action, they could not withstand the military organization with which they were opposed by the nobles. Their chief, Guillaume Caillet, was taken prisoner by Charles the Bad, of Navarre, who had him crowned with a red-hot tripod of iron and then beheaded. A few weeks later the Capital de Buch and the Count of Foix slaughtered seven thousand of these peasants in the vicinity of Meaux, and thus brought the insurrection to an end.

What has been thus far said in regard to labor under the feudal system refers chiefly to France, and is confined to the labors of the peasantry; but, as has already been pointed out, the finer industrial arts were almost unknown at the period under consideration, the town and city populations were very limited, and the work performed on the rural estates really comprised the great bulk of all the work for which, in that rude age, there was any occasion or demand. The condition of the serfs and peasants on the rural estates was therefore at that time the condition of the vast majority of the laboring population.

It is now time to turn to the condition of the laborers during the middle ages. The laborers were immediately subjected to the most oppressive conditions. The third of the bondage applied in bonds put in bonds are spoken of common means were a medium computed.

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THE FEUDAL PERIOD IN ENGLAND.

It is now time to glance briefly at the history of our English ancestors during the period of Saxon supremacy, and in the centuries immediately succeeding the Norman conquest. In the former period two-thirds of the people are said to have been either slaves, or in a state of bondage approaching slavery, to the remaining one-third. They might be put in bonds and whipped; they might be branded, and on one occasion are spoken of as if actually yoked. Cattle and slaves, in fact, formed a common measure of value under the denomination of live money, and were a medium of exchange in which the prices of commodities were computed.

The operatives and handicraftsmen of this period, as well as the agricultural laborers, were mostly slaves. The clergy and nobility employed as domestic servants persons of this class who were qualified to supply them with such things as were then considered the necessities of life.

Hence in monasteries we find smiths, carpenters, millers, illuminators, architects, agriculturists, and fishermen. Smiths and carpenters were the most numerous and important as ministering to the chief secular pursuits of the time, both in war and husbandry.

Great as were the political effects of the Norman invasion, it did not materially alter the condition of the masses of the people. Their services were as necessary to the new masters as to the old, and the terms on which these were rendered could hardly have been made more onerous than they had been. In order to maintain more firmly the ascendancy of the invaders the feudal relations were enforced with somewhat greater strictness than before, but no changes were made in the chain of subordination which had already been established.

Hence for a long time after the conquest the Saxon subdivisions of society were maintained, and the inhabitants of the country continued to be divided into the two great classes of freemen and serfs or slaves. Except the baronial proprietors of land and their vassals, the free tenants and socmen, the country people were depressed in servitude which was uniform in this respect, that no one who had either been born in, or had fallen into bondage, could acquire any absolute right to property. Aside from this, however, there were distinctions in the degrees of servitude. One class of villeins, or villagers, though bound to the most servile offices of rural industry, were permitted to occupy small portions of land to sustain themselves and families.

Other ranks of men, equally servile, are noticed in the ancient records, particularly the bordars and cottars. The former, in consideration of being allowed a small cottage, were required to provide poultry, eggs, and other articles of diet for the lord's table; and the latter were employed in the trades of smith, carpenter, and other handicraft arts, in which they had been instructed at the charge of their masters. Inferior to these were the thralls, or *serci*, principally employed in menial services about the mansion.

Their lives were professedly protected by law, and with the consent of their owners they were allowed in some cases to purchase their freedom; but, in other respects, they were in the lowest degradation, so much so as to be considered mere chattels and regular articles of commerce.

Giraldus relates that the number of them exported to Ireland for sale in the reign of Henry II was so great that the market was absolutely overstocked; and from William I to the reign of John there was scarcely a cottage in Scotland but possessed an English slave.

In the details of the border wars mention is frequently made of the

number of slaves taken prisoners as forming a principal part of the booty. It is not easy to ascertain from writers of this period the precise immunities of the several classes of bondmen mentioned; the chief differences in their condition arose probably from the relative utility of their occupations; the *serfs*, or *serfs*, as least valuable, being a more ordinary article of traffic and transfer than the *bordars* and *cottars*, who had been trained to useful arts or obtained a fixed habitation. All, however, alike appear to have been deuded of the substantial attributes of freemen; the law recognized in none the uncontrolled right to property or change of place without the consent of a superior; the lord had the absolute disposal of his bondmen; they might be attached to the soil or transferred by deed, sale, or conveyance from one owner to another; in short, they were slaves in the strictest sense of the word—men under an obligation of perpetual servitude, which the consent of the master could alone dissolve, and in all probability they enjoyed less legal protection from the ill-usage of their oppressors than the humanity of modern legislation has extended to the brute creation.

Attempts have been made to determine the relative numbers of the several classes of the population at the close of the Anglo-Saxon period, but with no great pretensions to accuracy. In thirty-four counties the burgesses and citizens are set down at 17,105, the villeins at 102,704, the *bordars* at 74,823, the *cottars* at 5,917, and the *serfs* or thralls at 26,552. The remaining population consisted of freemen, ecclesiastics, knights, thanes, and landowners.

The final extinction of slavery in England was a slow and gradual process. The first blow which the system received was in the disuse of the ancient practice of reducing prisoners of war to the condition of bondmen, a step which was probably due to the humane teachings of Christianity, and which certainly marks a decided advance toward the sentiments appropriate to a higher and kindlier civilization. In the eleventh century the Pope formally issued a bull for the emancipation of slaves, and in 1102, in the great council of the nation held at Westminster, it was declared unlawful for any man to sell slaves openly in the market, which had previously been the common custom of the country. It was not until several centuries later, however, that slavery was finally and entirely abolished in England. An attempt to extinguish it, made in 1526, proved unsuccessful, and even Cromwell did not scruple to send the Scottish prisoners, taken at Dunbar in 1650, to the West India colonies as slaves. The system was finally abolished by statute in the reign of Charles II, but even so late as 1775 certain Scottish colliers were so far from being free that their services were bought and sold with the estates to which they were attached, and to which they could be brought back by summary procedure before a magistrate if they ventured to leave and seek employment elsewhere.

But though slavery in the British isles, as well as on the continent, maintained a feeble spark of life until a comparatively recent period, the process of enfranchisement, both personal and political, had been going on for many centuries, and had gradually changed the face of society. One of the chief agencies in effecting this great change was the growth of the incorporated towns and cities. During the turbulent and lawless period which resulted in the development of feudalism the warlike and predatory habits of the age left little security either for industry or commerce; and from this fact, coupled with the absence of any demand for the finer products of industry, to which reference has already been made, it resulted, both in England and in continental countries, that from the fifth to the eleventh centuries there was no tendency among the population

toward urban growth of new towns. So great, in fact, was the power, that the lords, who often lived in various parts of their little less than the Leicester example, name the sun probably as he went to Rome married in view.

But with the liberation of the people there came into the world the germ of a new social order, gradually arising before had seen the light. Another circumstance, materially to the advantage of the churches, was that the slaves themselves had not received such protection as the freemen, and found refuge in the towns. "The people of men laboring in the neighborhood of some city, place, or carrying away some city, place, men became citizens, a desirable improvement of resistance to independence. The burgesses of which they too were a part, were swept away secure in their rights, injustice kindled by their conduct, the burgesses a energetic resistance unrecorded, struggling during the elevation of their hands, resistance we find large numbers of municipal share of municipal opinion of Hall, any other country, tion of the community, and Amiens, we reigns of the two of France acquire

toward urban life. Under these circumstances there was scarcely any growth of new towns or cities, and even those which Roman civilization had left were steadily declining in population, wealth, and influence. So great, in fact, became the preponderance of rural population and power, that the cities were included in the domains of adjacent feudal lords, who often appointed their magistrates, exercised arbitrary authority in various ways, and frequently exacted tribute which amounted to little less than pillage and spoliation. Thus we find the second Earl of Leicester exacting from one of the burgesses of the town of the same name the sum of 500 marks, and from other burgesses sums which were probably as large in proportion to their wealth, in order to make a journey to Rome and purchase a dispensation for his wife, whom he had married in violation of the canons of the church.

But with the complete establishment of feudalism and that rude equilibration of the discordant elements of society which the event involved, there came into existence wants and tendencies which at once formed the germ of a new order of things, a new form of society. Thus there gradually arose a demand for the products of various industries which before had scarcely had an existence. These industries tended to concentrate in the towns and thus to attract population to these centers. Another circumstance which, in the opinion of Guizot, contributed materially to the early growth of the towns, was the right of asylum which the churches gave to fugitives, even at a time when the towns themselves had neither charters nor fortifications, and could not have afforded such protection. It was not merely serfs and villeins who thus sought and found refuge within the precincts of the churches situated in the towns. "The chronicles of the times," says Guizot, "are full of examples of men lately powerful, who, upon being attacked by some powerful neighbor, or even by the king himself, abandoned their dwellings, carrying away all the property they could rake together, and entering some city, placed themselves under the protection of a church. These men became citizens, and while the capital they brought with them gave a desirable impulse to industrial and commercial enterprise, the spirit of resistance to baronial or kingly authority which they also imported was not less useful in promoting the progress of the cities toward civil independence. As the opportunities for industry and trade increased the burgesses felt more keenly the exactions of their feudal lords, by which they too frequently saw the reward of their energy and enterprise swept away. The consciousness of what they could accomplish, if secure in their rights, stimulated them to organization, and each new injustice kindled their resentment, while the feudal lords themselves, by their conduct toward each other and toward their king, furnished the burgesses a perpetual example of the value of resolute will and energetic resistance. How many were the fruitless, and, because fruitless, unrecorded, struggles of the cities for liberty, we shall never know; but during the eleventh and twelfth centuries we find them with arms in their hands, resisting baronial or kingly power, and as a consequence we find large numbers of them obtaining charters by which a liberal share of municipal independence was guaranteed to them." In the opinion of Hallam, such corporations existed earlier in Spain than in any other country. The charter of Leon, granted in 1020, makes mention of the common council of that city as an established and long existing institution. The earliest charters in France, those of St. Quentin and Amiens, were granted by Louis VI, during whose reign, and the reigns of the two succeeding kings, (1108 to 1223,) the principal towns of France acquired the privileges of incorporation. The charter of Lon-

don was granted by Henry I, in the year 1100, but it is not clear that any other corporate towns in England possessed the right of internal jurisdiction before the reign of Henry II, who ascended the throne A. D. 1153.

There are not wanting evidences of the services rendered by the cities when once they attained municipal independence in undermining serfdom and villeinage, and, indeed, the feudal system itself. Thus a chronicler of the twelfth century relates that Louis VII of France founded under his protection a multitude of new cities, which he complains did great wrong to the monasteries and seignors in their vicinity, *whose slaves came thither for refuge*. In like manner the English proprietors in the fourteenth century are found complaining to Parliament of the wholesale absconding of villeins, and above all of the support afforded to these fugitives by the tribunals and the towns. It was almost impossible, they alleged, to reclaim a villein who had escaped to another county or to London.

By thus affording a refuge and employment for fugitive serfs and villeins, the cities did much to bring about a general substitution of free for servile labor. Not only did they afford occupation for a large and growing class of paid laborers and handicraftsmen—a class that was steadily re-enforced by accessions from the serfs, villeins, bordars, and cottars of the country—but they also had a strong influence upon the relations of these classes of rural laborers to their manorial lords. The latter, finding that their subjects had opportunities of escaping from their service, were fain to treat them with greater leniency, and to secure their adhesion by allowing them increased privileges and immunities. In the first two centuries succeeding the Norman conquest, a villein could be subjected to unlimited service by his lord. They differed from the thralls, or personal serfs, in the fact that they were employed in agricultural work, while the latter were assigned to the menial or domestic service of the manor; but so similar was the condition of these two classes that the term “villain,” or villeins, came to be indifferently applied to either.

In short, according to Bracton, one of the most minute and thorough of the juridical writers who have treated on early English law, the agricultural serfs, or villeins proper, were entirely at the disposition of their lords’ pleasure. It is true that they occupied and cultivated for their own subsistence a portion of the lord’s estate, but this, at least in the beginning, appears to have been a matter of custom and convenience, rather than the consequence of any recognized right which they possessed. The first step toward their emancipation was the substitution of fixed and specified services for services subject directly to the lord’s command. Such a division of their time must indeed have been demanded by the lord’s convenience, no less than that of the villeins themselves; but at first he had a right to interfere with this arrangement at his own pleasure, and could command extra services whenever he chose. Moreover, the fixed services themselves were then exceedingly onerous.

As a rule, a man of each *virgata** worked for the lord three or four days a week from the first of August to Michaelmas, and two or three days a week for the rest of the year. “Beside this,” as we are informed by Nasse in his able and learned work on *The Agricultural Community*

* The virgata, or virgate, of land has been said to be only twenty-five acres, but in some calculations it has been rated as high as forty acres, and Mr. Rogers, in his history of English agriculture, expresses the opinion that both of these figures are below the mark.

of the Middle Ages (except during one acre for the fallow, furnishing the service in the farm two or wife usually sional hauling well as mess these service taxes.

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Mr. J. E. Th England, refer England in th which prevailed is Mr. Rogers’ (1216 to 1272,) serfs, perhaps fixed and invan ing been subst of commanding robber barons, state of terror, something like and habits of Rogers present the English vill 1400. Although our eyes must a holds that durin dents to which t rions, as they h may have been, expressions use of our forefath held positions o villein of Cuxha lege, was bailiff superintended t produce and kep

of the Middle Ages, "the peasants plowed sometimes one day weekly, (except during frost and harvest time,) sometimes a definite extent of one acre for the sowing of winter or summer grain, and also as a rule for the fallow; they harrowed and sowed the plowed land, sometimes furnishing the seed themselves. They rendered further extraordinary service in the hay and corn harvests, being obliged to turn out on the farm two or three times a year with their whole households, the housewife usually being alone excepted." To this must be added the occasional hauling of wood from the forest and corn to the market-town, as well as messenger duty, &c., and a variety of other services. Beside these services they were liable to numerous dues in kind and money-taxes.

It has been already stated that the charter of London was granted in the year 1100, and that other English cities were incorporated during the progress of the twelfth century. In the records of the thirteenth century we find evidences of the substitution of money-rents for personal services. This is the case with the landed estates of the monastery of Worcester and those of St. Paul's church. In many land registers of this period there is a statement of dues and how they shall be paid in work or in kind, and side by side with this statement the amount of money-rent which would be accepted as an equivalent for these services. In the Hundred Rolls (English land records) are found clear traces of the gradual change of service into rent, the words *ad voluntatem domini* (at the will of the lord) often found in connection with the specification of the money value of certain labor, indicating that the lords at first reserved to themselves the right of returning to the system of payment in personal services.

Mr. J. E. Thorold Rogers, in his history of agriculture and prices in England, refers to the marked contrast between the social condition of England in the reign of Henry II, (1153 to 1183,) and the condition which prevailed during the latter years of the reign of Henry III. It is Mr. Rogers' opinion that during the long reign of the latter monarch, (1216 to 1272,) the mass of the English people passed from the condition of serfs, perhaps even slaves, to that of freemen, a small money-rent or a fixed and invariable amount of service for the occupation of land having been substituted for the right which the lord had previously enjoyed of commanding the services of his dependents at his own pleasure. The robber barons, who, like social leeches of prey, had kept the country in a state of terror, had disappeared; the influence of established laws, with something like a regular administration of justice had begun to be felt, and habits of order were becoming diffused among the people. Mr. Rogers presents a mass of interesting facts bearing upon the condition of the English villeins during the century and a half ending with the year 1400. Although they were subject to restraints and liabilities which in our eyes must appear as outrageous violations of personal freedom, he holds that during the period under consideration the services and incidents to which they were liable were determinate, and in no case precarious, as they had been at an earlier period. And degraded as their lot may have been, Mr. Rogers believes that "it was not so grievous as the expressions used about their condition suggest, or inquirers into the state of our forefathers have concluded." In some cases persons of this class held positions of considerable responsibility. Thus Robert Oldman, a villein of Cuxham manor, one of the estates belonging to Merton College, was bailiff of that estate, in which capacity he must not only have superintended the operations of the farm, but also have marketed the produce and kept the accounts of the place. A serf on the estate just

mentioned, holding half a virgate of land, paid one-quarter of seed-wheat at Michaelmas, a peck at Martinmas, four bushels of oats, three fowls, and two pennyworth of bread. The average value of these payments is estimated by Rogers at 7s. 6d. a year. In addition to this, he had to cultivate a rood of land and work six days in harvest on the manor farm, the value of which labor is estimated at 2s. 6d. The total annual rent was, therefore, equivalent to about 10s., which, supposing a half virgate to have contained twenty acres, was only 6d. an acre—"a rate," says Rogers, "which, considering the general goodness of the land in Cuxham, as is evident from the comparative rate of production in that parish, cannot be considered excessive." The services exacted from the tenants in villenage at Farley, another manor belonging to Merton College, were all commutable for specified sums of money. "Thus, Hugh, the son of Chrispian at Haghe, held a messuage and a quarterium of land, (which may probably contain the same quantity as a virgate,) under the following conditions: he pays one shilling a year rent. He is bound to carry dung at a payment of a half-penny a day, or to give three halfpence in lieu of the service; to plow and be fed, or pay sixpence for the year's work; to gather nuts for three days, or forfeit three halfpence; to supply one man in harvest or pay two shillings, in case the lord assents to such a commutation; to plow half an acre for winter and half an acre for lent-corn, or pay sevenpence; to wash and shear sheep and lambs, or pay a half penny a day during the time; to hoe and be fed, or forfeit three farthings a day; to collect stubble for three days before dinner, and receive a half-penny, or forfeit three halfpence; to give a hen of the value of two pence or a cock of the value of three halfpence, and find a help for the thatcher or forfeit three farthings." Ten other tenants on the same manor held their land upon similar terms. Other villein tenants, holding from eleven to fourteen acres, pay a much smaller rent, their duties being mainly confined to harvest labor.

The rent-roll of the manor of Thorneroff, (Leatherhead in Surrey,) supplies the following facts for the year 1334: Twelve freeholders occupied each a virgate or more, the rent of a virgate varying from 1s. 6d. to 6s. Four held half a virgate, each lot being described as a messuage and thirteen and a half acres of land. Others held quantities varying from seven acres down to half an acre of meadow. One place containing thirteen and a half acres was held on condition of paying a wreath of red roses on midsummer day.

The same manor had one tenant in villenage holding a messuage and a virgate of land and paying five shillings a year, besides which and the liability to pay heriots, the following labor-rents were exacted:

I. To carry dung with cart and two horses and a man for two days; to receive on the first day a farthing's worth of bread, and on the second day a repast, worth three halfpence.

II. To gather stubble four and a half days, at no pay.

III. To plow one acre in winter and another in Lent, with a repast worth three pence each time.

IV. To harrow winter-seed with one horse for half a day, but receive no pay, and oats, with one horse, when they are sown, the lord supplying two other horses.

V. To find one person to assist the thatcher, when the service is needed, at no pay.

VI. To find one person to hoe the lord's corn, at a farthing every other day.

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VII. To find one person to turn and cock the hay, the lord being bound to scatter it.

VIII. To find one person to carry the hay in one particular field.

IX. To find one person to dig in the garden half a day, and to thrash half a day gratuitously.

X. To find one man to drag straw from the grange to the hay-rick.

XI. To find one woman to wash and shear sheep and lambs, and to do this for nothing.

XII. To find a man and woman to reap and bind corn all the autumn, to receive two repasts a day, but no drink besides water.

XIII. To find four persons at the lord's bidding in the time of harvest called "Alebedripe," (he himself coming the first hour,) to bind the sheaves and make stacks (hulac) of them, and to have two repasts and sufficient beer.

XIV. The day after he shall find four persons to reap and bind the corn, and have two repasts without beer.

XV. He shall find a cart for one day, and shall be fed on that day.

XVI. He shall reap, bind, and stack (hullare) an acre of wheat at his own cost.

XVII. He shall present a cock and two hens at Christmas.

Five other tenants held half a virgate, and were charged with analogous obligations and services. "These services," says Rogers, "are rather onerous, and represent more considerable liabilities than I have found elsewhere. But I do not think that, including the rent, the burdens laid on the tenant amounted to as much as fifteen shillings annually." On the same estate there were nine coterells, or cottars, each holding a cottage, and most of them an acre of land, and paying from one to two shillings a year, besides performing slight services of the same character as those rendered by the tenants in villenage.

Beside the services to which he was liable, the villein was subject to numerous restrictions. He was under the necessity of petitioning the lord for a license to marry, for which he was required to pay a sum of money varying in amount, and a breach of this regulation incurred a pecuniary mulct. He had also to pay for the privilege of sending his children to school, while the fine exacted for permanently quitting the manor was an obstacle to the selection of any other pursuit than husbandry, to which a legal impediment was added by a statute passed in the twelfth year of Richard II. It may be doubted, however, whether the statute was very effective, while the fact of its enactment is indicative of the increasing tendency of the villeins to bring their children up to mechanical trades and other non-agricultural occupations. The chief ambition which they entertained appears to have been that of sending one son to school, or rather to the university, with a view to his taking orders in the church, a desire which was looked upon with great suspicion. As early as A. D. 1164, the practice had aroused opposition, since one of the constitutions of Clarendon was directed against it, and more than two centuries afterward the Parliament of Richard II petitioned the king that villeins should be prohibited from sending their children to school to advance them in the church.

The villein was also restrained from purchase or manufacture, except at the lord's discretion. Thus the tenant on the estate of Merton College, at Cambridge, was required to buy his scythe at Chesterton, and at Pentrek a millstone could not be made in the bailiwick without a license from the lord of the manor. It is believed, too, that the use of the village mill, owned by the lord of the manor, was compulsory upon all such inhabitants as owed him suit and service. Thus the records of

the manor court of Kibworth, in Leicestershire, for the year 1331, show that on one occasion the entire village were fined for not having ground their malt at the lord's mill, as they were bound to do. Other cases mentioned in the records of the same manor illustrate the social dependence of the villeins at that time. Thus Robert Goodyer prays the lord of the manor for a license for his daughter Emma to marry, for which he pays eighteen pence; and Matilda Godwene having married without the lord's permission, Alice Godwene (probably her mother) subsequently pays a fine of twelve pence. Nicholas Harcourt pays two shillings for a license to make his son a monk, while Hugh Harcourt, in the following year, (1331,) obtains the same privilege for twelve pence. For two shillings John Scolasse obtains a license to betroth Alice, daughter of William Brown, and "to go and return according to his will whithersoever he wishes, with his chattels and all his goods, movable and immovable."

It is not difficult to understand the influence which the towns and cities would have in relaxing the restrictions and lightening the burdens to which the villeins were subject. A man ceases to be a slave the moment it becomes impracticable forcibly to hold him in a state of slavery. And so when the lords found their serfs had refuges to which they could fly, and from which it was difficult, if not impossible, to bring them back, and that oppressive treatment drove many of them to seek these refuges, they were induced, by self-interest itself, to relax the bondage in which they had held them. At first they were led to refrain from demanding any labor beyond certain regular fixed services, such as those already specified, attached to their "tenements" or holdings of land. Then these fixed services themselves were gradually diminished in amount, and finally, as already stated, they were made commutable into money-rent. The commutation, like the service which it replaced, was fixed in amount, but at first the lord could exact the service instead of its pecuniary equivalent, while the tenant, according to Rogers, could also insist upon giving the service, instead of the money, if he chose to do so. In course of time, however, the payment of money-rents became an established custom, and it is believed that in the latter half of the fourteenth century the number of tenants in villenage who paid rent by service was very small. It may be remarked here that this change occurred much earlier in England than in continental countries, and, coupled with the rulings of English law-courts, was perhaps one of the causes which led to the wide divergence between the subsequent career of the English agricultural class and that of the same class in the several countries of continental Europe. But whatever may have been its ultimate influence in promoting that complete divorce of the English agricultural laborer from the soil which in modern times has been a source of such serious evils, its first introduction was an important step in the direction of personal freedom. It left to the villein the control of his own time, and if by superior energy he could produce for himself a surplus over what was required to pay his dues to the lord, he was free to do so. Moreover, as the lord could now demand nothing from him but a fixed money payment, if he desired to secure his services as a laborer, he must pay him stipulated wages. Thus there gradually grew up a large body of free paid laborers in the country as well as in the cities, a result which, as may be readily seen, was largely due to the fact that the cities afforded a market for rural produce, created commerce, and familiarized the people generally with the use of money as a measure of value and a medium of exchange.

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exercised an immense influence upon the social condition of the country. Its immediate effects were disastrous in the extreme, sweeping away, according to some estimates, one-half of the population, but its ulterior consequences were seen in a great improvement in the condition of the masses of the people.

The great rise in wages, which was one of its first results, rendered the system of farming by bailiff unprofitable; for even the high price of wheat which prevailed for more than a quarter of a century after the plague, failed to compensate for the enhanced cost of labor. Under this condition of affairs, the practice of letting land on lease became quite general, and it is the opinion of Mr. Rogers that much of the land of the feudal lords was disposed of in small parcels, or, at least, granted at new quit-rents—a form of alienation which did not infringe the statute *quia emptores*. The rent of land at this time was very low, for the produce was worth very little more than the cost of production—a state of things which, however unfavorable it may have been to the owners of large estates, was highly conducive to the prosperity of the small occupier and the laborer—two characters which were often united in the same person.

The great rise in the price of labor at the period under consideration made the services due from the tenants in villenage much more valuable than the money-rents which had been fixed upon as their equivalent; and it is probable that there was a determined effort on the part of the land-owners to revive the exercise of a right which they still possessed in theory, but which in practice they had long before abandoned. Mr. Rogers expresses the opinion that they also undertook to convey the same right to those who took land from them on lease; and it is not unlikely that the latter, animated by a mercenary spirit, endeavored to enforce their claims with greater rigor than the lords themselves. At all events, the well-informed writer just cited regards it as "clear that an attempt to enforce the alternative of labor (instead of money-rents) was one of the most powerful stimulants to the great uprising of the serfs," known in history as Wat Tyler's insurrection.

The story of Tyler's swift vengeance on the Kentish tax-gatherer who had offered an indignity to his daughter is familiar to all readers of English history; but the rising of the peasants was apparently the result of a deliberate plan, a widely extended organization, and a general sense of oppression. The insurrection broke out on Monday, the 10th of June, 1381, under the lead of Tyler, in Kent, a thorough understanding having been entered into with the villeins of Bedford, Sussex, Essex, Norwich, and other counties. On the following Friday the rebels, who had already entered London, threatened that, unless the King (Richard II) gave them a conference, they would destroy the Tower, with all the persons in it, including of course the King himself and the royal family, who had taken refuge there. Richard, who was then a mere youth, met them at Mile-end, where, according to Froissart, he rode into the crowd and asked them to state their wants. They answered, "We will that ye make us free forever, ourselves, our heirs, and our lands, and that we be called no more bond, or so reputed." The King assented, bidding them to go home at once, but to leave three from each village, who should receive and carry back the charters of manumission—a suggestion upon which many of them immediately acted. Tyler, however, remained, together with two other leaders, Ball and Straw, and a force of about 30,000 men. On the following day, at an interview with the King, Tyler was assassinated by Walworth, mayor of London. By dissimulation Richard appeased the people; but before evening he issued

a proclamation commanding all the country-folk to depart from London under pain of death. The insurrection was broken, and the King soon proceeded to take vengeance on its originators. He made a progress through the disturbed districts, demanding from the chief persons in all the towns and villages the surrender of the movers in the sedition. According to Froissart, no less than fifteen hundred persons were put to death—hanged or gibbeted in chains—while such charters of manumission as had been granted in accordance with the King's promise were revoked and canceled. The terms of one of these charters addressed to the authorities of the county of Herts are given by Walsingham, and are as follows:

Know that, of our special grace, we have manumitted all our liege and singular subjects and others of the county of Hertford, freed each and all of them of all bondage, and made them quit by these presents: Pardon them all felonies, treasons, transgressions, and extortions committed by any or all of them, and assure them of our *summa pax*. Dated June the fifteenth, anno regni quarto.

To certain delegates sent from Essex to request the confirmation of the charters of manumission and certain other benefits, the King, after some hesitation as to how he should answer these audacious petitioners, broke out in the following language:

O vile and odious by land and sea, you are not worthy to live when compared with the lords whom you have attacked; you should be forthwith punished with the vilest deaths, were it not for the office you bear. Go back to your comrades and bear the king's answer. You were and are rusties, and shall remain in bondage; not that of old, but in one infinitely worse. For as long as we live, and by God's help rule over this realm, we will attempt by all our faculties, powers, and means, to make you such an example of offense to the heirs of your servitude, as that they may have you before their eyes, and you may supply them with perpetual ground for cursing and fearing you.

The spirit of Parliament in regard to the same movement is indicated by the answer of that body to a communication informing the Commons of the King's action in granting the charters of manumission, and desiring them to provide for the confirmation or revocation thereof. The communication set forth, among other things, that if they (the Lords and Commons) should desire to manumit their villeins by common consent, the King would assent to it. The unanimous answer was, "that all grants of liberties and manumission to the said villeins and bond-tenants obtained by force are in disinherison of them (the Lords and Commons) and to the destruction of the realm, and therefore null and void." To the suggestion in regard to manumitting their villeins by common consent they replied, "that this consent they would never give to save themselves from perishing altogether in one day."

In view of the austere reply of Richard to the delegates from Essex, his suggestion to Parliament seems a little surprising; but, as Mr. Rogers suggests, "that answer may have been partly the expression of indignation, partly of fear, and therefore have had no more than a temporary significance." "We know, too," says the same author, "that the policy of the court was not unfriendly to the emancipation of the serfs; that every construction which lawyers could put upon usage or statute was favorable to the freedom of the serf; and we also know that in after years the King put his veto on those resolutions of the Commons by which they intended to subject the condition of villenage to social disabilities. This is particularly the case in the answer given to the petitions of Parliament in 1391, when the King declines to accede to the request that the sons of villeins should not be allowed to frequent the universities, and to the complaint that villeins fly to cities and boroughs and are there harbored, and that the lord, on attempting to recover his villein, is hindered by the people; with a suggestion that the remedy might

be allowed of place in which insurrection v disinclined to tude." It seemed quelled and it the villeins, w rights and p week, and alth affection allay lion was clear power of the p to service inste rection, the eff then, nor at an any permanent the latter year nized place as s as well as the s Henry IV (who court. The str ing at the close teenth by the p strife known a and proscription dal aristocracy in the mean time nobility on the r

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be allowed of seizing the villein without regard to the franchises of the place in which he had taken refuge. When the alarm felt at the actual insurrection was passed away, we may well conceive that the court was disinclined to strengthen the lords by tightening the bonds of servitude." It seems certain that, although the insurrection of 1381 was quelled and its leaders summarily punished, its result was to obtain for the villeins, within a few years, a very considerable extension of their rights and privileges. They had been masters of the situation for a week, and although disbanded, their spirit was not broken, their disaffection allayed, or their secret organization destroyed. Another rebellion was clearly a possible event, and experience had shown that the power of the peasantry was not a thing to be contemned. If the claim to service instead of money-rent had been one of the causes of the insurrection, the effort to enforce it must have been abandoned; for neither then, nor at any subsequent period, was such an effort attended with any permanent or general success. Moreover it is believed that during the latter years of the fourteenth century the villeins attained a recognized place as freemen before the law, since it seems probable that they, as well as the small freeholders, were included in the election statute of Henry IV (who usurped the throne in 1399) as suitors in the county court. The strength and importance which the yeomanry were acquiring at the close of the fourteenth century was promoted during the fifteenth by the prosperity of agriculture, and even by the desolating civil strife known as the wars of the roses. By the expenses, forfeitures, and proscriptions incident to this series of desperate struggles, the feudal aristocracy was almost destroyed, and the Crown, whose power had in the mean time been largely augmented, subsequently built up a new nobility on the ruins of the Church.

But long before the destruction of feudalism, that system had been but the mere shadow of its former self. Villenage, as we have seen, was virtually extinct at the end of the fourteenth century; and long before the villein was formally recognized as a freeman before the law, he had been in the practical enjoyment of many of a freeman's rights. In the mean time, free wage labor had been steadily extending the sphere of its operations—a result, as already shown, which was largely due to the growth of the towns, and to the development of mechanical and manufacturing industry.

During the earlier years of the reign of Edward III (1327 to 1377) the necessities growing out of the war with France brought about intimate commercial relations with the Flemish manufactories, and ultimately led to much industrial prosperity in Norfolk and some other of the eastern counties. A number of Flemish weavers had come over with William the Conqueror, and during the two succeeding reigns the manufacture of woollen cloth had made considerable progress. But under Edward III, this industry received a new impetus. An expert Flemish manufacturer who came to England in 1331, bringing his workmen with him, was very kindly received by this monarch, who issued a proclamation promising similar protection to all foreign weavers and fullers who should settle in England. In 1337 several additional statutes were enacted, one of which made it a felony to export wool, while another limited the use of foreign cloth to the royal family, a third forbade its importation, and a fourth invited cloth-workers into England, and promised them further protection and encouragement. These strong protective measures must have occasioned for a time inconveniences which might have been avoided by the more delicate arrangements known to modern legislation; but they appear to have been instrumental in build-

was abundant and near, it is probable wood was more frequently used as the framework of the building. The chimney, however, must have been built of stone, except in the very rudest huts, some of which are said to have been without that convenience.

The first mention of bricklayers occurs in the statute of 1496, so that it is probable the occupation was unknown during the preceding centuries, although tilers are mentioned in the statute of 1550, and tiles are known to have been in use in Suffolk at least as early as 1358.

Sawyers are frequently mentioned, but probably did not carry on a distinct business. They were paid by the day or by the one hundred square feet sawn, and generally the two who worked at the same saw were paid together, which seems to imply that they had mutual arrangements in hiring. When separately paid, the top sawyer was paid at higher rates than the lower one.

Of the farm servants some were engaged permanently; others temporarily and for special purposes. Thus the mowing of hay was done partly by the regular servants of the farm, partly by tenants holding land by customary service, and partly by hired labor, which was often obtained from a distance. The regular servants comprised the plowmen and drivers, the carters, a shepherd or two, according to the size of the flock, a pig-keeper, a cow-herd, and a dairy-woman.* When the work of the fields was over, the plowmen and drivers were engaged in house occupations, of which the principal was threshing. The winnowing, as a rule, was done by women, especially the dairy-woman, whose in-door work in winter was comparatively light. Where two shepherds were employed, one of them was assigned to the special charge of the ewes, and received better pay than his fellow-servant.

The laborers were generally supplied with an allowance of beer, but as a rule none of them appear to have been maintained in the house except occasionally during harvest. Indeed, they had land and stock of their own—that is, land which they held in villenage—and occasionally the shepherd was remunerated for his services by permission to use the lord's pasture for his own little flock, while the dairy-woman was often the purchaser of calves from the farm on which she was employed.

It should be understood that the word "farm," as here used, refers to the portion of each parish or manor which was held by the lord himself and farmed for his benefit, under the direction of a bailiff. This usually comprised from one-third to one-half of the arable and better pasture-land. The remainder (with the exception of the glebe, over which the feudal rights of the lord of the manor did not extend) comprised the estates of the small freeholders, who paid quit-rents, the holdings of the villeins, bordars, and cottars, and the waste or common, upon which all the tenants had the right of pasture, and sometimes that of cutting turf. The holdings of the villeins were often as extensive as those of the freeholders.

Respecting the physical condition of the English laborer at the period under consideration we possess but scanty knowledge, but it is evident that he must have lived in a very rude and primitive style, and that he was subject to much hardship and privation. His dwelling was constructed of the coarsest materials, most commonly of wattles daubed with mud or clay. Bricks do not appear to have been used until the latter part of the fifteenth century, as the first mention of brick-layers occurs in the statute of 1496. The manor-house was usually built of stone, but the tenements by which it was surrounded were of the mean-

* The work of the dairy was, however, sometimes performed by a man.

est description. The occupation of a glazier is mentioned in the statute just referred to, but although glass had at that date been long used as the ornament of churches, it was not used even in the better class of private houses until a much later period; for even as late as 1557 it was not common to find glass windows in the castles of the nobility, and they probably were not used in farm-houses much before the reign of James I. That it was an unknown luxury in the hut of a mediæval peasant it is unnecessary to state. Artificial light, too, must have been used very sparingly by the poorer classes, since a pound of candles would almost have absorbed a workman's daily wages. It is believed that fuel also was comparatively dear, and the poor man's home in winter must, therefore, have been the scene of severe privation and discomfort. Hence the advent of spring was hailed with a joy and gladness of which we in modern times can form but a faint conception. Even as late as the reign of Queen Mary the peasant lived in a wretched clay-built hovel; and according to Erasmus the dwellings of the poor generally were unprovided with a chimney to let out the smoke, while their beds consisted of straw, with a block of wood for a pillow, and the flooring of their huts was nothing but the bare ground covered with rushes, among which was "an ancient accumulation of filth and refuse."

The valuation of the movable property in the borough of Colchester made in the year 1296, which has been already referred to, gives an idea of the degree of domestic comfort enjoyed by the small tradesmen and artificers of that period. The amount of household furniture possessed by each family appears to have been very limited, consisting chiefly of a brass pot valued at from 1s. to 3s., and a bed valued at from 3s. to 6s. The former was apparently almost the only culinary utensil then used in the households of the poor.

The valuation taken at the same place in 1301 is still more curious and minute. Among the articles mentioned in the list then made out are found the following, along with which are given the figures indicating the range of their respective values:

	s. d.	s. d.
A bed	1 6	to 6 8
A tripod	3	to 9
A brass pot	1 0	to 2 6
A brass cup	6	to 1 0
An andiron	3½	to 8
A brass dish	6	to 1 0
A gridiron	6	to 1 6
A ring or coverlet	8	to 1 6
A broad-ax	3	to 5
An adze	2	
A square	1	

A blacksmith's tools were valued at from 2s. to 5s.; a cobbler's stock in trade at 7s. 5d.; that of two other cobblers at 10s. 6d. and 12s. 2d., respectively; and that of a tanner at £9 17s. 10d. There is reason to believe, however, that these prices were considerably below the real value of the articles.

At the period under consideration the manor-house itself was but scantily furnished, while the movables of the "ordinary house" consisted, according to Mr. Rogers, of "a brass pot or two for boiling, and two or three brass dishes; a few wooden platters and trenchers, or, more rarely, of pewter; an iron or latten candlestick; a kitchen knife or two;

a box or barn walls were g corn measure and but rarch ally the cover

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"The date o queathed his g two others at 2 and a materae rium pro lecto,) at 4s.; a kayne i. e., a cover fr two napkins, at these articles o rings, one of wh at 4d.; a pouch at 3s.; and ano rae,) one with a valued at 3s. 2d mounted by a g at 3d.; two pai shilling; beside must have been

Owing to the must have been to the use of the of the laboring p valuable articles tations doles, and devised by will. tenth century is comprising a jaci by a belt or gird shoes, and occasio a century later.

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Meat appears to supply. Mutton c ease, which could beef was very littl 10s. Yet, even at diet than wheat, o for a penny. Butt

a box or barrel for salt, and a brass ewer and basin. * * * The walls were garnished with mattocks, scythes, reaping-hooks, buckets, corn measures, and empty sacks. The dormitory contained a rude bed, and but rarely sheets and blankets, for the gown of the day was generally the coverlet at night."

In the same connection (page 13, vol. i, History of Agriculture and Prices) Mr. Rogers presents the inventory of the effects of John Senekworth, who for several years was bailiff of Merton College, at its manor of Gamlingay, in Cambridgeshire, as well as at other places before. "Senekworth," says this writer, "was evidently a valued servant of the college, (of which one of his brothers was a fellow,) and for a few years before his death the society presented him with five pounds '*ex speciali gratia sociorum*.'"

"The date of the inventory is 1314, the deceased bailiff having bequeathed his goods to the college. It contains a tapetum valued at 7s., two others at 5s., one more at 20d.; 6 lintheamina, (sheets,) at 4s. each, and a materace,* at 1s.; a red coverlet, at 2s.; a counterpane, (*co-opertorium pro lecto*), at 4s.; a red gown, at 8s.; another, at 3s.; a blue gown, at 4s.; a kaynet gown, at 2s. 6d.; a russet tunic, at 1s. 6d.; a banker, i. e., a cover for a seat, at 15d.; a table-cloth, at 1s.; two more and two napkins, at 6s.; three quisins, i. e., cushions, at 9d. each. Beside these articles of linen and clothing Senekworth possessed three gold rings, one of which was broken, the whole being valued at 18d.; a purse, at 4d.; a pouch, at 3d.; a knife, at a penny; a foreer—that is, a chest—at 3s.; and another, at 6d.; a leathern foreer, at 3d.; two glasses, (murræ), one with a silver stand, worth 7s.; a second, 8d.; four silver spoons, valued at 3s. 2d.; two silver seals, (*firmacula*), 2s., one of these being mounted by a gilded penny as a symbol; three books of romance, valued at 5d.; two pair of linen panni, at a shilling; a basin and ewer, at a shilling; beside some less characteristic effects. Senekworth, however, must have been an official of more than usual opulence and social position."

Owing to the high price of clothing the dress of the mediæval peasant must have been exceedingly plain, and the statutes which limited them to the use of the lower-priced materials must have seemed to the mass of the laboring people a very superfluous precaution. Shirts were such valuable articles that they were often the objects of charitable or ostentatious doles, and even in considerably later times they were frequently devised by will. The dress of the laborers in the latter part of the fourteenth century is, however, described as being simple and well-contrived, comprising a jacket and a coat, buttoned and fastened round the body by a belt or girdle, a bonnet of cloth, and hose of the same material, shoes, and occasionally a hat, though the latter was not much used until a century later. The latter article is mentioned in a statute of Richard III, in which the price is limited to 20d.

In respect to food, the English peasantry of the thirteenth, fourteenth, and fifteenth centuries appear to have been tolerably well off. The records of agriculture indicate that wheat was the principal grain consumed by the people. In the allowances to farm servants it was sometimes mixed with rye or barley, but then, as now, the latter grain was chiefly used in the manufacture of beer.

Meat appears to have been cheap, and, therefore, was probably in fair supply. Mutton could be bought in plenty at about a shilling the carcase, which could scarcely have been more than a farthing a pound; and beef was very little dearer, since the carcase of an ox could be had for 10s. Yet, even at these prices, mutton or beef was a far more expensive diet than wheat, of which, on an average, six pounds could be bought for a penny. Butter and cheese, though abundant and cheap in com-

* Mattress



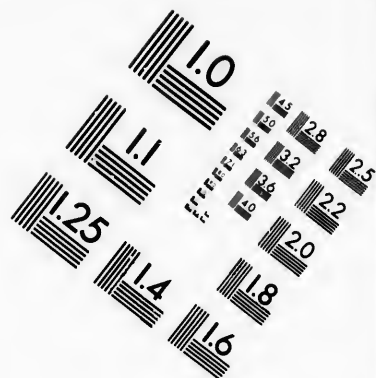
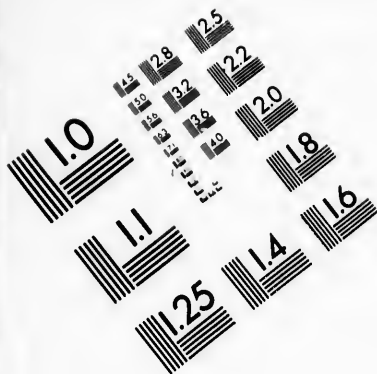
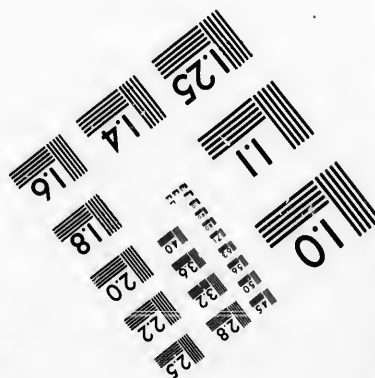
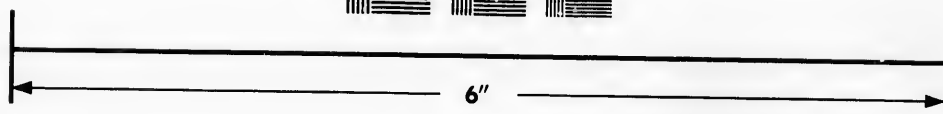
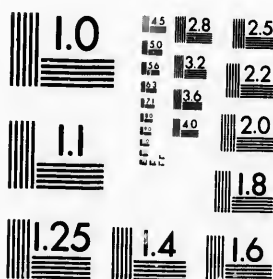


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parison with their modern prices, were at least twice as high as meat. Poultry was to be had in plenty at low prices, and is believed to have been kept by the poorest classes. The most common varieties were geese, ducks, and fowls. Eggs were also exceedingly plentiful and were extensively used. The kind of meat most commonly used by the working classes was pork. Mr. Rogers shows that a hog for the farm-laborers invariably figured in the expenses for autumn on one of the estates belonging to Merton College, while the same estate also allowed its laborers two red herrings a day. Beer was often furnished to laborers by their employers, even where board was not included in their compensation, and on some manors they were feasted at the conclusion of the harvest.

Notwithstanding the abundance and comparative cheapness of meat it was not uncommon to eat the flesh of animals that had died of disease; but it is possible that this arose rather from the want of delicacy and ignorance of hygienic laws than from necessity. The consumption of such meat certainly does not appear to have been confined to periods of scarcity, for we find Walter de Henley, in an ancient treatise on the management of sheep, laying down the following rule: "If one of your sheep dies put the flesh at once into water, and keep it there from day-break to three o'clock, then hang it up to drain thoroughly, salt it and dry it. It will do for your laborers." It may be inferred from this rule that the practice of using diseased meat was not general, otherwise it would hardly have seemed necessary to point out to the thrifty husbandman this particular mode of economizing his means.

The difficulty of keeping stock through the winter caused its slaughter in large quantities during the autumn, and for more than half the year fresh meat was untasted by a great majority of the people. Vegetables were also scarce, for not only was the potato then unknown, but the people were without various other roots, such as carrots, parsnips, &c., which are now in common use. Mr. Rogers expresses the opinion that onions and cabbage were almost the only esculent vegetables in use, though nettles may have been quite commonly used as greens, since *urtice* (supposed to mean nettles) were occasionally sold from the garden. The household roll of the Countess of Leicester, (for 1265,) which is more particularly referred to further on, mentions dried peas and beans, parsley, fennel, onions, green peas, and new beans, and it is possible that the term *potagium* may include other varieties. It is not by any means necessary to infer, however, that these were all in general use among the people. In France, cresses, endive, lettuce, beets, parsnips, carrots, cabbages, leeks, radishes, and cardoons were grown as early as the reign of Charlemagne; but it is not probable that many of these varieties were cultivated in England until a much later period; for even in the fifteenth century the produce of the English kitchen-garden was contemptible in comparison with that of the Netherlands, France, and Italy.

The only fruits of which mention is made in the Countess of Leicester's roll are apples and pears, and it is believed that few other kinds were generally cultivated in England prior to the latter end of the fifteenth century, although Matthew Paris, describing the bad season of A. D. 1257, observes that "apples were scarce and pears scarcer, while quinces, vegetables, cherries, plums, and all shell-fruits were entirely destroyed." In the wardrobe-book of the fourteenth year of the reign of Edward I is found the bill of Nicholas, the royal fruiterer, in which the only fruits mentioned are pears, apples, quinces, medlars, and nuts, the supply of which from Whitsuntide to November cost £21 11s. 1^d.

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sumption of salt-meat and salt-fish for more than six months out of the year, gave rise to scurvy in its most virulent forms; and even leprosy, modified, perhaps, by climate, is spoken of by Rogers as a common disorder. The tendency to these and other diseases was doubtless aggravated by the prevalent uncleanness of the peasantry, their wretched habitations, and the indifference which they showed to the simplest sanitary precautions. Even in the latter years of the sixteenth century their habits in this respect had apparently undergone no great change for the better; for the ambassadors of Philip II, who visited England several years after the Spanish invasion, commented on the abundance of food and the uncleanly habits of the common people, remarking that "these peasants" lived "like hogs," though they fared "as well as the king." In the latter particular, especially as regards bread and meat, the English peasants were probably much better off than their brethren of continental Europe, for Fortesque who wrote in the reign of Henry VI, says of the French peasantry that "they drink water, they eat apples with bread right brown, made of rye; they eat no fiesche, but, if it be seldom, a littel larde, or of the entrails or heds of beasts selayne for the nobles or the merchants of the land."

But although the supply of food in England was generally good, there were times when the people suffered intensely through the failure of the crops. The great English statistician, Dr. Farr, in an essay published in the Journal of the Statistical Society, states that during the eleventh, twelfth, and thirteenth centuries there was, on an average, a degree of scarcity amounting to famine once every fourteen years. The series of unproductive harvests during the reign of Edward I occasioned intense suffering among the peasantry. In 1308 the price of wheat exceeded all previous experience; was still higher in 1309, and not much reduced in 1310. In 1314 it again exceeded all experience; was greatly enhanced in 1315, and in 1316 was three times as high as the average for 1314. In 1317 the price was about the same as in 1314; was again excessively high in 1321; and did not materially decline until 1322. In the two following years wheat still remained dear, but from that time until the breaking out of the great plague in 1348 the abundance of the harvests was continuous and remarkable. For the first twenty-five years after the plague the average price of wheat was quite high, but the last twenty years of the fourteenth century constituted a period distinguished for its abundant harvests.

It is said that during the long period of scarcity in the early part of that century, a scarcity attributable to incessant rain, and cold, stormy summers, the people ate the flesh of horses and dogs, and were even reduced to the necessity of subsisting upon roots. Stories still more terrible are told of the acts to which they were driven in their dire extremity; and Mr. Rogers, who makes much allowance for exaggeration, says that "no years in the whole course of the economical history of England approach the scarcity of that time, except, perhaps, the few years at the end of the eighteenth and the commencement of the nineteenth centuries."

The effects of a bad harvest in any particular locality were far more disastrous, at the time under consideration, than they would be at present, owing to the want of those facilities for transportation which we now possess in our railways, canals, and ships; yet there is reason to believe that the means of communication in England were better and the habit of travel more general in the thirteenth and fourteenth centuries than they were two or three centuries later. The trade of grain-dealer was, however, unknown, and it does not appear that, except in the abbey granges, grain was anywhere collected in large quantities. The

consequence of this was that a season of comparative plenty was often followed before the next harvest by a very inconvenient scarcity; and the fluctuations in prices were sometimes extremely sudden and violent. Thus Stow relates that in 1317, one of the years of scarcity above referred to, the harvest was all got in before the 1st of September, and that wheat, which before harvest had been selling as high as £4 per quarter, immediately fell to 6s. 8d., one-twelfth of its former price.

Upon a general survey of the field, it is clear that during the thirteenth, fourteenth, and fifteenth centuries, there was a vast improvement in the average condition of the English people. The progress of the industrial arts brought with it a great augmentation of their comforts; rapine and violence gave place to the orderly habits which grow up under the influence of an efficient administration of justice, and the masses made a great advance in securing from the crown and the aristocracy a recognition of their personal and political rights. "The wail over universal oppression, violence, and lawlessness, which is heard in the writings of Hoveden is exchanged in those of Matthew Paris for indignant comment on unwise administration, and uncourtly criticism on the king's domestic and foreign policy;" yet the first of these ancient chroniclers closes his history with the year 1202, and the latter with the year 1273. Such was the progress made in the thirteenth century. A little more than a century later we find the insurrectionist under Wat Tyler, who were chiefly villeins, boldly demanding from the king the rights of freemen, the liberty to trade in the market towns without tolls or imposts, and the legalization of the money-rents, which in practice had already superseded personal services in payment for the occupation of land. And it has already been seen that although the insurrection was crushed, it did not fail to exert a powerful influence in hastening the consummation of the objects aimed at.

It was not without many struggles, however, that the lords relinquished their control over their subjects. In the middle of the fourteenth century, when free labor had become quite general, they made their first attempt to recover, by parliamentary enactment, the substantial results of that authority which, as individuals, they had found themselves unable to maintain. The great plague of 1349, above referred to, had swept off a large portion of the population, and labor, as we have already seen, became extremely dear. To reduce its price, a royal proclamation was issued, fixing the rates of wages, and this, having proved ineffective, was speedily followed by the famous "statute of laborers," which provided for the enforcement of obedience to its enactments by means of fines and corporal punishment. The statute states that since the pestilence no person would serve unless he was paid double the usual wages allowed five years before, to the great detriment of the lords and commons; it then provides that in future carters, plowmen, plow-drivers, shepherds, swine-herds, and other servants should be content with such liveries and wages as they received in the twentieth year of the king's* reign, and two or three years before; and that in districts where they had been severally paid in wheat, they should receive wheat or money at the rate of ten pence a bushel, at the option of their employers; they were to be hired by the year and other accustomed periods, and not by the day; weeders and haymakers were to be paid at the rate of one penny, mowers five pence per acre, or five pence a day; reapers during the first week in August two pence a day, and from that time till the end of the month three pence a day, without diet or other perquisite. Laborers of this description were enjoined to carry

* Edward III.

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The wages of a quarter of barley, oats, bushels. In offenders were stocks.

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their implements of husbandry openly in their hands to market-towns, and to apply for hire in a public quarter of the town.

The wages for threshing were then regulated. A man, for threshing a quarter of wheat or rye, was allowed $2\frac{1}{2}d.$; for threshing a quarter of barley, oats, beans, and peas, $1\frac{1}{2}d.$, or a certain number of sheaves or bushels. In places where it had been customary to pay in kind, laborers were to be sworn twice a year to observe these regulations, and offenders were punishable with three or more days' imprisonment in the stocks.

Wages of artificers were fixed at the following rates: A master-carpenter, by the day, $3d.$; a master mason, by the day, $4d.$; other carpenters, by the day, $2d.$; other masons, by the day, $3d.$; their servants, by the day, $1\frac{1}{2}d.$; from Easter to Michaelmas without diet. Tilers, by the day, $3d.$; their knaves, by the day, $1\frac{1}{2}d.$; thatchers, by the day, $3d.$; their knaves, by the day, $1\frac{1}{2}d.$; plasterers, and other workers of mud-walls, by the day, $3d.$; their knaves, by the day, $1\frac{1}{2}d.$; from Easter to Michaelmas without diet.

In 1369 the statute of laborers was confirmed by Parliament, and it was provided that servants absenting themselves from their work, or quitting their place of abode, should be imprisoned for fifteen days and branded in the forehead with an iron in the form of the letter E. In cases where laborers fled into the towns, the magistrates were directed to deliver them up; and if they failed to do so, were subjected to a penalty of fifteen pounds, of which ten pounds went to the king and five pounds to the master by whom the fugitive was claimed.

In 1363 a law was enacted to regulate the diet and apparel of laborers. It directed that artificers and servants should be served once a day with meat and fish, or the waste of other viands, as milk and cheese, according to their station; and they should wear cloth of which the whole piece did not cost more than twelve pence per yard. The cloth of yeomen and tradesmen was not to cost more than one shilling and sixpence per yard. Carters, plowmen, ox herds, neat-herds, shepherds, and all others employed in husbandry, were to use no kind of cloth but that called black russet, twelve pence per yard. Clothiers were commanded to manufacture the necessary kind of cloth, and tradesmen to have a sufficient stock on hand at the *established legal prices*. Twenty-five years later another law was enacted prohibiting servants from changing their place of abode.

Under Henry VI justices of the peace were empowered to fix the price of labor every Easter and Michaelmas, by proclamation; and in 1444 the wages of agricultural laborers was limited by act of Parliament to the following rates:

I.—YEARLY WAGES.

A bailiff in husbandry, $\text{£}1\ 3s. 4d.$, with food and drink, and 5s. for clothing.

A chief-hind, carter, or chief-shepherd, $\text{£}1$, with food and drink, and 4s. for clothing.

A common farm-servant, 15s. with food and drink, and 3s. 4d. for clothing.

A woman-servant, 10s., with food and drink, and 4s. for clothing.

A child under 14 years of age, 6s., with food and drink, and 3s. for clothing.

II.—DAILY WAGES.

A mower, with food and drink, $4d.$ a day; without, $3d.$ a day.

A reaper or carter, with food and drink, $3d.$ a day; without, $5d.$ a day.

Women, and other laborers, with food and drink, $2\frac{1}{2}d.$ a day; without, $4d.$ a day.

A farm-servant intending to leave his place at the end of the year was required to give his master six months' notice; and if he failed to do so, he was obliged to remain with him another year.

The following were the rates of daily wages for artificers, as fixed by the same statute:

	Between Easter and Michaelmas.		Between Michaelmas and Easter.	
	With diet.	Without diet.	With diet.	Without diet.
A master mason.....	d. 4	d. $5\frac{1}{2}$	d. 3	d. $4\frac{1}{2}$
A master carpenter.....	4	$4\frac{1}{2}$	3	$4\frac{1}{2}$
A tiler.....	3	$4\frac{1}{2}$	$2\frac{1}{2}$	4
A slater.....				
A rough mason.....				
A common carpenter.....	2	$3\frac{1}{2}$	$1\frac{1}{2}$	3
Common workman.....				

In the reign of Henry VIII it was enacted that no serving-man under the degree of a gentleman should wear a long gown or coat, containing more than three broad yards, or trimmed with fur, under the penalty of forfeiture; nor any girdle hose, or cloth above the price of twenty pence. The fashion of wearing peaks to shoes or boots, of a length exceeding eleven inches, was prohibited to all but gentlemen.

The rate of wages may be collected from the statute of 1496, mentioned above, and was as follows:

Agricultural servants, with diet for one year.

To a bailiff of husbandry, not more than £1 16s. 8d.; for clothing, 5s.

A chief-hind or chief-shepherd, £1; for clothing, 5s.

A common servant of husbandry, 16s. 8d.; for clothing, 4s.

A woman-servant, 10s.; for clothing, 4s.

A child under 14 years of age, 6s. 8d.; for clothing, 4s.

The daily wages of artificers and other laborers, as fixed by the same statute, was as follows:

	Between Easter and Michaelmas.	Between Michaelmas and Easter.
	<i>Per diem.</i>	<i>Per diem.</i>
A master mason, master carpenter, rough mason, brick-layer, master tiler, plumber, glazier, carver, joiner.....	{ With diet, 4d. { Without diet, 6d.	{ With diet, 3d. { Without, 5d.
Other laborers, (except in harvest)	{ With diet, 2d. { Without diet, 4d.	{ With diet, 1½d. { Without diet, 3d.
In harvest, every mower, by the day	{ With diet, 4d. { Without diet, 6d.	
A reaper, by the day	{ With diet 3d. { Without diet, 5d.	
A carter, by the day	{ With diet, 3d. { Without diet, 5d.	
Women and other laborers, by the day.....	{ With diet, 2½d. { Without diet, 4½.	

If any one might be im statute. The meals, by pro shall be from hour shall be half an hourf ing of day" to half-hour at t May to the m

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In Table III, highest daily wa tilers, slaters, an In the case of til used in the colum ant is included.

Table IV show ing, and of vario with the general fifty years after,

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* Despite repeated the advance which h vol. I, p. 62.

† North Wales is inc ties of England.

If any unemployed person refused to serve at the above wages, he might be imprisoned till he found sureties to serve according to the statute. The latter part of this statute regulates the hours of work and meals, by providing that the hours of labor, from March to September, shall be from 5 o'clock in the morning till 7 in the evening; that one hour shall be allowed for breakfast, an hour and a half for dinner, and half an hour for *noon meate*. The hours of labor in winter are from "springing of day" to dark, and one only hour is allowed for dinner, the extra half-hour at the meal being allowed for sleeping, from the middle of May to the middle of August.

The same scale of prices as is given in the foregoing table was substantially re-established by the statute of 1514.

It must not be supposed, however, that the prices fixed by statute were universally, or even generally, adhered to among the people,* and for evidence in regard to the actual rates of wages and the cost of subsistence, it is necessary to look to other sources. Thanks to the learned researches of Mr. Rogers and his patient examinations of ancient records, a large fund of authentic information upon these points is now available. The following tables, which are taken from that author's *History of Agriculture and Prices in England*, probably contain a greater amount of detailed information upon the subjects to which they relate than has ever before been given to the public, showing, as they do, the prices of labor and commodities in England for a period comprising nearly the latter half of the thirteenth and all of the fourteenth century.

Table I shows the highest prices for threshing a quarter of wheat, barley, and oats, respectively, in the eastern, midland, southern, western, and northern counties of England, and in North and South Wales.† The prices are expressed in pence.

Table II shows the average cost of reaping an acre of (1) wheat, (2) barley, (3) drage, (4) oats, (5) rye, (6) beans, peas, and vetches. In that table the seventh column contains the rate for mowing an acre of grass, the sign †, when used, showing that the making of the hay is included. The eighth column relates to the daily wages of thatchers, the ninth to that of a thatcher's assistant, and the tenth to the wages paid to the thatcher and his assistant together.

In Table III, the first column shows the *average*, and the second the *highest* daily wages of carpenters. The columns relating to masons, tilers, slaters, and sawyers show the highest daily wages in these trades. In the case of tilers and slaters, the sign * indicates that, wherever it is used in the columns relating to these two trades, the wages of an assistant is included.

Table IV shows the prices of threshing, reaping, mowing, and thatching, and of various kinds of mechanical labor, by decennial averages, with the general average (1) for the ninety years before, and (2) for the fifty years after, the great plague.

Table V shows the price of the same kinds of labor for the same periods, expressed in grains of pure silver:

* Despite repeated legislation and incessant complaint, the laborer ultimately secured the advance which he demanded for his service.—*History of Agriculture and Prices*, vol. I, p. 62.

† North Wales is included with the northern, and South Wales with the western, counties of England.

TABLE I.—HIGHEST PRICES FOR THRESHING

A. D.	East.			Midland.			South.			West.			North.		
	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
1269...	2	1													
1270...				2	1										
1271...				2											
1272...				1½											
1273...				1½	10	20									
1274...				1½	10	20									
1275...				1½	10	20									
1276...				1½	10	20									
1277...				2½	1								2½	1½	
1278...				2½	1								2½	1½	
1279...	4	1½		2½	1								2½	1½	
1280...	2½	1½		2½	1								2½	1½	
1281...	3½	1½		2½	1								2½	1½	
1282...	3½	1½		2½	1								2½	1½	
1283...	3½	1½		2½	1								2½	1½	
1284...	3½	1½		2½	1								2½	1½	
1285...	3½	1½		2½	1								2½	1½	
1286...	3½	1½		2½	1								2½	1½	
1287...	3½	1½		2½	1								2½	1½	
1288...	3½	1½		2½	1								2½	1½	
1289...	3½	1½		2½	1								2½	1½	
1290...	3½	1½		2½	1								2½	1½	
1291...	3½	1½		2½	1								2½	1½	
1292...	3½	1½		2½	1								2½	1½	
1293...	3½	1½		2½	1								2½	1½	
1294...	3½	1½		2½	1								2½	1½	
1295...	3½	1½		2½	1								2½	1½	
1296...	3½	1½		2½	1								2½	1½	
1297...	3½	1½		2½	1								2½	1½	
1298...	3½	1½		2½	1								2½	1½	
1299...	4	2	1	3	2	1½	3½	2½	1½	2	2½	1½	3	2	1
1300...	3	1½	1½	3	1½	1	3½	1½	1	2½	1½	1½	3	1½	1
1301...	3	2	1	2½	1½	1½	2½	1½	1	2	1½	1	2½	1½	1
1302...	3	1½	1	2½	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1303...	3	2	1½	2½	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1304...	3	1½	1	2½	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1305...	2½	1½	1	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1306...	3	2	2	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1307...	3	1½	1½	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1308...	3	2	1	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1309...	3	2	1	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1310...	3	2	1	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1311...	3	2	1	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1312...	3	2	1	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1313...	3	2	1	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1314...	3	2	1	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1315...	3	2	1	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1316...	3	2	1	2	1½	1	2½	1½	1	2	1½	1	2½	1½	1
1317...	5	2	1	3	2	1½	3	2	1½	3	2	1½	3	2	1
1318...	4½	1½	1½	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1319...	4½	1½	1½	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1320...	3	2	1½	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1321...	3	2	1½	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1322...	3	2	1½	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1323...	3	2	1½	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1324...	3	2	1½	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1325...	3	2	1½	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1326...	3	2	1½	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1327...	3	2	1½	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1328...	3	2	1½	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1

* With winnowing.

† Ten bushels at 3d.

‡ Nine bushels.

A. D.	East.		
	Wheat.	Barley.	Oats.
1329...	3	1½	
1330...	3	1½	
1331...	2	1½	
1332...	3	1½	
1333...	3	1½	
1334...	2½	1½	
1335...	3	1½	
1336...	3	1½	
1337...	3	1½	
1338...	3	1½	
1339...	3	1½	
1340...	3	1½	
1341...	3	1½	
1342...	3	1½	
1343...	3	1½	
1344...	3	1½	
1345...	3	1½	
1346...	3	1½	
1347...	3	1½	
1348...	3	1½	
1349...	3	1½	
1350...	3	1½	
1351...	3	1½	
1352...	4	1½	
1353...	3	1½	
1354...	3	1½	
1355...	3	1½	
1356...	3	1½	
1357...	3	1½	
1358...	3	1½	
1359...	3	1½	
1360...	3	1½	
1361...	3	1½	
1362...	3	1½	
1363...	3	1½	
1364...	6	4	
1365...	4	4	
1366...	3	1½	
1367...	3	1½	
1368...	3	1½	
1369...	3	1½	
1370...	3	1½	
1371...	3	1½	
1372...	3	1½	
1373...	3	1½	
1374...	3	1½	
1375...	7	3	
1376...	3	1½	
1377...	3	1½	
1378...	3	1½	
1379...	5	3	
1380...	3	1½	
1381...	3	1½	
1382...	3	1½	
1383...	3	1½	
1384...	3	1½	
1385...	4	1½	
1386...	3	1½	
1387...	3	1½	
1388...	3	1½	
1389...	3	1½	
1390...	3	1½	
1391...	3	1½	
1392...	3	1½	
1393...	3	1½	
1394...	3	1½	
1395...	3	1½	
1396...	3	1½	
1397...	3	1½	
1398...	3	1½	
1399...	3	1½	
1400...	3	1½	

* Nine bushels.

93

A. D.	East.			Midland.			South.			West.			North.		
	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
1329.	ence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
1330.	2	3	1	2	1	1	2	1	1	2	1	1	Pence.	Pence.	Pence.
1331.	2	2	1	1	1	1	2	1	1	1	1	1			
1332.	3	1	1	2	2	1	1	2	1	2	1	1			
1333.	3	3	2	2	1	1	2	2	1	1	1	1	3	2	
1334.	3	3	2	1	1	1	2	2	1	1	1	1	3	3	2
1335.	3	3	2	2	1	1	2	2	1	1	1	1			
1336.	3	3	2	2	1	1	2	2	1	1	1	1			
1337.	3	2	1	1	1	1	2	1	1	1	1	1			
1338.	3	1	1	2	2	1	2	1	1	1	1	1	3		
1339.	3	3	2	2	1	1	2	2	1	1	1	1			
1340.	3	3	1	2	1	1	2	2	1	1	1	1	3		
1341.	3	1	1	2	1	1	2	2	1	1	1	1	3	2	1
1342.	3	1	1	2	1	1	2	2	1	1	1	1			
1343.	3	1	1	2	1	1	2	2	1	1	1	1			
1344.	3	1	1	2	1	1	2	2	1	1	1	1			
1345.	3	1	1	2	1	1	2	2	1	1	1	1			
1346.	3	1	1	2	1	1	2	2	1	1	1	1			
1347.	3	1	1	2	1	1	2	2	1	1	1	1	2	1	
1348.	3	1	1	2	1	1	2	2	1	1	1	1			
1349.	5	3	2	2	3	1	2	1	1	1	1	1			
1350.	4	3	2	4	3	4	3	6	3	3	2	1			
1351.	4	3	2	4	3	3	4	4	2	2	2	2	4		
1352.	4	2	2	3	3	3	2	4	1	1	1	1			
1353.				3	3										
1354.	2	1	1	3	3	3	3	3	1	1	1	1	4	2	1
1355.	2	1	1	4	3		3	3	1	1	1	1			
1356.	2	1	1	3	3	1	4	2	1	1	1	1			
1357.	3	1	1	3	3		3	2	1	1	1	1			
1358.				3	2	2	2	2	1	1	1	1	4	2	
1359.	3	2	2	3	2	2	2	2	1	1	1	1			
1360.	3	2	2	3	2	1	3	2	2	3	2	2			
1361.	3	2	2	3	3	1	4	2	1	3	2	2			
1362.	8	7	2	3	3					3	2	2			
1363.	3	2	1	4	3	1				3	2	2			
1364.	6	4	3	4	3		3	2	1	3	3	3			
1365.	11		12	4	3		3	2	1	3	3	2			
1366.				4	3	1									
1367.				4	3										
1368.				3	3		3	3	2	3	2	1			
1369.															

‡ Winnowed.

TABLE II.—PRICES OF REAPING, MOWING, AND THATCHING.

Years.	Reaping, per acre.							Mowing, per acre.	Thatcher, per day.	Assistant, per day.	Thatcher and man.
	Wheat.	Barley.	Oats.	Rye.	Beans, peas, and vetches.	Wheat.	Barley.				
	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
1861.											
1862.											
1863.											
1864.											
1865.											
1866.	6	6	6				3				
1867.	6	6	6				4				
1868.	5	5	5				5				
1869.	5	5	5				5				
1870.	5	5	5				5				
1871.	3	3	3				3				
1872.											
1873.	4	4					4				
1874.	5	4					4				
1875.											
1876.											
1877.	6	5					6				
1878.	5	6					5				
1879.	5	6	6	5	5	5	4				
1880.	5	6	6	5	5	5	4				
1881.	5	5	5	4	4	4	4				
1882.	5	5	5	4	4	4	4				
1883.	4	4	5	3	3	3	3				
1884.	4	5	5	4	4	4	4				
1885.	4	5	5	4	4	4	4				
1886.	4	5	5	4	4	4	4				
1887.	4	5	5	4	4	4	4				
1888.	4	5	5	4	4	4	4				
1889.	4	5	5	4	4	4	4				
1890.	4	5	5	4	4	4	4				
1891.	4	5	5	4	4	4	4				
1892.	4	5	5	4	4	4	4				
1893.	4	5	5	4	4	4	4				
1894.	4	5	5	4	4	4	4				
1895.	4	5	5	4	4	4	4				
1896.	4	5	5	4	4	4	4				
1897.	4	5	5	4	4	4	4				
1898.	4	5	5	4	4	4	4				
1899.	4	5	5	4	4	4	4				
1900.	4	5	5	4	4	4	4				
1901.	4	5	5	4	4	4	4				
1902.	4	5	5	4	4	4	4				
1903.	4	5	5	4	4	4	4				
1904.	4	5	5	4	4	4	4				
1905.	4	5	5	4	4	4	4				
1906.	4	5	5	4	4	4	4				
1907.	4	5	5	4	4	4	4				
1908.	4	5	5	4	4	4	4				
1909.	4	5	5	4	4	4	4				
1910.	4	5	5	4	4	4	4				
1911.	4	5	5	4	4	4	4				
1912.	4	5	5	4	4	4	4				
1913.	4	5	5	4	4	4	4				
1914.	4	5	5	4	4	4	4				
1915.	4	5	5	4	4	4	4				
1916.	4	5	5	4	4	4	4				
1917.	4	5	5	4	4	4	4				
1918.	4	5	5	4	4	4	4				
1919.	4	5	5	4	4	4	4				
1920.	4	5	5	4	4	4	4				
1921.	4	5	5	4	4	4	4				
1922.	4	5	5	4	4	4	4				
1923.	4	5	5	4	4	4	4				
1924.	4	5	5	4	4	4	4				
1925.	4	5	5	4	4	4	4				
1926.	4	5	5	4	4	4	4				
1927.	4	5	5	4	4	4	4				
1928.	4	5	5	4	4	4	4				
1929.	4	5	5	4	4	4	4				
1930.	4	5	5	4	4	4	4				
1931.	4	5	5	4	4	4	4				
1932.	4	5	5	4	4	4	4				
1933.	4	5	5	4	4	4	4				
1934.	4	5	5	4	4	4	4				

f See note on page 91.

a Thatcher and two men.

TABLE II.

1335.
1336.
1337.
1338.
1339.
1340.
1341.
1342.
1343.
1344.
1345.
1346.
1347.
1348.
1349.
1350.
1351.
1352.
1353.
1354.
1355.
1356.
1357.
1358.
1359.
1360.
1361.
1362.
1363.
1364.
1365.
1366.
1367.
1368.
1369.
1370.
1371.
1372.
1373.
1374.
1375.
1376.
1377.
1378.
1379.
1380.
1381.
1382.
1383.
1384.
1385.
1386.
1387.
1388.
1389.
1390.
1391.
1392.
1393.
1394.
1395.
1396.
1397.
1398.
1399.
1400.

LABOR IN EUROPE UNDER FEUDAL SYSTEM.

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TABLE II.—PRICES OF REAPING, MOWING, AND THATCHING—Continued.

Years.	Reaping, per acre.						Mowing, per acre.	Thatcher, per day.	Assistant, per day.	Thatcher and man.
	Wheat.	Barley.	Oats.	Rye.	Beans, peas, and vetches.					
	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
1335.	6	7	5	11	5	5	5	1	4	4
1336.	6	9	5	5	7	5	5	1	4	4
1337.	6	6	4	5	5	5	5	1	4	4
1338.	6	6	4	5	5	5	5	1	4	4
1339.	6	6	6	4	5	5	5	1	4	4
1340.	6	6	6	4	5	5	5	1	4	4
1341.	6	6	6	4	5	5	5	1	4	4
1342.	6	6	6	4	5	5	5	1	4	4
1343.	6	6	6	4	5	5	5	1	4	4
1344.	6	6	6	4	5	5	5	1	4	4
1345.	6	6	6	4	5	5	5	1	4	4
1346.	6	6	6	4	5	5	5	1	4	4
1347.	6	6	6	4	5	5	5	1	4	4
1348.	6	6	6	4	5	5	5	1	4	4
1349.	6	6	6	4	5	5	5	1	4	4
1350.	6	6	6	4	5	5	5	1	4	4
1351.	6	6	6	4	5	5	5	1	4	4
1352.	6	6	6	4	5	5	5	1	4	4
1353.	6	6	6	4	5	5	5	1	4	4
1354.	6	6	6	4	5	5	5	1	4	4
1355.	6	6	6	4	5	5	5	1	4	4
1356.	6	6	6	4	5	5	5	1	4	4
1357.	6	6	6	4	5	5	5	1	4	4
1358.	6	6	6	4	5	5	5	1	4	4
1359.	6	6	6	4	5	5	5	1	4	4
1360.	6	6	6	4	5	5	5	1	4	4
1361.	6	6	6	4	5	5	5	1	4	4
1362.	6	6	6	4	5	5	5	1	4	4
1363.	6	6	6	4	5	5	5	1	4	4
1364.	6	6	6	4	5	5	5	1	4	4
1365.	6	6	6	4	5	5	5	1	4	4
1366.	6	6	6	4	5	5	5	1	4	4
1367.	6	6	6	4	5	5	5	1	4	4
1368.	6	6	6	4	5	5	5	1	4	4
1369.	6	6	6	4	5	5	5	1	4	4
1370.	6	6	6	4	5	5	5	1	4	4
1371.	6	6	6	4	5	5	5	1	4	4
1372.	6	6	6	4	5	5	5	1	4	4
1373.	6	6	6	4	5	5	5	1	4	4
1374.	6	6	6	4	5	5	5	1	4	4
1375.	6	6	6	4	5	5	5	1	4	4
1376.	6	6	6	4	5	5	5	1	4	4
1377.	6	6	6	4	5	5	5	1	4	4
1378.	6	6	6	4	5	5	5	1	4	4
1379.	6	6	6	4	5	5	5	1	4	4
1380.	6	6	6	4	5	5	5	1	4	4
1381.	6	6	6	4	5	5	5	1	4	4
1382.	6	6	6	4	5	5	5	1	4	4
1383.	6	6	6	4	5	5	5	1	4	4
1384.	6	6	6	4	5	5	5	1	4	4
1385.	6	6	6	4	5	5	5	1	4	4
1386.	6	6	6	4	5	5	5	1	4	4
1387.	6	6	6	4	5	5	5	1	4	4
1388.	6	6	6	4	5	5	5	1	4	4
1389.	6	6	6	4	5	5	5	1	4	4
1390.	6	6	6	4	5	5	5	1	4	4
1391.	6	6	6	4	5	5	5	1	4	4
1392.	6	6	6	4	5	5	5	1	4	4
1393.	6	6	6	4	5	5	5	1	4	4
1394.	6	6	6	4	5	5	5	1	4	4
1395.	6	6	6	4	5	5	5	1	4	4
1396.	6	6	6	4	5	5	5	1	4	4
1397.	6	6	6	4	5	5	5	1	4	4
1398.	6	6	6	4	5	5	5	1	4	4
1399.	6	6	6	4	5	5	5	1	4	4
1400.	6	6	6	4	5	5	5	1	4	4

TABLE III.—PRICES OF MECHANICAL LABOR.

Years.	Carpenter average.	Carpenter.	Mason.	Tiler.	Slater.	Sawyer.	Sawing per 100 feet.	Years.	Carpenter's average.	Carpenter.	Mason.	Tiler.	Slater.	Sawyer.	Sawing per 100 feet.
	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.		Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
1863	3½	4	2½	.....	2½	2½	.....	1834	3½	4	3½	3½	4½	3½	.....
1864	3½	4	2½	.....	2½	2½	.....	1835	3½	4	3½	3½	4½	3½	.....
1865	3	3	2½	.....	3½	2½	.....	1836	3½	4	4	4	5	3½	.....
1866	3	3	2½	.....	3½	2½	.....	1837	3½	4	4	4	5	3½	.....
1867	3	3	2½	.....	3½	2½	.....	1838	3	4	4	4	5	3	.....
1868	3	3	2½	.....	3½	2½	.....	1839	3½	4	4	4	5	3	.....
1871	2½	3	2½	.....	3½	2½	.....	1840	3½	4	4	4	5	3	.....
1872	2½	3	2½	.....	3½	2½	.....	1841	3½	4	4	4	5	3	.....
1873	2½	3	2½	.....	3½	2½	.....	1842	3½	4	4	4	5	3	.....
1874	2½	3	2½	.....	3½	2½	.....	1843	3½	4	4	4	5	3	.....
1875	2½	3	2½	.....	3½	2½	.....	1844	3	4	4	4	5	3	.....
1877	2½	3	2½	.....	3½	2½	.....	1845	3½	4	4	4	5	3	.....
1878	2½	3	2½	.....	3½	2½	.....	1846	3½	4	4	4	5	3	.....
1879	3	3	2½	.....	3½	2½	.....	1847	3½	4	4	4	5	3	.....
1880	2	2	2	.....	3½	2½	.....	1848	3	4	4	4	5	3	.....
1881	a1½	a1½	5	.....	6	4½	.....	1849	4½	5	4	5	5	3	.....
1882	b5	b5	5	.....	6	4½	.....	1850	4½	5	4	5	5	3	.....
1883	a1	a1	5	.....	6	4½	.....	1851	4½	5	4	5	5	3	.....
1884	3	3	5	.....	6	4½	.....	1852	4	a9	4	4	5	3	.....
1885	3	3	5	.....	6	4½	.....	1853	4½	a12	4	4	5	3	.....
1886	3	3	5	.....	6	4½	.....	1854	4½	6	3	4	5	3	.....
1887	3	3	5	.....	6	4½	.....	1855	4½	6	3	4	5	3	.....
1888	3	3	5	.....	6	4½	.....	1856	4½	6	3	4	5	3	.....
1889	3	3	5	.....	6	4½	.....	1857	4½	6	3	4	5	3	.....
1890	3	3	5	.....	6	4½	.....	1858	4½	6	3	4	5	3	.....
1891	3	3	5	.....	6	4½	.....	1859	4½	6	3	4	5	3	.....
1892	3	3	5	.....	6	4½	.....	1860	4½	6	3	4	5	3	.....
1893	3	3	5	.....	6	4½	.....	1861	4½	6	3	4	5	3	.....
1894	3	3	5	.....	6	4½	.....	1862	4½	6	3	4	5	3	.....
1895	3	3	5	.....	6	4½	.....	1863	4½	6	3	4	5	3	.....
1896	3	3	5	.....	6	4½	.....	1864	4½	6	3	4	5	3	.....
1897	3	3	5	.....	6	4½	.....	1865	4½	6	3	4	5	3	.....
1898	3	3	5	.....	6	4½	.....	1866	4½	6	3	4	5	3	.....
1899	3	3	5	.....	6	4½	.....	1867	4½	6	3	4	5	3	.....
1900	3	3	5	.....	6	4½	.....	1868	4½	6	3	4	5	3	.....
1901	3	3	5	.....	6	4½	.....	1869	4½	6	3	4	5	3	.....
1902	3	3	5	.....	6	4½	.....	1870	4½	6	3	4	5	3	.....
1903	3	3	5	.....	6	4½	.....	1871	4½	6	3	4	5	3	.....
1904	3	3	5	.....	6	4½	.....	1872	4½	6	3	4	5	3	.....
1905	3	3	5	.....	6	4½	.....	1873	4½	6	3	4	5	3	.....
1906	3	3	5	.....	6	4½	.....	1874	4½	6	3	4	5	3	.....
1907	3	3	5	.....	6	4½	.....	1875	4½	6	3	4	5	3	.....
1908	3	3	5	.....	6	4½	.....	1876	4½	6	3	4	5	3	.....
1909	3	3	5	.....	6	4½	.....	1877	4½	6	3	4	5	3	.....
1910	3	3	5	.....	6	4½	.....	1878	4½	6	3	4	5	3	.....
1911	3	3	5	.....	6	4½	.....	1879	4½	6	3	4	5	3	.....
1912	3	3	5	.....	6	4½	.....	1880	4½	6	3	4	5	3	.....
1913	3	3	5	.....	6	4½	.....	1881	4½	6	3	4	5	3	.....
1914	3	3	5	.....	6	4½	.....	1882	4½	6	3	4	5	3	.....
1915	3	3	5	.....	6	4½	.....	1883	4½	6	3	4	5	3	.....
1916	3	3	5	.....	6	4½	.....	1884	4½	6	3	4	5	3	.....
1917	3	3	5	.....	6	4½	.....	1885	4½	6	3	4	5	3	.....
1918	3	3	5	.....	6	4½	.....	1886	4½	6	3	4	5	3	.....
1919	3	3	5	.....	6	4½	.....	1887	4½	6	3	4	5	3	.....
1920	3	3	5	.....	6	4½	.....	1888	4½	6	3	4	5	3	.....
1921	3	3	5	.....	6	4½	.....	1889	4½	6	3	4	5	3	.....
1922	3	3	5	.....	6	4½	.....	1890	4½	6	3	4	5	3	.....
1923	3	3	5	.....	6	4½	.....	1891	4½	6	3	4	5	3	.....
1924	3	3	5	.....	6	4½	.....	1892	4½	6	3	4	5	3	.....
1925	3	3	5	.....	6	4½	.....	1893	4½	6	3	4	5	3	.....
1926	3	3	5	.....	6	4½	.....	1894	4½	6	3	4	5	3	.....
1927	3	3	5	.....	6	4½	.....	1895	4½	6	3	4	5	3	.....
1928	3	3	5	.....	6	4½	.....	1896	4½	6	3	4	5	3	.....
1929	3	3	5	.....	6	4½	.....	1897	4½	6	3	4	5	3	.....
1930	3	3	5	.....	6	4½	.....	1898	4½	6	3	4	5	3	.....
1931	3	3	5	.....	6	4½	.....	1899	4½	6	3	4	5	3	.....
1932	3	3	5	.....	6	4½	.....	1900	4½	6	3	4	5	3	.....
1933	3	3	5	.....	6	4½	.....							

See comments on Table III, page 91, for explanation of *.
 a London. b Chiefly Oxford. c Oxford only.

Years.

1259-1270.
 1271-1280.
 1281-1290.
 1291-1300.
 1301-1310.
 1311-1320.
 1321-1330.
 1331-1340.
 1341-1350.
 1351-1360.
 1361-1370.
 1371-1380.
 1381-1390.
 1391-1400.

Average up to—
 1350
 1351-1400.

Years.

1361-1370.
 1371-1380.
 1381-1390.
 1391-1400.
 1401-1410.
 1411-1420.
 1421-1430.
 1431-1440.
 1441-1450.
 1451-1460.
 1461-1470.
 1471-1480.
 1481-1490.
 1491-1500.

General average:
 1261-1350
 1351-1400

LABOR IN EUROPE UNDER THE FEUDAL SYSTEM.

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TABLE IV.—PRICES OF THRESHING BY DECENNIAL PERIODS.

(a) Decennial averages. Threshing, (per day.)

Years.	East.			Midland.			South.			West.			North.		
	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
1259-1270.....	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.	d.
1271-1280.....	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1281-1290.....	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1	2½	1½	1
1291-1300.....	3	1½	1	3	1½	1	3	1½	1	3	1½	1	3	1½	1
1301-1310.....	3	1½	1	3	1½	1	3	1½	1	3	1½	1	3	1½	1
1311-1320.....	3	1½	1	3	1½	1	3	1½	1	3	1½	1	3	1½	1
1321-1330.....	3½	1½	1	3½	1½	1	3½	1½	1	3½	1½	1	3½	1½	1
1331-1340.....	3½	1½	1	3½	1½	1	3½	1½	1	3½	1½	1	3½	1½	1
1341-1350.....	3	1½	1	3	1½	1	3	1½	1	3	1½	1	3	1½	1
1351-1360.....	3½	1½	1	3½	1½	1	3½	1½	1	3½	1½	1	3½	1½	1
1361-1370.....	4	2	1½	4	2	1½	4	2	1½	4	2	1½	4	2	1½
1371-1380.....	4½	2½	2	4½	2½	2	4½	2½	2	4½	2½	2	4½	2½	2
1381-1390.....	5	3	2½	5	3	2½	5	3	2½	5	3	2½	5	3	2½
1391-1400.....	5½	3½	3	5½	3½	3	5½	3½	3	5½	3½	3	5½	3½	3
Average up to—															
1350.....	4½	2½	2	4½	2½	2	4½	2½	2	4½	2½	2	4½	2½	2
1351-1400.....	4½	2½	2	4½	2½	2	4½	2½	2	4½	2½	2	4½	2½	2

(b) Decennial averages. Reaping, mowing, thatching.

Years.	Reaping, per acre.						Mowing, per acre.				Thatcher, per day.		Assistant, per day.		Thatcher and man.	
	Wheat.	Barley.	Drags.	Oats.	Rye.	Beans, peas, and vetches.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
1259-1270.....	5½	5½	5½	5½	5½	5½	4	2	2	2	1	1	1	1	1	1
1271-1280.....	5	4½	5	4½	4½	4½	4	2	2	2	1	1	1	1	1	1
1281-1290.....	5½	5½	5½	5½	5½	5½	4½	2½	2½	2½	1½	1½	1½	1½	1½	1½
1291-1300.....	5½	5½	5½	5½	5½	5½	4½	2½	2½	2½	1½	1½	1½	1½	1½	1½
1301-1310.....	5½	5½	5½	5½	5½	5½	4½	2½	2½	2½	1½	1½	1½	1½	1½	1½
1311-1320.....	5½	5½	5½	5½	5½	5½	4½	2½	2½	2½	1½	1½	1½	1½	1½	1½
1321-1330.....	6½	6½	6½	6½	6½	6½	5½	3½	3½	3½	2½	2½	2½	2½	2½	2½
1331-1340.....	6	6	6	6	6	6	5	3	3	3	2	2	2	2	2	2
1341-1350.....	6	6	6	6	6	6	5	3	3	3	2	2	2	2	2	2
1351-1360.....	6½	6½	6½	6½	6½	6½	5½	3½	3½	3½	2½	2½	2½	2½	2½	2½
1361-1370.....	7½	7½	7½	7½	7½	7½	6½	4½	4½	4½	3½	3½	3½	3½	3½	3½
1371-1380.....	7½	7½	7½	7½	7½	7½	6½	4½	4½	4½	3½	3½	3½	3½	3½	3½
1381-1390.....	10	10	10	10	10	10	7½	5½	5½	5½	4½	4½	4½	4½	4½	4½
1391-1400.....	10	10	10	10	10	10	7½	5½	5½	5½	4½	4½	4½	4½	4½	4½
General average:																
1261-1350.....	5½	5½	5½	5½	5½	5½	4	2	2	2	1	1	1	1	1	1
1351-1400.....	5½	5½	5½	5½	5½	5½	4	2	2	2	1	1	1	1	1	1

(c) Decennial averages. Carpenters, &c., (per day.)

Years.	Carpenter.	Carpenter, highest rate.	Mason.	Tiler.	Tiler and mason.	Slater.	Slater and mason.	Sawyer.	Sawing per 100 feet.
	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
1569-1570.....	3½	3½	2½	.....	.....	2½	.....	.....	.....
1571-1580.....	3½	4	4	3	5	.....	3½	3½	7½
1581-1590.....	3½	4	2½	3½	5½	4½	.....	.....	7½
1591-1600.....	3½	4½	3½	4	5½	4½	.....	.....	10½
1601-1610.....	3½	4½	3½	4	5½	4½	.....	.....	8
1611-1620.....	3½	4½	3½	4	5½	4½	.....	.....	7½
1621-1630.....	3½	4½	3½	4	5½	4½	.....	.....	8
1631-1640.....	3½	4½	3½	4	5½	4½	.....	.....	7½
1641-1650.....	3½	4½	3½	4	5½	4½	.....	.....	8
1651-1660.....	3½	4½	3½	4	5½	4½	.....	.....	8
1661-1670.....	3½	4½	3½	4	5½	4½	.....	.....	8
1671-1680.....	3½	4½	3½	4	5½	4½	.....	.....	8
1681-1690.....	3½	4½	3½	4	5½	4½	.....	.....	8
1691-1700.....	3½	4½	3½	4	5½	4½	.....	.....	8
General average:	3½	4½	3½	4	5½	4½	.....	.....	8
1261-1350.....	4½	5½	5½	5½	10½	5	8	5½	12
1351-1400.....	4½	5½	5½	5½	10½	5	8	5½	12

TABLE V.—PRICES OF THRESHING, ETC., IN GRAINS OF SILVER.

(a.) Threshing, (per day.)

Years.	East.			Midland.			South.			West.			North.		
	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.	Wheat.	Barley.	Oats.
1569-1570.....	59.03	25.78	15.47	41.83	30.62	12.89	.....	.....	.....	.....	.....	.....	51.56	25.78	18.05
1571-1580.....	56.72	20.92	15.05	41.83	33.51	20.62	65.45	30.92	23.2	41.25	.....	.....	0.62	48.48	30.92
1581-1590.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
1591-1600.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
1601-1610.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
1611-1620.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
1621-1630.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
1631-1640.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
1641-1650.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
1651-1660.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
1661-1670.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
1671-1680.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
1681-1690.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
1691-1700.....	62.87	30.92	20.62	48.98	30.92	20.62	51.56	28.36	18.05	51.56	.....	.....	.....	.....	15.47
General average up to...	65.45	33.51	20.62	51.56	33.51	20.62	51.56	33.51	20.62	48.98	0.96	33.2	56.72	36.09	30.62
1350.....	85.98	46.41	13.83	73.19	56.72	43.83	73.19	46.41	36.09	62.87	13.83	33.51	75.76	51.56	41.25
1351-1400.....	85.98	46.41	13.83	73.19	56.72	43.83	73.19	46.41	36.09	62.87	13.83	33.51	75.76	51.56	41.25

Years.

1261-1270.....
1271-1280.....
1281-1290.....
1291-1300.....
1301-1310.....
1311-1320.....
1321-1330.....
1331-1340.....
1341-1350.....
1351-1360.....
1361-1370.....
1371-1380.....
1381-1390.....
1391-1400.....
Average:
1261-1350.....
1351-1400.....

Years.

1261-1270.....
1271-1280.....
1281-1290.....
1291-1300.....
1301-1310.....
1311-1320.....
1321-1330.....
1331-1340.....
1341-1350.....
1351-1360.....
1361-1370.....
1371-1380.....
1381-1390.....
1391-1400.....
Average:
1261-1350.....
1351-1400.....

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TABLE I.—AVER

Decade.

1261-1270.....
1271-1280.....
1281-1290.....
1291-1300.....
1301-1310.....
1311-1320.....
1321-1330.....
1331-1340.....
1341-1350.....
1351-1360.....
1361-1370.....
1371-1380.....
1381-1390.....
1391-1400.....

General average, 140

LABOR IN EUROPE UNDER FEUDAL SYSTEM.

99

(b.) Reaping, &c., (per day.)

Years.	Reaping, &c., (per acre.)						Mowing per acre.	Thatcher, per day.	Assistant, per day.	Thatcher and man.
	Wheat.	Barley.	Drugs.	Oats.	Rye.	Beans, pease, and vetches.				
1261-1270.....	113.41	113.41	121.75	108.98	82.31	100.55	82.5	41.25	.....	63.19
1271-1280.....	103.12	97.07	121.75	87.66	92.31	100.55	108.28	42.08	.....	68.03
1281-1290.....	105.7	118.59	101.12	87.66	87.66	93.39	100.55	43.83	18.05	59.3
1291-1300.....	108.28	103.12	118.59	87.66	87.66	103.7	105.7	51.56	18.05	63.19
1301-1310.....	105.7	118.59	103.12	87.66	97.97	103.7	100.55	51.56	20.62	70.61
1311-1320.....	123.75	134.06	135.34	113.44	126.33	124.75	126.61	59.3	25.78	92.81
1321-1330.....	123.75	141.37	108.28	110.86	123.75	110.86	110.86	62.87	30.62	80.92
1331-1340.....	126.33	146.95	124.75	115.29	128.91	112.41	103.12	55.5	23.2	85.08
1341-1350.....	130.84	172.73	111.8	139.22	175.31	121.17	134.06	59.3	23.2	85.08
1351-1360.....	140.95	175.31	183.05	157.26	162.42	132.11	131.48	74.19	41.25	113.41
1361-1370.....	207.25	207.25	186.62	24.67	204.67	151.59	151.59	74.19	41.25	118.59
1371-1380.....	207.25	207.25	186.62	24.67	204.67	151.59	151.59	74.19	41.25	118.59
1381-1390.....	207.25	207.25	186.62	24.67	204.67	151.59	151.59	74.19	41.25	118.59
1391-1400.....	152.11	154.59	144.37	146.95	144.37	146.95	146.95	85.08	54.14	144.37
Average:										
1261-1350.....	116.01	121.17	116.01	100.55	108.28	108.28	108.28	41.25	20.62	73.1
1351-1400.....	175.31	183.05	167.58	170.16	159.84	172.73	144.37	46.4	30.62	128.9

Mechanical labor, (per day.)

Years.	Currier, average.	Carpenter.	Mason.	Thor.	Thor and man.	Slier.	Slier and man.	Sawyer per day.	Sawyer per 100 feet.
1263-1270.....	65.45	73.19	51.56	.....	108.28	51.56	.....	51.56	.....
1271-1280.....	51.56	56.72	82.5	.....	103.12	41.25	.....	51.56	.....
1281-1290.....	73.19	82.5	82.5	.....	105.7	118.59	65.45	154.59	.....
1291-1300.....	54.14	68.34	56.72	73.19	105.7	92.81	59.3	116.06	.....
1301-1310.....	62.87	85.08	82.5	65.45	82.5	82.5	126.33	70.61	209.83
1311-1320.....	73.19	100.55	72.34	123.75	121.17	118.59	126.33	165.	.....
1321-1330.....	70.61	100.55	78.4	82.5	113.44	134.16	134.16	165.	.....
1331-1340.....	68.03	87.66	74.19	103.12	172.73	110.86	110.86	165.	.....
1341-1350.....	65.45	87.66	74.19	103.12	172.73	110.86	110.86	165.	.....
1351-1360.....	87.66	118.59	110.55	103.12	172.73	110.86	110.86	165.	.....
1361-1370.....	57.06	113.44	110.86	103.12	172.73	110.86	110.86	165.	.....
1371-1380.....	103.12	134.16	126.33	113.44	196.93	90.23	113.44	165.	.....
1381-1390.....	97.17	113.44	126.33	113.44	247.5	103.12	103.12	165.	.....
1391-1400.....	85.39	128.91	116.01	123.75	253.61	92.81	165.	116.01	330.
Average:									
1261-1350.....	65.45	85.18	73.19	82.5	110.86	65.45	126.33	62.87	165.
1351-1400.....	85.39	121.17	116.01	110.86	212.41	103.12	165.	105.7	217.5

The eleven tables which follow give the prices of various commodities in England for the period comprised in the foregoing tables on wages:

TABLE I.—AVERAGE PRICE OF GRAIN BY DECENNIAL PERIODS, (PER QUARTER.)

Decade.	Wheat.	Barley.	Oats.	Beans.	Pease.	Rye.	Malt (first quality.)
1261-1270.....	s. d. 4 2 1/2	s. d. 3 5 1/2	s. d. 1 11 1/2	s. d. 2 10 1/2	s. d. 3 1 1/2	s. d. 4 4 1/2	s. d. 3 7 1/2
1271-1280.....	5 7 1/2	4 4 1/2	2 4 1/2	4 2 1/2	3 1 1/2	4 9 1/2	4 4 1/2
1281-1290.....	5 0 1/2	4 5 1/2	2 3 1/2	3 3 1/2	3 1 1/2	4 8 1/2	4 4 1/2
1291-1300.....	6 1 1/2	4 5 1/2	2 5 1/2	4 5 1/2	4 4 1/2	4 8 1/2	5 1 1/2
1301-1310.....	5 7 1/2	3 11 1/2	2 5 1/2	4 1 1/2	3 2 1/2	4 4 1/2	4 1 1/2
1311-1320.....	7 10 1/2	5 6 1/2	3 1 1/2	5 9 1/2	5 2 1/2	6 5 1/2	6 6 1/2
1321-1330.....	6 11 1/2	4 6 1/2	2 8 1/2	5 6 1/2	4 6 1/2	5 3 1/2	5 10 1/2
1331-1340.....	4 8 1/2	3 5 1/2	2 3 1/2	3 5 1/2	3 0 1/2	3 3 1/2	3 11 1/2
1341-1350.....	5 3 1/2	4 1 1/2	2 10 1/2	3 8 1/2	2 11 1/2	3 2 1/2	4 2 1/2
1351-1360.....	6 10 1/2	4 1 1/2	3 3 1/2	4 4 1/2	3 11 1/2	4 5 1/2	5 2 1/2
1361-1370.....	7 3 1/2	5 1 1/2	3 3 1/2	5 5 1/2	4 4 1/2	5 2 1/2	6 7 1/2
1371-1380.....	6 1 1/2	3 10 1/2	2 5 1/2	4 2 1/2	3 3 1/2	4 1 1/2	4 1 1/2
1381-1390.....	5 2 1/2	3 4 1/2	2 2 1/2	4 5 1/2	3 4 1/2	3 8 1/2	4 4 1/2
1391-1400.....	5 3 1/2	3 5 1/2	2 3 1/2	4 3 1/2	3 5 1/2	3 4 1/2	4 4 1/2
General average, 140 years.	5 10 1/2	4 3 1/2	2 5 1/2	4 3 1/2	3 9 1/2	4 4 1/2	4 10 1/2

TABLE II.—AVERAGE PRICE OF GRAIN, BY DECENNIAL PERIODS, REDUCED TO GRAINS OF PURE SILVER, (PER QUARTER.)

Decade.	Wheat.	Barley.	Oats.	Beans.	Pease.	Rye.	Malt, (first quality.)
1261-1270.....	1167.89	858.51	483.11	720.3	742.5	1077.66	899.76
1271-1280.....	1397.34	1077.66	592.93	1049.3	957.48	1166.33	1077.66
1281-1290.....	1255.55	850.78	537.87	843.63	708.61	970.37	1163.31
1291-1300.....	1508.9	1098.28	602.28	1103.41	1089.23	1157.58	1268.44
1301-1310.....	1387.63	983.26	607.44	1020.94	931.7	1082.21	1015.78
1311-1320.....	1914.91	1374.14	768.28	1431.28	1229.06	1590.7	1619.66
1321-1330.....	1225.76	1116.33	607.74	1371.14	1167.89	1315.84	1455.66
1331-1340.....	1170.47	845.62	510.47	855.91	742.5	840.81	978.11
1341-1350.....	1302.95	917.81	577.87	910.68	930.61	922.57	1040.3
1351-1360.....	1705.14	1134.17	702.25	1077.66	975.53	1109.86	1366.41
1361-1370.....	1798.53	1239.08	786.33	1308.11	1085.39	1261.23	1634.53
1371-1380.....	1510.78	951.91	597.12	1041.56	810.53	1015.78	1013.2
1381-1390.....	1278.75	832.73	516.25	1100.86	830.16	917.81	1087.97
1391-1400.....	1310.37	863.67	563.63	1052.87	845.62	840.47	1111.17
General average, 140 years.....	1450.22	1041.34	612.59	1063.19	929.12	1087.97	1197.25

TABLE III.—AVERAGE PRICE OF CATTLE AND HORSES, BY DECENNIAL PERIODS.

Decade.	Oxen.	Cows.	Bulls.	Affri and stotts.	Cart-horses.
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
1261-1270.....	10 3	6 2	10 6	11 3½	17 1½
1271-1280.....	12 2½	7 1½	9 6½	13 1½	17 1½
1281-1290.....	10 ½	6 10	8 2½	11 5½	20 9
1291-1300.....	10 7	8 1½	8 8½	10 1½	14 5
1301-1310.....	11 1½	8 7½	11 4½	11 5½	16 4½
1311-1320.....	14 4	10 10½	11 11	13 3	19 4
1321-1330.....	14 6½	12 1	11 10½	12 5½	21 0
1331-1340.....	12 2½	9 3½	9 ½	10 7	19 5½
1341-1350.....	11 8½	9 1	10 11	11 2	17 5½
1351-1360.....	13 10	10 2	10 3½	11 7½	17 ½
1361-1370.....	15 10	11 4½	12 9½	13 4	23 9½
1371-1380.....	15 10	11 4½	10 10½	21 2½	22 9½
1381-1390.....	13 4½	8 7½	9 11½	17 2	23 2½
1391-1400.....	14 9½	10 8	9 4½	19 7½	20 8½
General average.....	13 1½	9 5	10 4½	13 5½	19 3½

* The affri was an ill-looking, little horse, used chiefly in farm-work.

TABLE IV.—AVERAGE PRICE OF SHEEP AND HOGS, BY DECENNIAL PERIODS.

Decade.	Muttons, highest price.	Muttons.	Ewes.	Lambs.	† Porculi.	† Porci.	Sows.	Boars.	† Porculi.
	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>	<i>s. d.</i>
1261-1270.....	1 5	1 1½	1 0	4½	0 7½	3 2½	3 2½	2 6	6½
1271-1280.....	1 5½	1 3	1 2½	8½	1 6½	3 3½	3 6½	4 2½	6½
1281-1290.....	1 11	1 5½	1 3½	8½	1 9½	2 5½	2 2	4 6½	3½
1291-1300.....	1 10½	1 5½	0 11½	5½	1 8½	2 6½	3 3½	5 1	4
1301-1310.....	1 9½	1 5½	1 1	4½	1 9	3 10½	2 9½	8 3	6
1311-1320.....	2 2½	1 8½	1 1½	9½	2 1	3 5½	2 9½	5 7	5½
1321-1330.....	2 14	1 6	1 3	9½	1 11½	2 6½	3 9	4 3½	5½
1331-1340.....	1 8	1 2½	1 ½	6½	1 7½	2 9½	3 6½	3 11½	4½
1341-1350.....	1 8½	1 2½	0 9½	7½	1 10½	2 8½	2 9½	3 3½	5½
1351-1360.....	2 12	1 8½	1 4½	8½	1 7½	3 1½	3 7½	4 4½	6½
1361-1370.....	2 2 3	1 7½	1 6½	10½	2 3½	3 8	5 1	5 0	5½
1371-1380.....	2 9½	1 9½	1 4½	10½	1 9	3 5½	3 1	4 3	7½
1381-1390.....	1 9½	1 4½	1 2	9½	1 5	3 3	2 7½	4 0	6
1391-1400.....	2 3	1 4½	1 ½	7½	1 6½	3 2	3 11	5 6½	4½
General average.....	1 10½	1 5	1 2	8	1 8	2 11½	3 4½	4 7½	5½

† Porculi is supposed to mean lean hogs; Porci, fattened hogs; and Porcelli, sucking pigs.

The prices in
in the second
1 pound 7½ on

1261-1270.....	1271-1280.....	1281-1290.....	1291-1300.....	1301-1310.....	1311-1320.....	1321-1330.....	1331-1340.....	1341-1350.....	1351-1360.....	1361-1370.....	1371-1380.....	1381-1390.....	1391-1400.....
General average.....													

General average.....

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TABLE V.—AVERAGE PRICE OF POULTRY, BY DECENNIAL PERIODS.

Decade.	Capon.	Cock.	Hens.	Pullets.	Geese.	Goats.	Ducks.	Pigeons, per dozen.
	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
1261-1270.....	2½	1½	1½	1½	2½	2	1½	1½
1271-1280.....	1½	1½	1½	1½	2½	2	1½	1½
1281-1290.....	2½	1½	1½	1½	2½	2	1½	1½
1291-1300.....	2½	1½	1½	1½	2½	2	1½	1½
1301-1310.....	2½	1½	1½	1½	2½	2	1½	1½
1311-1320.....	2½	1½	1½	1½	2½	2	1½	1½
1321-1330.....	3	1½	1½	1½	2½	2	1½	1½
1331-1340.....	2½	1½	1½	1½	2½	2	1½	1½
1341-1350.....	2½	1½	1½	1½	2½	2	1½	1½
1351-1360.....	2½	1½	1½	1½	2½	2	1½	1½
1361-1370.....	3½	1½	1½	1½	2½	2	1½	1½
1371-1380.....	4	2½	2½	1½	4½	2½	2½	2½
1381-1390.....	3½	2	2	1½	4	2	2½	2½
1391-1400.....	3½	1½	1½	1½	3½	3	2	4
General average.....	3	1½	1½	1	3½	2½	2	3½

TABLE VI.—AVERAGE PRICE OF WOOL, BY DECENNIAL PERIODS.

Decade.	Wool, (great.)	Lamb.	Pound.	Decade.	Wool, (great.)	Lamb.	Pound.
	s. d.	s. d.	d.		s. d.	s. d.	d.
1261-1270.....	2 3	1 3½	34	1341-1350.....	1 8½	1 0½	3½
1271-1280.....	2 3½	3 0½	34	1351-1360.....	1 7½	1 0	2½
1281-1290.....	2 2½	2 2	31	1361-1370.....	2 3½	1 6½	2½
1291-1300.....	1 1½	1 4	23	1371-1380.....	2 0	1 10½	2½
1301-1310.....	2 3	2 0½	34	1381-1390.....	2 0	1 5½	4½
1311-1320.....	2 4½	2 4½	3½	1391-1400.....	2 6½	1 3	4½
1321-1330.....	2 4½	2 4½	4½				
1331-1340.....	1 9½	1 3½	3	General average...	2 1½	1 11½	3½

The prices in the first column refer to the fleeces of sheep, and those in the second to fleeces of lambs. The average weight of the fleece is 1 pound 7½ ounces.

TABLE VII.—AVERAGE PRICE OF HIDES, BY DECENNIAL PERIODS.

Decade.	Ox.	Cow.	Horse.	Stott.	Horse, (unwed.)
	s. d.	s. d.	s. d.	s. d.	s. d.
1261-1270.....	2 3½	1 9½	0 10	0 9½	1 5½
1271-1280.....	2 3½	1 10½	0 11½	0 11½	1 4
1281-1290.....	1 5½	1 6½	1 0½	1 0	1 10
1291-1300.....	2 2	1 9½	1 1½	0 11½	1 5½
1301-1310.....	2 2½	2 1½	1 1½	1 0	1 4
1311-1320.....	2 6	1 11½	1 1½	1 0	1 11½
1321-1330.....	2 7½	1 8½	1 6½	1 0	1 7½
1331-1340.....	2 7	1 11½	1 6	1 0	1 11½
1341-1350.....	2 6½	1 8	0 10	1 0	1 7½
1351-1360.....	1 5½	1 5½	0 10	1 0	1 7½
1361-1370.....	2 1½	1 6½	2 0	2 2	2 2
1371-1380.....	1 9½	1 6½	2 0	2 2	2 2
1381-1390.....	1 8½	1 3½	2 0	2 4	1 6½
1391-1400.....	1 10½	1 3½	2 0	2 4	1 8
General average.....	2 2½	1 8	1 4½	0 11½	1 10

TABLE VIII.—AVERAGE PRICE OF CHEESE, BUTTER, AND EGGS, BY DECENNIAL PERIODS.

Decade.	Cheese.				Butter.					Eggs. (120.)
	Wey, (160lbs.)	Stone, (14 lbs.)	Clove, (7 lbs.)	Pound.	Wey, (160lbs.)	Stone, (14 lbs.)	Clove, (7 lbs.)	Gallon.	Pound.	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	
1260-1270	10 1	7				7 1/2	4	4 1/2		3 1/2
1271-1280	9 8	6 1/2			9 9	9 1/2	5 1/2			4
1281-1290	8 1 1/2	6 1/2			8 9 1/2	7 1/2	5	6		3 1/2
1291-1300	9 7 1/2					8 1/2		6 1/2		3 1/2
1301-1310	9 9	8				9 1/2	5 1/2	6 1/2		4 1/2
1311-1320	11 7 1/2	9 1/2				9 1/2		9		4 1/2
1321-1330	11 3 1/2	10 1/2				10		9 1/2		4 1/2
1331-1340	10 1 1/2	9			10 0		5 1/2	7 1/2		4 1/2
1341-1350	8 4	8			9 0		4 1/2	7 1/2		4 1/2
1351-1360	10 0 1/2					5		7 1/2		5
1361-1370	10 2 1/2				10 0		5	9		4 1/2
1371-1380	9 6 1/2						4 1/2	9 1/2		5 1/2
1381-1390	9 6						4 1/2	6 1/2		5
1391-1400	10 2						4 1/2	8	1	5 1/2
General average..	9 11 1/2	8	4 1/2		9 6	9 1/2	4 1/2	7 1/2		4 1/2

TABLE IX.—AVERAGE PRICE OF WAX, CIDER, APPLES, ETC., BY DECENNIAL PERIODS.

Decade.	Wax, (lb.)		Cider, (run of 252 gals.)		Apples, (qr.)		Charcoal, (qr.)		Sea-coal, (qr.)		Fagots, (100.)	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1260-1270	6 1/2	10 5 1/2	0 1/2		3 1/2						1 0	
1271-1280	6 1/2	10 2 1/2	0 8		8			0 9	1 1 1/2			
1281-1290	5	10 4 1/2	0 10 1/2		7 1/2			1 0	2 7 1/2			
1291-1300	7 1/2	11 2 1/2	0 7 1/2		5 1/2			1 0 1/2	2 7 1/2			
1301-1310	7	10 5 1/2	0 9 1/2		6			0 10	2 6 1/2			
1311-1320	6 1/2	10 6 1/2	1 4 1/2					1 1	2 7 1/2			
1321-1330	6 1/2	13 6 1/2	0 11 1/2		4 1/2			1 0	3 6 1/2			
1331-1340	6 1/2	10 4 1/2	0 1 1/2		6 1/2			1 0	2 11 1/2			
1341-1350	6 1/2	10 1	0 6 1/2		4 1/2			0 7	2 7 1/2			
1351-1360	7	12 4	0 4 1/2		8			3 5 1/2	5 6			
1361-1370	7	16 1 1/2			10 1/2			2 4	2 7 1/2			
1371-1380	6 1/2	13 4			10			1 11 1/2	2 6 1/2			
1381-1390	5 1/2	9 2 1/2							2 4			
1391-1400	6 1/2				10 1/2				2 10			
General average.....	6 1/2	11 4 1/2	0 9		7 1/2			1 4 1/2	2 8 1/2			

TABLE X.—AVERAGE PRICE OF HERRINGS, FOREIGN PRODUCE, ETC., BY DECENNIAL PERIODS.

Decade.	Herrings, (M @ 1200.)		Wine, (doz. gals.)		Pepper, (lb.)		Oil, (gln.)		Sugar, (lb.)		Almonds, (lb.)		Ginger, (lb.)		Saffron, (lb.)	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1250-1270	4 7 1/2	2 1	0 1 1/2				1 4 1/2		3	1 9 1/2		13 0				
1271-1280	5 1	2 6 1/2	1 0		0 8				1 1/2							
1281-1290	6 4 1/2	2 6	0 9 1/2				0 9 1/2					5 5				
1291-1300	C 9	1 1 1/2	1 3 1/2		1 0	1 8	2 1/2					6 0				
1301-1310	7 0 1/2	4 0	1 1 1/2		1 6	1 1 1/2	1 1/2					5 0				
1311-1320	8 3 1/2	3 3 1/2	0 11 1/2		0 11 1/2	1 2	1 1/2					4 9				
1321-1330	8 3 1/2	4 4 1/2	1 3 1/2		1 4	1 2	1 1/2					5 0				
1331-1340	9 2 1/2	4 5	1 3 1/2		0 11 1/2	0 11 1/2	1 1/2					4 3 1/2				
1341-1350	3 3	10 1 1/2	1 6 1/2		1 1 1/2	1 2	2 1/2	1 9 1/2				15 0				
1351-1360	13 8 1/2	8 1	2 3 1/2		1 5 1/2			3 1/2	1 4							
1361-1370	13 4	8 1 1/2	1 5 1/2		1 4 1/2											
1371-1380	14 4 1/2	9 6	1 6		1 4 1/2	1 9		3	1 6			15 8				
1381-1390	15 3 1/2	7 1 1/2	0 11 1/2		1 5 1/2	3	1 5	1 1 1/2				11 11				
1391-1400	18 2 1/2	6 6 1/2	1 0		1 2 1/2	1 6 1/2	3	2 3				15 11				
Average:																
1250-1350	7 5	3 1 1/2	1 1 1/2		1 1 1/2	1 1 1/2	2	1 6 1/2				8 5 1/2				
1351-1400	15 0	8 2 1/2	1 4 1/2		1 4 1/2	1 7	3 1/2	1 7 1/2				14 2				

TABLE XI.—A

Dec

1260-1270	
1271-1280	
1281-1290	
1291-1300	
1301-1310	
1311-1320	
1321-1330	
1331-1340	
1341-1350	
1351-1360	
1361-1370	
1371-1380	
1381-1390	
1391-1400	

Average:
1260-1350
1351-1400

TABLE XII.—A

Years.

1361-1370	
1371-1380	
1381-1390	
1391-1400	

Average:
1361-1370
1371-1380
1381-1390
1391-1400

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TABLE XI.—AVERAGE PRICE OF CANVAS, LINEN, AND WOOLEN CLOTHS, BY DECENNIAL PERIODS.

Decade.	Canvas. (course.)	Hair-cloth.	Linen.	Table- linen.	Cloth.	
					Best.	Second quality.
	Doz. ells.	Doz. yds.	Doz. ells.	Doz. ells.	Pannus of 24 yards.	Pannus of 24 yards.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1260-1270.....	2 3½	.....	5 0	3 0	4 2 0	1 12 3
1271-1280.....	1 6	.....	5 7½	2 5½	.....	1 9 1½
1281-1290.....	1 5½	.....	2 6	2 10	4 11 9	1 19 2
1291-1300.....	3 2½	3 9	3 8½	3 2½	3 11 8	1 17 10
1301-1310.....	3 8	4 0	4 0	3 14	4 3 4	1 6 2½
1311-1320.....	3 0	2 0	4 0	4 1	3 15 3	1 14 10
1321-1330.....	2 10	5 0	4 0	3 6½	3 14 0	1 7 0
1331-1340.....	2 8	4 0	4 0	4 4	4 4 8	1 19 5½
1341-1350.....	2 5½	3 8½	4 4	3 6½	4 4 8	2 5 0
1351-1360.....	6 5	.....	8 1½	5 3½	4 10 8½	2 10 2½
1361-1370.....	5 2½	11 9	11 6½	6 8	3 19 7½	2 5 6
1371-1380.....	5 1½	8 0	9 7½	7 6	3 17 8½	2 1 9½
1381-1390.....	3 9½	6 9	7 5	7 2	.....	.....
1391-1400.....	3 9½	5 10	6 1½	6 4½	.....	.....
Average:	.....	.....	.....	.....	.....	.....
1260-1350.....	2 6½	3 9	4 1½	3 3	3 19 8	1 13 2½
1351-1400.....	4 10½	8 1	8 4½	6 7½	4 3 2	2 6 6½

TABLE XII.—AVERAGES PRICE OF BUILDING-MATERIALS, LATHS, ETC., BY DECENNIAL PERIODS.

Years.	Laths.	Plain tiles.	Crofts.	Tile-plugs.	Lath- nails.	Board- nails, &c.	Millstones.	
	Per 1,000.	Per 1,000.	Per 1,000.	Per 1,000.	Per 1,000.	Per 1,000.	Foreign.	Books.
	s. d.	s. d.	s. d.	d.	s. d.	d.	s. d.	s. d.
1261-1270.....	4 4	.....	2 3	1	0 1½	2½	31 8	.....
1271-1280.....	4 4½	3 5½	.....	.....	0 8½	2½	36 9	.....
1281-1290.....	3 6	2 1½	.....	1½	0 8½	3½	36 6	.....
1291-1300.....	4 5½	2 5½	3 4½	1½	0 9½	3½	48 9	.....
1301-1310.....	4 2½	2 11	4 6	1	0 9½	3½	46 1	.....
1311-1320.....	4 5½	2 7½	2 10	1½	0 10	3½	44 0	12 6
1321-1330.....	4 1½	2 5½	3 1	1½	0 12	3½	37 8	7 6
1331-1340.....	5 6½	2 4½	2 4	1½	0 9	3½	39 10	.....
1341-1350.....	5 6½	2 4½	2 4	1½	0 9	3½	30 0	12 9
1351-1360.....	7 ½	5 5½	2 10½	1½	0 8½	3½	56 3	15 5
1361-1370.....	7 ½	5 5½	6 10½	3½	1 7½	5½	68 4	14 9½
1371-1380.....	6 3	4 7½	8 11	3½	1 4	6½	87 10	.....
1381-1390.....	7 9½	3 9½	10 5½	3	1 4½	6	66 8	13 4
1391-1400.....	7 10	4 2½	8 7	3	1 3½	5½	66 2	14 1
Average:	.....	.....	.....	.....	.....	.....	.....	.....
1261-1350.....	4 5½	2 9½	3 ½	1½	0 9½	3½	39 4	10 11
1351-1400.....	7 2½	4 7½	9 1½	3	1 5½	6½	69 1	14 5

Comparing the rates paid for threshing in the thirteenth and fourteenth centuries, as shown in the foregoing tables, with those paid for the same labor in 1767, as given by Arthur Young in his Northern Tour, Mr. Rogers concludes that the medieval laborer was rather better paid than his descendant in the eighteenth century; for "while the laborer in Arthur Young's time got one-twenty-fourth part of wheat and barley, and about the one-and-twentieth part of oats, the laborer of the fourteenth century received rather more than an eighteenth in wheat, a twenty-second part of barley, and a little less than a fourteenth part of oats. These proportions are taken from the eastern counties, in which the rate for threshing wheat was above the average, that of barley rather less, and that of oats rather more. If, however, the other districts had been

taken, the rate would still have been favorable to the mediæval laborer, though not to the extent which may be inferred from the case of the eastern counties." * * In this connection Mr. Rogers remarks that "no kind of labor appears to suggest more distinctly than that of threshing what was the ordinary rate of wages to an agricultural laborer." Elsewhere he refers to a practice not uncommon among farm-servants of contracting for the produce of cows, and even ewes, (for ewe-milk cheese was not unknown,) at an annual rent. This he regards as "an evidence that the condition and means of the persons who entered into hired service at annual wages and allowances with the lord's bailiff was far better than anything of which our modern experience informs us as to the condition of the descendants of these farm-servants in our own time." Indeed, he once expresses the opinion that the wages of labor generally, in the period embraced in the above tables, were "virtually higher than they have been from 1825 up to within the last five years, if, indeed, they were not higher than even they are now."

From an account of the expenditures of Merton College in rebuilding the bell-tower of their chapel, Mr. Rogers obtains the wages paid for certain kinds of labor for a period about half a century later than the conclusion of that embraced in his tables, the structure in question having been commenced in May, 1448, and concluded in May, 1450. "The laborers," says he, "are well paid. The chief mason, besides an annual pension of 20*s.*, receives, whenever he is at work, 8*d.* a day. It appears that he resided in Oxford, for the college purchases straw and hay of his wife. The other masons get a fraction under 7*d.* a day for the greater part of the year, and from 5*d.* to nearly 6*d.* in the three winter months. The carpenters who are merely engaged in rough work are paid 4*d.* a day, as are also the laborers, who seem to wait on the masons. The quarrymen are paid from 4*d.* to 4½*d.* These wages may, if we estimate them in modern money, be reckoned by the multiple of 12, and fully bear out that which has been often stated that the condition of laborers relatively to the price of the necessities of life was high, not only in the period before us, but, as in this case, fifty years afterward; for the price of wheat during the first half of the fifteenth century was actually below the general average of the fourteenth."

It may be remarked here that the relation of wages to breadstuffs in the thirteenth, fourteenth, and fifteenth centuries, as compared with the relations between the same things in the eighteenth and nineteenth, does not alone furnish a sufficient test of the comparative condition of the laborer at these two periods; for even in the eighteenth century, to say nothing of the wonderful mechanical improvements of more recent times, the advance of the industrial arts must have placed within reach, even of the limited means of the working classes, many comforts and conveniences which were previously unknown to them. It must be confessed, however, that the progress of the nation has dealt very unequally with the descendants of the villeins and other servile classes of early mediæval times; for while millions of these descendants, as farmers, tradesmen, merchants, manufacturers, and members of the learned professions, are now in the full enjoyment of political liberty and the blessings of modern civilization, there is a class, comprising the bulk of the agricultural laborers and the unskilled operatives of the manufacturing and commercial towns, whose condition is all the more wretched from its violent contrast with that of the more fortunate classes, and whose lot in life could scarcely have been more hopeless had they been born in the twelfth century instead of the nineteenth.

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MANNERS, HOUSEHOLD EXPENSES, ETC.

To the foregoing tables may be added, in a less concise form, information derived from (1) the household roll of Eleanor, Countess of Leicester, for A. D. 1265, and (2) the "Expenses" and "Accounts and memoranda" of Sir John Howard, first Duke of Norfolk, for the ten years from 1462 to 1471, inclusive. These quaint and interesting documents, together with the accounts of the executors of Eleanor, consort of Edward I, bearing date A. D. 1291, were prepared for publication by Geriah Botfield, esq., who also wrote a valuable introduction explaining the papers, and giving some account of the lives of the persons to whom they relate. The papers and introduction together constitute a royal-octavo volume of 716 pages, which was issued from the Shakespeare Press, London, in 1841. The two earlier documents are printed in middle-age Latin; the other in the English of the time in which it was written. In addition to the statistical information which they contain, they furnish curiously relate, and they also contain interesting memoranda of the lives of persons conspicuous in English history. The period between the insurrection of the barons, in the reign of Henry III, and the contest of the rival houses of York and Lancaster, in the fifteenth century, was signalized by some of the most important changes which the manners and institutions of the English people have ever undergone, and the effect of these changes upon the condition of the people is strikingly illustrated by a comparison of the accounts and memoranda of Sir John Howard with the household-roll of the Countess of Leicester, which was written about two hundred years earlier. "The increase of labor, and those arts which at the former period were generally carried on by the domestics of every family of consequence, now [*i. e.*, in the time of Sir John Howard] support persons who make them the means of an independent livelihood. Brewing and baking have become profitable trades, and the tailor has ceased to be a domestic servant. * * * Notwithstanding the country had long suffered from civil commotions, it is obvious that wealth is greatly increased; inns have been established in country towns; a traveler no longer takes with him his wine and provisions, as did the Earl of Leicester; taverns have arisen in London, and become places of common resort for people of rank; 'Mastres Ysabell' lodges at the Bell in Westminster, and her father, Sir John, takes his wine and waffles at the Sun in Lombard street, or breakfasts with my Lord Audley at the Greyhound in Eastcheap. The same increase of wealth has brought with it a corresponding degree of luxury in dress and the general conveniences of life. The countess wore some garments of sheepskin, and was content with woollen gowns of which the nap was shorn more than once. My Lady Howard has her 'plytes of fyne lawne,' and Humphrey Gentili, the Lombard, supplies Sir John with costly cloths of damask, satin, and velvet upon velvet 'pyrled with goold.' In the age of the countess ladies arranged their dress with skewer-like implements, but fair 'Mastress Anne' Howard used 'fyne pyymes.' * * * Of all things the means of communication between distant places was, perhaps, the least improved. Roads and bridges were still wanting. Dobbe, the shepherd, guides the Countess of Leicester from Odiham to Porchester, and Sir John, on his road to Chester, gives a penny 'to a mayde that tawte the way ovyr Tyddysbery (Didsbury) forthe.'

"It would be easy to institute a more minute and less desultory com-

parison between the manners of the two periods, as illustrated by the present work. The accounts of Sir John Howard show the state of almost every department of domestic economy in his time. We have payments to bakers and brewers, builders, armorers, and shipwrights; silversmiths, mercers, drapers, tailors, and cordwainers; to sailors, soldiers, and servants; they contain notices of farming and stocking fish-ponds; and, taken in conjunction with the Paston letters, they furnish the liveliest picture we possess of any period anterior to the invention of printing."

The household-roll of the Countess of Leicester contains considerable curious information in regard to the diet of both the upper and lower classes in her time, but so much of it as would be suitable to the present work has been substantially anticipated. The following list, however, will serve to show the prices of a number of articles then comprehended under the general term "spicery," and but little used except among the wealthy:

Sugar, per pound, 1s. to 2s.; almonds, 2½d. to 3½d.; anise, 3d.; cinnamon, 10d.; galingal, 1s. 6d. to 3s.; ginger, 10d., 1s., 1s. 6d., 2s.;* pepper, 8d., 10d., 1s.; cloves, 10s. to 12s.; cummin, 2d.; fennel, dried, 3d.; rice, 1½d.; saffron, 10s. to 12s.

In connection with the subject of condiments, it may be noticed that mustard, verjuice, and vinegar were used in considerable quantities.

Items occasionally occur for the purchase of table linen, plates, dishes, and drinking cups. In respect to wearing apparel the roll contains little information. Woolen cloths were the chief material of female apparel, but the following materials are also mentioned, viz. linen, sindon,† scarlet and rayed or striped cloths of Flemish, French, or Italian make, *pers*, or blue cloth, manufactured chiefly in Provence, russet, say or serge, and blanchet, or blanket, a name supposed to mean flannel. When woolen cloth was new the nap was generally very long, and after wearing it some time it was customary to have it shorn, a process which was repeated as long as the cloth would bear it. Thus the Countess of Leicester sends Hicqe, her tailor, to London to get her robes reshorn.

There are two passages in the roll in relation to the cost of a pocket breviary for the use of Eleanor de Montford. Twenty dozen of fine vellum, purchased for this book, cost 10s., and the writing, which was executed at Oxford, cost 14s.

A noteworthy circumstance connected with this document is the fact that the household servants mentioned therein are generally distinguished by Saxon names, such as Hande and Jacke of the bake house, Hicqe the tailor, Jacke the keeper of the countess's barriers, Dobbe the shepherd, Digon, Gobithesty, and Treubodi, who were often employed in carrying letters, and Shingaway, a courier, whose name was probably descriptive of his gait and manner.

The accounts of Sir John Howard relate to a period posterior by from sixty to seventy years to the date at which Mr. Rogers' tables terminate. They were transcribed from the original manuscripts, of which, at the time of the publication of Mr. Bottfield's book, there were two in existence, one of them forming a part of the valuable archaeological collection of Sir Thomas Phillips, bart., at Middle Hill, while the other was the property of the Duke of Norfolk. Mr. Bottfield states that the only

*When several different prices are given they are obtained from different entries. It seems strange, however, that the price of ginger should have varied in so short a time from 10d. to 2s.

† This has been interpreted to mean satin or very fine linen.

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The account
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Item, flor making
Item, payd for lynyng
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Item, payd flor bro
Item, payd to John
long gowne
Item, payd flor a ne
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Item, my masterye p
Item, my masterye p
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Item, payd flor a da

Item, my masterye p
Item, my masterye p
wyne flor my seyd
Item, flor xx. drynky
Item, v. doseyn plat
Item, flor v. doseyn s
Item, payd flor ij. e
Item, viij. pypys sale
Item, iij. barrellys sal
Item, payd * * *
Item, payd to Thomas
Item, to Thomas Tho
Item, flor di. t a pow
Item, flor v. li. datys
Item, vj. li. almundys
Item, flor j. li. sugar
Item, the same day pe
Item, payd to the
masterye

* Black fi

liberty taken with the text has been that of extending contracted words and inserting a few points. In the published work the modern printed characters are necessarily used instead of the manuscript letters of the fifteenth century, but the quaint and irregular spelling of the original documents is faithfully preserved, the same word being sometimes spelled in two or three different ways in a single entry.

The accounts were kept by a steward who refers to Sir John as "my master;" but occasional entries are found in the handwriting of Sir John himself, and these are indicated by printing them in italics. The "Expenses" and "Accounts and memoranda" cover 473 pages of Mr. Botfield's book, and the following extracts embrace only occasional entries, which have been selected so as to include the prices of a considerable variety of articles and the wages of different kinds of labor. In many of the entries a few unnecessary words are omitted. Thus, the entry on page 111, "Fore costs fore my lady lyeinge at London be xiiij dayis in bred and vytaylle, xvij*s. jd.*," is preceded in the original by the words, "Item, the same day my master payd to Seynelow." Occasionally explanatory words are interpolated and put in parentheses, and in a very few instances easily distinguishable by the form of expression, the language of the original entry, for the sake of clearness or brevity, has been entirely abandoned. The following are the extracts, with the years to which the different entries relate:

A. D. 1462.

Item, flor makynge off a jacket off erymysyn clothe flor my sayd lord.....	ij. s. iiij. d.
Item, payd flor lynyng to the said jacket.....	xij. d.
Item, flor makynge off a long gown and lynyng the sleevys.....	ij. s.
Item, payd flor makynge off a short gown off ruset.....	ij. s.
Item, payd flor ij zerdis off blakkefryce.....	xx. d.
Item, payd flor makynge off my lordys tawny cloke lynyng wyth velvet.....	ij. s. ob.
Item, payd flor makynge off a jaket off the kyngys levery.....	xvj. d.
Item, flor lynyng to the same jaket.....	xx. d.
Item, payd flor browderynge off a kloke.....	xij. d.
Item, payd to John Frawncys flor to pay to John Kooke flor fluryng off my lordys long gowne.....	xvj. d.
Item, payd flor a new tronke flor my lord whych was delyvared to Wyllyam off Ward-roppe.....	vij. s. ix. d.
Item, my mastyre payd flor a whyte bonett for my lord.....	x. s.
Item, my mastyre payd flor ij. zerdis off blakke velvet.....	xvj. d.
Item, payd flor a horsee to Rogere Tego.....	xxxij. s.
Item, payd flor a daggere flor my sayd lord.....	xxx. s.

A. D. 1463.

Item, my mastyre payd at Donwyche flor a samon flor my sayd lord.....	xx. d.
Item, my mastyre payd the xj. day off July, at Yipswyche, flor ij. tonus off Spanyshe wyne flor my sayd lord.....	xx. d.
Item, flor xx. drynkyng dyscheys.....	xvj. mare.
Item, v. dosen platerys.....	x. d.
Item, flor v. dosen sawceres.....	ij. s. iiij. d.
Item, payd flor ij. e. stokfyscheys.....	x. d.
Item, vij. pypys salt.....	iiij. li.
Item, iij. barellys salt.....	xij. s.
Item, payd * * * flor ij. peyre off morrey hosyn flor my mastyr.....	ij. s.
Item, payd to Thomas Goldsmythe flor a chene off gold.....	xij. s.
Item, to Thomas Thorpe flor a peyre shoyis.....	xl. s.
Item, flor di. t. a pown of dynamann t.....	vj. d.
Item, flor v. li. datys.....	x. d.
Item, vj. li. almundys.....	ij. s. vj. d.
Item, flor j. li. sugar.....	xvij. d.
Item, the same day payd flor a potelle wyne.....	xvij. d.
Item, payd to the cordwaner flor ij. peyr shoyis and a peyre hors flor my mastyr.....	v. d.
	ij. s. vj. d.

* Black frieze.

† One-half.

‡ Cynamann.

Item, payd to Clayson for v. pypps of hyer, the sayd day, liij. of them for my masterys
 balynger spent to Caleyys ward, and j. pypp theys day..... xxvj. s. viij. d.
 Item, payd the sayd day flor xviij. yerdys of lyuen kloyt, bowyt of Dene of
 Herwysche..... v. s. liij. d.
 Item, flor a pot off traynys flor my lady..... liij. d.
 Item, flor an elle off canvas..... v. d.
 Item, payd for a peyre knyvs flor my mastyr..... j. d.
 Item, payd the sayd day for wayshyng of my masterys shyrt..... vj. d. ob.
 Item, payd the xxx. day of Octobyr, for ij. bosshellys otys, at the Holt..... liij. d.
 Item, payd for a goys* for my mastyr..... vj. d. ob.
 Item, payd for a peyre shoys for John Reschardde, the scheld t of the stabylle... vj. d.
 Item, my mastyr paid the xvj. day of Novembyr, for liij. lodys hay..... vij. s.
 Item, flor notyng off a peyr botys, flor John Davy..... vj. d.

A. D. 1464.

Item, payd for a payr hosyn flor the chyld off the stable..... x. d.
 Item, for ij. breshys..... liij. d.
 Item, for liij. zerdys and dl. off damaske, to John Martyn..... xxxvj. s.
 Item, the same day my mastyr payd flor liij. zerdys flinsteyn blakke..... ij. s. liij. d.
 Item, the same day for x. zerdys off Chawmpeyn clothe..... liij. s. viij. d.
 Item, to Thorp for a shyrt the same day..... xij. d.
 Item, flor ij. mennys dyner the same day..... liij. d.
 Item, the same day payd flor x. zerdys sarsynnet to Thomas Rowson, merser in Chepe-
 syde..... xx. s.
 Item, the same day payd to my masterys taylor flor makynge off a tawny gown flor my
 mastyr..... liij. s.
 Item, the same day flor liij. off your mennys dyner at Lambythe..... viij. d.
 Item, the same day for x. zerdys off blew bolckram, prise the zerd vi. d. summa, v. s.
 Item, the sayd day payd flor a blakke bonet for my mastyr..... xx. d.
 Item, the sayd kay payd flor a quarto wyn..... ij. d.
 Item, the same tyne payd for a li. candyllys..... j. d. ob.
 Item, the same day payd to John Smythe, sadeler, for ij. sadelys..... xxiij. s.
 Item, the same day my mastyr payd to the smyth in Stanstret for shoyng of xx.
 shoys..... ij. s. vj. d.
 Item, the same day payd for a quarter otys..... xviij. d.
 Item, for a payr sporys † for Jake of stable..... viij. d.
 Item, the same day my mastyr payd for a c. and a quarter of saltfyshe..... xv. s.
 Item, for shoyng of a horse at Lanum..... ij. d.
 Item, payd for a pype of new Gaseoyne wyn..... xxxv. s.
 Item, the xxvj. day of June, my mastyr payd to Scraton for a zerd and a quarter of
 blakke clothe..... xvj. d.
 And I payd the same tyne fore a scherte and for a peyre shoes fore Jake..... xvj. d.
 Item, the same day payd to a man of Colchestre, for xvij. ellys of corse Holond
 clothe..... vij. s. j. d.
 Item, the vj. day of Jule, my mastyr payd to Payne, for liij. dayis werke..... viij. d.
 Item, my mastyr payd for xx. lenges †..... liij. s.
 Item, the same day my mastyr payd for x. coddys §..... vij. s.
 Item, the liij. day of Octobyr, my mastyr payd flor liij. ellys of fyn Holond for a shyrt
 for hym selfe..... liij. s. vj. d.
 Item, payd for a payr botez for my mastyr..... liij. s.
 Item, my master gaffe to the bryngere of them..... j. d.
 Item, payd fore a payre shoes and a payr pennsons..... xij. d.
 Item, payd fore ij. payr shoes and ij. payr sokkes for m. Thomas and m. Nichol-
 las..... xvj. d.
 Item, payd fore a payr hosen for Lew..... xxj. d.
 Item, payd for a shyrt for the same Lew..... ix. d.
 Item, the xxviij. day of Desembre, my master payd to yonge Wendam fore a
 dagger..... liij. s. liij. d.
 Item, the same day my master payd to Thomas of Wardroppe, fore makeinge of my
 ladyis gowne of cremson velvet..... vj. s.
 The xvij. day of Desembre my ma-ter payd to Lunquyer, the mersere, for xij. yerdys of
 crymysyn velvet, pryse the yerd, xvij. s. summa totalis, xj. li. xij. d.
 For xij. yerdys of tyne cremysyn velvet, pryse the yerd, xvij. s. summa, x. li. liij. s.
 Receyved for a cowes hyde..... xv. d.
 Receyved of John Noryse for talow of the said cow..... xix. d.
 Receyvid of John Doket for a boloko hyde..... xij. d.
 For vj. li. talow of the said bullocke..... v. d.
 For the fate and the offaile of a boloke..... liij. d.
 Paid fore a payre shoes fore Anne Fuller..... liij. d.

* Goose.

† Child.

‡ Spurs.

§ Ling.

§ Cod.

Fore clowting of
 For makeinge of
 For liij. li. cand
 Fore a pygge.....
 Fore ij. saltfyshe
 Fore a kow bon
 Paid to John Pe
 For a pekke of
 Fore a quarter b
 For vj. spores
 For xv. howstry
 For a shepe.....

Item, my master
 wiche coste my
 Item, my master
 master.....
 Item, to Cumber
 For an axe for the
 For botchyre fro li
 Item, for a li. of w
 For a dl. an unne
 To Arnold, goodls
 Payd for a doblot
 For vi. elles canva
 For a payr shone
 For slaying Thurs
 For Thurstone's h
 For makeinge of B
 The same day, in c
 For liij. yerdys of r
 For liij. yerdys and
 For liij. yerdys of bl
 For a yerd of blak
 Item, the same da
 hym.....
 Item, the liij. th da
 Eschepe.....
 Item, payd for ij. ye
 Margaret.....
 For a furre.....
 Fore xij. elles canva
 Item, my master gaf
 Fore a payre shoes a
 For a boke conteyny
 Fore lynyng of my
 Fore makeinge of the
 Item, the xxvj. day
 For a peyre shoes for
 Payd to a barbor.....
 Fore wyne and walke
 Item, the liij. day of
 menster.....
 Item, the same day, li
 Item, paid for Braham
 For a quarto malmes
 For a quarto wyn fo
 Fore ij. mennys dyner
 Fore a li. candelles
 Fore vj. mennys dyner
 For Braham's dyner
 For Braham's soper at
 To the cordwanere for
 For an horsse be ij. d
 For wrytyng of a sup
 For vj. mennys sopers
 To the barbor.....

* Course.

Fore clowting of master Danyelles shoes.....	h. d.
For makenge of ij. petycotes for mastres Marget and m. Anne.....	liij. d.
For ij. li. candelles.....	liij. d. ob.
Fore a pygge.....	liij. d.
Fore ij. saltfshes.....	x. d.
Fore a kow bout at Blakborow at Seynt Katerynes feyre.....	vij. s. v. d.
Paid to John Pepyne for a bullok.....	liij. s. vij. d.
For a pekke of otemelle.....	liij. d.
Fore a quarter helle.....	xx. d.
For vij. spones.....	ob.
For xv. howstryngges.....	v. d.
For a shepe.....	xx. d.

A. D. 1464-5.

Item, my master gaffe to the Kyngo a cawser* called Lyard Duras, the same day, the wiche coste my master.....	xl. li.
Item, my master gaffe to the Quene a cowser called Lyard Lewez, the wiche cost my master.....	vij. li.
Item, to Cumberton for a letelle panne, the same day.....	vij. d.
For an axe for the chambre.....	vij. d.
For botelhyre fro London to Grenewyche.....	liij. d.
Item, for a li. of whyzthe soppe.....	ij. d. ob.
For a di. an unnce of tawny sylke.....	vij. d.
To Arnold, gooldsmythe, for a jasynt sett in goold.....	xx. s.
Payd for a doblot for Boton.....	liij. s.
For vi. elles canvas for the chambre at Eltam.....	xxij. d.
For a payer shone for Boton at Eltam.....	vij. d.
For shoyng Thurstone's horsse.....	liij. d.
For Thurstone's hors Senete at Eltam.....	xxij. d.
For makynge of Boton's hosez and his gowne.....	vij. d.
The same day, in expences of ij. menne.....	xxij. d.
For ijij. yerdes of russet fryse for his (Sir John's) longe gowne of velvet.....	ij. s. vij. d. ob.
For ijij. yerdes and di. of blakke fryse for his russet gowne of velvet.....	xxij. d.
For ijij. yerdes of blak fryse for hys gowne of blakke.....	v. s.
For a yerd of blak sarset fore lynyng for ij. typettes of russet velvet.....	vij. s. liij. d.
Item, the same day my master gaff to Ser Thomas a Borow a dagger that cost hym.....	liij. s. ij. d.
Item, the liij. th day of Feverer, my master payd fore his soper at the Grewd, in Eschepe.....	xxij. s. vij. d.
Item, payd for ij. yerdes and a quarter of cromysen engreynd for a gowne for mastres Margret.....	vij. s. liij. d.
For a furro.....	liij. s.
Fore xij. elles canvas, prise the elle, liij. d.....	xxij. d.
Item, my master gaff to a barbour.....	x. d.
Fore a peyre shoes and a peyre of patyns.....	vij. d.
For a boke conteynyng vij. quayres off fyne paper.....	liij. d.
Fore lynyng of my master's longe blak gowne.....	ij. s. j. d.
Fore makenge of the said gowne.....	liij. s. vij. d.
Item, the xxvj. day of Janevere, paid fore vij. menes dyners.....	xx. d.
For a peyre shoes for my master.....	vij. d.
Payd to a barbor.....	liij. d.
Fore wyne and waffers at the Sonne, in Lumberd strete.....	ij. d.
Item, the ij. day of Feverer, payd Mastres Ysbelles costs at the Belle at Westmenster.....	xxij. d.
Item, the same day, paid fore ijij. mennes sopers that bront her to London.....	vi. d.
Item, paid for Braham soper at Lyncolnes Yone, the same tyme.....	ij. d.
For a quarte malmesey.....	liij. d.
For a quarte wyne for James Hobard and Solyard.....	ij. d.
Fore ij. mennes dyners.....	v. d.
For a li. candelles.....	ij. d.
Fore vij. mennes dyners.....	vij. d.
For Braham's dynere.....	ij. d.
For Braham's soper at Lyncoln Yn.....	ij. d.
To the cordwanere for shoes for my master.....	xx. d.
For an horsse be ij. dayes.....	ij. d.
For wrytyng of a superviso.....	xx. d.
For vij. mennes sopers.....	ij. d.
To the barbor.....	liij. d.

* Courser.

† Friezo.

‡ Greyhound.

Fore horse-hyge to Stoke be liij. dayis.....	ij. s. viij. d.
For hutchewen the Westmenster to London.....	ij. d.
For a quymetale color.....	vij. d.
Fore a flaken ale for my lady.....	s. d.

A. D. 1445.

For ij. payre old shetes.....	liij. s. viij. d.
Item, the xj. day of Jenevere, my master bout of Rygon x. couerlytys of tapety werke, a pece conteynyng xxx. denyshe elles, and ix. pees conteynyng xx. denyshe elles, every pece pryse the pece, xx. s.....	summa, s. li. x. s.
Payd to Arnold, goldsmythe, floore a tablett of gold.....	ij. li. x. s. d.
Fore a flaket of sylver.....	xxx. s.
Bout of Arnold, goldsmythe, a dysyse of gold for Mastres Margret, the pryse therof is.....	xl. s.
Payd for ij. verye embes.....	xvij. d.
For liij. capettes.....	xxliij. s. liij. d.
Item, the xv. day of Marche, my master bout of goldsmythe in Chepe sortayn sylver vesseles, and my master to pay the said goldsmythe for every unnce.....	ij. s.
Item, the day and yere above wreten, my master paid to Fremman, his bedmakers, for makinge of a bed wyth v. costres to the same.....	xx. s.
Item, paid hym for xxviij. li. lyere, pryse the li. v. d.....	summa, xij. s. xi. d.
Item, paid hym xxix. elles canvas, pryse the elle, v. d.....	summa, xij. s. v. d.
Item, paid hym for viij. li. corde, pryse the li. v. d.....	summa, iij. s. iij. d.
Item, paid hym for v. li. di. of frenge, pryse the li. xvj. d.....	summa, vij. s. iij. d.
Item, paid hym for lings fore xij. coshones.....	v. s.
Item, paid hym for vj. stone feders, pryse the stone, li. s.....	summa, xij. s.
Item, paid hym fore makinge of the same koshons.....	ij. s.
Item, paid hym fore performyng of the valaunce.....	ij. s. iij. d.
Item, the yere aforesaid, and the xxviii. day of Marche, my master bout of Untrey, the goldsmythe, a chaffler of sylver weyng xxvj. unnces and a quarter, and my master paid hym therof of old grotes.....	l. s.
And in new grotes.....	ij. s. vi. d.
A short gonne, clothe of eremysen velvet, pryse the yerd.....	xxx. s.
A short gonne, clothe of tawny velvet, pryse the yerd.....	x. s.
A sadyle, a lyttyle harneys, & xij. reynes.....	xj. s. viij. d.
Item, John Hule, off the town off Cley, in Northfolke owyth hym be obligaciou for a shype.....	liij. li.
Item, for a combe whete.....	liij. s. iij. d.
Item, for a payr shone for my lady.....	v. d.
Item, for a payr shone for mastres Margret.....	liij. d.
Item, the same day my master paid to Mawt Clerke, for a ran and xix. ewes, pryse the pece xx. d.....	summa, xxxviij. s. iij. d.
Item, paid here the same day for v. lumbes, pryse the pece xij. d.....	summa, v. s.
Item, the same day my master paid her for a sowe.....	ij. s.
Item, my master paid her for a gander, liij. bredgesse and v. yonge goslynges, the pryse of alle drawyth.....	liij. s.
Item, the same day paid for a flerken ale.....	x. d.
Item, my master paid to Cumbert n for an hatte.....	ij. s. viij. d.
Item, for a payr sheres and a payr gloves for mastres Ysbelle.....	ij. d.
Item, my master paid to the cordwainer for ij. payr shoyis for him self.....	xvj. d.
Item, my master hatte paid for iij. pelwest of downe.....	vij. s. viij. d.
Item, for ij. tylers iij. dayis, every day viij. ob.....	summa, iij. s. iij. d.
Item, for a laborer ij. dayis.....	xvj. d.
Item, for j. lede of sande.....	vj. d.
Item, iij. sakkes lyn.....	vj. d.
Item, for lx. fete of cl. & fodele.....	xx. d.
Item, for ij. carpenters & v. dayis and di. the day viij. d. ob.....	summa, vj. s. iij. d. ob.
Item, the same day my master paid for xxvj. li. flax.....	vj. s.
Item, for xij. li. dates.....	vj. s.
Item, for vj. li. reysors of Capmas.....	xx. d.
Item, for j. li. of ponit of gylver.....	xvj. d.
Item, the same day my master paid to a Lucheman for vj. ferkens of whygthe herenge.....	ij. s. iij. d.
Item, the same day my master paid for xxxij. fresche herenges.....	vj. d.
Item, the same day my master paid to James Peterson for a galone oyle.....	xij. d.
Item, the v. day, a quater helle, the pryse.....	xix. d.
Item, paid for sewenge of iij. federbeddes, iij. bolsters, and ix. pelwes.....	vij. s. vj. d.

* Comb of wheat.

† Pillows.

‡ A halfpenny.

Item, the same
Item, the xliij. d.
of depe hew.
Item, xxliij. rhe
Item, xx. lambes
Item, xxx. pygge
Item, xij. losawt
Item, xxxij. gule
Item, xvj. bachel
Item, the same d
Item, for xviij.
vi. s. viij. d.
And v. lytelle he
Also my master
Also for a fore ha
And for a payr gla
A balynger of u
For xj. yerdes rus
To the Kyngges c
For ij. godels of
For ij. payre of m
Fore earshot, fore
Item, my master y
Item, the same d
Item, given to Ro
Item, my master g
Item, my master g
For board of work
diem.
ij. c. of oken bord.
For x. stodes, pryse
For a beeme.....
Fore liij. smale sto
Fore a baye stoole
Fore liij. moyneles t
Fore xj. day werke
For iij. dayis werke
To John Cobdok off
Fore John Copdoko
Fore ij. dayes werke
My master paid for
Payd for John Desp
For a horsecambe...
For caryngs of a fee
My master paid to l
Fore a payr putyns
Fore a payre shous f
My master paid fore
My master paid for a
Fore eustes fore my la
Fore a barelle and
Escepe
My master spent at
Grewnd.
For ij. yerdes clothe f
My master paid for a
For a new saddle
For a dobel and a pa
For a potelle wyne.
For iij. barres to the
Paid at Westmenster
Fore ij. elles Holland c
Paid to Wadselle for l
to a kertelle
For a plite of laune
Fore an elle and di. fy
For iij. elles of course
Paid to Nete and to Jo
My master gaffe to the

Item, the same day my mastyr paid for vij. payr of fyn gloves	ij. s. iij. d.
Item, the xliij. day of Aprille, my mastyr paid to a draper in Canwey strete, for ij. yerdes of depe bl. w. prise the yerde, vj. s. iij. d.	summa, xij. s. vi. d.
Item, xxiij. rhepe, pryse	xviij. s.
Item, xx. lambes, pryse	xxvj. s. x. d.
Item, xxx. pygges, pryse	xxvj. s. x. d.
Item, xij. tesautes, pryse	xv. s.
Item, xxxij. galones, mylke	xlii. s.
Item, xvj. barelles of syngelle lene, prise the barrelle, ij. s.	ij. s. viij. d.
Item, the same day my mastyr paid for di. a yerde of damaske	summa, xxxij. s.
Item, for xviij. yerdes and a quarter of rede satyn, prise the yerde	liij. s. ij. d.
vi. s. viii. d.	
And v. lytelle horse, the prise of a peece vij. s.	v. li. xx. s.
Also my master muste pay fore a quarter whete	summa, xxxv. s.
Also fore a four horse I bochte thes day of the seyd Werer	v. s.
And for a payr gloves	xij. s.
A halenger, Item, the v. th yere of Kyng Edward the iij. th, Thomas a Chandre sold for xj. yerdes russet, ij. yerdes brode, prise the yerd, ij. s. v. d.	vij. mare, vj. s. viij. d.
To the Kynges curdwaners man flor ij. payre of shooz	xxvj. s. xij. d.
Fore ij. godels of sylke, with a harneys of sylver and gilt	ij. s.
Fore ij. payre of nutty hosen engreynd	vj. s. viij. d.
Fore sarsnet fore his (Sir John's) fepet, and fore lynyng of hys gonnys	xliij. s.
Item, my master payd for a hat ij. and bonettes for hym sellde	xij. s. v. d.
Item, the same day my mastyr g. d. to James Redesman a yunge	v. s. iij. d.
Item, geven to Roger Key a ryng, the same day, pryse	v. s.
Item, my master gaff to the herandes the same day	xij. s.
Item, my master gaff to the menstres the same day	x. s.
Item, my master gaff to the troumpettez the same day	x. s.
For board of workmen engaged on some work for Sir John Howard, each man per diem	x. s.
ij. c. of oken bord, for every hundred	ij. d.
For x. stodes, pryse every peece ij. d.	xxviij. s.
For a beeme	summa, ij. s. vi. d.
Fore iij. smille stodes	viiij. d.
Fore a baye stode	iiij. d.
Fore iij. moyncles to the same bay wyndow, pryse of every peece	xij. d.
Fore xj. day werke in carpentry	ij. d.
For ij. dayis werke upon a bay wyndow and a stode	ij. s. viij. d.
To John Coldok off Sudbury for a day werke and a halff	xij. d.
Fore John Copdeke of Halsted for ij. di. dayes werke	vj. d.
Fore ij. dayes werke of John Strete, prentys to the same John Copdeke	iiij. d.
My master paid for his brekefast at Westmenster	iiij. d.
Payd for John Despays botes	ix. d.
For a horsecumbe	xliij. d.
For caryngs of a feder bed fro Westmenster to London	ij. d.
My master payd to hys curdwanere fore ij. payr shone	ij. d.
Fore a payr patyns for my master	ij. s.
Fore a payre shous fore mastres Marget	iiij. d.
My master payd fore a hatt	iiij. d.
My master paid for a typett fore my lord of Norfolke	iiij. s.
Fore costes fore my lady lyng at London be xliij. dayis, in bred and vytaylle	xliij. s.
Fore a barrelle and a kylderkene ale, to the wyffe of the Garlond in Eseepe	xviij. s. j. d.
My master spent at hys brekefasts with my lord Andeley, at the seigne of the Grewnd	iiij. s. ii. d.
For ij. yerdes clothe fore a gowne fore Braham	vj. s. x. d.
My master paid for a tonne wyne, that is to say, a pype and ij. hogges hedes	iiij. s. x. d.
For a new saddle	c. s.
For a dobler and a payr hosen for Lew	viiij. s. iij. d.
For a potelle wyne	v. s. iij. d.
For iij. barres to the hoggeshedes of wyne	iiij. d.
Paid at Westmenster for a bed by xi. wekes	iiij. d.
Fore ij. elles Holand clothe	iiij. s. viij. d.
Paid to Wadselle for langyngs of aras be ij. dayis, and for makeinge of a payre sleeves to a kertelle	ij. s. viij. d.
For a plite of laune	ij. s.
Fore an elle and di fyne Holand clothe	x. d.
For iij. elles of coarse holand	ij. s. vj. d.
Paid to Nete and to John Mase for ij. day werke at Stoke Halle ponde	ij. s. xij. d.
My master gaffe to the persone of Framynggham for his potentes	viiij. s. iij. d.

To Nicholle Perye for wrytyng of the said potentes.....	iiij. s. ij. d.
For ij. bushelles of saltte.....	xx. d.
For ix. fote of glasse to the new closet.....	iiij. s. ix. d.
For xij. galons age.....	ij. s.
For xxxj. c. saltyshe, prise of c., xxv. s.....	summa, xxxvij. li. x. s.
Fore a quartere helle.....	xxij. d.
A saddle, price.....	v. s.
A bonnet.....	xii. d.
Fore a sadylle.....	vj. s.

A. D. 1460-7.

Fore makege of xij. coshones of eremesene and grene velvet, prise.....	iiij. s.
Fore the stuffenge of the said coshones, fore vi. stone fethers, prise the stone ij. s.....	xij. s.
Fore a bonet fore master Gorge.....	xij. d.
xvij. yerdes of tyne plonket, prise the yerde.....	iiij. s. iiij. d.
X pees of counterfet tapstre, every pece conteynenge xx. flenyshe elles, prise the pece.....	xj. s.
Item, the xvij. day of December my mastyr bowt of Bolstrode x. yerds of russet for ij. longe gownes for my lord and a gowne for my lady, the yerde vj. s. vij. d.....	summa, iiij. li. vj. s. vij. d.
Item, my mastyr paid to Edwardes wyffe for j. cade of rede herynge, the wyche my mastyr sent to John Hoobbes.....	v. s.
Item, paid to Thomas Purcer, for Willyam Fykett, for ij. dayis werke.....	vj. d.
Item, my mastyr paid to ij. carpenters of the Holke, for werkenge on his werke, ij. dayis eche of them.....	xv. d.
Item, my mastyr paid to James Peterson for a galon oyle for the peyntinge of the payoyces.....	xij. d.
Item, * * * my mastyr paid for a li. f of whygthe led.....	iiij. d.
Item, my mastyr rekened wyth Willyam Welshe, and the said Willyam axsethe for tylenge of my masters place at London, be the space of xx. dayis, every day vij. d.....	summa, xij. s. iiij. d.
Item, fore his laborer servynge him, be the said xx. dayis, for every day v. d.....	summa, vij. s. iiij. d.
Item, * * * for iij. lodes of sand.....	xvij. d.
Item, the same day my mastyr paid fore a hatt.....	iiij. s.
Item, the same day paid for v. mennez deners.....	viii. d.
Item, the same day paid fore ij. mennez sopers.....	ij. d.
Item, paid for iiij. barrells of pyche and terre.....	xvij. s.
Item, the yere a bove sayd, and the xxvij. day of Foverer, t my master bout iiij. sponez of sylvere weyng iiij. unnees, marked wyth a rose, and my master paid for every unnee ij. s.....	summa, xij. s.
Item, the same day paid fore vj. mannez dyners.....	vij. d.
Item, the same day at nyzthe for iiij. mennez sopers.....	vij. d.
Paid for a bowe at Caley.....	iiij. s. iiij. d.
A sadylle, pryse.....	ij. s.
An entry records that "Danyelle," a servant, began service with Sir John on the next day after Holy Rode day, in the 7th year of Edw. IV. His yearly wages in money was to be.....	xl. s.
He was also to receive "ij. gownes and a bowse for his wife to dwelle at Stoke." Item, my master toke hym (Danyelle) a peyre of botes that cost hym.....	iiij. s.
Item, an olde peyre of spores tht coste my master.....	vj. d.
Item, my master toke hym a standard bowe that Melsone gaff hym, and it is worthe in money.....	vj. s. vij. d.
An entry records that Robart Messendeno receives by the year.....	xxvij. s. vij. d.
A pair of hose.....	ij. s. iiij. d.
A doublet and a pair of hose.....	vj. s.
For a shyrtte.....	xv. d.
For a shyrtte.....	iiij. s. iiij. d.

A. D. 1468.

For v. c. salt fyshe, the price.....	v. li.
For xiiij. barrells of fyshe.....	iiij. li. xij. s. iiij. d.
For ix. barrells of fishe, price.....	ij. li.
Item, the secunde day of September, and the yere afore seid, my master made cemen- aunte with John Marlow to brne hym lxxx. pipes of beyr by this day fourthnighte, paing for the pipe and the beyr vj. s. iiij. d.....	iiij. xxj

* Large shields.

† A pound.

‡ February.

¶ NOTE.—The numerals "iiij. xx" printed in italics are in the handwriting of Sir John Howard, and relate, not to the aggregate cost of the beer, but to the number of pipes, which was eighty—four or fourscore.

Paid to the go-
price of the p-
For an hogshed
Item, the iiij. th
small and gret
For a M. fyshe,
For vj. barrells fys-
Item, the iiij. d. d-
whete, after
tere, vij. s.....
Item, paid to Cla-
Item, the ix. d-
price
Item, paid for a l-
Item, paid for 1
wey, ix. s.....
Item, paid for ij.
Item, paid for vj.
Item, paid for vij.
For ix. xx quarter
every quartere,
Paid to Robert Di-
iiij. s. vij. d....
Item, paid to John
Item, paid to hy-
pece, xij. s. vij.
Item, paid to hym
For x. sual oxene
For xx. kyene
For vij. oxene and
For other ij. oxene
For iiij. oder oxene
For v. steres
For vj. new sakkes
Item, my master pay-
of whete, safe a l-
Item, paid to Ric-
ij. d.
of a c. xxiij. s.....
Item, the xxj. day o-
price of a pece, x-
Item, paid to the
pece, xij. s.....
For vij. wey of salt
Paid to master Coke
Item of Reynold, wy-
Item, paid for bryng-
watir side
Item, paid fore a bar-
wyne to Redclif
Paid to Robert Porf-
price quantyr, ix. ()
Item, paid to a Doche
Item, paid to the
price
Paid * * * for vj.
Fore iiij. barrells piche
Item, to ij. cartes of
Kyngestone
Item, paid fore iiij. xx
For xxxvij. others sm-
For iiij. barrells of py-
Fore iiij. cabilles, a
the c. vij. s.....
Paid to a gentel man-
Item, paid to the to-
the c. xvj. d.

* The numerals "vij."
chased being eight score
† The wey comprised

Paid to the godewife at the Sone in the Kinges strete at Westmyenster for vj. pipes, price of the pipe, viij. d.	summa, liij. s.
For an hoggeshed	liij. d.
Item, the liij. th day of September, my master paid to Waneshed for xxv. bullockes of small and gret, the price of a pece, xii. s. x. d.	summa, xxiij. mare. xv. s.
For a M. fyshe, the prise of a c., xx. s.	summa, x. li.
For vj. barels fyshe, price of a barelle, vj. s. viij. d.	xl. s.
Item, the iij. d. day of September, bought of Lewes Galyot viij. xx* and xvi. quarters whete, after the account of ix. bushels fore viij., payng fore every quar- tere, vij. s.	summa, li. li. xxiij. s.
Item, paid to Clase for c. and di. of pipe hopes	v. s.
Item, the ix. day of September, my master bought of Waneshed xliij. oxene, price	xxviij. li. x. s.
Item, paid for a bargo hyre to bryng fyshe from Whencheth to Redeliff	liij. s. liij. d.
Item, paid for lxiiij. cheses, weyng ij. weyt and a halfe, price of a wey, ix. s.	summa, xxiij. s. ix. d.
Item, paid for ij. wey salt, price the wey, xv. s.	summa, xxx. s.
Item, paid for vj. waneshottes, price of the pece, viij. d.	liij. s. vi. d.
Item, paid for viij. wey of leay salt, price the wey, xliij. s.	summa, liij. li. xviij. s.
For ix. xx quarters (160 quarters) whete, and to every quarter a bushelle, the price of every quarter, vij. s.	summa, lxiiij. li.
Paid to Robert Diesone fore xxv. M. ^{lb} and di. of wode, price of a M. ^{lb}	liij. s. viij. d.
Item, paid to John Wilkokkes, the xv. day of September, for xx. oxene	v. li. xviij. s. viij. d.
Item, paid to hym fore xliij. oxene of a noder sorte, the same day, price of a pece, xliij. s. viij. d.	summa, viij. li. xviij. s. viij. d.
Item, paid to hym the same day fore xx. gret oxene	xviij. li.
For xx. kyene	vj. li. vj. s. viij. d.
For viij. oxene and steres	x. li. x. s.
For other ij. oxene	v. li. viij. s. viij. d.
For liij. oder oxene	xxiiij. s. viij. d.
For v. steres	lvj. s. viij. d.
For vj. new sakkes	liij. li.
Item, my master paid to Warrewick, my lord of Warwyk haroude, for ecc. xij. quarters of whete, safe a bushelle, price of a quarter of whete	vij. s.
Item, paid to Richard Seuer, fyslemongere, for viij. c. dryed saltfyshe, price of a c. xxiij. s.	summa, ix. li. xij. s.
Item, the xxj. day of September, my master paid to a buchere of London for xx. oxene, price of a pece, xv. s. vi. d.	summa, xv. li. x. s.
Item, paid to the same bucher for x. bullockes, the same day, price of a pece, xij. s.	summa, vj. li.
For viij. wey of salt, the price of a wey, xliij. s. vj. d.	summa, v. li. xv. s.
Paid to master Coke for v. pipes	liij. s. liij. d.
Item of Reynold, wyndrawer, viij. pipes, price	v. s.
Item, paid for bryngyng downe of xx. empty pipes frome Kinges hed in Chepe to the watir side	xxviij. d.
Item, paid fore a barge that brought vij. wey of salt and lxiiij. cheses, and a pipe of wyne to Redeliff	xxj. d.
Paid to Robert Porfoot and to Rychard Porfoote be Whitham for xv. quarters whete, price quartyr, ix. (bushels) for viij. s.	summa, vj. li. vj. s.
Item, paid to a Docheman of London for lxiiij. waneskottes, prie of	xx. s.
Item, paid to the same Docheman for ij. c. xij. fyshe, by the smalle tale, price	xviij. s. x. d.
Paid * * * for vj. barels pyche and terre, price the barel, liij. s. viij. d.	xxviij. s.
Fore liij. barels piehe and terre, price the barel, v. s.	summa, xx. s.
Item, to ij. cartes of Cobham for caryng of ij. lodes and di. of tymber fro Dorkyng to Kyngestone	liij. s. liij. d.
Item, paid fore liij. xx (four score) chese waneskottes, price the pece, vi. d.	summa, xl. s.
For xxxviij. others smallere waneskottes, price the pece, liij. d. ob.	summa, xliij. s. liij. d.
For liij. barcelles of pycho and terre	xviij. s.
Fore liij. cabilles, a lawsero, and liij. other ropes, weyng xxij. c. xxvi. lb., price the c., viij. s.	vij. li. xviij. s.
Paid to a gentel manne of the Kynges house that went with me to the beyr houses	x. d.
Item, paid to the turners for j. c. drynkynge bolles, vj. c. sawcers, price the c., xviij. d.	viij. s.

* The numerals "viij. xx" mean "eight score," the aggregate quantity of wheat pur-
chased being eight score (or 160) quarters, plus sixteen quarters, or 176 quarters.
The wey comprised fourteen stone, or 196 lb.

Fore iij. c. platers, price the c., iij. s.	xij. s.
For iij. gret tankordes	ij. s. vj.
For xv. galone tankordes	vij. s. vj. d.
For xv. potelle tankordes	v. s.
For vj. baskettes, price the pece, iij. d.	xviij. d.
For xx. gret trayes	vj. s. viij. d.
Item, paid to a bark fore bryngyng downe of vj. pipes flour, ix. pipes beere, iij. pipes fleshe, xliij. c. fyshe to Gravesend	v. s.
For vj. bs. mustard sede	xx. s.
For ij. copir ketyls weyng xlvij. li., price the li., vj. d.	xxviij. s.
Fore iij. brode clothes of russet, the firste clothe contenyng xxv. and di. yerdes, the ij. d. pece contenyng xxiiij. and di. yerdes, and the iij. d. pece contenyng xv. and di. yerdes, price of a yerde, iij. s.	summa, ix. li. xvj. s.
For iij. yerdes and j. quarter and di. of morrey engraned, for gownes for master Thomas & master Nicholace, price of a yerd, ix. s.	xxx. s. iij. d.
Item, the xxx. day of September, paid for a harnes complet fore hym (Master Nicholace Howard) and an estriche fether	vj. li. xvj. s. viij. d.

A. D. 1468-9.

iij. brels of fulle heryng of whyte heryng, the price of every brelle, xj. s. xliij. s.	
<i>Bowete of Tomas Motense v. brode clothes, ij. planketes, ij. derke rowetes, and they contengen in yerdes viij. s., viij. yerdes, the yerde ij. s. iij. d.; the same drawethe. xix. li. vj. s.</i>	
<i>A blacke kloth kaled pewcke brode kloth, contengyng xvj. yerdes and halfe, the yerde xxx. d.; the same is. iij. s. ix. d.</i>	
For vij. s. ij. quarters and a halfe of wete, London measure, (London measure,) the pryse of the quarter is	vj. s. viij. d.
Paid to Richard Ashe for xij. pipes of heyre, price the pipe, vij. s. viij. d. summa, iij. li.	
For xj. peses lede, the weyte iij. foder, ec., iij. quarteres, xxi. li., the foder v. li. vj. s. viij. d.; the same is	xxij. li. ij. s. xj. d.
Paid to Thomas Burne fore a dagger	vj. s. viij. d.
Paid to William Martyn for a loce of hey	vij. s. iij. d.
Fore a peyer pensones	iiij. d.
Fore a lode heg	vij. s.
Fore a lode strave	ij. s. iij. d.
Paid to Godfrey mypone the Northre for makenge of xij. jaketes of mayle, and makenge elene, and fore the goldsmythes werke to the same	xv. s.
Fore a standard of mayle	ij. s.

A. D. 1469.

For vj. brydille bittes, price the pece, xij. d.	vij. s. ij. d.
Paid for xiiij. wey salt	xliij. mare.
For xij. elles of lyne holond clothe	xix. s. ij. d.
Fore makeyng of a long gowne for my masters owne selfe	xx. d.
Fore a di. yerd of blak frese fore the same gowne	iiij. d.
For makeyng of a longe blak gowne furred with cony	ij. s.
Fore ij. yerdes and di. of blak lynngge fore the same	ij. s.
Fore makeyng of a shorte gowne of silke fore master Nicholace	v. s.
Fore a yerd and a halfe of blak lynngge for the same	ij. s.
Paid to Hans, cordwanere, fore ij. pare of shoes fore my master	xvj. d.
For ij. pare of shoes fore Edmonde	vij. d.
For floweth child shoes	v. d.
Fore a pare of patens	ij. d.
Fore a peyre of shoes fore Herry Hout	vij. d.
Fore a peyre of hotes for Thome of the stabille	vij. d.
Fore danyske fore a new dobelcte fore selfe, (Sir John)	xx. s.
For ij. yerdes of porpel schawelcte fore a jakete fore my selfe	x. s.

A. D. 1471.

Stefen Howethe, be yere*	vj. marke
John Blyante, be yere*	v. marke
Wylgenc Farnwel, be yere*	v. marke
Hery Polington, be yere*	v. marke
John Schote, be yere*	v. marke
Yeren Bickersdall, be yere*	v. marke
Semond Man, be yere*	iiij. makke
Wylgenc Pulgrave, be yere*	xtrj. s. viij. d.

* Either a list of servants, with their yearly wages, or else a portion of a roll of retainers.

It has already been very unequal. Liberated from opportunities for them rapidly rial out of wh built up. It is his personal e which he and that in many i pauperism; a took no such h ander II, in al gradually disa tural laborers, class of mend as to occa

The first men 1349, when it v as they may liv idleness and y upon pain of in anything to suc sloth, so that t sary living."

"The nuisance and Working C dence of a stron plaint of the H servants high w runaways turn b they have suffie work; that oth parties from vill rogues, infesting evils, the Comm are able to worl beggars, and sta turn home to wo liable to a penalt opinion of Parlia mons, we learn t chiefly found in t of manufactures,

Two years after gars shall contin of passing this ac they are to remov of their birth. F where they finally of 1588 proceeded boded in the celel enactments of th the revenues of t

ORIGIN OF THE ENGLISH POOR LAWS.

It has already been remarked that the progress of the nation has dealt very unequally with the descendants of the medieval serfs and villeins. Liberated from their legal thralldom, they enjoyed greatly enlarged opportunities for the exercise of their powers, and a large proportion of them rapidly improved their position, furnishing the bulk of the material out of which the great and influential middle class was gradually built up. It was the misfortune of the English villein that in securing his personal enfranchisement, he relinquished his hold upon the soil to which he and his ancestors had been attached. The consequence was, that in many instances his liberation was but a leap from bondage into pauperism; a result against which the English government of that day took no such humane and statesmanlike precaution as was taken by Alexander II, in abolishing serfdom in Russia in 1861. Hence as villenage gradually disappeared, there grew up not only the class of free agricultural laborers, and that of artificers and tradesmen in the towns, but a class of mendicants and thieves, whose number became so formidable as to occasion no little trouble and embarrassment to the authorities.

The first mention of this class in the statute-book occurs in the year 1349, when it was enacted that "because many valiant beggars, as long as they may live of begging, do refuse to labour, giving themselves to idleness and vice, and sometimes to theft or other abominations, none, upon pain of imprisonment, shall, under the colour of pity or alms, give anything to such which may labour, or presume to favor them in their sloth, so that thereby they may be compelled to labour for their necessary living."

"The nuisance, however," says Wade in his "History of the Middle and Working Classes," "was not abated;" and in 1376, we have evidence of a strong disposition to vagrancy among laborers, in the complaint of the House of Commons, that masters are obliged to give their servants high wages to prevent them running away; that many of the runaways turn beggars, and lead idle lives in cities and boroughs, although they have sufficient bodily strength to gain a livelihood, if willing to work; that others become *staff-strikers*, (endgel-players,) wandering in parties from village to village, but that the chief part turn out sturdy rogues, infesting the kingdom with frequent robberies. To remedy these evils, the Commons propose that no relief shall be given to those who are able to work, within boroughs or in the country; that vagrants, beggars, and staff-strikers shall be imprisoned till they consent to return home to work, and whoever harbors a runaway servant shall be liable to a penalty of ten pounds. These enactments show the earliest opinion of Parliament on mendicity, and, from the language of the Commons, we learn that the objectionable classes under consideration were chiefly found in towns, where, owing to commerce and the introduction of manufactures, the principal wealth of the nation had accumulated.

Two years after, by 12 Richard II, c. 7, it is directed that impotent beggars shall continue to reside in the places where they were at the time of passing this act. In case those places are not able to maintain them, they are to remove to some other place in the hundred or to the place of their birth. From the tenor of this act, it is evident that the district where they finally settled was bound to maintain them, and the legislature of 1388 proceeded on the same principle of compulsory assessment embodied in the celebrated act of Elizabeth in 1601. It seems, too, from the enactments of this period that the indigent classes had a legal claim on the revenues of the clergy. In 1391 it is declared that, in all appropri-

ations of tithe for the support of monastic institutions a certain portion shall be set apart for the maintenance of the poor. In these regulations we see the foundation of the system of poor-laws; and, instead of referring their origin to the 43 Elizabeth, we ought only to ascribe to that act the concentration and development of an ancient practice that had prevailed long before her time. It is apparent, indeed, from the acts to which I have referred, and from other statutes which might be quoted, that, for nearly two centuries prior to the Reformation, the legislature was sedulously struggling against the evil which accompanied the transition from slavery to free labor, and that their policy was directed to objects similar to those which have lately engaged attention, namely, to analyze the mass of vagabondage, imposture, and real destitution which afflict society—to punish the former and relieve the latter. Branding, whipping, imprisonment, and setting in the stocks were the punishments chiefly employed for the suppression of vagrancy. Scholars were liable to these penalties unless provided with written testimonials from the chancellor of their respective universities. Sailors, soldiers, and travelers were also to be provided with passports, and were required to travel homewards by the shortest road. Artificers and laborers (11 Henry VII, c. 2) were forbidden to play at unlawful games, except during Christmas; and two justices were empowered to restrain the common selling of ale in towns and places where they should think expedient, and to take surety of ale-house keepers for their good behavior, as they might be advised, at the time of the sessions."

By an act passed in 1530 beggars were divided into two classes, namely, the aged and impotent, and vagabonds and idle persons; and justices were empowered to license persons of the first description to beg within certain precincts. Their names were directed to be registered and to be certified at the next sessions. Begging without a license, or without the limits assigned, subjected the offender to imprisonment in the stocks for two days and nights, and to feeding on bread and water. Able-bodied vagabonds found begging were flogged at the cart's tail, and then sworn to return to their places of birth, or where they last dwelt for the space of three years, and there put themselves to labor.

It is probable that inconveniences arose from begging being authorized by the legislature, for within five years several material alterations were made in the laws respecting the impotent poor. In the 27 Henry VIII, c. 25, we have a near approximation to the principle of a poor-rate. The preamble states that it had not been provided "how poor-people and sturdy vagabonds should be ordered at their repaire and coming into their countries, nor how the inhabitants of every hundred should be charged for their *reliefe*, nor yet for the setting and keeping in worke and labour the said valiant beggars at their repaire into every hundred of this realme." From these expressions the legislature seems to have been convinced of the necessity of a compulsory maintenance, and although a regular tax for that purpose was not immediately imposed, yet it seems to have been conceded, from the regulations of the statute, that the poor, even at this period, should be maintained by the public. The act makes it obligatory, under a penalty of twenty shillings a month, on the head officer of every parish, to maintain, by the collection of voluntary and charitable alms, the poor of their parish in such a way that none of them "of very necessity" might be compelled "to go openly on begging." The alms to be collected on Sundays, holidays, and festivals. All ministers, in their sermons, collations, biddings of the beads, confessions, and at the making of wills, are required to "exhort, move, stir, and provoke people to be liberal in contributions to-

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wards the comfort and relief of the poor, impotent, decrepit, indigent, and needy people, and for setting and keeping to work the able poor." Certain of the poor are directed twice or thrice every week to go round and collect from each householder his broken meat and refuse drink for equal distribution among the indigent, but precautions are taken by fines and penalties to guard against the embezzlement of the parochial alms and doles by constables and church-wardens.

At the period under consideration the police regulations of the country, rigid as they were, appear to have been utterly inadequate to the preservation of order. Never were severe laws enacted in greater profusion or more rigorously executed, and never did the unrelenting vengeance of authority prove more ineffectual. Harrison informs us that seventy-two thousand great and petty thieves were put to death during the reign of Henry VIII; and that even in the time of Elizabeth there was not "one year commonly wherein three hundred or four hundred rogues" were not devoured and eaten up by the gallows in one place and another." Looking at the subject from the more enlightened stand-point of modern jurisprudence, we can hardly be surprised to learn that, "in spite of these sanguinary punishments, the country continued in a dreadful state of turbulence." "Every part of the kingdom," we are told, "was infested with robbers and idle vagabonds, who, refusing to labor, lived by plundering the peaceable inhabitants, and often strolling about the country in bodies of three hundred or four hundred, attacked with impunity the sheep-folds and dwellings of the people."

It will be shown further on that a cause which goes far toward explaining this deplorable state of affairs is to be found in the revolution in land-tenures which occurred under the Tudor dynasty. To the same cause may be attributed the greater part of that increasing pauperism which continually called for new enactments. "The long reign of Elizabeth," says Wade, "is filled with statutes for supplying the deficiencies or correcting the errors of former poor-laws. In the year 1597 several acts were passed relative to vagrancy and mendicancy, and the provision of former acts in some degree moulded into a uniform system. In one act four overseers are directed to be chosen in each parish for setting poor children and others in want of employment to work, and for raising, weekly or otherwise, a stock of materials for that purpose. Justices are empowered to levy the rate by distress, and for the relief of the impotent poor the church-wardens and overseers are authorized, with the permission of the lords of manors, to build convenient houses on the waste at the general charge of the parish, and to place inmates of more families than one in each cottage. Parents of old, blind, lame, and other poor persons are bound to assist their children as shall be directed at the general quarter-sessions, on penalty of twenty shillings for every month they fail to do so. And begging, unless for victuals, in the parish, is entirely prohibited. Several acts were also passed for the relief of soldiers and mariners, and every parish charged a certain sum weekly for their maintenance.

"Increasing inconveniences at length produced the celebrated statute of 43 Elizabeth, which concentrated in one act the accumulated experience of previous years, and long formed the groundwork of our poor-laws. By comparing this statute with the provisions of that referred to in the last paragraph, it appears that its most material provisions were not, as many erroneously suppose, originally framed in 1601; on the contrary, the principal clauses of the act of 39 Elizabeth, respecting the appointment of overseers, levying the rate, setting the able to work, providing relief for the impotent, and binding out children as apprentices, were

copied almost verbatim. From the tenor of the last clause in this great legislative measure it was evidently intended only to be experimental. It was, however, continued by subsequent statutes, and by the 16 Car. I, c. 4, made perpetual.

"Although Scotland is, for the most part, exempted from the poor-rate, it is remarkable that a compulsory provision for the poor was established by law in that kingdom twenty-two years before the passing of the act of 43 Elizabeth. In James VI's Parliament, held at Edinburgh, in 1579, an act was passed in which every branch of the English system—the punishment of vagabonds, of runaway servants, the mode of passing soldiers and seamen to their parishes, the regulation of hospitals for aged and impotent persons, the settlement of the poor, their maintenance by the parish, the appointment of overseers and collectors, the manner of treating those who refuse to work, and the putting out of poor children as apprentices—is more fully detailed than in any English statute. The assessment for the poor is very general: 'the haill inhabitants within the parochin' are to be 'taxed and stented according to the estimation of their substance, without exception of persones, to silk ouklie, (weekly,) charge and contribution as sall be thoct expedient and sufficient to susteine the saidis pure peopill."

"It is impossible, at this distance of time to form any accurate idea of the comparative number of the receivers and payers of parochial contributions immediately after the establishment of the poor-rate. Sir F. M. Eden was of opinion that, at the period he wrote, (1797,) the pauper class constituted a larger proportion of the community than at the close of the sixteenth and the beginning of the seventeenth centuries. But the fact is, though the act of 1601 empowered parishes to levy a poor rate, it was not for many years after carried into execution in various parts of the kingdom. The author of a pamphlet published in 1698, entitled 'Bread for the Poor,' says that, though parishes were enabled (by the act of 43 Elizabeth) to make rates, and the owners of estates obliged to the payment, yet in many places no such rates were made in twenty or thirty years after.

"It is probable that the dearth of corn and other articles of subsistence, which took place toward the close of Elizabeth's reign, greatly accelerated the passing of the act for raising a compulsory poor-rate. In 1587 wheat rose to £3 4s. the quarter; in 1594 it was £2 16s., and in 1595, £2 13s. 4d. the quarter. For several years there had been a succession of bad weather and scanty crops.

"In the year 1601, however, the season was more favorable; which, by rendering the condition of the poor more comfortable, concurred to recommend, even beyond its deserts, the new measure of the legislature.

"Among the various funds appropriated to the relief of the poor, previous to the act of 1601, may be mentioned pecuniary forfeitures, which, for many statutable offenses, especially those relative to profaneness and immorality, were applied in aid of the poor. As early as 1558 churchwardens were empowered to levy twelvecence upon every parishioner who omitted going to church on Sunday. In 1570 a moiety of the forfeitures for detaining goods belonging to a bankrupt's estate was directed to be distributed among the poor of the town in which the bankrupt was resident; and in the same Parliament half the penalty for not wearing a woolen cap on a Sunday was appropriated to the same purpose. One-third of the fines for saying mass, and other offenses against the established worship, were given to the poor; also penalties for swearing, tippling, and disorderly conduct on the Lord's day. It is not improbable that these various mulcts for offenses against

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religion and morality were intended as part compensation to the poor for the loss they had sustained by the dissolution of the monasteries and the new disposition of ecclesiastical property."

THE INCLOSURES OF THE SIXTEENTH CENTURY.

The revolution in land tenures, above referred to as having occurred during the Tudor reigns, was one of the most momentous events in the economical history of England. A detailed inquiry into the facts connected with it would far transcend the limits assignable to such a subject in a work like this; but to pass it by without notice would be to leave out of view the principal cause of that increase of pauperism, vagrancy, and crime which characterized the period under consideration, as well as the chief explanation of the present status of the agricultural laborers of England. It has already been intimated that the substitution of money-rents for personal services in payment for the occupation of land was instrumental "in promoting that complete divorce of the English agricultural laborer from the soil, which in modern times has been a source of such serious evils." It was, indeed, a part of the process of emancipation from feudal dependence and servitude—a dependence which had been degrading, and a servitude which at one time had certainly been extremely galling and severe; but in England this emancipation was attended with unfortunate conditions—a fact which will be better understood if we first glance briefly at the legislation which attended the emancipation of the Prussian peasantry at a much later day.

In Prussia the feudal system existed, at least in form, until after the beginning of the present century. Mr. R. B. D. Morier, in an essay on "The Agrarian legislation of Prussia during the present century," gives the following account of villenage and villein tenure as they existed in Prussia prior to the edict of October 9, 1807:

The status of villenage differed according as the villein was "*Leibeigen*," (i. e., as his lord had rights of property in his body,) or only "*erbhinterthänig*," i. e., in a state of hereditary subjection to the manor, "*adscripti glebæ*."

In its worst form the villein could be held to unlimited service, and could be deprived of his holding and located in another. At his death the whole or the largest portion of his personal estate fell to the lord. His children could not marry without the lord's consent, and could be kept an unlimited number of years as personal servants ("*Gesinde*") in the service of the manor. He could receive corporal punishment to heighten his productive power and to enforce respect, but his life was protected.

This extreme form was, however, the exception to the rule. It occurred mostly in the more remote provinces.

The milder form differed from the former in the services to be performed and the dues to be paid, being limited by local custom, and in a greater freedom in the disposal of the holding. The villein knew what work he and his team would have to perform in the course of the year, the number of years his children would have to serve in the household of the lord, the tax he would have to pay on their marriage, the amount of the mortuary dues which at his death the lord would have a right to. He could also buy his freedom at a fixed price, and, with the permission of his lord, dispose of his holding.

The free peasant differed from the villein in having no personal dues to pay, and in his service and dues being usually recorded in writing in the grants made to him, and, therefore, bearing more directly the character of a legal contract. He could not, however, acquire by purchase or inheritance other than peasant land,* nor could he change his position by changing his country life for a city life; nor could he in the country exercise any trade or calling but that of agriculture.

The land cultivated by the peasant, therefore, was divided into two principal categories:

1. That in which he had rights of property.
2. That in which he had only rights of usufruct.

In both cases services were rendered and dues were paid in kind or money to the manor. But in the first case these services and dues may be considered as having had a public, in the latter case a private, origin.

*The soil was divided into noble land and peasant land. The former could not be acquired by a peasant nor the latter by a noble.

term of years, or for life, the edict provided that the lord should receive one-half of the land so held as his indemnity for the loss of the dues, services, and rights which he surrendered to the tenant.

In other respects the conditions of the adjustment were much the same as in the case of the hereditary holdings, but with occasional differences, which were in favor of the lord of the manor.

The new conditions of land-tenure inaugurated by this edict necessitated corresponding changes in other portions of the agricultural system, and to bring these changes about, the "edict for the better cultivation of the land" was issued on the same day as the one last considered.

To present even a brief statement of its provisions would require more space than can be spared in this connection; but there is one passage which so well illustrates the policy of the Prussian government in regard to the distribution of land among the people that it may properly be quoted in full. After providing that "the proprietor shall henceforth (excepting always where the rights of third parties are concerned) be at liberty to increase or diminish his estate by buying or selling as may seem good to him," to leave the appurtenances thereof to one heir or to many, as he pleases, to "exchange them or give them away, or dispose of them in any and every legal way without requiring any authorization for such changes," the edict enumerates various advantages which will result from "this unlimited right of disposal," and among others the following:

But there is yet another advantage springing from this power of piecemeal alienation which is well worthy of attention, and which fills our paternal heart with especial gladness. It gives, namely, an opportunity to the so-called small folks, (*Kleine Leute*,) cottiers, gardeners, boothmen, and day-laborers, to acquire landed property, and little by little to increase it. The prospect of such acquisition will render this numerous and useful class of our subjects industrious, orderly, and saving, inasmuch as thus only will they be enabled to obtain the means necessary to the purchase of land. Many of them will be able to work their way upward and to acquire property and to make themselves remarkable for their industry. The state will acquire a new and valuable class of industrious proprietors. By the endeavor to become such, agriculture will obtain new hands, and by increased voluntary exertion more work out of the old ones.

In respect to hereditary leaseholds, this edict enacted that the services and fines attached to such holdings might be commuted into rent-charges, which in their turn could be redeemed by a capital payment calculated at the rate of four per cent. That is, by a payment of twenty-five times the annual rent charge, it might be forever extinguished and the leaseholder be thus made a freeholder.

Such were a few of the leading features of the great measures familiarly known as the Stein and Hardenberg legislation. Several laws of minor importance were subsequently adopted, but the only ones which need be noticed here are those of March 2, 1850, viz, the "law for the redemption of services and dues, and the regulation of the relations between the lords of the manor and their peasants," and the "law for the establishment of rent-banks." These were designed to complete whatever had been left unfinished by previous legislation in the great work of establishing free and separate ownership in the soil. The former abrogated the "dominium directum," or right of over-lordship so far as it was still held by lords of manors, commuted all remaining services and dues into fixed money-rents calculated on the average money value of the services and dues rendered and paid during a certain number of years preceeding, and finally provided that these rents should be compulsorily redeemable, either by the immediate payment of eighteen times the annual rent charge, or by an annual payment of $4\frac{1}{2}$ or 5 per cent.

for a specified time* on a capital of twenty times the annual rent-charge.

The other law provided the machinery by which this wholesale redemption was to be effected, the state, through the instrumentality of the rent-banks, constituting itself the broker between the tenant and the landlord. The bank established in each district advanced to the landlord, in rent-debentures bearing interest at the rate of four per cent. per annum, a capital sum equal to twenty times the annual rent-charge, and the peasant, along with his ordinary rates and taxes, paid into the hands of the district tax-collector, each month, one-twelfth part of a rent calculated at 5 or 4½ per cent. on this capital sum, according as he elected to free his property from incumbrance in 41½ or 56½ years, the respective terms within which, at compound interest, the 1 or the ½ per cent., paid in addition to the 4 per cent. interest on the debenture, would extinguish the capital.

From the foregoing brief outline of the agrarian legislation of Prussia during the present century, it will be seen how earnest and persistent have been the efforts of that monarchy† to protect all the customary rights in the soil which the peasantry enjoyed under the feudal system as it existed at the beginning of the present century, to give them a full equivalent for such rights under the new system of land-tenure, and in so doing to constitute the masses of the tillers of the soil a sturdy yeomanry cultivating their own fields, and not a race of dependent hirelings living and laboring upon the land of others.

It is here that we see a marked contrast between the agrarian revolu-

* If the annual payment was 4½ per cent. it was to be continued 56½ years; if 5 per cent. it was to be continued 41½ years.

† The Russian government, in abolishing serfdom, also adopted measures having for their object to secure to the serfs a permanent interest in the soil. Previous to their emancipation the serfs of each estate had occupied land which they cultivated for their own subsistence, the proprietor allowing them three days in the week for their own work and claiming three days for himself. The amount of land assigned to them on their emancipation varied according to circumstances and locality, considerable scope being left for voluntary agreements between the proprietors and the peasants, under conditions calculated to leave the latter as nearly as possible in possession of the same land which they occupied as serfs. The occupation of this land, whatever its amount might be, was obligatory upon the peasants for nine years, as also was the payment of a certain money-rent, or, at the option of the peasant, the performance of a certain amount of labor, the amount for the maximum holding being fifty days of man's work and thirty days of woman's, making seventy days in all, of which three-fifths were to be summer and two-fifths winter days. It should be said here that the Russian serfs as a rule lived in villages and cultivated their land in common—a mode of life which prevailed among their ancestors before they were reduced to serfdom, (in 1601,) and to which a considerable proportion of them, perhaps a large majority, will probably adhere for many years to come. The land was assigned to them at the rate of so much per male head of the village community or "mir," and it appears to have been the object of the government to leave the peasants as free as possible either to continue their system of common property in land, or to dissolve the "mir," and establish individual ownership with separate cultivation. The average maximum share was about twelve acres, for which the average money-rent was about \$6.80 per annum, or at the rate of 56 cents per acre. As the average rent (\$6.80) is treated as the equivalent of seventy days' labor, the average value of the latter must have been set down at a fraction less than 10 cents per diem. This, however, is less than the average market value of agricultural labor, and therefore the arrangement is calculated to stimulate the peasants to pay for their land in money rather than in labor. As a rule the rental value of land under tillage is considerably higher than the price fixed, so that while paying rent the peasants are not in the position of tenants who pay full competition rents. Moreover, the law gives them the right to purchase their land upon payment of 16½ times the annual rent; or, if the community is dissolved, each peasant may insist upon his individual right of purchase. In this case, however, the price is increased by twenty per cent. The government has also adopted a system somewhat analogous to that embodied in the Prussian rent-banks for assisting the peasants in the purchase of their land, and thus smoothing their way to complete independence.

tion accomplished took place in Prussia and Prussia accompanied by a champion con- that the former which existed in common by a- ings cultivated "champion con- says Morier, "the true significance either English movement in th- merely had for importance as a ju- draw their demer- been overlooked the 'condition s- undeniable; it c- community had cess in England being effected by during the presen- the one-sided ac- practical difficul- tations, will reac- in such a process- the most favorable the land from the third portion, b- parcels intermixe- the further comm- freeholders and c- rights on any to- manor did not lo- interpreted the c- suited them best, between the two c- land with demes- the consequent v- townships is wel- "Three great c- political life from great conflict betw- and tenant land, b- out. In England peasant won; the- and the stakes ha- Yes, in England appears to have b- time advantages danger of invasion make her, even at- nities for remun- tures attracted th-

tion accomplished in Prussia within the present century and that which took place in England upwards of three hundred years ago. In England and Prussia alike the change in the system of land-tenure was accompanied by a change in the mode of cultivation. Indeed, it is probable that the former change was due in a great measure to the necessity which existed for the latter; that is, to the change from cultivation in common by each peasant community to the system of separate holdings cultivated by individuals, or, to use two old English terms, from "champion country" to "severall." "To the student of English history," says Morier, "the word which corresponds to this change is 'inclosure,' the true significance of which has, however, not always been seized by either English or foreign writers on the subject. The great 'inclosing' movement in the sixteenth century is usually described as if it had merely had for its object to turn arable land into pasturage. Its importance as a joint effort on the part of the lords of the manor to withdraw their demesne lands from the 'communion' of the township has been overlooked. That this object was in itself highly desirable, and the 'conditio sine qua non' of any improvements in agriculture is undeniable; it was an organic change through which every Teutonic community had necessarily to pass. The evils which attended the process in England at the time referred to, arose from the fact that instead of being effected by impartial legislation, as has been the case in Prussia during the present century, the change was forcibly brought about by the one-sided action of the landlords. Any one acquainted with the practical difficulties experienced in Germany in making analogous separations, will readily comprehend all the injustice which one-sided action in such a process on the part of the stronger must have implied. In the most favorable case the withdrawal of, say, one-third or one-half of the land from the 'commonable' arable land of a township, such half or third portion, be it remembered, consisting, in many cases, of small parcels intermixed with those of the commoners, must have rendered the further common cultivation impossible, and thereby compelled the freeholders and copyholders to part with their land and their common rights on any terms. That in less favorable cases the lords of the manor did not look very closely into the rights of their tenants, but interpreted the customs of their respective manors in the sense that suited them best, and that instead of an equitable repartition of land between the two classes, the result was a general consolidation of tenants' land with demesne land, and the creation of large inclosed farms, with the consequent wholesale destruction of agricultural communities or townships is well known to every reader of history. * * * *

"Three great countries—England, France, and Germany—began their political life from a similar agricultural basis. In each of them the great conflict between *immunity* and *community*, between *demesne land* and *tenant land*, between the *manor* and the *peasant*, has had to be fought out. In England the manor won; the peasant lost. In France the peasant won; the manor lost. In Germany the game has been drawn, and the stakes have been divided."

Yes, in England the manor won, and the victory, complete as it was, appears to have been achieved without any serious difficulty. The maritime advantages of England, her comparative exemption from the danger of invasion, and the superiority of her internal police tended to make her, even at an early period, a commercial nation. The opportunities for remunerative employment presented by trade and manufactures attracted the peasants to the towns; and their readiness to sever

their connection with the soil, a connection which in their minds was associated with subjection and servitude, must have been unfavorable to the growth of those prescriptive rights which in time would have made them, like the Prussian peasants at the beginning of the present century, coproprietors with the lords in the land which they occupied. The actual course of events was calculated to encourage the pretensions of the nobility to the absolute control of the soil. One of their earliest encroachments upon the customary rights of the peasantry was the legalization of the claim of the lords of the manor to inclose for their own use a portion of the common pasture-land. In a law passed in 1235 or 1236, it was set forth that many large landed proprietors, who had made over in fee small holdings on their manors to knights and other small freeholders, could not make use of their waste lands and forests, inasmuch as they had let to their vassals the appurtenant pasturage-rights, together with the land-plots. On this account it was enacted that if the tenants should complain of the withdrawal of this right of pasturage, and if upon judicial inquiry it should appear that they had as much pasture as was necessary to their holdings, together with free ingress and egress, the complaint should be dismissed. Another law passed in 1285 went a step further, and to the right of inclosure which the lord possessed as against his own vassals, added the same right as against other commoners who were not tenants of the manor. These laws, however, had reference only to complaints made by the free tenants; and as the villeins are not mentioned, it is probable that with regard to them the lord of the manor was entirely unrestricted in his encroachments on the common pasture. The right established by these laws was frequently exercised, and is believed to have been of great value, although the land inclosed was sometimes used as a private manorial pasture or park, and not for the purpose of tillage. The origin of many of the vast pleasure-parks now attached to the mansions of the nobility may doubtless be traced to the inclosures of those early times.

Mr. Nasse, however, expresses the opinion* that up to some time in the fifteenth century the agrarian movement of the Middle Ages was, on the whole, advantageous to the position of small landed proprietors, but he says that its further development was "as ruinous to their interests as it had before been favorable." After the general substitution of money-rents for personal services, the lord of the manor had no longer an interest in the preservation of the small tenant, since it was more convenient for him to draw the same amount of rent from a smaller number. It was advantageous to him to diminish the number of claimants to rights in the manorial pasture, and was much easier to convert large peasant-holdings into lease-hold tenures than smaller ones.

We first perceive, says Nasse, in the reign of Henry VII the complaints, subsequently so numerous, of the decreasing numbers of the small landed proprietors, of the inclosures, and of encroachments on the pasture. Two laws of the fourth year of that king's reign (1488) gave public expression to the apprehension excited by the agrarian revolution, which was then in progress. The first, cap. 16, particularly noticed by historians, relates especially to the grass husbandry and the depopulation of the Isle of Wight; the other, cap. 19, "An acte against pulling down of townes,"† is of a general character, and applies to the whole country. "Many houses and villages in the kingdom are deserted, the arable land belonging to them is inclosed and converted into pasturage, and idleness (the cause of all evil) is therefore generally prevalent. Where, formerly, two hundred men supported themselves by honest labor, are now to be seen only two or three shepherds." In the first law, which referred to the Isle of Wight, on

*"The agricultural community of the Middle Ages and inclosures of the sixteenth century in England."

†"Tonne" is manifestly here used in its old sense, not of city, but dwelling-place, or village.

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account of the especial necessity which still existed for a strong population as a defense against the French and other enemies, it was ordered that no one should have a leasehold of more than ten marks of yearly rent, and that no one should pull down farm-buildings or suffer them to fall into decay. The second lays down, generally, that all dwelling and farm buildings which within the last three years have been carrying on an arable husbandry. If this law should be violated, the next superior owner of the land, the farm-buildings of which had not been maintained.

These complaints may be traced throughout the sixteenth century into the beginning of the seventeenth, in the same manner, without interruption.

We find them also in the following reign again most plainly expressed in the statute-book, in the introduction to the laws by which the practice of encroachments was sought to be restrained. Thus, in 6 Henry VIII, c. 5, and 7 Henry VIII, c. 1, where the mischief done is as plainly described as in the just-cited law of Henry VII: "Pulling downe and destruction of tonnes wythin thys realme and laying to pasture-lands which customably have been manured and occupied wyth tyllage and husbandry." When such houses, it goes on to say, have been destroyed since the first day of the present Parliament they are immediately to be rebuilt and the closed lands restored to tillage. The penalty for violation of the law is the same as that of 4 Henry VII, c. 10, but with the aggravation that if the next feudal lord should neglect to interpose, then the next superior, and finally, above all, the king is empowered to enforce the penalty. These last rulings were later (24 Henry VIII, c. 24) repeated, with the modification that they applied to all agricultural buildings which had fallen into decay since 4 Henry VII, as well as to arable land which had been converted into pasture since 4 same period, and that generally for thirty to fifty acres of arable land a dwelling-house should be established in which a respectable man could live.

Shortly after this followed the law 25 Henry VIII, c. 12, 13, (1533-1), which is especially directed against the encroachments with regard to sheep-farming. "Differ-ent individuals in the last years had accumulated in their own hands a number of landed properties, a multitude of cattle, and especially of sheep. Some of them possessed 24,000 sheep, others 10,000, &c. Tillage is thereby displaced, the country depopulated, and the price of sheep and wool raised in an unbecoming manner." No one, therefore, shall possess more than two thousand sheep, with the exception of laymen, who, carry on sheep-farming on other properties." Especially it was dwelt upon that in Suffolk and Norfolk the owners of fold-courses within the properties and manors over which their rights extended, redeemed or rented from all the other possessors of land who had the right to pasture their sheep with the manorial flock their pasture-right, and against this custom a prohibition was issued.

There is good reason to believe that the evils so generally complained of were materially aggravated by the confiscation of the abbey lands in the later years of the reign of Henry VIII.† This measure might have yielded great advantages to the nation had the immense domains of the church, comprising from one-fourth to one-half of the kingdom, been wisely disposed of for the best interests of the people; but, under the selfish and unstatesmanlike policy of Henry, they were transferred from the ecclesiastical corporations to landlords, who, as a rule, were far more exacting than the abbots had been,‡ without giving more attention to the cultivation of their estates.

The religious houses, situated in the midst of their domains, had themselves afforded to the tenants a market for a considerable portion of their produce; the new landlords not only exacted higher rents, but spent the greater portion of their incomes in the capital, thus inflicting upon the country the well-known evils of absenteeism, of which Ireland has more recently afforded so striking an illustration. Moreover, the transfer of title from the ecclesiastical bodies to the king, and through him to new proprietors, appears to have been effected without proper reservations for the rights of the occupiers of the soil, many of whom were not mere tenants at will, but persons having a sort of qualified

† The rise in the price of sheep and wool was doubtless one of the causes of the state of things complained of instead of being one of its effects.

‡ The measure was authorized by Parliament in the year 1539.

§ It is admitted that the abbots were most indulgent landlords.

ownership. Thus it was set forth in a publication, which appeared in 1546, that the new possessors of church property claimed that its secularization had extinguished all the old rights of copyholders on church lands, who were obliged either to give up their holdings, or retain them on temporary leases. In the end the liberation of the land from the shackles of mortmain was doubtless conducive to a higher cultivation, but it must be remembered that these were not the only shackles by which English estates had been bound, nor were they at all times the shackles whose effect was most injuriously felt. The Hon. C. Wren Hoskyns, M. P., in a carefully-prepared paper on "the land-laws of England," published in 1870, refers in the following language to the effect of the two famous statutes (*Quia Emptores* and *De Donis Conditionalibus*), passed in the reign of Edward I:

These two statutes for nearly two centuries crushed the growing effort to emancipate land from its feudal fetters, at least, by open alienation, and had the further mischievous effect of making the position of the unfortunate tenant in agriculture more insecure than ever, as no leasing power of one tenant-in-tail was binding on his successor. Thence all good farming betook itself to the monastic houses, whose mortmain lands became the fixed asylum of agricultural knowledge and improvement. Certainty of tenure out of doors, and the classical writers on husbandry studied and transcribed within, told powerfully upon the soil, and were draining and redeeming into cultivation the fens and marshes of Lincoln and Somerset and Sussex, while elsewhere the pressure of feudal exaction upon the fee-simple proprietor, and the insecurity of the farming tenant, even under lease, reduced cultivation to its most precarious and servile condition, and dwarfed the agricultural growth of the kingdom. The remedy for the effects of these statutes was gradually found in a practice which drew from the machinery of the law the instrument of its own evasion by means of what was called a common recovery.

Sir F. M. Eden remarks that "the statutes which enabled the nobility to alienate their estates, the seizure and sale of the abbey lands by Henry VIII, and the general effects of increasing industry, must have powerfully operated toward a more equal division of property than could possibly have taken place in times when the nation was poorer and the shackles of mortmain and entails more rigidly observed." He admits, however, that, "while these powerful causes were gradually transferring a great portion of the estates of the church and the nobility into the hands of country gentlemen, * * * the race of cottagers was going fast to decay." He adds: "This must ever be the case in an improved state of agriculture," since "the half-starved proprietor of ten or twenty acres will often be persuaded to part with his land to a rich neighbor who farms on an extensive scale." The predilection of an English baronet for the system of large farms was very natural: but without stopping to discuss the advantages of *la petite culture*, as exemplified in different parts of Europe, and especially in portions of France, and in Belgium, it may be said here that the decay of "the race of cottagers," or peasant farmers, was undoubtedly one of the causes of that enormous increase of vagabondage and mendicancy which, at the period under consideration, was the theme of such constant complaint.

About the middle of the sixteenth century, the popular discontent at the agrarian revolution, which was making such rapid progress, became intense. The pamphlets of the time, says Nasse, are filled with it, and the most celebrated preachers zealously inveighed against it as the ruling sin of the times. Bishop Latimer, in his famous "Sermon of the Plough," preached before the court of Edward VI on the 8th of March, 1549, complains that, where formerly there were dwellings and inhabitants, now there are only the shepherd and his dog. He reproaches the nobles, who were among his audience, as "inclosers, graziers, and rent-

raisers," who more vehemently of the gentlemen consider no crime out of their head door to door "were there so of Rochester, which he com- merly there we put out of cult- men fit for serv- in a much worse soon be "more and godly yeom- The following illustrates the- ning of the six- great a change- stances of that

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raisers," who made dowerless slaves of the English yeomanry. Still more vehemently did Bernard Gilpin raise his voice against the conduct of the gentlemen: "To drive poor people out of their dwellings they consider no crime, but say the land belongs to them, and then cast them out of their homes like vermin. Thousands in England now beg from door to door who formerly kept honest houses. Never," said he, "were there so many gentlemen and so little gentleness." Scory, bishop of Rochester, in the year 1551, presented a petition to the King, in which he complains that now there are only "ten ploughs, where formerly there were from forty to fifty." Two acres out of three have been put out of culture, and where his majesty's predecessors had a hundred men fit for service, now there are scarcely half that number, and those in a much worse position. The country population in England would soon be "more like the slavery and peasantry of France than the ancient and godly yeomanry of England."

The following passage from one of Latimer's sermons incidentally illustrates the condition of substantial English yeomen at the beginning of the sixteenth century, and at the same time serves to show how great a change the lapse of half a century had made in the circumstances of that class:

My father, he says, was a yeoman, and had no landes of his owne, onely he had a ferme of 3 or 4 pounds by year at the uttermost, and hereupon he tilled so much as kept half a dozen men. He had walke for an hundredth sheepe, and my mother milked xxv kine. * * * He kept me to schole, or els I had not bene able to have preached before the Kinge's majestic now. He maryed my sisters with five pound, or xx nobles a peece, so that he brought them up in godlynes and feare of God. He kept hospitalite for his poore neighbours, and some almes he gave to the poore; and all this did he of the said ferme. Where he that now hath it payeth xvi pound by the yeare, or more, and is not able to doe anything for his prince, for himselfe, nor for his children, or geve a cup of drinke to the poore.

After the accession of the boy-king, Edward VI, the lord protector appointed an extraordinary commission for the redress of the grievances attendant upon inclosures, exhorting its members to fulfill the duties of their office without any respect to persons, and fearlessly to bring to account those who had violated the laws of Henry VIII for the maintenance of tillage. "A kind of memorial," says Professor Nasse, "has been handed down to us of the state of things which was laid before the commission by John Hales, one of their most active members. These could not be painted in darker colors than they are there described. Ruined dwellings and evicted husbandmen were everywhere to be seen; where formerly 12,000 men dwelt, there were now scarcely 4,000; sheep and oxen, destined to be eaten by man, have devoured men; the defensive power of the country had fallen into danger by depopulation; the King had been obliged to take into his service foreign troops, German, Italian, and Spanish, &c. He specifies the following five principal heads of grievances: Ruin of villages and agricultural buildings; conversion of arable land into pasture; great multitude of sheep; amalgamation of farms; and the failure of hospitality on account of the dissolution of monasteries. He also expressly mentions that inclosures, (in themselves,) which every one undertakes himself on his own ground and soil, are beneficial to the common good, the question only being of such inclosures by which the rights of others suffered, when 'houses of husbandry were pulled down or arable land converted to pasture.'"

These representations, as well as the recommendations based upon them, were barren of results; and Hales complained that the sheep had been intrusted to the protection of the wolf.

"It is no wonder," says Nasse, "that under such circumstances the

country population attempted to apply a remedy themselves. The formidable insurrection of the peasantry in 1549, in the eastern counties, had principally for its object the removal of the inclosures. Similar disturbances were frequently repeated at a later period on a smaller scale; and even at the end of the sixteenth and commencement of the seventeenth century, insurrections of the peasants occurred in Oxfordshire and other places in central England, in order to root out the hedges (levellers) and to restore the tillage.

"We may learn, also, that the agrarian revolution progressed under Elizabeth, from, among other things, an interesting dialogue, 'A compendious or briefe examination of certayne ordinary complaints,' &c., by W. S., gentleman, of London, 1581. In this dialogue, the inclosures, as the crying evil of the times, were discussed by different persons—a doctor, a nobleman, and a farmer. The farmer complains that he and his class are ruined by the inclosures, which raise rents and cause a dearth of arable land. He has witnessed in his district, in a circuit of less than six English miles, in the last seven years, a dozen plows lying idle, and the lands where sixty persons and more had gained their living, were now occupied by the cattle of one.

"It is still very remarkable how the supplanting of so many landed proprietors just then took place, when that class among them which stood in the most unfavorable position in a legal point of view, had obtained a protection at law for their rights of property.

"In spite of this, these copyholders were driven in great numbers from their rural hides.* When an extraordinary royal commission like that of the protector, ordered to inquire into illegal inclosures and the eviction of peasants, could not prevail against the ruling classes, it is very easy to conceive that the protection of the high courts of judicature or the judges in their circuits could afford little help to the poor small peasant. His rights rested on the custom of the manor, which was to be proved from the manor-roll, in the possession of the lord of the manor; and a copyholder could lose these rights by numerous acts, by which he failed in his obligations toward the lord, or even by acting otherwise than in unison with rights established by custom of the manors. The small copyholders were not in a position to establish such rights before learned tribunals when opposed by experienced advocates. Latimer, on this account, accuses the judges even of injustice and corruption, (being open to bribes,) and maintains that, 'in these days gold is all-powerful with the tribunals.' Certainly, also, a time like that under the rule of Henry VIII, and the following years, while so great a revolution in church and state was in progress, could not have been favorable for the support of rights which were dependent upon custom.

"It is no part of our task here to follow these movements beyond the sixteenth century; but this much is certain, that however powerfully they showed themselves at that time, they only attained their object to a limited extent. The official reports concerning the duration of the agrarian community up to this century have been already referred to; and it has also been shown that the smaller landed proprietors had certainly in no wise completely disappeared in the sixteenth century.

"The freeholders had, for the most part, maintained their holdings, and the copyholders had not nearly all been supplanted or converted into leaseholders. Still, in the beginning of the seventeenth century, Coke could say, in a well-known judgment, that the third part of England

* The term *hide* refers to a quantity of land, the extent of which is variously estimated at from 60 to 100 acres.

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* See note on page 9 L

consisted of copyhold. But the revolution which then began has continued even in our times. Its progress has been sometimes quicker, sometimes slower, and gradually the connection which there was at the commencement between the two phenomena—inclosures and peasant eviction—has been less close; but it still remains unmistakable that, among the many circumstances which have caused the complete disappearance of the medieval peasant class, the first and most important was the dissolution of the old communities in land."

Admitting that the dissolution of these communities and the establishment of separate and independent tillage were essential to the progress of agriculture, it must still be regarded as a great misfortune to the masses of the English people, and, indeed, to England as a nation, that this change was not effected without a complete sacrifice of the interests of the peasant to those of the noble.

It has been shown that the abolition of the feudal relations in Prussia was followed by measures expressly designed for the creation of a freeholding peasantry, and substantially the same thing occurred in other German states. In like manner the emancipation of the Russian serf* was accompanied by measures which exhibited at once the humane regard of the government for his future well-being and its enlightened recognition of the fact that material independence is an essential condition of true freedom—a condition without which the much-vaunted civil liberty of Anglo-Saxon nations may become to millions of the unfortunate an empty name.

In France, Switzerland, Belgium, Holland, and, indeed, throughout the greater part of Europe, the people who cultivate the soil are, for the most part, the people who own it. In England the agricultural laborer does not own so much as the hovel in which he dwells. "Theirs," says Mr. Fawcett,† speaking of the members of this class, "is a life of incessant toil for wages too scanty to give them a sufficient supply even of the first necessities of life. No hope cheers their monotonous career. A life of constant labor brings them no other prospect than that, when their strength is exhausted, they must crave as suppliant mendicants a pittance from parish relief. Many classes of laborers have still to work as long and for as little remuneration as they received in times past; and one out of every twenty inhabitants of England is sunk so deep in pauperism, that he has to be supported by parochial relief."

In the paper on "The Land Laws of England," from which an extract has been already given, Mr. C. Wren Hoskyns speaks as follows:

It is true we commonly hear our agricultural system spoken of as comprehending the landlord, the tenant, and the laborer, and so, in a certain sense, it does; but no one who considers the position of the laborer in English agriculture will assert that he has any fixed personal tie within the structure—that he stands to it in any relation but that of an auxiliary, more or less in demand at different seasons of the year, subject to the precarious vicissitudes of that demand; no longer, indeed, as in former times *adscriptus gleba*—free to go and come as he pleases, but without part or parcel in the land he helps to cultivate, or any certain abode upon it, near it, or in connection with it, for himself or for his family.

In many respects the people of England are far more fortunate than their neighbors on the continent. The insular position of the country exempts it from the ravages of war, greatly diminishes the cost of the military establishment, and, by warding off external dangers, increases liberty at home. Enriched by an enormous commerce and a prodigious development of manufacturing industry, and enjoying the blessings of free speech, a free press, and a government which is republican in all but the name, the middle classes occupy a truly enviable position; and

* See note on page 122.

† Economic Position of the British Laborer, p. 6.

even the more fortunate of the working men enjoy a very fair degree of comfort. But, whatever may be said of other classes of the English people as compared with corresponding classes in other countries, no one can seriously compare the condition of the agricultural laborer* of Great Britain with that of the peasant proprietor of France or Belgium, who, however severe may be his toil, has a home from which no landlord can expel and an employment from which no master can dismiss him. The comparative advantages of large and small farms, with a view to economy of cultivation, may, perhaps, be regarded as an open question; but to those who regard the state of the people as being of greater moment than the state of agricultural industry, no system of land-tenure will seem less satisfactory than one which reduces the great mass of the tillers of the soil to the condition of hirelings and paupers.

FROM THE REIGN OF ELIZABETH TO THAT OF GEORGE III.

From the causes already referred to, as well as from others that need not here be discussed, the circumstances of the working people of England during the Tudor reigns underwent a decided change for the worse. "In 1495," says Wade, "A laborer could purchase with his wages 199 pints of wheat; in the year 1593, only 82 pints; in 1610, only 46 pints." Eden expresses the opinion that in the sixteenth century† the consumption of meat was principally confined to the cities, and that bread commonly of an inferior quality was the principal diet of the laboring people. About the year 1576, Harrison wrote that "the gentilitie" commonly provided themselves "sufficientlie of wheate" for their own tables, while their households and their poor neighbors in some shires were obliged to content themselves with rye or barley. He adds, "Yea, and in time of dearth many with bread made either of peas, beans, or oats, or of all together, and some acorns among, of which scourge the poorest do soonest taste, sith they are least able to provide themselves of better. I will not say that this extremity is oft so well seen in time of plenty as of dearth, but if I should, I could easily bring my trial. For albeit that there be much more ground eared now almost in every place than hath been of late years, yet such a price of corn continues in each town and market that the artificer and poor laboring men is not able to reach it, but is driven to content himself with beans, peas, oats, tares, and lentils." The following extract from the "orders, rules, and directions," issued by the justices of the peace of the county of Suffolk in the year 1588, affords an example of the food then allowed in houses of correction, and may, perhaps, be regarded as supplying some indication of the ordinary fare of the poor:

Item. It is ordered, that every person committed to the said house, shall have for theie dietts, theis portions of meate and drinke followinge, and not above, (viz:) At every dynner and supper on the fleshe daies, bread made of rye, viii ounces troye weight, with a pynte of porridge, a quarter of a pound of fleshe and a pynte of beere, of the rate of iiii. a barrell, every barrell to contayne xxxvi gallands; and on every fyshe daie at dynner and supper the like quantitie made cyther of milke or pease or such lyke, and the thurd part of a pound of chese, or one good heringe, or twee white or redd, accordinge as the keeper of the house shall thinke meete.

Item. It is ordered that such persons as will applie theire worke, shall have allowance of beere and a litle bread between meales, as the keeper of the house shall fynd that he doth deserve in his said worke.

Item. It is ordered, that they which will not worke shall have noe allowance but bread and beere only, untill they will conforme themselves to worke.

* It must be confessed that a large proportion of the unskilled laborers of the towns and cities are quite as badly off as the most wretched of the agricultural laborers.

† It was probably the latter part of that century which he chiefly had in view.

In the reign of the regular "is their no" Tusser, who

But if roas seems probal was used as c was fixed by mutton at th higher than Stow's Chron calves or wet London," says poor—every p penny; and th pence." Mr. F in consequenc again to what beef was sold markets a fat pence or fourp But in the later and excessive cession of bad s ter; in 1594 it v history of Norf at Norwich was meal, £2; of be lambs, 5s; of ea bits, 8d; and of of 1596 prices fe again, so that w ming of August, l lowing all things year with the poe How high these if they are comp embraced in Mr. I price of wheat fro ter; that of barle 4½d. Froude stat average price of quarter. "With table of its possil quarter to 20s; t same scale, with a hold until the distr years from 1551 to extraordinary price 4d. Six and eight the average; and, that time with little

* Statute 3, c

In the reign of Henry VIII bacon appears to have formed a part of the regular diet of laborers; and Latimer, in one of his sermons, says it "is their necessary meate to feede one, which they may not lacke." Tusser, who died about the year 1580, or 1585, says,

Good ploughmen looke weekly, of custome and right,
For roast meat on Sundays and Thursdaies at night.

But if roast meat was used by "good ploughmen" twice a week, it seems probable that at the time Tusser wrote meat of some kind, or fish, was used as often as once a day. As late as the year 1532 the price of beef was fixed by act of Parliament * at a halfpenny per pound, and that of mutton at three farthings. These rates, low as they now appear, were higher than those which had previously prevailed, for we read in Stow's Chronicle that fat oxen were sold for £1 0s. 8d. a head; fat calves or wethers for 3s. 4d.; and fat lambs for 1s. "The butchers of London," says Stow, "sold penny pieces of beef for the relief of the poor—every piece two pounds and a half, sometimes three pounds, for a penny; and thirteen, and sometimes fourteen, of these pieces for twelve pence." Mr. Froude informs us that the act just mentioned was repealed in consequence of the complaints against it, but that prices never fell again to what they had been. He states, however, that as late as 1570 beef was sold in the gross for a halfpenny a pound, while in country markets a fat goose could be bought for fourpence, a capon for threepence or fourpence, a hen for twopence, and a chicken for a penny. But in the later years of Queen Elizabeth's reign there was a general and excessive rise of prices, in consequence of an uninterrupted succession of bad seasons. In the year 1587 wheat rose to £3 4s. per quarter; in 1594 it was £2 16s.; and in 1595 £2 13s. 4d. Blomefield, in his history of Norfolk, states that during the latter year the price of wheat at Norwich was £2 per quarter; of rye, £1 10s.; of barley, £1; of oatmeal, £2; of beef, 3s. per stone; of the best sheep, 14s. *per capita*; of lambs, 5s.; of calves, £1; of fat capons, 3s. 4d.; of pigeons, 3d.; of rabbits, 8d.; and of cheese, 4d. per pound. He adds that in the beginning of 1596 prices fell, but says that "by reason of a wet May they rose again, so that wheat was sold in the market at 28s. a comb in the beginning of August, but fell to 18s. the same month; and in the month following all things rose again to such large prices that it was a very hard year with the poor."

How high these prices were for those times may be better appreciated if they are compared with those of the one hundred and forty years embraced in Mr. Rogers's table, from which it appears that the average price of wheat from 1261 to 1400, inclusive, was only 5s. 10½d. per quarter; that of barley, 4s. 3½d.; that of oats, 2s. 5½d.; and that of rye, 4s. 4½d. Froude states† that in the middle of the fourteenth century the average price of wheat was 10d. per bushel, and that of barley 3s. per quarter. "With wheat," he says, "the fluctuation was excessive; a table of its possible variations describes it as ranging from 18d. the quarter to 20s.; the average, however, being 6s. 8d. * * * The same scale, with a scarcely appreciable tendency to rise, continued to hold until the disturbance in the value of the currency. In the twelve years from 1551 to 1562, although once before harvest wheat rose to the extraordinary price of 45s. the quarter, it fell immediately after to 5s. 4d. Six and eight pence continued to be considered in Parliament as the average; and, on the whole, it seems to have been maintained for that time with little or no variation."

* Statute 3, 21 Henry VIII. † History of England, Vol. I, p. 29.

The high prices which Blomfield gives as prevailing at Norwich in 1596 were exceeded in many other portions of the kingdom. At Bristol wheat sold as high as 18s. and 20s. per bushel and rye at 10s.; and, according to an old manuscript chronicle, such was the prevailing distress that "every alderman and worshipful man, and every burgess of this city that was of any worth, was appointed every day to find with victuals at his table so many poor people that wanted work, whereby the poor of our city were all relieved and kept from starving or rising."

During the same period the prices of a large number of commodities were greatly enhanced by a cause that was artificial in its character, namely, the granting of patents of monopoly by the Crown. "The English sovereigns," says Macanlay,* "had always been intrusted with the supreme direction of commercial police. It was their undoubted prerogative to regulate coin, weights, and measures, and to appoint fairs, markets, and ports. The line which bounded their authority over trade had, as usual, been but loosely drawn. They therefore, as usual, encroached on the province which rightfully belonged to the legislature. The encroachment was, as usual, patiently borne till it became serious. But at length the Queen took upon herself to grant patents of monopoly by scores. There was scarcely a family in the realm which did not feel itself aggrieved by the oppression and extortion which this abuse naturally caused. Iron, oil, vinegar, coal, saltpeter, lead, starch, yarn, skins, leather, glass, could be bought only at exorbitant prices. The House of Commons met in an angry and determined mood. It was in vain that a courtly minority blamed the speaker for suffering the acts of the Queen's Highness to be called in question. The language of the discontented party was high and menacing, and was echoed by the voice of the whole nation. The coach of the chief minister of the Crown was surrounded by an indignant populace, who cursed the monopolies, and exclaimed that the prerogative should not be suffered to touch the old liberties of England. There seemed for a moment to be some danger that the long and glorious reign of Elizabeth would have a shameful and disastrous end. She, however, with admirable judgment and temper, declined the contest, put herself at the head of the reforming party, redressed the grievances, thanked the Commons in touching and dignified language for their tender care of the general weal, brought back to herself the hearts of the people, and left to her successors a memorable example of the way in which it behooves a ruler to deal with public movements which he has not the means of resisting."

The patents of monopoly, however, were too valuable a source of income to be overlooked by Elizabeth's successor, by whom they were renewed to be again abolished. Even the exercise of skilled industry was hampered by the arbitrary and exclusive regulations of the incorporated guilds and trade companies which monopolized the commerce and industry of the principal cities, and vigilantly guarded their prerogatives against all trespassers.

The system of regulating wages by statute, which has been noticed further back, was maintained under Elizabeth. An act passed in the fifth year of her reign, (A. D. 1563,) recognized the rise of prices which had already taken place, and in view of which the wages fixed under Henry VIII had become inadequate to the needs of the laborer. It empowered the justices of the peace to fix the rates of wages from year to year, according to "the plenty or scarcity of the time and other circumstances necessarily to be considered." The following synopsis of its

* History of England, Vol. I, p. 49.

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leading provisions, as well as those of two other statutes passed a few years later, is given by Eden, in the work already referred to:

The persons affected by it may be divided into three classes: menial servants, laborers, and apprentices. With respect to the first, all single persons between twelve years old and sixty, and married ones under thirty years of age, and unmarried women between twelve and forty, not having a visible livelihood, are compellable by two justices to go out to service in husbandry or certain specific trades; and no master can put away his servants, or servant leave his master, before the expiration of his term without the assent of a justice, nor even at the end of his term without giving a quarter's warning. Servants departing from their masters before the end of their term, unless upon some reasonable cause to be allowed by a justice, or refusing to serve for the wages appointed by the magistrates, are punishable with imprisonment till they consent to serve. The givers of greater wages than what were allowed by the statute were made liable to ten days' and the takers to twenty-one days' imprisonment.

Laborers and artificers, hired by the day or week, are bound to work, in summer, from five in the morning till between seven and eight at night, and in winter from daylight till dark; they are allowed the same time for meals as in former statutes. Artificers are compellable to serve in getting in the harvest. Laborers, who cannot procure harvest-work in their own countries, are permitted to go into other countries during the hay and corn harvest, provided they carry with them a testimonial from a justice of peace.

The statute enables householders, in time of husbandry, to receive apprentices under the age of eighteen to serve till twenty-four years of age by indenture; and the householders in corporate towns, exercising any art, mystery, or manual occupation there, and all persons elsewhere using the trades specified in the statute, are empowered to take apprentices, under certain qualifications, to serve them for seven years, provided the term does not expire before the apprentice is twenty-four years of age.

And male children of poor persons, by a subsequent statute, may be apprenticed out by the overseers, with consent of two justices, till twenty-four years of age, and females till twenty-one, to such persons as are thought fitting. Blackstone remarks that "gentlemen of fortune and clergymen are equally liable with others to such compulsion: it being impossible for any magistrate to be a judge of the employment of menial servants, or, of course, to assess their wages."

The first Parliament under James I extended the rating powers of the magistrates to the wages of "laborers, weavers, spinsters, and workmen, or workwomen, whatsoever, either working by the day, week, month, or year, or taking any work at any person's hand whatsoever, to be done in great or otherwise." An act intended to have a somewhat similar effect was passed in the thirty-ninth year of Elizabeth, but appears to have been inoperative.

One of the effects of this extension of the power of the magistrates was to enable employers in many cases to fix the rate of wages for their own workmen. In respect to one branch of business this evil appears to have been foreseen; for it was provided by the last clause of the act above referred to, "that no clothier, being a justice of the peace in any precinct or liberty, should be any rater of wages for any weaver, tucker, spinster, or other artisan that depended upon the making of cloth; and in case there were not above two justices of the peace within such precinct but such as were clothiers, the wages should be rated and assessed by the major part of the common council of such precinct or liberty, and such justice or justices as were not clothiers."

Before the close of the reign of James I, (1625,) some amelioration in the condition of the working classes had apparently taken place. The discovery of America had by this time begun to exhibit its effect in stimulating commercial enterprise, and manufactures had received a new impetus in consequence of the ferocious persecutions of Philip II and his lieutenants (particularly the notorious Alva) in the Netherlands, which, during the preceding reign, had compelled thousands of industrious Flemings to seek a refuge in England, where they established the manufacture of baizes, serges, and other stuffs, and successfully carried on a variety of textile industries.

The policy of encouraging ship-building by public bounties had been inaugurated under Elizabeth, and under James large sums of money were devoted to this object, while the twenty-two years of uninterrupted peace with which this reign was favored afforded a rare opportunity for the development of the new industries which had taken root. The increase of capital is indicated by the fall in the legal rate of interest, which during this reign was reduced from 10 to 8 per cent., and whatever may have been the condition of the working classes, that of the country at large appears on the whole to have been prosperous.

The increasing activity of industry, no doubt, diminished the amount of pauperism and vagrancy; but the increase of wages which it brought with it does not appear to have been equal to the increase in the prices of commodities. From a proclamation issued in 1623, directing the purchase of wheat, rye, and barley for storage in public magazines, whenever these grains fell below 32s., 18s., and 16s. per quarter, respectively, it appears that these prices were at that time considered low; and from the Windsor table of prices it appears that the average price of middling wheat from 1606 to 1625 was £1 14s. 1½d. per bushel. (Winchester measure.) Meat was also extremely high in comparison with its price in former times. Mr. Birch, in a life of Prince Henry, presented the prices paid for meat by the purveyors of the prince's household, and it appears that beef was 3½d. and mutton 3½d. the pound. This was probably about the year 1610, at which time the wages allowed by the magistrates in a midland county to men employed in agricultural labor ranged from 6d. to 10d. a day, without board, while women employed in hay-making were allowed 4d. a day without board.

From a contract for victualing the navy, entered into by King James in 1622, the text of which is given in Rymer's "Foedera," we obtain the following statement of the fare allowed to common seamen at the time in question, from which some idea may perhaps be formed of the diet of the laboring classes:

Every man's daily allowance was one pound of biscuit, one gallon of beer, and two pounds of beef, with salt, four days in the week; or else, instead of beef, for two of the four days, one pound of bacon, or pork salted, and one pint of pease, as heretofore hath been used and accustomed; and for the other three days of the week, one quarter of stock-fish, half a quarter of a pound of butter, and a quarter of a pound of cheese, except that on Friday only one meal of fish, butter, and cheese was allowed. Herrings or other fish, according to the season, were to be provided in lieu of stock-fish.

The allowance to the contractor was, for every man's victuals, in harbor, sevenpence half-penny, and at sea, eightpence the day.

In a tract published in 1615, advocating the fitting out of busses* to enable the English to compete with the Dutch in the herring fisheries, we find a minute statement of the provisions which the author considered necessary for the sustenance of sixteen men and boys on one of these vessels for a period of sixteen weeks, together with a statement of the price of each commodity. The proposed daily allowance for each man or boy was one gallon of beer, one pound of biscuit, half a pound of oatmeal or pease, one-fourth pound of butter, one-half pound of Holland cheese, and as much fresh fish as they could eat. In addition to the above each man or boy was to be allowed 2 pounds of bacon (for four meals) per week, and 3 pints of vinegar daily were to be divided among the entire number. There was also an allowance of 800 Kentish fagots for fuel to last through the voyage.

The prices were as follows: Beer, £2 per tun, or 2½d. per gallon; biscuit, 13s. 4d. per cwt., (of 112 pounds,) or 1½d. per pound; oatmeal or

* The name of a class of fishing-vessels.

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pease, 4s. per bushel; bacon, 3¹/_d. per pound; butter, £1 per firkin, (56 pounds,) or 4¹/_d. per pound; cheese, 2¹/_d. per pound; vinegar, £1 per tierce, (of 42 gallons,) or 5¹/_d. per gallon; faggots, 8s. per 100.

The wages of the crew were stated as follows: Master or captain, per month, £5; two mates, each, per month, £1 4s.; six men, each, per month, £1; six other men, each, per month, 16s.; a boy, per month, 6s. It should be observed that these wages are high when compared with those of agricultural laborers at the same period.

In forming an estimate of the fare of the common people at the time under consideration, it must be remembered that many esculent plants, now commonly used, were then but little known, or were confined exclusively to the tables of the rich. "Potatoes," says Eden, "which are now very generally used by the poor in every part of England, where fuel is cheap, were, in King James's reign, considered as a great delicacy. They are noticed among the different articles provided for the Queen's household; the quantity, however, is extremely small, and the price is 1s. per pound. In 1619 two cauliflowers cost 3s., and sixteen artichokes 3s. 4d.; prices which would now be deemed extravagant, but they were then regarded as rarities, as they are still * in the remote parts of the kingdom. Tea and sugar, which are now to be met with in most cottages in the southern parts of England, were still greater rarities. The latter is, indeed, noticed by many authors even as early as the fourteenth century, but continued to be very dear even in James's reign."

From a small pamphlet entitled "Grievous Grones for the Poore," published in 1622, it appears that beggary was still a prevalent evil, and that the poor laws were not rigidly enforced; for the writer complains that "though the number of the poore do daillie encrease there hath bene no collection for them, no not these seven yeares, in many parishes of this land, especiaillie in countrie townes."

During the early years of the reign of Charles I the condition of the working classes was much the same as it had been under his immediate predecessor; and after the commencement of the civil war, as well as under the Protector, the attention of the government was so much engrossed with exciting public events as to leave little time for legislation in regard to the interests of the poor. In 1646 there was published a small quarto tract, entitled "Stanley's Remedye: or the way how to reform wandring beggers, theeves, highway-robbers, and pickpockets," in which it was argued that the condition of the poor might be greatly relieved "by the means of work-houses in all cities, market-townes, and all able parishes in the kingdome." The following extracts from the concluding portion of this pamphlet will serve to illustrate the prevalence of mendicancy and crime, as well as the summary manner in which the authorities were accustomed to deal with these evils:

The poor may be whipped to death and branded for rogues, and so become felons by the law, and the next time hanged for vagrancie, (by an act made in the days of Queen Elizabeth, of famous memorie,) before any private man will set them to work, or provide houses for labor, and stock and materials for them. The public must join their shoulders to the work, else it will never be done. * The public must join their

To conclude, it is very lamentable that poor rogues and beggars should be whipped, or branded according to law, or otherwise punished, because they are begging, or idle, and do not work, when no place is provided for them to set them to work. I have heard the rogues and beggars curse the magistrates unto their faces, for providing such a law to whip and brand them, and not provide houses of labor for them. *

I make no doubt (most gracious soveraigne!) but it is evident to all men, that beg

* This was near the close of the last century.

gary and thievery did never no more abound within this your realm of England; and the cause of this misery is idleness, and the only means to cure the same must be by his contrary, which is labor; for tell the begging soldier, and the wandering and starily beggar, that they are able to work for their living, and bid them go to work, they will presently answer you, they would work if they could get it. But if work-houses were set up in all able parishes, it will take away all such defensory and usual answers, and then it will be tried whether it will work or not.

There is no doubt that the civil war, which at the time this pamphlet appeared had been in progress for several years, occasioned much distress among all classes; yet manufacturing and mechanical industry had taken root so firmly in the country, that under the commonwealth it was quickly restored to a prosperous condition; and the progressive increase of capital, as compared with the demand for it, is indicated by the fact that in 1651 the legal rate of interest was reduced from 8 to 6 per cent.

In 1662 there was passed the important statute in relation to settlements, by which the mass of the laboring poor were practically restricted to a residence in the parish in which they were born. Up to this time they had been free to seek employment wherever it was to be found, only those who were unable or unwilling to work being compelled to reside in the places of their settlement, *i. e.*, the places where in case of necessity they were entitled to parish relief. But the act of 13 and 14 Charles II,* provided against the possibility that workmen might at some future time become chargeable to the parish by preventing them from wandering from their usual places of abode, "lest particular parishes," says Eden, "which, from their situation, their privileges, or other circumstances, held out inviting prospects to new-comers, should in the end be overburdened with poor." By this act it was provided "That the residence in a parish necessary in order to procure a settlement should be reduced to forty days, and that within that time it should be lawful for any two justices of the peace, upon complaint made by the church-wardens and overseers of the poor, to remove any new-comer to the parish where he was last legally settled, unless he either rented a tenement of ten pounds a year or could give such security for the discharge of the parish where he was living as the two justices should deem sufficient."

"The law respecting settlements," says Eden, "unavoidably led to the commission of frauds, both by poor persons who were desirous of obtaining settlements, and by the parish officers who allowed them to acquire settlements, by a clandestine residence in the parish they came to; it was, therefore, enacted by the 1st of James II that the forty days' continuance of any new-comer should be accounted only from the time of his delivering notice, in writing, of the place of his abode and the number of his family (when he had any) to one of the church-wardens or overseers of the parish to which he should remove; and in order to prevent parish officers from collusively receiving such notices, it was further enacted, by the 3d of William and Mary, that the forty days' continuance in a parish should be accounted only from the publication of such notice by its being read in the church, immediately after divine service, on the Sunday after it was delivered to the overseer.

While, however, the legislature thus restrained the laboring poor from obtaining settlements by a notice, it appointed other ways by which a person might gain a settlement without the publication of a notice, namely, by being charged to the public taxes and paying them; by exe-

*Although Charles actually ascended the throne in 1660, his reign is officially dated from the time of his father's death in 1649, and the various acts of Parliament are numbered accordingly.

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160	Temporal lords
26	Spiritual lords
800	Baronets
600	Knights
3,000	Esquires
12,000	Gentlemen
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cutting an annual office in the parish, and serving in it a year; by serving an apprenticeship in the parish; by being lawfully hired into any parish for a year, and (as a subsequent statute requires) continuing in the same service a twelvemonth.

As might have been foreseen, the effect of these regulations was to keep large numbers of people in poverty and idleness in their own parishes, when employment might have been readily obtained in other localities, had they been free to go and seek it. This was set forth in the preamble to the act of 1697, which provided that if any person coming to reside in a parish should deliver to the church-wardens or overseers a certificate under the hand and seal of the church-wardens and overseers of the parish where he was last legally settled, allowed and subscribed by two justices of the peace, he should not be removable merely on account of his being likely to become chargeable, but only on his becoming actually chargeable, to the parish, when the parish which granted the certificate should be required to pay the expense both of his maintenance and removal. It was not, however, until near the close of the eighteenth century that the law was so changed as to afford any material relief from the unwholesome and senseless restrictions imposed by the law of settlements.

It does not appear that the reigns of Charles II and his immediate successor were unfavorable to the industrial and commercial prosperity of the country, however unsatisfactory they may have been in their political aspects. In 1662, the second year after the Restoration, the revenue from customs amounted to £111,946; in 1688 it had increased to £781,987. The intervening period had also been marked by an increase in the number of buildings, the consumption of luxuries, and other indications of material prosperity. Sir William Petty, in his *Political Arithmetic*, published in 1676, says that the number of houses when he wrote was double what it had been forty years before. The royal navy had doubled in the same period, and the shipping of Newcastle had increased fourfold. He also notices the increased imports of wine and the general improvement in the style of living. His contemporary, Sir Joshua Child, observes that in 1688 the number of men on 'change worth £10,000 was greater than the number worth £1,000 had been in 1650; that in those earlier times gentlewomen thought themselves well clothed when wearing a serge gown, in which a chamber-maid in 1688 would have been ashamed to appear; and that, besides the great increase in clothes, plate, jewels, and household furniture, the number of coaches had increased one hundred fold. How far the working classes shared in these improved conditions we are not informed.

The following classification of the population of England by professions, occupations, &c., for the year 1688, is based upon the estimates of Gregory King:

FAMILIES AND THEIR INCOMES IN 1688.

Number of families.	Ranks and professions.	Number per family.	Income per family.
160	Temporal lords	40	£2,800
85	Spiritual lords	30	1,300
800	Baronets	16	850
600	Knights	13	650
3,650	Esquires	10	450
15,000	Gentlemen	2	250
25,000	Persons in greater offices	6	240
55,000	Persons in lesser offices		150

FAMILIES AND THEIR INCOMES IN 1688.—Continued.

Number of families.	Ranks and professions.	Number per family.	Income per family.
2,400	Eminent merchants and traders	6	£ 100
8,600	Lesser merchants and traders	7	20.0
10,000	Persons in the law	7	11.0
2,000	Eminent clergymen	6	6.0
8,000	Lesser clergymen	7	4.0
40,000	Freeholders of the better sort	5	5.0
110,000	Freeholders of the lesser sort	5	4.1
150,000	Farmers	5	6.0
16,000	Persons in liberal arts and sciences	5	4.0
49,000	Shopkeepers and tradesmen	4	3.0
60,000	Artisans and handicraftsmen	4	2.0
5,000	Naval officers	4	6.0
4,000	Military officers	4	6.0
511,586	Average	54	67.0
50,000	Common seamen	3	20.0
364,000	Laboring people and out-servants	34	15.0
40,000	Craftsmen and paupers	31	6.10
35,000	Common soldiers	2	11.0
450,000	General average	31	10.10

It may not be amiss to present here some extracts from the account which Macaulay * gives of the condition of the English working classes a few years before the revolution of 1688: "The great criterion," says he, "of the state of the common people is the amount of their wages, and as four-fifths of the common people were, in the seventeenth century, employed in agriculture, it is especially important to ascertain what were then the wages of agricultural industry. On this subject we have the means of arriving at conclusions sufficiently exact for our purpose.

"Sir William Petty, whose mere assertion carries great weight, informs us that a laborer was by no means in the lowest state who received for a day's work 4*l.* with food, or 8*s.* without food. Four shillings a week, therefore, were, according to Petty's calculation, fair agricultural wages.

"That this calculation was not remote from the truth we have abundant proof. About the beginning of the year 1685 the justices of Warwickshire, in the exercise of a power intrusted to them by an act of Elizabeth, fixed, at their quarter sessions, a scale of wages for the county, and notified that every employer who gave more than the authorized sum, and every working-man who received more, would be liable to punishment. The wages of the common agricultural laborer, from March to September, were fixed at the precise amount mentioned by Petty, namely, 4*s.* a week without food. From September to March the wages were to be only 3*s.* 6*d.* a week.

"But in that age, as in ours, the earnings of the peasant were very different in different parts of the kingdom. The wages of Warwickshire were probably about the average, and those of the counties near the Scottish border below it; but there were more favored districts. In the same year, 1685, a gentleman of Devonshire, named Richard Dunning, published a small tract, in which he described the condition of the poor of that county. That he understood his subject well it is impossible to doubt, for a few months later his work was reprinted, and was, by the magistrates assembled in quarter sessions at Exeter, strongly

* History of England, Vol. I, pp. 33-339, Appleton's edition of Macaulay's works.

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recommended to the attention of all parochial officers. According to him, the wages of the Devonshire peasant were, without food, about 5s. a week.

"Still better was the condition of the laborer in the neighborhood of Bury St. Edmunds. The magistrates of Suffolk met there in the spring of 1682 to fix a rate of wages, and resolved, that where the laborer was not boarded he should have 5s. a week in winter and 6s. in summer.

"In 1661 the justices of Chelmsford had fixed the wages of the Essex laborer, who was not boarded, at 6s. in winter and 7s. in summer. This seems to have been the highest remuneration given in the kingdom for agricultural labor between the restoration and the revolution; and it is to be observed that in the year in which this order was made the necessities of life were immoderately dear. Wheat was at 70s. the quarter, which would even now be considered as almost a famine price. * * *

"In the year 1680, a member of the House of Commons remarked that the high wages paid in this country made it impossible for our textures to maintain a competition with the produce of the Indian looms. An English mechanic, he said, instead of slaving like a native of Bengal for a piece of copper, exacted a shilling a day. Other evidence is extant, which proves that a shilling a day was the pay to which the English manufacturer then thought himself entitled, but that he was often forced to work for less. * * *

"One of the most remarkable of the popular lays chanted about the streets of Norwich and Leeds in the time of Charles the Second may still be read on the original broadside. It is the vehement and bitter cry of labor against capital. It describes the good old times when every artisan employed in the woolen manufacture lived as well as a farmer. But those times were past. Sixpence a day was now all that could be earned by hard labor at the loom. If the poor complained that they could not live on such a pittance, they were told that they were free to take it or leave it. For so miserable a recompense were the producers of wealth compelled to toil, rising early and lying down late, while the master clothier, eating, sleeping, and idling, became rich by their exertions. A shilling a day, the poet declares, is what the weaver would have, if justice were done. We may, therefore, conclude that in the generation which preceded the revolution, a workman employed in the great staple manufacture of England thought himself fairly paid if he gained 6s. a week. * * *

"It seems clear, therefore, that the wages of labor, estimated in money, were, in 1685, not more than half of what they now are, and that there were few articles important to the working-man of which the price was not, in 1685, more than half of what it now is. Beer was undoubtedly much cheaper in that age than at present. Meat was also cheaper, but was still so dear that hundreds of thousands of families scarcely knew the taste of it. In the cost of wheat there has been very little change. The average price of the quarter, during the last twelve years of Charles II, was 50s. Bread, therefore, such as is now given to the inmates of a workhouse, was then seldom seen, even on the trencher of a yeoman or of a shopkeeper. The great majority of the nation lived almost entirely on rye, barley, and oats.

"The produce of tropical countries, the produce of the mines, the produce of machinery, was positively dearer than at present. Among the commodities for which the laborer would have had to pay higher in 1685 than his posterity now pay were sugar, salt, coals, candles, soap, shoes, stockings, and generally all articles of clothing and all articles of

bedding. It may be added that the old coats and blankets would have been not only more costly, but less serviceable than the modern fabrics."

Mr. W. T. Thornton, in his work on "Labor," published in 1869, takes issue with Macaulay in respect to the advantages which, according to the latter, the modern English workman possesses over the workman who lived in the last days of the Stuarts. In support of his view he cites "that most minute, careful, and comprehensive of inquirers," Daniel Defoe, whose description may be taken as applying to the early years of the eighteenth century. "It is curious to observe," says Mr. Thornton, "how, item by item, as if of malice aforethought, he disproves the whole of Lord Macaulay's proofs.

"Although in Yorkshire, and generally in the Bishoprick of Durham, a laborer's weekly wages might, he says, be only 4s., in Kent, and several of the southern and western provinces, they were 7s., 9s., or 10s. Often when he (Defoe) had wanted a man for work, and had offered 9s. a week to sturdy varlets at his door, he had been told to his face that they could get more by begging, and 'once,' says he, 'I put a lusty fellow in the stocks for making the experiment.' Again, he represents himself as habitually paying six or seven men together on a Saturday night, the least 10s., and some 30s., for work, and he mentions one man who for several years gained of him from 16s. to 20s. a week by his handiwork at the 'mean, scoundrel employment of tile-making.' Turning to manufactures, he says nothing was more common than for journeyman weavers to earn from 15s. to 30s. a week; and he appeals to silk-throwsters, whether they were not in the habit of giving 8s., 9s., and 10s. 'to blind men and cripples to turn wheels.' Then he speaks of 'the difficulty of raising soldiers, the vast charge the kingdom was at to officers to procure men, the many little and *not over honest* methods used to entice them into the service;' and all this he explains by the ease and plenty in which Englishmen lived. If, he argues, they had 'wanted employment, and consequently bread, they would have carried a musket rather than starve, and have worn the Queen's cloth, or anybody's cloth, rather than go naked and live in rags and want;' but he that could earn 20s. at an easy, steady employment, must be mad or drunk when he 'lists for a soldier to be knocked on the head for 3s. 6d. a week.'

"True, the high wages that prevailed were not always turned to the best account. They were higher here than in any other country in the world, but whereas a Dutchman with 20s. a week would be sure to grow rich and to leave his children in very good condition, an Englishman 'could often but just live, as it was called,' might, perhaps, 'hardly have a pair of shoes to his feet, or clothes to cover his nakedness, and might have his wife and children kept by the parish.' But then this was caused entirely by the extravagant humor of our poor people in eating and drinking, for they 'ate and drank, but especially the latter, three times as much in value as any sort of foreigners of the same dimensions in the world.' If it had not been for the ale-house, every one might have lived comfortably, for it was incontestable that there was 'more labor than hands to perform it,' and that the 'meanest labor in the nation afforded the workman sufficient to provide for himself and his family.'

"Not even Macaulay's eloquence and ingenuity can countervail these sturdy affirmations of Defoe, which place beyond dispute that there has not, since the earlier writer lived, been any such marked or general rise of money wages as the other imagined. Besides, money wages a century or two ago were very far from representing so accurately as at present the sum total of their recipient's resources. Among the proceedings, legal or other, which, with whatever motive instituted, have, together with

many benefited English laborers, bills, which it's reign. might, with tracts of negroes up a full fourth of other which rent- rural districts portion of the

"The peas from the wa common he l and poultry; for the gather marsh to allo the ague. It orchard rich wild fowl, has turnip-fields; is now a mead Bat of whate at large, to th tage at all. I set-off against access to shop the augmented all that the sa It was by supp Yorkshire hind nevertheless en ter than worki many, France, labor was chea the southern c average twice a same manner, t been one which contempt."

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* Mr. Thornton do sixteenth century. though contributing aristocracy. Macaul of George II to the authority thereby com mles. The inclosure might surely have be nex it to the estates

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many beneficial results, had the baneful one of utterly divorcing the English laborer from the soil, the most efficacious have been inclosure bills, which did not come much into fashion until the middle of George II's reign.* Previously, whoever wished to build himself a cottage, might, without much objection, squat himself down on one of the many tracts of neglected land which, scattered about on every side, then made up a full fourth of the whole area of the kingdom; while the ease with which rent-free dwellings were thus obtainable, necessarily lowered the rent of other dwellings of a similar class. Laborers, consequently, in rural districts had to pay little or nothing for lodgings, and no small portion of their board also was procurable on equally easy terms.

"The peasant's garden, cribbed probably, like the site of his cottage, from the waste, supplied him with roots and herbs; on the adjoining common he had grazing for a cow and a few sheep, as well as for pigs and poultry; some neighboring wood or heath furnished him with fuel for the gathering, and he was lucky if he lived too far from a meadow or marsh to allow of his catching an occasional eel or mallard, as well as the ague. It may be that where he once fed a flock of geese, is now an orchard rich with apple blossoms; and that the fen in which he snared wild fowl, has long since been drained and divided into corn-fields and turnip-fields; that the moor where he cut turf among the furze bushes, is now a meadow bright with clover, and renowned for butter and cheese. But of whatever advantage such transformations may be to the country at large, to the poor countryman they have been of less than no advantage at all. His share of the gain resulting from them is a miserable set-off against his concomitant loss, for what he has gained is simply access to shops and markets, stocked more abundantly than before from the augmented produce of the improved land, while what he has lost is all that the same land would have yielded if left in a state of nature. It was by supplemental aids derived from land in that state that the Yorkshire hind, when earning no more than 5s. a week in money, was nevertheless enabled, as we are expressly told he was, to live much better than working-men in any of the manufacturing countries of Germany, France, or Italy. When this was the case in Yorkshire, where labor was cheapest, it is very certain that in Kent and Sussex, and in the southern counties generally, where agricultural wages were on an average twice as high as in the north, and were supplemented in the same manner, the condition of the laborers in husbandry cannot have been one which their successors have any reason to look back to with contempt."

The apparent discrepancies between Macaulay's conclusions and the statements of Defoe may, perhaps, be explained in part by an actual improvement in the condition of the working-classes having taken place between 1685, the year to which Mr. Macaulay's description refers, and 1704, the date at which was published the pamphlet from which Mr. Thornton has quoted.† Mr. Rogers, in the work heretofore mentioned, says that the mass of the people recovered to some extent during the

* Mr. Thornton does not here bring in question the great inclosing movement of the sixteenth century. The later inclosures by act of Parliament are a different matter, though contributing largely to the same result, namely the monopoly of the soil by the aristocracy. Macaulay says that the number of inclosure acts passed since the accession of George II to the throne exceeds four thousand, and that the area inclosed under the authority thereby conferred exceeds, on a moderate calculation, ten thousand square miles. The inclosure of this area was doubtless a desirable thing in itself, but this might surely have been accomplished without taking it away from the people to annex it to the estates of the nobility.

† *Giving alms no charity.*

seventeenth century from the depression into which, from various causes, they had fallen during the sixteenth, and that they "had a golden age during the first half of the eighteenth." Whether they had attained a condition which warranted this description as early as 1704 may, indeed, be doubted; but that their circumstances were better than they had been at the close of the reign of Charles II is quite probable. The war with France which followed the accession of William III to the throne in 1688 occasioned a considerable falling off in external trade, the amount of shipping clearing outwards from English ports having declined from 285,800 tons in 1688 to 174,791 tons in 1696, while the value of merchandise exported fell in the same period from £4,086,089 to £2,729,520. This decline in commerce was, however, accompanied with increased activity in a number of domestic industries. This was the case in the manufacture of copper and brass, silk, and the finer descriptions of glass, which latter had up to that time been chiefly imported from France. A sword-blade company which had settled in Yorkshire, established a prosperous business, and so great was the improvement in the manufacture of men's hats, previously imported in large numbers from Normandy, that the English article soon excluded its foreign competitor, than which it was at once better and lower in price. These and other improvements in manufactures were largely promoted by the influx of French refugees which followed the revocation of the edict of Nantes in 1685. The intolerant bigotry of Louis XIV drove from his kingdom nearly half a million of his Protestant subjects,* who were among the most industrious, enterprising, and intelligent of the population. Consisting largely of manufacturers and skilled artisans, they carried their experience, skill, and artistic taste, as well as a large amount of capital, to the several countries of Protestant Europe in which they found refuge. It is believed that not less than fifty thousand of them settled in England. Voltaire, in his *Age of Louis XIV*, states that a part of the suburbs of London (Spitalfields) was peopled entirely with French manufacturers of silk, while thousands of French refugees, engaged in other industries, established themselves in the suburbs of Soho and St. Giles. Others, he says, carried to England the art of making crystal in perfection, which for that same reason was about this same time lost in France. Anderson, in his *History of Commerce*, (Vol. II, page 569) estimates the amount of capital, in money and effects, brought into the country by these immigrants at an aggregate of three million pounds sterling, and says: "To the French refugees England owes the improvement of several of its manufactures of slight woollen stuffs, of silk, linen, paper, glass, and hats, (the last two since brought to perfection by us.) The silks called *à la mode* and lustrings were entirely owing to them; also brocades, satins, black and colored mantuas, black paduasoes, ducafes, watered tabbies, and black velvets; also watches, cutlery-ware, clocks, jacks, locks, surgeons' instruments, hardware, toys, &c."

The peace of Ryswick, negotiated in September, 1697, was quickly followed by evidences of increased prosperity. The improvements which had been made in manufactures, and the new industries introduced, now co-operated with a revived commerce to produce an era of increased industrial activity. In 1697 the merchandise shipped from English ports amounted to only £3,525,907. During the first three years of peace it averaged £6,709,881 per annum. The increased activity of internal traffic may be in part inferred from the great increase which occurred in the use of the mails. During the eight years of the war the revenue of

* The number has been variously estimated at from three hundred thousand to one million.

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the post-office amounted to only £67,222 per annum. Its annual revenue during the first four years of peace averaged £82,319. Among other causes of the improved condition of trade have been mentioned the recoinage of the silver, with the withdrawal of debased coin, the establishment of the Bank of England in 1694, the enlargement of the bounds of religious toleration, and the augmented confidence in the future which arose from a more definite settlement of the political constitution of the kingdom.

The reign of Anne, extending from 1702 to 1714, was distinguished for the successful military campaigns of the famous Duke of Marlborough. Out of the entire period, only two years were years of peace. It does not appear, however, that the activity of internal trade and industry was interrupted; and though foreign commerce may have languished for a time, it did not suffer as it had done during the preceding reign. It was more seriously crippled during the earlier years of the reign of George I, under whom England was successively involved in petty wars with various states which had sheltered the pretender to the British throne. There are evidences, however, that the country was in a prosperous condition. The taxes yielded increased revenues; money was abundant; the government seldom borrowed at a higher rate than 4 per cent., and at the close of George's reign in 1727 the market rate of interest was but 3 per cent. The abundance of capital did not fail to arouse the cupidty of the speculator, and it was during this period that the famous South-Sea bubble expanded and collapsed.

The following brief account of the condition of the country during the reign of George II (1727 to 1760) is given by John Wade in his history of the middle and working classes:

Of the thirty-three years of this king's government, only thirteen were years of war; the remainder of peace, prosperity, and great internal improvements. Shipping increased; agriculture, commerce, and the manufacturing arts flourished. Under numerous inclosure acts, the waste lands were reclaimed; new roads were opened and old ones improved; bridges were erected, and numerous rivers widened and deepened for facilitating internal communication; vast quantities of corn were annually exported. The balance of payments in return for the excess of exports in grain and other commodities kept up the circulation almost without the aid of a paper currency; commercial interest ran steadily at 3 per cent. The prices of the public securities rose above par, so that ministers were enabled to reduce the annuities, by offering the usual alternative to the creditors, of either the payment of the principal, or the acceptance of a lower rate of interest.

The activity of national industry and abundance of capital are evidenced by the extent of local improvements, especially in London and Edinburgh. In London no fewer than eight new parishes were erected between the Revolution and the end of the reign of George II. An act had passed in Queen Anne's reign for the building of fifty additional churches in the metropolis. The extension of commerce and manufactures caused a great addition to the population in the chief seats of industry and enterprise in the country—in Manchester, Birmingham, Liverpool, Bristol, Glasgow, Leeds, Sheffield, Frome. One source of the general prosperity was the growing importance and increasing temptations held out by the colonies of North America. Already the New World had become the land of refuge and of hope to the needy and adventurers both from England and the continental states. In one year, that of 1729, there emigrated to the single province of Pennsylvania no fewer than 6,208 persons, of whom, as in the existing stream of emigration, the great mass were Irish, forced into exile, as at present, by high rents and destitution.

In the following paragraph Mr. Wade mentions a few of the leading improvements in agricultural industry introduced during the first half of the eighteenth century:

In 1710 the winnowing-machine was introduced from Holland, and about the same time the thrashing-machine began to be used in the northern parts of the island. In 1732 the celebrated Jethro Tull commenced his experiments on his farm in Berkshire, but thirty years elapsed before they excited much practical atten-

tion and before the more valuable parts of his system began to be adopted by intelligent agriculturists. He introduced the drill-husbandry and recommended the substitution of labor and arrangement in the place of manure and fallow in the culture of land. A rotation of crops and the cultivation of turnips, clover, and potatoes in the field became more general. That agriculture was extending is shown by the course of legislation. More land was devoted for cultivation. In the belligerent reign of William III not a single act was passed for the inclosure of wastes or the draining of marshes. In the equally fighting reign of Anne there were only two inclosure-acts, but in that of George I the number was twenty-six, and in the thirty-three years' reign of George II two hundred and twenty-six were passed.*

The period under consideration witnessed the birth of a number of those inventions which, after successive improvements, were destined to effect a revolution in most of the industrial arts. The revival of Greek learning had brought to the knowledge of modern scholars certain ancient applications of the power of steam which, trifling as they were, contained the germs of those stupendous applications of the same force with which we are now familiar. During the sixteenth and seventeenth centuries the subject had occupied the minds of a number of mechanicians, and in 1663 the Marquis of Worcester, in his "Century of Inventions," announced that he had invented and constructed a steam-machine, by means of which he could raise a column of water to the height of forty feet. This was improved upon by Savery a few years later, and in 1690 the piston, in a rude form, was devised by Dr. Dennis Papin. In 1705 Thomas Newcomen patented an engine which gradually came into very general use for pumping water out of mines, and which, after successive improvements by Potter, Beighton, Smeaton, and others, formed the basis for the famous inventions of James Watt, the first of which was patented on January 5, 1769.

In the year 1738 Mr. John Kay, a native of Bury, in Lancashire, then residing at Colchester, one of the seats of the woolen manufacture, suggested a new mode of throwing the shuttle, by the use of which a weaver was enabled to turn out nearly twice as much cloth as he could before. In the same year a patent was taken out by Lewis Paul for spinning cotton or wool by the aid of rollers; and although his machine was unsuccessful in practice, it contained the principle subsequently developed by Arkwright in the spinning-frame, which he patented in 1769, within a few months of the time when Watt obtained his patent for the engine, in conjunction with which the new devices for spinning were soon to work such wonders.†

These and other inventions of the same period did not begin to produce their great effects upon manufacturing industry until near the close of the century; but they are evidences of the intellectual energy that marked the period now under consideration, and of an industrial activity which taxed to the utmost the modes of production then in use, thus stimulating inventive genius to those efforts that were soon to achieve such magnificent triumphs.

The growth of the cotton-manufacture between 1697 and 1764 is illustrated by the following table, showing the quantity of cotton-wool im-

* That the large number of inclosure-acts passed during these two reigns is an evidence of the flourishing condition of the country at the time may readily be admitted; but we need not, therefore, infer that the permanence of this condition was promoted by the measures in question. To bring the common lands under cultivation was obviously a means of increasing the aggregate resources of the country. To annex them to the great estates of the nobility was *not* the way to make their cultivation most conducive to the welfare of the masses of the working people.

† The spinning-jenny was invented by Hargreaves about 1764, and patented in 1770. In 1775 Samuel Crompton invented a machine, since known as the mule, which combined the actions of Arkwright's frame and Hargreaves's jenny, and in 1785 the power-loom was invented by Cartwright.

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ported to, and the value of cotton goods exported from, Great Britain at different times between the years just mentioned:

Years.	Quantity of cotton-wool imported.	Value of cotton goods exported.
	<i>Pounds.</i>	
1697.....	1,976,359	25,915
1701.....	1,985,868	24,253
1710.....	715,008	5,698
1730.....	1,972,805	16,300
1741.....	1,545,472	13,521
1751.....	1,645,091	20,709
1764.....	2,976,610	45,986
	3,876,392	209,354

It will be seen from these figures that the exports of cotton goods in 1741 were more than three times as great as they were in 1697, and that in 1764 they were nearly five times as great as in 1741.* Defoe, speaking of Manchester, in his "Tour through the Whole Island of Great Britain," published in 1727, says:

Here, as at Liverpool, and also at Frome, in Somersetshire, the town is extending in a very surprising manner, being almost double what it was a few years ago. The grand manufacture which has so much raised this town is that of cotton in all its varieties, which, like all our other manufactures, is very much increased within these thirty or forty years.

An article in the Daily Advertiser, of September 5, 1739, and which was also copied into the Gentleman's Magazine, says:

The manufacture of cotton, mixed and plain, is arrived at so great perfection within these twenty years, that we not only make enough for our own consumption, but supply our colonies and many of the nations of Europe. The benefits arising from this branch are such as to enable the manufacturers of Manchester alone to lay out about £30,000 a year, for many years past, on additional buildings. 'Tis computed that two thousand new houses have been built in that industrious town within these twenty years.

During the same period considerable improvement took place in the manufacture of iron, and before the middle of the century Lord Dudley's plan of smelting iron with coal, instead of charcoal, was successfully carried on at various points. The increase of production thus effected led to the use of iron for purposes to which it had never before been applied, and thus stimulated improvement in other directions. The hardware manufacture steadily grew in importance, and Birmingham and Sheffield, the chief centers of this industry, rapidly increased in wealth and population. The various operations connected with this industry were carried on chiefly by hand, but machinery was used in the rolling of metal sheets, the stamping of dies, and other processes requiring a greater power than human muscle could apply. In the

* The growth of the woolen manufacture is indicated by the number of pieces of broadcloth milled at the various fulling-mills in the West-Riding of Yorkshire at different dates from 1727 to 1795, inclusive, which was as follows:

Dates.	Number of pieces.	Dates.	Number of pieces.
1727.....	28,900	1765.....	
1735.....	31,744½	1775.....	54,660
1745.....	60,453	1785.....	95,878
1755.....	57,125	1795.....	157,275
			250,993

making of nails, an industry which was extensively carried on in the neighborhood of Birmingham, it was not uncommon to employ the labor of females, as appears from the following passage in Hutton's history of that town:

When I first approached Birmingham, in 1711, I was surprised at the prodigious number of black-smiths' shops upon the road, and could not conceive how the country, though populous, could support so many people of the same occupation. In some of these shops I observed one or more females, stripped of their upper garments, and not overcharged with their lower, wielding the hammer with all the grace of their sex. The beauties of their face were rather eclipsed by the smut of the anvil. Struck with the novelty, I inquired whether the ladies of this country shod horses, but was answered with a smile, "They are nailers."

It is evident that the growth of these manufactures and of many others which either came into existence, or were greatly improved, during the same period, must have reacted powerfully upon agriculture by furnishing an ample and ready market for its various products. The advantages arising from this source appear to have been enjoyed for many years by the farmers, and, probably also, to a considerable extent, by their laborers, before the landlords, by a general enhancement of rents, asserted their claim to the increased pecuniary returns obtained from their lands. A neighbor of Arthur Young informed that eminent agricultural writer, that between 1770 and 1780 an aged relative of his had frequently expressed surprise at the rise of rents that was then taking place, for during the long period through which his experience extended the renewal of leases had been commonly regarded as a matter of course; and father, son, and grandson, in turn had occupied the same farm without such a thing as an increase of the rent entering into the thoughts of either landlord or tenant.

To this fact, in conjunction with the activity of the various industries, the prosperity of the working-classes, during the period in question, was doubtless mainly due; while the raising of rents, the extension of land monopoly by the inclosure acts, and the disturbance of industry incident to a period of transition in the methods of production co-operated with war and commercial revulsions to produce that deterioration in their circumstances which occurred in the latter part of the century. Of the improvement in their condition between the revolution of 1688 and the accession of George III in 1760, an indication is afforded by the fact that at the earlier date the use of wheaten bread by the common people was mainly confined to a small proportion of the inhabitants of the southern counties, whereas, at the later, it was used by about five-eighths of the population of England. That the fare of the laboring people was by no means scanty may reasonably be inferred from the treatment of the inmates of work-houses. The following account taken from a parliamentary return, shows the expense of maintaining the work-house at Saint Giles's in the Fields for they ear ended April 18, 1727:

	£	s.	d.
For baking	2	13	4
For milk	59	1	3
For butcher's meat	180	0	6
For cheese	81	7	2
For bread and flour	321	6	6
For oat-meal	26	3	9
For peas	6	10	0
For beer	161	12	6
For shop-goods	61	7	5½
For herbs	8	9	6½
For mackerel	1	6	4
	903	18	3½

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Milk, 1½d., butter, 1½
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Considering the comparatively low price of meat at the time in question,* the amount obtained for the expenditure above given must have been quite liberal, while the supply of beer, then worth about 1½d. per gallon, was large enough to attest the generosity of the managers of the establishment, however unfavorably it may impress us in regard to their judgment.

The bill of fare of the inmates of the work-house at Bedford about the same time was as follows :

Day of week.	Breakfast.	Dinner.	Supper.
Sunday.....	Bread and cheese	Boiled beef and suet-pudding.....	
Monday.....	Broth.....	Cold meat left on Sunday.....	Bread and cheese.
Tuesday.....	Bread and cheese.....	Boiled beef and a little mutton and suet pudding.....	Do.
Wednesday..	The same as Monday..	The same as Tuesday.....	Do.
Thursday....	The same as Tuesday..	The same as Tuesday.....	Do.
Friday.....	The same as Monday..	The same as Monday.....	Do.
Saturday....	Bread and cheese.....	Musty-pudding, or milk-porridge..	Broth, or bread and cheese.

The writer who furnishes this information further says :

Their bread is wheat dressed down and made into large household loaves by a woman in the house. Their drink is beer, turned in from the public brew-house at three half-pence per gallon. The overseers do sometimes put a cow upon the common for them and that nothing may be wasted or lost, they have a pig or two brought in to live upon their wash and drags, and fragments ; which when well grown, is fed and killed for the house. They have also a little garden for herbs, onions, &c.

Mr. Wade states that from 1720 to 1760, there was no material variation either in the prices of provisions or the rates of wages. "Through-out the whole of that period," says he, "wheat kept steadily at from 32s. to 35s. the quarter, which was lower than it had been about the time of the revolution. Wages of husbandmen rose a little toward the close of the reign of George II, but not those of artificers. According to Mr. Barton's tables wages in husbandry were in 1725, per week, 5s. 4d.; in 1751, 6s.; in 1770, 7s. 4d." Eden, however, writing near the close of the eighteenth century, expresses the opinion that in most parts of England, except in the vicinity of the large towns, the price of labor had nearly doubled within the preceding sixty years.

The following statement shows the expense of maintaining the family of an agricultural laborer in 1762, the second year of the reign of George III :

	Per week.
Bread, flour, oat-meal.....	s. d.
Roots, greens, beans, peas, fruit.....	2 6
Firing, 6d., candles, 3d., soap, 2½d.....	0 5
Milk, 1½d., butter, 1½d., cheese, 5d.....	0 11½
Flesh, 6d., rent, 6d., pins, worsted, thread, &c., 1d.....	0 8½
Clothes, repairs, bedding, shoes.....	1 1
Salt, beer, exoties, vinegar, spices.....	1 0
Total per week.....	0 8½
	7 4½

As these are actual expenses, they indicate the mode as well as the cost of living at the time in question.

* According to a table published further on, the average price of mutton from 1706 to 1730, was only 1s. 8d. per stone of 8 pounds, or 2½d. per pound. In 1740 the same price was paid for beef by the victualing office, and four years later the same meat was purchased for 1½d. per pound.

The following statement shows the contract-rates of wages at Greenwich Hospital in 1760:

	s.	d.
Carpenter, per day.....	2	6
Bricklayer, per day.....	2	6
Mason, per day.....	2	8
Plumber, per day.....	3	6

The contract-rate of wages for artificers had undergone no change from 1729, and continued without variation till about 1795, when they suddenly rose from 2s. 6d. to 5s. per day.

The contract-prices for provisions and clothing in 1760 at the same hospital were as follows:

	£.	s.	d.		£.	s.	d.
Flesh, per cwt.....	1	11	0	Beer, per barrel.....	0	5	7½
Bread, for 13½ ounces.....	0	0	1	Candles, per dozen pounds.....	0	6	6
Butter, per pound.....	0	0	5½	Shoes, per pair.....	0	4	0
Cheese, per pound.....	0	0	3½	Coals, per chaldron.....	1	12	8
Pense, per bushel.....	0	3	6	Stockings, per pair.....	0	1	8
Oatmeal, per bushel.....	0	4	0	Hats, each.....	0	2	0
Salt, per bushel.....	0	4	0	Suit of bedding.....	0	4	4½
Malt, per quarter.....	1	4	9	Coats, each.....	1	1	0
Hops, per cwt.....	4	13	4				

Mr. Howlett, in a pamphlet on "the insufficiency of the causes to which the increase of our poor and of the poor's rates has been ascribed," published in 1788, maintained that, for a considerable period prior to the time he wrote, the rates of wages had not kept pace with the rise in the prices of provisions. An expensive war had brought an additional debt of more than one hundred millions sterling, and the increased taxes thus occasioned had fallen in part on articles which were necessities of life, even among the poorest of the people, such as soap, leather, candles, &c. Within twelve years the price of these articles had increased one-fifth. Wheat, in the mean time, had cost the poor man nearly 6s. a bushel; butter and cheese had risen three half-pence a pound, and meat a penny. The general increase in the price of these commodities he reckons at one-fifth, or 20 per cent., and asks, "What advantage have they (the working-classes) had to enable them to bear this augmented burden? What advance within the last ten or twelve years has been made in their wages? Very little indeed; in their daily labor nothing at all, either in husbandry or manufactures. In some branches of the latter, by the iniquitous, oppressive practices of those who have the direction of them, they are at this moment considerably lower. The only advantage they enjoy more than they did a few years ago is in piece-work." He thinks, however, that while this "augments the wages of the workmen it shortens the duration of their lives, and of their capacity for labor." Extending his review to a somewhat longer period, Mr. Howlett says that wheat, "which, between the years 1746 and 1765, was only 32s. a quarter, was almost from that time to the year 1776, above 45s." To counterbalance this, "the rise in the price of labor was very little, if anything, more than twopence on the shilling, except only the money earned by piece-work, which, ten or twelve years ago, was not nearly so general as at present."

To show the very moderate rise of wages in the south of England, during the fifty years from 1737 to 1787, he gives the following statement:

	Wages per diem 1737. 1787.	
Agriculture:	d.	d.
Laborers out of doors, in the country.....	10	12
Threshers.....	9	12
Laborers out of doors, near great towns.....	16	16

Cloth-mans
Scribblers.....
Shearmen.....
Women spinners.....

The wages raised "about superfluous."

Below are p official orders, during the sev

TABLE I.—Showing fixed by the justice eighth year of the

Smith.....
Wheelwright.....
Plowwright.....
Millwright.....
Master carpenter.....
Servant carpenter.....
Joiner.....
Rough-mason.....
Plasterer.....
Sawyer.....
Lime-maker.....
Brick-layer.....
Brick-man.....
Tiler.....
Slater.....
Tile-maker.....
Linew-weaver.....
Turner.....
Woolen-weaver.....
Cooper.....
Miller.....
Fuller.....
Walter.....
Thatcher.....
Shingler.....
Shearman.....
Dyer.....
Hosiery.....
Shoemaker.....
Tanners.....
Pewterers.....
Pokers.....
Browers.....
Glovers.....
Cutlers.....
Saddlers.....
Spurriers.....
Cap-makers.....
Hat-maker.....
Bowlers (bow-makers).....
Fetchers.....
Arrow-head makers.....
Hatchers.....
Cooks.....
Buttlers of husbandry.....
Movers of grass.....
Taskers.....
Reapers.....
Mowers of corn.....
Servants of the best sort.....
Servants of the second sort.....
Servants of the third sort.....

Cloth-manufacturers:

Scribblers.....	14	15
Shearmen.....	15	15
Women spinners.....	6	7

The wages of weavers during the same period, he says, had been raised "about 2d. a day in the coarse trade and nothing at all in the superfine."

Below are presented a number of tables, extracts from old accounts, official orders, &c., illustrating the rates of wages and the cost of living during the seventeenth and eighteenth centuries:

WAGES AND PRICES FROM 1596 TO 1796.

TABLE I.—*Showing the wages of servants, laborers, and artificers in the county of Chester as fixed by the justices of the peace of the said county, at the said city of Chester, in the thirty-eighth year of the reign of Queen Elizabeth, (A. D. 1596.)*

Occupation.	Wages by the year.		Wages by the day.
	With meat and drink.	Without meat and drink.	With meat and drink.
Smith.....	£. s. d.	£. s. d.	£. s. d.
Wheelwright.....	1 11 8	5 0 0	0 0 2
Plowwright.....	2 0 0	5 10 0	2 1
Millwright.....	1 10 0	5 0 0	2
Master carpenter.....	1 3 4	5 10 0	3
Servant carpenter.....	2 13 4	5 13 4	4
Joiner.....	1 0 0	3 10 0	1
Rough-mason.....	1 10 0	4 0 0	2
Plasterer.....	1 6 8	5 0 0	2 1
Sawyer.....	1 0 0	5 0 0	2
Line-maker.....	1 8 0	4 10 0	2 1
Brick-layer.....	1 3 0	4 6 8	2
Brick-man.....	1 0 0	4 0 0	2 1
Tiler.....	1 6 0	4 10 0	2
Slater.....	1 5 0	3 13 4	2
Tile-maker.....	1 6 0	4 0 0	2 1
Linon-weaver.....	1 10 0	4 0 0	2
Turner.....	1 0 0	4 0 0	1
Woolen-weaver.....	16 0	3 0 0	1
Cooper.....	1 8 0	3 13 4	1
Miller.....	1 10 0	4 0 0	2
Fuller.....	1 10 0	4 0 0	2
Walker.....	1 6 0	3 13 4	1 1
Thatcher.....	1 3 4	4 0 0	1 1
Shingler.....	1 0 0	4 0 0	1
Shearman.....	1 10 0	3 13 4	1 1
Dyer.....	1 0 0	3 13 4	1 1
Hosiery.....	2 6 8	3 13 4	1 1
Shoemaker.....	1 3 0	3 10 0	1
Tanners.....	1 10 0	4 0 0	2
Pewterers.....	1 6 0	4 0 0	1
Bakers.....	1 0 0	3 13 4	2 1
Brewers.....	16 0	3 10 0	1
Glovers.....	1 0 0	3 10 0	1 1
Outlers.....	1 6 8	3 16 0	1
Saddlers.....	1 7 0	4 10 0	1 1
Sprisers.....	1 5 0	4 0 0	1 1
Cap-makers.....	1 5 0	4 0 0	1 1
Hat-maker.....	1 0 0	3 10 0	2
Bowlers, (bow-makers).....	1 10 0	4 10 0	2
Fletcherers.....	1 8 0	4 0 0	2
Arrow-head makers.....	1 0 0	3 10 0	2
Hatchers.....	15 0	3 10 0	1
Cooks.....	1 6 8	3 10 0	1
Billits of husbandry.....	1 0 0	3 5 0	1
Mowers of grass.....	2 0 0	4 0 0	3
Taskers.....	.....	.....	4
Peepers.....	.....	.....	4
Mowers of corn.....	.....	.....	2
Servants of the best sort.....	1 0 0	3 10 0	4
Servants of the second sort.....	10 0	2 10 0	.....
Servants of the third sort.....	8 0	1 16 0	.....

TABLE II.—*Showing the wages of servants, laborers, and artificers, as fixed by the justices of the peace at Okeham, in the county of Rutland, on the 28th day of April, 1610.*

	Wages per annum.		
	£.	s.	d.
A bailiff of husbandry, having charge of a plow-land, at least	2	12	0
A man-servant for husbandry of the best sort, who can sow, mow, thresh, make a rick, thatch and hedge the same, and kill a hog, sheep, or calf...	2	10	0
A common servant of husbandry, who can mow, and cannot expertly make a rick and thatch it, nor kill and dress a hog, sheep, or calf.....	2	0	0
A servant who can drive, plow, pitch, cart, and thresh, but cannot expertly sow and mow.....	1	9	0
A boy under sixteen years of age.....	1	0	0

WAGES OF WOMEN-SERVANTS.

A chief woman-servant, who can cook, bake, brew, make malt, and oversee other servants.....	1	6	8
A second woman-servant of the best sort, who cannot dress meat nor make malt, but can brew, &c.....	1	3	4
A "mean or simple woman-servant," who can do only out-work and drudging.....	0	16	0
A girl under sixteen years of age.....	0	14	0

WAGES OF MILLERS.

A chief miller, who can "expertly beat, lay, grind, and govern his mill"...	2	6	0
A common miller, who cannot, &c.....	1	11	8

WAGES OF SHEPHERDS.

A chief shepherd, who is skillful in the ordinary of his cattle, winter and summer	1	10	0
A common shepherd.....	1	5	0

WAGES OF MOWERS AND HARVEST-FOLK.

Occupations.	With meat.		Without meat.	
	£.	s.	£.	s.
A mower by the day.....	5	10		
A man reaper.....	4	8		
A woman reaper.....	3	6		
A man hay-maker.....	4	8		
A woman hay-maker.....	2	5		
A follower of scythes.....	3	6		
A raker of barley and peas.....	3	6		
A hedger.....	4	8		
A ditcher.....	4	8		
Every other laborer not before set down, (harvest excepted,) shall have from Easter to Michaelmas.....	3	7		
And afterward, every such laborer shall have from Michaelmas to Easter.....	2	6		

Chief joiner, per
Joiner's apprentice
Master sawyer, per
Plow-wright, per da
Thatcher, per da
Hurdle-maker, pe
Horse-collar-make
Master mason, per
Rough mason, per
Master carpenter,
Expert carpenter,
Carpenter's appren
Bricklayer, per da
Tiler or slater, per
Tiler or slater's ap
Turner, per day...
Gardener, per day...
Tailor, per day....

It appears, by
the statutes fro
above given was

TABLE III.—*Showing the price at Chelms the true meaning of having a special reg and apparel, both laborers, and serran*

A master mason

A master rough mason...

A master mason's servan

ago of fourteen and und

A master carpenter.....

A master carpenter, jour

eighteen and under twen

A master carpenter, serv

fourteen and under twen

A master sawyer

A master sawyer's laborer

Palers

Rivers of pale and clap-bo

A millwright

A plow-wright and cartwr

Copers

A master shipwright

A hewer or common shipw

WAGES OF ARTIFICERS AND THEIR APPRENTICES.

Occupations.	From Easter to Michaelmas.		From Michaelmas to Easter.	
	With meat.	Without meat.	With meat.	Without meat.
Chief joiner, per day.....	d.	d.	d.	d.
Joiner's apprentice, per day.....	6	12	4	
Master sawyer, per day.....	4	8	3	
Plow-wright, per day.....	6	12	4	6
Thatcher, per day.....	5	10	4	
Hurdle-maker, per day.....	5	9	4	
Horse-collar-maker, per day.....	5	9	4	
Master mason, per day.....	6	10	4	
Rough mason, per day.....	3	12	6	10
Master carpenter, per day.....	5	10	4	
Expert carpenter, per day.....	8	14	6	14
Carpenter's apprentice, per day.....	5	10	4	
Bricklayer, per day.....	3	7	2	6
Bricklayer's apprentice, per day.....	5	9	4	
Tiler or slater, per day.....	3	7	2	6
Tiler or slater's apprentice, per day.....	5	10	4	
Turner, per day.....	3	7	2	6
Gardener, per day.....	6	12	6	12
Tailor, per day.....	6	12		
	4	8	4	8

It appears, by the high constable's catalogues of persons hired under the statutes from 1626 to 1631, that the rate of wages for servants above given was then complied with.

TABLE III.—Showing the wages of artificers, laborers, and servants as fixed by the justices of the peace at Chelmsford, in the county of Essex, on the 8th of April, 1651, "according to the true meaning of a statute made in the twenty-ninth year of the reign of Queen Elizabeth, having a special regard and consideration to the prices at this time of all kinds of victuals and apparel, both linen and woollen, and all other necessary charges wherewith artificers, laborers, and servants have been more grievously charged than in times past."

Occupations.	By the day from March to September.		By the day from September to March.		By the whole year.	
	With board.	Without board.	With board.	Without board.	Wages.	Livery.
A master mason.....	d.	d.	d.	d.	s. d.	s. d.
A master rough mason.....	12	12	10	16	4 0 0	10 0
A master mason's servants and apprentices, above the age of fourteen and under eighteen.....	10	17	7	14	3 0 0	10 0
A master carpenter, journeymen, and servants, above eighteen and under twenty years.....	4	10	3	7	1 10 0	8 0
A master carpenter, servants and apprentices, above fourteen and under twenty-four years.....	2	14	6	12	2 10 0	8 0
A master sawyer.....	6	12	6	10	1 4 0	8 0
A master sawyer's laborer.....	10	16	7	14	4 10 0	10 0
Palers.....	2	2	2	12	4 0 0	8 0
Rivers of pole and clap-board and laths.....	10	12	2	12	4 0 0	10 0
A millwright.....	12	12	10	16	4 0 0	10 0
A plow-wright and cartwright.....	10	12	8	16	0 0 0	0 0
Copers.....	10	16	6	14	0 0 0	0 0
A master shipwright.....	16	24	12	16	0 0 0	0 0
A helper or common shipwright.....	10	12	8	14	0 0 0	0 0

TABLE III.—Showing the wages of artificers, laborers, and servants, &c.—Continued.

Occupations.	By the day from March to September.		By the day from September to March.		By the whole year.	
	With board.	Without board.	With board.	Without board.	Wages.	Livory.
	d.	d.	d.	d.	s. d.	s. d.
An able elencher	10	14	12	16	0 0	0 0
An able holder	8	14	12	16	0 0	0 0
A master calker	11	21	16	26	0 0	0 0
A calker, laboring by day	10	18	14	20	0 0	0 0
A common calker	9	16	14	20	0 0	0 0
A master joiner or carver	10	18	14	20	0 0	10 0
A master joiner or carver's servants and apprentices, above eighteen and under twenty-four years	8	14	6	12	3 10	0 0
A master joiner or carver's servants and apprentices, above fourteen and under twenty-four years	6	9	5	8	1 13	4 0
A master bricklayer, tiler, plasterer, and shingler	10	18	14	20	0 0	10 0
Second bricklayers, tilers, and slaters, above sixteen and under twenty-four years	8	16	6	14	2 0	0 0
Their servants and apprentices, above twelve and under twenty-four years	6	10	5	8	0 0	0 0
Brick and tile makers, burners of wood, ashes, and lime. Their servants and laborers	6	11	5	10	2 10	0 0
A plumber and glazier	10	16	8	14	3 5	0 0
Their servants and apprentices, above fourteen and under twenty-four years	6	10	5	8	1 10	4 0
Master thatchers	10	16	8	14	3 0	0 0
Their servants	8	13	6	12	2 10	0 0
Woodcutters, ditchers, hedgers, thrashers, and all other common laborers, (the time of harvest excepted)	8	14	6	12	3 5	0 0
Loaders of corn and meal	0	0	0	0	4 0	0 0
Knackers, collar-makers, and armors	0	18	8	14	6 0	0 0
A bullock husbandry	0	0	0	0	5 0	0 0
A chief hind, best plowman, carter, shepherd, or cart-horse	0	0	0	0	4 10	0 0
The second hind, carter, or servant in husbandry	0	0	0	0	3 10	0 0
Apprentice at husbandry, with board and clothes	0	0	0	0	0 0	0 0
The best woman-servant, being a cook able to take charge of a household	0	0	0	0	2 10	0 0
The second woman-servant	0	0	0	0	2 0	0 0
A dairy-maid or wash-maid	0	0	0	0	2 5	0 0
A chamber-maid	0	0	0	0	2 10	0 0
Gardeners	8	16	7	12	3 0	0 0
Haymakers, men	8	12	0	0	0 0	0 0
Haymakers, women	5	10	0	0	0 0	0 0
Weeders of corn	4	9	0	0	0 0	0 0
Mowers of corn and grass	10	18	0	0	0 0	0 0
A fallower	6	15	0	0	0 0	0 0
Reapers, men	12	24	0	0	0 0	0 0
Reapers, women	8	14	0	0	0 0	0 0
Best journeyman clothiers	0	0	0	0	10	0 0
Best journeyman weavers in fine cloths	0	0	0	0	0	10 0
Second journeyman weaver and clothier	0	0	0	0	10	0 0
A journeyman wool-comber, above the age of twenty-four	0	0	0	0	3 0	0 0
Wool-combers doing their work by task, for every warp*	6	0	0	0	0 0	0 0
A journeyman tucker, fuller, sheerman, and dyer	0	0	0	0	2 10	0 0
Tailors and hosiers	8	14	6	12	2 10	0 0
Shoemakers, cutlers, smiths, farriers, saddlers, spurriers, tanners, and cooper	0	0	0	0	2 10	0 0
Millers, bakers, brewers, butchers, and cooks	0	0	0	0	2 10	0 0
The second sort of said artificers	0	0	0	0	2 10	0 0

* Weavers doing their work at home were left to make their own agreements with the clothier.

WAGES OF ARTIFICERS AND LABORERS, BY TASK, OR IN GREAT, WITHOUT MEAT AND DRINK.

	s.	d.
The mowing of an acre of grass, after land-measure	2	0
The well-making, clean-raking, and cocking of an acre of grass ready to carry	0	1
The reaping, binding, cocking or shocking, of an acre of wheat, rye, or mixtlyn	0	2
The reaping, binding, and shocking of an acre of barley	0	2
The reaping, binding, and shocking of an acre of oats	0	2

* A mixture of wheat and rye.

The reaping,
The making
The following
Thrashing and
Thrashing and
Sawing plank
Sawing board
Slitting work
Riving bath, th
Riving pales, t
Riving clapnet
The making of
The bodying of
The heading of
The making of
The hewing of
The making of
The hewing of
The setting on
The hewing m
ing 25.
Brick making a
per thousand,
The striking, d
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The working au

TABLE IV.—
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realm in suc
sideration to
circumstance

A master mason ..
A master brick-m
Their servants an
years ..
Master carpenters
Their servants an
years ..
Their servants and
Plow-wrights and
Master brick-layer
Tilers, plasterers, a
Master plasterers ..
Their servants and
Master thatchers ..
Their servants ..
Fellers of wood, thr
time of harvest ex
Hay-makers, men ..
Hay-makers, women
Weeders of corn ..
Mowers of corn and
A raker in corn harv
Reapers, men ..
Reapers, women ..

The reaping, binding, and shocking of an acre of beans.....	0	3	6
The "making" of an acre of peas, vetches, and tares.....	0	1	9
The mowing of an acre of barley or oats.....	0	1	2
The following, making bands, raking and laying the same per acre.....	0	1	0
Thrashing and winnowing wheat or rye, per quarter.....	0	1	10
Thrashing and winnowing barley or oats, per quarter.....	0	0	10
Thrashing and winnowing beans, peas, and tares, per quarter.....	0	0	10
Sawing plank, the hundred, (six score).....	0	2	6
Sawing boards, the hundred.....	0	2	6
Splitting work, the hundred.....	0	2	6
Riving lath, the hundred.....	0	2	6
Riving pales, the hundred.....	0	0	4
Riving clapboards, the hundred.....	0	1	0
The making of a plow, all new with meat and drink.....	0	4	0
The bodying of a plow, with meat and drink.....	0	1	6
The heading or bodying of a plow, with the handle, with meat and drink.....	0	0	10
The heaving of a pair of cart-wheels, without meat and drink.....	0	1	0
The making of all the stuff of a body of a cart, without meat and drink.....	0	8	0
The heaving of the body of a cart, without meat and drink.....	0	1	8
The setting of every gang of fellows.....	0	3	6
The heaving of a fellow, without meat and drink.....	0	1	4
The heaving and riving of every gang of spoke-timber, the gang, containing 25.....	0	0	8
Brick making and burning, straw and all other necessities being provided per thousand, (without meat and drink).....	0	1	0
The striking, drying, and setting on piler, every thousand tile, without meat and drink.....	0	2	6
The waiting and dealing of every thousand tile, without meat and drink.....	0	0	10
	0	1	0

TABLE IV.—Showing the wages of artificers, laborers, and servants as fixed by the justices of the peace of the county of Warwick, on Tuesday next after the close of Easter, 1684, "according to the laws and statutes of the realm in such case made and provided, having a special regard and consideration to the prices at this time of victuals and apparel, and all other circumstances necessary to be considered."

Occupations.	By the day.	
	With meat and drink.	Without.
A master mason.....	s. d. 0 6	s. d. 1 4
A master brick-mason.....	0 6	1 0
Their servants and apprentices, above the age of eighteen years.....	0 4	0 8
Master carpenters.....	0 6	1 0
Their servants and journeymen, above the age of eighteen years.....	0 6	1 0
Their servants and apprentices.....	0 6	1 0
Plow-wrights and cart-wrights.....	0 4	0 8
Master brick-layers.....	0 6	1 0
Tilers, plasterers, and shinglers.....	0 6	1 0
Master plasterers.....	0 6	1 0
Their servants and apprentices, above the age of twelve years.....	0 4	0 8
Master thatchers.....	0 3	0 6
Their servants.....	0 6	1 0
Fellers of wood, thrashers, and all other common laborers, the time of harvest excepted.....	0 4	0 8
Hay-makers, men.....	0 4	0 8
Hay-makers, women.....	0 4	0 8
Weeders of corn.....	0 2	0 4
Mowers of corn and grass.....	0 2	0 4
A raker in corn harvest.....	0 6	1 0
Reapers, men.....	0 3	0 6
Reapers, women.....	0 6	1 0
	0 4	0 8

From the middle of September to the middle of March, the wages was to be one penny a day less than the above rates.

WAGES BY THE YEAR.

	£	s.	d.
A bailiff of husbandry.....	4	0	0
Chief hind, best plowman and carter.....	5	15	0
Shepherds.....	5	0	0
Inferior servant-man.....	2	10	0
A woman-servant, able to manage a household.....	1	15	0
A second woman-servant.....	1	6	8
A dairy-maid or wash-maid.....	1	10	0

TABLE V.—*Showing the wages of artificers, laborers, and servants in the county of Lancaster, as fixed by the justices of the peace at Manchester on the 22d of May, 1725, "upon conference with discreet and grave men of the said county respecting the plenty of the time and other necessary circumstances."*

WAGES BY THE YEAR.

	£	s.	d.
A bailiff of husbandry or chief hind, not above.....	6	00	00
Experienced millers, without meat and drink, not above.....	10	00	00
Experienced millers, with meat and drink, not above.....	5	00	00
Chief servants in husbandry, that can sow or mow and do other husbandry well, not above.....	5	00	00
Common servants in husbandry, twenty-four years of age and upward, not above.....	4	00	00
Men-servants, from twenty to twenty-four years of age, not above.....	3	10	00
Men-servants, from sixteen to twenty years of age, not above.....	2	10	00
Best women-servants, that can cook or take charge of a household, not above.....	2	10	00
Chamber-maids, dairy-maids, and wash-maids, or other ordinary servants, not above.....	2	00	00
Women-servants under the age of sixteen, not above.....	1	10	00

WAGES BY THE DAY.

Occupations.	With meat and drink.		Without.	
	£	s. d.	£	s. d.
Best farm-laborers, from the middle of March to the middle of September, not above.....	0	0 6	0	1 0
Ordinary farm-laborers, from the middle of March to the middle of September, not above.....	0	0 5	0	0 10
Best farm-laborers, from the middle of September to the middle of March, not above.....	0	0 5	0	0 10
Ordinary farm-laborers, from the middle of September to the middle of March, not above.....	0	0 4	0	0 9
Hay-makers, men, not above.....	0	0 6	0	0 10
Hay-makers, women, not above.....	0	0 3	0	0 7
Mowers of lay, not above.....	0	0 9	0	1 3
Reapers, men, not above.....	0	0 6	0	1 0
Reapers, women, not above.....	0	0 6	0	0 10
Hedgers, ditchers, palers, thrashers, &c., not above.....	0	0 6	0	0 10
Masons, carpenters, joiners, plumbers, tilers, slaters, coopers, turners, master workmen, not above.....	0	1 2	0	1 2
Masons, carpenters, joiners, plumbers, tilers, slaters, coopers, turners, who are not master workmen, not above.....	0	0 6	0	1 0
Brick-layers, plasterers, white-liners, not above.....	0	0 6	0	1 0
Master brick-layer who has others working under his direction, not above.....	0	1 0	0	1 2
A pair of sawyers.....	0	1 0	0	2 0
Master tailors.....	0	0 6	0	1 0
Their journeymen and apprentices.....	0	0 5	0	0 10

Threshing,
Threshing,
Threshing,
For hewing
For making
Miners in a
Miners in a
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and that not p
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be credited.
2d. An artifi
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to be recovered
3d. That mas
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town. The mas
such a testimoni
timonial shall su
produce one wi
show a forged or

WORK BY TASK.

	£ s. d.
Threshing, winnowing, or fanning a quarter of oats.....	0 1 0
Threshing, winnowing, or fanning a quarter of barley, beans, and pease.....	0 1 6
For hewing a gang of fellows.....	0 2 0
For making a plow.....	0 1 0
For making brick, including all labor, per thousand, (six score to the hundred).....	0 2 0
Miners in a standing delf, for 21 baskets, (one ton).....	0 3 0
Miners in a sitting delf, for 21 baskets, (one ton).....	0 1 0
Pavers, for every square yard, (the foundation being prepared and the materials on the ground).....	0 1 3
	0 0 1

The order of the justices provides that the above rates shall not be exceeded in any part of the county, but suggests that as the county is eighty miles long, the work-people in the northern portion of it ought not to demand so much, but should "be content with what the custom of the country hath usually been." The mayor or chief officer of every corporate town is called upon to have the order publicly proclaimed, and the sheriff of the county is to cause it to be proclaimed in every other market-town within the county. After proclamation, publicly and solemnly made on the market-day "at the height of the market," a legible copy of the order is to be posted in some open public place in each of the said market-towns, and "the wages, rates, and allowances" therein established are to remain in force until "an alteration be made, and such alteration afterwards proclaimed." In connection with the order, the justices publish the "denunciations, penalties, punishments, and forfeitures which the statutes appoint to be inflicted impartially upon such as oppose or transgress what is ordered." These are as follows:

1st. As to artificers, workmen, and laborers, that conspire together, concerning their work or wages, every one of them so conspiring shall forfeit, for the first offense, ten pounds to the King, and if he does not pay within six days after conviction by witness, confession, or otherwise, shall suffer twenty days' imprisonment, and during that time shall have no sustenance but bread and water; for the second offense, he shall forfeit twenty pounds, and that not paid within six days, as aforesaid, shall suffer the pillory; and for the third offense, shall forfeit forty pounds, and that not paid within the said time, shall again suffer the pillory, lose one of his ears, and be forever after taken as a man infamous, and not to be credited. 2 and 3 Edw. VI, chap. 15.

2d. An artificer or laborer who undertakes a piece of work by the task may not leave the same unfinished, unless for not paying the wages or hire agreed on (or to do the King service,) without license of the owner of the work, on pain of imprisonment a month without bail, and five pounds forfeited to the owner of the work, besides his cost and damages, to be recovered by law.

3d. That master and servant may know that no servant that hath been in service before ought to be retained without showing a testimonial that he or she is legally licensed to depart from his or her last service, and at liberty to serve elsewhere, such testimonial to be registered with the minister of the parish whence the servant departs, and subscribed by the chief officer or constable, and two honest householders in the town. The master or mistress retaining a servant without showing such a testimonial forfeits five pounds; the person wanting such a testimonial shall suffer imprisonment till he procure it; and if he do not produce one within twenty-one days after his imprisonment, or if he show a forged one, to be whipped as a vagabond.

4th. No person shall put away his servant, nor any leave his service, before the end of his term, and none to be put away or depart at the end of the term without a quarter's warning before the end of the said term, unless for causes allowed by one or more justices of the peace. Such as put away a servant without cause so allowed before the end of his term forfeits 40s.; and the servant refusing to serve out his time or departing without cause so allowed shall be committed without bail till they become bound to serve according to their retainer.

5th. The person that gives more wages than is limited and appointed by the justices shall forfeit five pounds and be imprisoned ten days; and the servant retained that takes more wages than by the justices' order are limited, to be imprisoned twenty-one days without bail.

6th. The forfeitures are, one moiety to the King, the other to the informer, or him that will sue for the same. And lest these penalties and punishments might not suffice to keep masters and servants conformable to the wages limited by the justices' orders, but that some secret agreements might be made to elude them, the statutes further provide that every retainer, promise, gift, or wages, or other thing whatsoever, contrary to such orders, and every writing and bond to be made for that purpose, shall be utterly void and of none effect.

7th, and lastly. We the said justices, as the laws in this case do enjoin us, shall from time to time make strict inquiries and see the defaults against these ancient and useful statutes severally corrected and punished.

TABLE VI.*—Showing the rates of wages paid for agricultural labor in 1762 at various places in England, with the distance of each place from London.

Places.	Pay per week.				
	Distance.	Harvest.	Haytime.	† Winter.	Medium.
	Miles.	s. d.	s. d.	s. d.	s. d.
Hatfield	20	13 3	9 0	6 6	7 6
Stevenage	32	12 0	9 6	6 6	7 4
Otley	34	15 0	11 0	6 0	7 3
Houghton	37	15 0	11 0	7 0	8 0
Milton	41	14 3	8 6	5 6	6 6
Warden	49	13 9	11 0	5 0	6 4
Broughton .....	.....	13 0	3 0	5 6	6 5
Astwick	46	15 0	8 0	4 3	5 6
Biddenham	47	15 0	8 0	4 6	5 6
Hale Weston	53	14 6	9 6	6 6	7 5
Catworth	57	13 0	9 6	4 9	5 10
Aycliffe	70	13 3	11 0	4 9	6 1
Casterton	85	12 6	11 0	6 0	7 2
Paorton	99	0 9 0			6 0
Tossen	112	11 0	11 0	8 6	9 0
Cromwell	123	11 0	11 0	9 0	9 4
Drayton	124	11 0	11 0	9 0	9 4
Cantler	150	10 0	10 0	9 0	9 2
Coneyshro'	155	10 0	10 0	6 6	7 2
Ecclesfield	167	10 0	8 6	6 0	6 8
Woolley	167	8 0	7 0	4 9	5 3
Kildel	194	10 0	7 0	6 0	6 6
Wilbersfort	192	11 6	7 0	4 0	5 0
Hatton	183	13 0	13 0	7 0	8 5
Risby	185	12 6			7 0
Stillingfleet	192	13 0	13 0	8 0	9 0
Holderness	193	14 0	14 0	8 6	9 7
Howdon	173	9 6	7 0	4 0	6 5
Thorne	168	12 6	9 6	6 0	7 0
Wentworth	155	10 0	10 0	6 0	6 10
Driffield	200	13 0	11 0	6 6	7 7

*Tables VI, V.
† Under the go
time and harve

Averages

TAB

Yeddington
Newton
Nunnington
Kirby
Kirkstall
Schorton
Gilling
Rookby
Fremington
Kiplin
Swinton
Crakhill
Steningford
Danby
Asgarth
Raby
Gosworth
Morpeth
Alnwick
Belford
Hetton
Fenton
Berwick
Rothbury
Cambo
Glenworth
Ascot
Poult
Kewick
Shapp
Holme
Kahors
Garslang
Ormskirk
Altringham
Knotsford
Holm's Chapo
Stone
Shenstone
Aston
Hagley
Broomsgrove
Pershore
Bendsworth
Moreton
Bensington
Honley
Maldenhead
Harmondsworth
Kensington
Mims

TABLE VI.—Showing the rates of wages paid for agricultural labor, &c.—Continued.

Places.	Pay per week.				
	Distance.	Harvest.	Haytime.	† Winter.	Medium.
	Miles.	s. d.	s. d.	s. d.	s. d.
Yeddingham	225	14 6	11 6	8 0	9 9
Newton	226	14 0	14 0	8 0	9 3
Nunnington	226	10 0	10 0	7 0	7 7
Kirby	225	8 6	8 6	7 0	7 3
Kirkstatham	228	10 6	9 0	5 0	5 11
Schorton	260	7 9	7 8	6 0	6 3
Gilling	240	15 0	7 8	5 0	6 3
Rookby	264	16 0	10 0	8 0	9 0
Fromington	270	10 0	7 0	6 0	7 1
Kiplin	238	10 0	10 0	5 0	6 0
Swinton	230	9 4	9 6	7 0	7 6
Craikhill	232	6 6	6 6	4 9	5 1
Steningford	232	6 3	7 6	4 9	5 2
Danby	235	7 6	6 0	5 0	5 4
Asgarth	240	7 6	7 6	7 0	7 6
Taby	250	9 9	8 0	6 0	7 6
Gosworth	270	9 6	12 6	6 0	7 0
Morpeth	291	10 0	9 6	5 9	6 0
Alnwick	310	8 3	8 3	5 0	5 8
Belford	325	6 0	0 0	5 0	5 2
Hetton	325	9 0	6 6	4 6	5 1
Penton	330	9 0	9 0	6 0	6 7
Borwick	340	6 0	6 0	5 0	5 2
Rothbury	301	10 9	8 9	6 0	6 9
Cambo	290	10 0	10 0	8 6	8 9
Glenwell	276	8 0	7 0	7 0	7 1
Ascot	290	8 0	10 0	8 0	8 2
Penrith	290	8 0	8 6	5 6	6 2
Keswick	293	8 6	6 6	7 0	6 10
Shapp	286	8 6	11 6	7 0	7 7
Holme	268	10 0	10 0	7 0	7 7
Kabors	246	10 0	10 0	7 0	7 7
Garslang	230	10 0	9 0	7 0	7 7
Ormeskirk	223	10 0	4 0	5 0	4 11
Altringham	200	7 3	0 6	5 0	5 4
Knotsford	160	7 3	9 6	6 0	6 9
Holm's Chapel	170	14 0	14 0	7 0	8 5
Stene	153	6 6	6 6	5 6	6 10
Shenstone	141	11 0	11 0	8 0	8 7
Aston	117	11 0	11 0	6 6	7 0
Hagley	112	11 0	11 0	6 0	7 0
Brooms Grove	110	11 0	11 0	6 0	7 0
Penrith	118	11 0	11 0	6 0	7 0
Bendsworth	102	11 0	11 0	6 0	7 0
Moreton	96	13 0	9 6	6 6	7 3
Pennington	85	15 0	6 6	6 6	7 0
Honley	47	12 6	9 6	6 6	7 5
Maldenhead	35	14 0	9 6	6 6	7 6
Harmondsworth	27	12 6	9 6	6 6	7 3
Kensington	16	12 6	9 6	7 0	7 9
Mims	2	14 3	9 0	7 0	7 9
Averages	10 8	9 5	6 5	7 1	

* Tables VI, VII, and VIII are taken from Arthur Young's *Northern Tour*, Vol. IV, pp. 442, 447, and 470.
† Under the general term "winter" Mr. Young includes the entire year, with the exception of hay-time and harvest, to which he assigns, respectively, six weeks and five weeks.

TABLE VII.—Showing the yearly wages of different classes of farm-servants, and the weekly wages of women employed in field-work in 1768 at various places in *Essex*, *Ireland*.

Places.	First-men.		Second-men.		Lads.	Average.		Dairy-maids.		Other maids.		Average.	Women per week.			
	£	s. d.	£	s. d.		£	s. d.	£	s. d.	£	s. d.		£	s. d.	s. d.	
Nisby	12	0 0	12	0 0	7	0 0	10	0 0	5	0 0	4	12	0	0	0	
Stillington	11	0 0	12	0 0	6	0 0	8	6 0	5	0 0	4	12	0	0	0	
Holderness	13	0 0	9	0 0	5	0 0	9	0 0	3	15 0	3	15 0	3	15 0	0	
Howden	11	0 0	11	0 0	4	0 0	8	13 0	4	0 0	4	0 0	4	0 0	0	
Thorne	11	11 6	4	0 0	9	0 0	3	5 0	3	5 0	3	5 0	0	0	0	
Wentworth	9	10 0	7	10 0	4	0 0	7	0 0	3	9 0	3	9 0	3	0 0	2	
Driffield	13	10 0	8	10 0	1	15 0	7	12 0	4	15 0	4	7 6	7	6 3	6	
Newton	11	10 0	5	0 0	2	0 0	6	3 0	5	0 0	4	15 0	4	9 3	2	
Nunnington	12	10 0	5	10 0	3	10 0	7	3 0	4	10 0	3	10 0	4	6 3	0	
Kirby	8	0 0	5	0 0	2	0 0	5	0 0	0	0 0	0	0 0	0	0	0	
Kirkcubbin	12	10 0	10	0 0	3	0 0	8	10 0	5	0 0	4	0 0	8	6 4	2	
Schorton	12	0 0	9	0 0	4	0 0	8	6 6	4	0 0	4	0 0	7	9 3	3	
Gilling	12	0 0	5	10 0	4	0 0	7	0 0	4	10 0	3	10 0	4	0 0	0	
Rookly	12	0 0	4	0 0	3	0 0	6	6 0	5	10 0	3	0 0	4	5 0	5	
Fremington	9	0 0	7	0 0	2	10 0	6	3 0	4	0 0	4	0 0	4	0 0	0	
Kiplin	13	0 0	10	0 0	4	0 0	9	0 0	5	0 0	3	10 0	4	5 0	2	
Swinton	11	10 0	7	0 0	3	0 0	7	3 0	5	0 0	3	17 6	4	8 6	3	
Craikhill	10	15 0	9	0 0	3	10 0	7	13 0	4	20 0	3	10 0	4	0 0	0	
Stenningford	12	0 0	9	0 0	4	10 0	8	10 0	5	0 0	4	0 0	4	0 0	0	
Dunby	15	0 0	8	0 0	4	0 0	9	0 0	5	10 0	4	0 0	4	5 0	4	
Asgarth	10	10 0	7	0 0	3	10 0	7	0 0	3	10 0	3	0 0	3	5 6	5	
Raby	13	0 0	11	0 0	6	0 0	10	0 0	5	0 0	4	0 0	7	0 0	2	
Gosworth	12	0 0	8	10 0	3	0 0	7	16 6	4	0 0	3	10 0	3	15 0	3	
Morpeth	11	0 0	7	0 0	3	0 0	7	0 0	3	10 0	3	0 0	3	5 0	0	
Alnwick	9	0 0	6	0 0	3	0 0	6	0 0	4	0 0	4	0 0	4	0 0	0	
Belford	9	0 0	7	7 0	5	0 0	7	2 0	3	3 0	3	3 0	3	6 0	2	
Hetton	10	0 0	7	0 0	5	0 0	7	6 6	2	10 0	2	10 0	6	0 0	2	
Fenton	8	0 0	6	0 0	3	0 0	5	13 0	2	15 0	2	15 0	5	0 0	2	
Berwick	9	0 0	7	0 0	5	0 0	7	2 0	3	3 0	3	3 0	0	0 0	2	
Rothbury	12	0 0	8	0 0	3	0 0	7	13 0	3	5 0	3	5 0	7	0 0	6	
Cambo	12	0 0	8	0 0	3	0 0	7	13 0	4	0 0	4	0 0	7	6 5	3	
Glenwell	10	0 0	6	0 0	1	0 0	5	13 0	5	0 0	4	0 0	6	5 6	4	
Ascot	11	0 0	7	3 6	1	5 0	6	9 0	2	15 0	2	7 6	2	12 0	6	
Penrith	13	0 0	9	0 0	3	0 0	8	6 6	5	10 0	3	10 0	4	0 0	3	
Keswick	10	10 0	6	0 0	3	5 0	6	11 6	4	14 6	3	3 0	3	16 6	3	
Shapp	9	0 0	7	10 0	2	10 0	6	6 6	4	10 0	4	0 0	4	0 0	0	
Holme	9	10 0	5	0 0	3	0 0	6	3 0	4	4 0	2	17 0	3	10 6	6	
Kabers	9	0 0	5	0 0	2	0 0	5	6 6	3	0 0	2	5 0	2	16 6	4	
Garslang	10	0 0	7	0 0	1	18 6	6	6 6	3	10 0	3	0 0	3	5 0	4	
Ormskirk	7	0 0	5	0 0	1	10 0	4	10 0	3	0 0	2	10 0	2	15 0	0	
Altringham	8	0 0	5	0 0	2	0 0	5	0 0	4	10 0	2	10 0	3	10 0	0	
Holm's Chapel	10	10 0	7	10 0	1	0 0	6	6 6	3	10 0	1	17 6	2	13 6	3	
Stono	2	0 0	6	0 0	3	0 0	5	13 0	3	10 0	3	10 0	3	9 9	9	
Shenstone	11	0 0	6	10 0	2	10 0	6	13 0	4	0 0	2	10 0	3	5 0	2	
Aston	7	10 0	5	0 0	2	0 0	4	16 6	3	5 0	3	5 0	3	3 3	3	
Hagley	10	0 0	6	15 0	2	15 0	6	8 6	3	10 0	2	15 0	3	2 6	3	
Broomsgrove	8	0 0	6	0 0	2	10 0	5	16 6	3	0 0	2	10 0	2	15 0	0	
Pershore	9	10 0	8	0 0	3	0 0	6	6 6	3	0 0	3	0 0	6	0 0	3	
Bendsworth	10	0 0	5	0 0	3	0 0	7	0 0	4	0 0	2	15 0	3	7 6	6	
Mereton	7	10 0	5	0 0	2	5 0	4	18 6	4	0 0	3	0 0	3	10 0	0	
Bensington	10	10 0	8	0 0	1	17 6	6	18 6	3	10 0	2	5 0	2	17 6	3	
Henley	8	0 0	5	10 0	2	0 0	5	3 0	4	0 0	3	0 0	3	10 0	0	
Maldonhead	7	7 0	5	0 0	2	0 0	4	15 6	4	0 0	3	5 0	3	12 6	3	
Harmondsworth	9	10 0	7	0 0	3	0 0	6	10 0	3	5 0	3	5 0	3	5 0	3	
Kensington	10	5 0	7	3 6	3	0 0	6	16 0	4	10 0	4	16 0	4	0 0	0	
Mims	11	5 0	8	0 0	2	6 0	7	3 0	4	15 0	4	15 0	6	0 0	5	
Averages	10	8 6	6	11 0	3	2 6	5	5 6	3	19 0	3	9 0	6	3 4	3 0	
	£ 9s. 9d.															

* Under the general term "winter," Mr. Young includes the entire year with the exception of hay-time and harvest, to which he assigns, respectively, six weeks and five weeks.

TABLE VIII.

Pla

Bedford.....

Rotherham

Sheffield

Wakefield

Leeds.....

Aston

Fremington.....

Darlington.....

Newcastle.....

Carlisle

Kendal

Warrington.....

Liverpool.....

Manchester.....

Burslem

Newcastle.....

Worcester

Average of men.

Average of women.

Average of children.

TABLE IX.—S

1596. A whole

A fat wet

1597. A fore-qu

A fat wet

A fat shee

1610. A mutton

A lamb...

1618. A leg of m

A mutton

1660 to 1690. M

1700. Live sheep

1710. Beef, two p

Veal, ditto

Mutton, di

Lamb, ditto

1706 to 1720. Mu

1730 to 1760. Mu

1734. Mutton at

TABLE VIII.—Showing the weekly wages of operatives in various industries at different places in England in the year 1768.

Places.	Manufactures.	Labor.
Bedford.....	Lace.....	Women..... <i>s. d.</i> 4 6
Rotherham.....	Iron, potteries.....	Girls..... 4 0
Sheffield.....	Plating, cutlery, &c.....	Men..... 10 0
Wakefield.....	Cloths.....	Boys..... 3 0
Leeds.....	do.....	Men..... 13 6
Ayton.....	Alum.....	Women..... 4 0
Fremington.....	Lead-mines.....	Men..... 3 0
Darlington.....	Backbones.....	Boys..... 10 0
Newcastle.....	Colliers.....	Colliers..... 11 0
Carlisle.....	Cotton-checks.....	Men..... 8 3
Kendal.....	Stockings, cottons, flannel, woolen, tannery.....	Women..... 3 6
Warrington.....	Sail cloth, sack, plus, shoes.....	Boys..... 5 0
Liverpool.....	Porcelain, stockings, glass.....	Girls..... 1 8
Manchester.....	Fustians, check, hats, small wares.....	Men..... 7 6
Purslow.....	Potteries.....	Men..... 7 6
Newcastle.....	Shoes, hats.....	Women..... 6 0
Worcester.....	Porcelain, gloves.....	Boys and girls..... 3 3
		Men..... 8 6
		Children..... 15 9
		Men..... 9 0
		Women..... 9 5
		Children..... 3 2
		Men..... 2 0
		Women..... 8 7
		Children..... 4 6
		Men..... 8 11
		Women..... 7 1
		Children..... 5 4
		Men..... 3 5
		Women..... 0 6
		Children..... 6 6
		Men..... 7 6
		Women..... 4 6
		Children..... 1 0
		Men..... 9 0
		Women..... 4 6
		Children..... 2 3
Average of men.....		<i>s. d.</i> 9 6
Average of women.....		4 7
Average of children.....		2 8

TABLE IX.—Showing the price of meat (chiefly of mutton) at different dates from A. D. 1596 to A. D. 1734, inclusive.

MUTTON.

	£.	s.	d.
1596. A whole mutton.....	0	13	0
A fat wether.....	0	15	0
1597. A fore-quarter of mutton.....	0	5	0
A fat wether, in wool.....	0	13	0
A fat sheep.....	0	14	0
1610. A mutton weighing 41 pounds or 46 pounds, the stone, (8 pounds).....	0	2	3
A lamb.....	0	6	8
1618. A leg of mutton.....	0	1	10
A mutton.....	0	10	0
1660 to 1690. Mean price of mutton, the stone, (8 pounds).....	0	1	4
1700. Live sheep, the pound, from.....	0	0	23 to 3
1710. Beef, the pound.....	0	0	23 to 3
Veal, ditto.....	0	0	23 to 3
Mutton, ditto.....	0	0	23 to 3
Lamb, ditto.....	0	0	23 to 3
1706 to 1730. Mutton, the stone.....	0	1	8
1730 to 1760. Mutton, the stone.....	0	2	0
1734. Mutton at Smithfield market, the stone.....	0	2	9

TABLE X.—Showing the prices paid by the British Victualling Office for beef, pork, and butter, and for Cheshire and Suffolk cheese, from 1740 to 1795.

Date.	Beef.		Pork.		Butter.	Cheshire cheese.	Suffolk cheese.
	Cwt.	Pound.	Cwt.	Pound.	Pound.	Pound.	Pound.
	£ s. d.	d.	£ s. d.	d.	d.	d.	d.
1740	1 3 7½	2½	1 11 0½	3½	.....	.....	.....
1741	1 4 9½	2½	1 10 3½	3½	.....	.....	.....
1742	1 4 4	2½	1 12 9	3½	.....	.....	.....
1743	0 19 2½	2	1 7 2	2½	.....	.....	.....
1744	0 18 3½	1½	1 2 5½	2½	.....	.....	.....
1745	0 19 9½	2	1 1 9	2½	.....	.....	.....
1746	1 1 3½	2½	1 4 8½	2½	.....	.....	.....
1747	0 19 4½	2	1 4 0½	2½	.....	.....	.....
1748	.....	2½	.....	2½	.....	.....	.....
1749	.....	2½	.....	2½	.....	.....	.....
1750	.....	2½	.....	2½	.....	.....	.....
1751	.....	2½	.....	2½	.....	.....	.....
1752	.....	1½	.....	3	.....	.....	.....
1753	.....	2	.....	2½	.....	.....	.....
1754	.....	2½	.....	3	.....	.....	.....
1755	.....	2½	.....	3½	.....	.....	.....
1756	.....	2½	.....	3½	5-7-16	3	.....
1757	.....	2½	.....	3½	5½	3½	.....
1758	.....	2½	.....	4½	5-7-16	3	.....
1759	.....	2½	.....	3½	4½	2½	.....
1760	.....	2½	.....	3	5½	2½	.....
1761	.....	2	.....	3½	5	2½	.....
1762	.....	2	.....	3½	6½	3-7-16	.....
1763	.....	2	.....	5½	2½	.....	.....
1764	.....	2½	.....	4½	5½	2½	.....
1765	.....	2½	.....	4½	5	3	.....
1766	.....	2½	.....	.....	.....	.....	.....
1767	1 5 5½	2½	.....	.....	.....	.....	.....
1768	1 5 3½	2½	.....	.....	.....	.....	.....
1769	1 2 9	2½	1 13 0	3½	5-9-16	2½	.....
1770	1 2 2½	2½	2 1 5	4½	5½	3½	.....
1771	1 2 6	2½	2 3 3½	4½	6½	3½	.....
1772	1 6 3	2½	2 12 6	5½	6½	3½	.....
1773	1 4 0	2½	2 9 11	5½	7	3½	.....
1774	1 8 8½	3	1 18 3	4	6½	3½	.....
1775	1 10 4½	3½	2 4 7½	4½	5½	3½	.....
1776	1 8 7	3	2 2 11½	4½	6½	3	.....
1777	1 8 5½	3	2 3 11½	4½	7½	3½	.....
1778	1 5 8	2½	2 3 0	4½	8	3½	.....
1779	1 13 2	3½	1 19 6	4	8½	3	.....
1780	1 11 2	3½	2 0 9	4½	7½	3½	.....
1781	1 6 3	2½	1 17 6	4	5½	3½	.....
1782	1 6 8	2½	2 1 0	4½	6	3½	.....
1783	1 10 0	3	(*)	.....	6½	4½	.....
1784	(*)	.....	(*)	.....	7½	4½	.....
1785	1 5 6	2½	12 5 0	4½	6	4	.....
1786	1 8 6	3	.....	.....	5	4	.....
1787	1 6 5	2½	.....	.....	6	4	.....
1788	1 9 1	3	2 7 11	5	5	4	.....
1789	1 9 2	3	2 3 11	4½	4	3	.....
1790	1 8 9	3	2 3 2	4½	6	4	.....
1791	1 8 6	3	2 6 5	4½	6	4	.....
1792	1 8 7	3	2 6 5	4½	6	4	.....
1793	1 10 4	3½	2 6 5	4½	6	4	.....
1794	1 11 10	3½	2 7 7	5	6	4	.....
1795	1 13 11	3½	2 11 3	5½	7	4	.....

* None bought.

† Ready money.

NOTE.—These prices are considerably lower than the price paid by the consumer, which, in 1795, was about 7d. a pound for beef and mutton; they, however, show the proportion between the prices of different periods. In the price per pound fractions less than one-fourth are omitted.

TABLE XI.—

Harfield	.....
Stevengo	.....
Office	.....
Houghton	.....
Arton	.....
Warden	.....
Houghton	.....
Biddulham	.....
Weston	.....
Catworth	.....
Casterton	.....
Beton	.....
Poulton	.....
Pessan	.....
Cromwell	.....
Drayton	.....
Croft	.....
Conesborough	.....
Rotherham	.....
Ecclesfield	.....
Woolley	.....
Wakefield	.....
Leeds	.....
Kidley	.....
Wibram	.....
Wilberforce	.....
Hatton	.....
Risby	.....
Stillingfleet	.....
Howden	.....
Thorne	.....
Around Wentworth	.....
Driffield	.....
Honanby	.....
Newton	.....
Namington	.....
Kirby	.....
Kirkstall	.....
Schorton	.....
Gilling	.....
Bookby	.....
Brough	.....
Fremington	.....
Kiplin	.....
Swinton	.....
Craikhill	.....
Slingsford	.....
Danby	.....
Aspath	.....
Raby	.....
Newcastle	.....
Morpeth	.....
Alnwick	.....
Belford	.....
Hutton	.....
Eenton	.....
Rochbury	.....
Cambo	.....
Glenwell	.....
Ascot	.....
For Eth	.....
Kewick	.....
Shapp	.....
Kendal	.....
Holm	.....
Kahers	.....
Garslang	.....
Warrington	.....
Liverpool	.....
Altricham	.....
Knotsford	.....
Holmes Chapel	.....
Newcastle under Line	.....
Shewstone	.....
Aston	.....
Bagley	.....

* Tables XI, XII, and 169.

TABLE XI.—*Showing the prices of the principal articles of subsistence in 1768, at different places in England, with the distance of each place from London.*

Places.	Distance.	Bread.	Butter.	Cheese.	Mutton.	Beef.	Veal.	Pork.	Average of meats.
Hatfield.....	20	2	7	4	4	4	3	4	3
Stevenage.....	32	2	7	4	4	4	3	4	3
Odley.....	34	2	7	4	4	4	3	4	3
Houghton.....	37	1	7	4	4	4	3	4	3
Milton.....	41	1	7	4	4	4	3	4	3
Vauden.....	49	1	7	4	4	4	3	4	3
Warrington.....	49	1	7	4	4	4	3	4	3
Biddenden.....	47	1	6	4	4	4	3	4	3
Weston.....	53	1	6	4	4	4	3	4	3
Catworth.....	57	2	6	4	4	4	3	4	3
Aylchurch.....	79	1	6	4	4	4	3	4	3
Casterton.....	85	1	6	4	4	4	3	4	3
Donington.....	92	1	6	4	4	4	3	4	3
Fessen.....	98	1	6	4	4	4	3	4	3
Cromwell.....	112	1	6	4	4	4	3	4	3
Mayton.....	123	1	6	4	4	4	3	4	3
Cusker.....	134	1	6	4	4	4	3	4	3
Conesborough.....	150	1	6	4	4	4	3	4	3
Rothenham.....	155	1	6	4	4	4	3	4	3
Ecclesfield.....	161	1	6	4	4	4	3	4	3
Woolley.....	167	1	6	4	4	4	3	4	3
Wakefield.....	165	1	6	4	4	4	3	4	3
Leeds.....	178	1	6	4	4	4	3	4	3
Kiddle.....	190	1	6	4	4	4	3	4	3
Whitmore.....	191	1	6	4	4	4	3	4	3
Wilberforce.....	192	1	6	4	4	4	3	4	3
Hatton.....	188	1	6	4	4	4	3	4	3
Risby.....	185	1	6	4	4	4	3	4	3
Stillington.....	182	1	6	4	4	4	3	4	3
Howden.....	173	1	6	4	4	4	3	4	3
Thorne.....	168	1	6	4	4	4	3	4	3
Around Weirworth.....	155	1	6	4	4	4	3	4	3
Driffield.....	200	1	6	4	4	4	3	4	3
Honnamby.....	220	1	6	4	4	4	3	4	3
Newton.....	220	1	6	4	4	4	3	4	3
Naunton.....	225	1	6	4	4	4	3	4	3
Ridby.....	238	1	6	4	4	4	3	4	3
Ripketham.....	260	1	6	4	4	4	3	4	3
Shorton.....	240	1	6	4	4	4	3	4	3
Gilling.....	254	1	6	4	4	4	3	4	3
Rookby.....	270	1	6	4	4	4	3	4	3
Brough.....	280	1	6	4	4	4	3	4	3
Fremington.....	230	1	6	4	4	4	3	4	3
Kiplin.....	238	1	6	4	4	4	3	4	3
Swinton.....	230	1	6	4	4	4	3	4	3
Craikhill.....	232	1	6	4	4	4	3	4	3
Sloutingford.....	235	1	6	4	4	4	3	4	3
Danby.....	240	1	6	4	4	4	3	4	3
Ascarth.....	250	1	6	4	4	4	3	4	3
Raby.....	276	1	6	4	4	4	3	4	3
Newcastle.....	291	1	6	4	4	4	3	4	3
Morpeth.....	310	1	6	4	4	4	3	4	3
Abwick.....	325	1	6	4	4	4	3	4	3
Belford.....	345	1	6	4	4	4	3	4	3
Hatton.....	330	1	6	4	4	4	3	4	3
Rothbury.....	301	1	6	4	4	4	3	4	3
Cambo.....	290	1	6	4	4	4	3	4	3
Olenweit.....	276	1	6	4	4	4	3	4	3
Ascut.....	282	1	6	4	4	4	3	4	3
Forth.....	286	1	6	4	4	4	3	4	3
Kewick.....	268	1	6	4	4	4	3	4	3
Shapp.....	268	1	6	4	4	4	3	4	3
Kendal.....	256	1	6	4	4	4	3	4	3
Holme.....	240	1	6	4	4	4	3	4	3
Kabers.....	230	1	6	4	4	4	3	4	3
Garsington.....	223	1	6	4	4	4	3	4	3
Warrington.....	182	1	6	4	4	4	3	4	3
Liverpool.....	200	1	6	4	4	4	3	4	3
Altringham.....	180	1	6	4	4	4	3	4	3
Knotsford.....	170	1	6	4	4	4	3	4	3
Holmes-Climpel.....	154	1	6	4	4	4	3	4	3
Newcastle under Line.....	150	1	6	4	4	4	3	4	3
Shewstone.....	147	1	6	4	4	4	3	4	3
Aston.....	112	1	6	4	4	4	3	4	3
Hagley.....	110	1	6	4	4	4	3	4	3

* Tables XI, XII, and XIII are taken from Arthur Young's "Northern Tour," vol. iv, pp. 424, 435, and 469.

TABLE XI.—Showing the prices of the principal articles of subsistence, &c.—Continued.

Places.	Distance.	Bread.	Butter.	Cheese.	Mutton.	Beef.	Veal.	Pork.	Average of meats.
Broomsgrove	118	1½	6½	3½	3½	3	2½	4	3½
Pershore	162	1½	7	3	3	3	2	4	3½
Bendsworth	26	1½	8	3½	3	2½	3	3½	3
Moreton	85	1½	7	3½	3½	3½	2½	4	3½
Bensington	47	1½	6	4	3½	3½	3	4	3½
Henley	45	1½	7	4	3½	3½	3½	4	3½
Maidenhead	27	1½	7	4½	3½	3½	3½	4	3½
Harnsworth	16	1½	7	4	3½	3½	3½	4	3½
Kensington	2	1½	8	4½	3½	2½	3½	4	3½
Mims	17	1½	8	4½	3½	3½	4½	4½	4
Averages		1½	6	3	3	3	3	3½	3

TABLE XII.—Showing the yearly expenditures of workmen for house-rent, fuel, and the wear of tools, at various places in England in 1768.

Places.	House-rent.	Firing.	Tools.	Places.	House-rent.	Firing.	Tools.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Hatfield	2 15 0	2 0 0	1 5 0	Asgarth	0 15 0	1 10 0	0 5 0
Stevynage	2 0 0	0 0 0	1 1 0	Raby	1 15 0	1 5 0	0 0 0
Odley	2 2 6	1 10 0	1 10 0	Newcastle	1 10 0	1 10 0	.....
Houghton	2 0 0	2 10 0	0 12 0	Gosworth	1 10 0	1 10 0	.....
Milton	1 10 0	1 5 0	0 6 0	Morpeth	0 10 0	0 10 0	.....
Warden	2 0 0	0 0 0	0 15 0	Alnwick	1 0 0	1 0 0	0 9 0
Broughton	1 0 0	2 10 0	1 0 0	Belford	1 0 0	1 4 0	0 0 0
Hale-Weston	1 7 6	1 10 0	1 0 0	Hetton	0 10 0	0 15 0	0 0 0
Catworth	1 1 0	1 5 0	0 8 6	Berwick	1 0 0	1 5 0	.....
Aychurch	0 3 9	2 10 0	0 8 0	.....	.....	.....	.....
Casterton	0 11 0	.....	.....	Rothbury	0 15 0	1 0 0	0 0 0
Byten	0 19 0	1 10 0	.....	Cambo	0 10 0	0 16 0	.....
Paenton	2 10 0	2 0 0	.....	Glenwelt	0 15 0	0 10 0	.....
Possan	0 15 0	1 10 0	.....	Ascot	0 15 0	.....	.....
Cromwell	1 5 0	1 0 0	.....	Penrith	1 0 0	1 10 0	.....
Drayton	1 0 0	1 15 0	.....	Kewick	1 0 0	1 5 0	.....
Cantler	1 10 0	1 0 0	0 5 0	Shapp	1 10 0	1 5 0	.....
Coneybrough	1 10 0	1 4 0	0 5 0	Kendal manufac- tures	1 10 0	2 7 6	.....
Ecclesfield	2 0 0	1 0 0	0 6 0	Holme	1 2 6	1 7 6	.....
Woolley	1 10 0	0 12 0	.....	Kabers	1 0 0	1 0 0	0 10 6
Wakefield manuf- actures	2 5 0	1 0 0	.....	Garslang	1 7 6	1 10 0	.....
Leeds manufactures	2 0 0	1 0 0	.....	Warrington man- ufactures	1 5 0	0 16 0	.....
Kiddell	0 18 0	1 0 0	0 5 0	Liverpool	1 5 0	0 17 6	.....
Withersfort	1 0 0	1 10 0	.....	Altringham	1 10 0	1 0 0	.....
Batton	1 0 0	0 5 0	0 10 0	Knotsford	2 5 0	1 0 0	.....
Isby	1 0 0	0 5 0	0 5 0	Tolnes Chapel	1 7 6	1 1 0	.....
Stillingfleet	1 0 0	1 0 0	.....	Newcastle manuf- actures	2 12 6	1 2 6	.....
Howden	1 10 0	0 15 0	.....	Stone	0 11 3	.....	.....
Thorne	1 5 0	0 12 0	0 5 0	Shenstone	1 15 0	1 10 0	.....
Ventworth	1 5 0	0 12 0	0 4 0	Aston	2 0 0	1 5 0	0 7 6
Driffield	1 10 0	1 10 0	0 0 0	Penley	2 15 0	1 10 0	0 5 0
Newtor	0 18 0	1 5 0	0 5 0	Broomsgrove	2 0 0	1 10 0	.....
Naunington	1 0 0	1 5 0	0 10 0	Pershore	1 5 0	1 10 0	0 10 0
Kirby	1 5 0	0 10 0	0 5 0	Bendsworth	0 12 6	1 5 0	0 2 6
Kirkleatham	1 0 0	1 10 0	0 2 6	Moreton	1 15 0	0 0 0	.....
Schorton	1 0 0	1 8 0	0 5 0	Bensington	1 10 0	1 5 0	0 2 6
Gilling	0 12 6	1 10 0	0 3 6	Henley	2 5 0	2 0 0	0 8 9
Jookby	0 5 0	2 10 0	0 3 6	Maidenhead	2 10 0	2 10 0	0 5 0
Brough	1 10 0	1 0 0	.....	Harnsworth	3 15 0	0 0 0	0 7 6
Fremington	1 5 0	1 15 0	.....	Kensington	5 0 0	.....	.....
Kiplin	1 5 0	0 16 0	0 3 0	North Mims	3 10 0	0 0 0	0 7 6
Swinton	1 7 6	0 15 0	0 6 0	Averages	1 8 2	1 3 11	0 7 11
Craikhill	1 5 0	1 0 0	0 10 0				
Steningford	0 15 0	0 0 0	0 5 0				
Danby	0 17 6	0 17 6	0 12 2				

TABLE XIII.—Showing the yearly value of servants' board, washing, and lodging at various places in England in 1768.

	£.	s.	d.
Danby	8	13	4
Ormskirk	9	0	0
Altringham	8	13	4
Knotsford	10	8	0
Stone	6	10	0
Shenstone	9	0	0

Hagley

Broomsgrove

Bendsworth

Bensington

Average

TABLE XIV.—

Second flour, the

Third flour, the s

Malt, bushel

Hops, cwt

Beef, cwt

Mutton, pound ..

Suffolk cheese, cw

Derby cheese, cwt

Soap, pound

Candles, dozen po

Coals, the chaldron

Butter, the firkin

Potatoes, the sack

TABLE XV.—Sh

EXPE

Bread, flour, or oat

Yeast and salt

Bacon or pork

Tea, sugar, and bat

Soap

Candles

Small beer

Milk

Potatoes

Thread and worsted

Total per week

Total per year

EARN

Man, average

Woman

Children

Total per week

Total per year

EXPE

Provisions, as above

Rent

Fuel—coal, wood, and

Clothing

Burials, burials, sickne

Total expenses

Total earnings

Surplus, (+) or

NOTE.—No. 1 is a d

children under 7 years

in great distress.

Hagley	£ s. d.
Brooms Grove	10 0 0
Bendsworth	6 0 0
Bensington	12 0 0
Average	10 0 0
	9 0 0

TABLE XIV.—Showing the prices of provisions in the hundreds of Colneis and Carlford, in the county of Suffolk, England, from 1792 to 1796.

	First quarter 1792.	First quarter 1793.	First quarter 1794.	First quarter 1795.	First quarter 1796.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Second flour, the sack	1 11 0	1 14 6	1 15 6	2 8 0	3 0 0
Third flour, the sack	1 0 0	1 13 0	1 13 6	2 6 0	3 18 0
Malt, bushel	1 1 0	1 2 0	1 3 0	1 2 6	1 3 6
Hops, cwt.	4 12 0	12 0 0	5 5 0	6 15 0	2 6 0
Beef, cwt.	1 11 0	1 13 6	1 15 6	1 17 0	2 6 0
Mutton, pound	0 0 4½	0 0 4½	0 0 4½	0 0 4½	0 0 4½
Suffolk cheese, cwt.	1 0 0	0 17 0	0 19 0	0 17 6	1 2 0
Derby cheese, cwt.	2 6 0	2 4 0	2 5 0	2 7 0	2 8 0
Soap, pound	2 16 0	2 12 0	2 16 0	3 8 0	4 0 0
Candles, dozen pounds	0 7 2	0 7 0	0 7 0	0 7 6	0 0 3
Coals, the chaldron	1 3 0	1 9 6	1 9 6		
Butter, the firkin	1 16 0			2 4 0	
Potatoes, the sack					

TABLE XV.—Showing the expenses and earnings of two families of agricultural laborers in a manufacturing parish near Carlisle, Cumberland.

	No. 1.—Four persons.		No. 2.—Six persons.	
	1792.	1794.	1793.	1795.
EXPENSES BY THE WEEK.				
Bread, flour, or oatmeal	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Yeast and salt	0 3 4	0 3 6	0 4 1	0 4 6
Bacon or pork	0 0 1½	0 0 1½	0 0 2	0 0 2
Tea, sugar, and butter	0 0 10	0 0 10	0 0 2	0 0 2
Soap	0 0 10	0 1 0	0 0 6	0 0 6
Candles	0 0 2½	0 0 2½	0 0 2½	0 0 2½
Small beer	0 0 1½	0 0 1½	0 0 0½	0 0 0½
Milk	0 0 3½	0 0 4		0 0 0½
Potatoes	0 0 6	0 0 7	0 0 10½	0 0 10½
Thread and worsted	0 0 5	0 0 5	0 0 10	0 0 10
	0 0 14	0 0 1½	0 0 2	0 0 2
Total per week	0 6 9½	0 7 2½	0 7 0½	0 7 5½
Total per year	17 12 1	18 14 10	18 5 1	19 7 10
EARNINGS PER WEEK.				
Man, average	0 7 6	0 8 0	0 7 0	0 7 6
Woman	0 1 4	0 1 4	0 2 0	0 2 0
Children				
Total per week	0 8 10	0 9 4	0 9 0	0 9 6
Total per year	22 19 4	24 5 4	23 8 0	22 14 0
EXPENSES PER YEAR.				
Provisions, as above	17 12 1	18 14 10	18 5 1	19 7 10
Rent	2 10 0	2 10 0	1 7 0	1 7 0
Fuel—coal, wood, and peat	2 0 0	2 0 0	1 14 4	1 14 4
Clothing	2 0 0	2 10 0	1 16 0	2 0 0
Births, burials, sickness			0 1 0	
Total expenses per year	21 2 1	25 14 10	23 3 5	21 9 2
Total earnings per year	22 19 4	24 5 4	23 8 0	22 14 0
Surplus, (+) deficiency, (—)	- 1 2 9	- 1 9 6	+ 0 4 7	+ 0 4 10

NOTE.—No. 1 is a decent family, living well, and managing economically; the man 35, woman 30, children under 7 years of age. No. 2, the man 35 years, wife the same, and four small children; often in great distress.

TABLE XVI.—Showing the expenses and earnings of two families of agricultural laborers at Buckden, in Huntingdonshire.

	No. 1.—Four persons.		No. 2.—Six persons.	
	1793.	1795-'96.	1793.	1795-'96.
EXPENSES PER WEEK.				
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Bread, flour, or oatmeal.....	0 3 10	0 2 5½	0 5 10	0 4 10½
Bacon or other meat.....	0 1 0	0 1 4½		
Tea, sugar, and butter.....	0 0 0	0 1 1½		0 1 0
Soap and lard.....	0 0 1½	0 0 2	0 0 1½	0 0 2½
Candles.....	0 0 2	0 0 3	0 0 2	0 0 3
Yeast and salt.....		0 0 2	0 0 2½	0 0 3
Cheese.....	0 0 4	0 0 6		
Beer.....	0 0 2½	0 0 3½		
Potatoes.....				0 0 6
Thread and worsted.....	0 0 0½	0 0 0½	0 0 1½	0 0 1½
Total per week.....	0 6 5½	0 6 3½	0 5 2½	0 7 2½
Total per year.....	16 16 11	16 7 2	18 13 0	18 15 11
EARNINGS PER WEEK.				
Man, average.....	0 7 4	0 7 4	0 7 3	0 7 3
Woman, average.....	0 0 5	0 0 5	0 1 2	0 1 2
Children, average.....	0 0 10	0 0 10		
Total earnings per week.....	0 8 7	0 8 7	0 8 5	0 8 5
Total earnings per annum.....	22 12 4	22 12 4	21 17 8	21 17 8
EXPENSES PER ANNUM.				
Provisions, as above.....	16 16 11	16 7 2	18 13 9	18 15 11
Rent.....	2 2 0	2 2 0	2 7 0	2 7 0
Fuel.....	2 3 0	2 8 0		
Shoes.....	1 5 0	1 10 0	1 6 0	1 11 6
Other clothes and furniture.....	2 18 0	3 5 0	3 0 0	3 11 0
Births, burials, sickness.....	0 9 0	0 0 0	1 1 0	1 1 0
Total expenses per year.....	25 13 11	26 1 2	26 7 9	27 6 5
Total earnings per year.....	22 12 4	22 12 4	21 17 8	21 17 8
Surplus, (+) deficiency, (—).....	—3 1 7	—3 8 8	—4 10 1	—5 8 9

NOTE.—The parish allows barley at 3s. the Winchester bushel. Even with this indulgence No. 2 live almost entirely on barley, water, and a few potatoes.

No. 1.—Man and wife under 40, boy 16 years, and a baby. This man, as well as No. 2, is a shepherd, and their wages are lower than those of other laborers. They make up their deficiencies by keeping two pigs and cultivating a little garden.

No. 2.—Man and wife under middle age, girl 11, boy 9, girl 6, girl 2½, a boy at service. During last year the family received 1s. a week from the parish.

TABLE XVII.—Showing the expenses and earnings of three families of agricultural laborers at Clapshill, in Bedfordshire, England, in 1795.

Expenses by the week.	No. 1.—Four persons.	No. 2.—Six persons.	No. 3.—Six persons.
Bread, flour, or oatmeal.....	0 4 1	7 6	0 7 6
Bacon or other meat.....	0 0 0	0 1 6	0 1 6
Yeast and salt.....	0 0 3	0 0 2½	0 0 3
Thread and worsted.....	0 0 1	0 0 2	0 0 2
Tea, sugar, and butter.....	0 0 10	0 1 0	0 0 10½
Soap.....	0 0 1½	0 0 2½	0 0 5
Candles.....	0 0 4	0 0 5	0 0 5
Cheese.....	0 0 0	0 0 0	0 0 0
Beer.....	0 0 3½	0 0 4	0 0 7
Potatoes.....	0 1 3	0 1 0	0 0 0
Total per week.....	0 7 11	0 12 4½	0 11 8½
Total per year.....	20 11 8	32 2 5	30 8 10

TABLE XVII.

Man, average...
Woman, average...
Children, average...

Total per...
Total per...

For provisions, a...
For rent...
For wood...
For clothing...
For sickness...

Total expen...
Total earni...

Deficiency...

* Harvest

No. 1.—Eldest c...
No. 2.—One girl...
a pig. The parish...
No. 3.—Eldest g...
barley at 3s. bushel

EXTRACTS

Below are accounts, and years 1650 and by James O now embrace about seven t and intended The design o lector of these the United St produce a w materials whi res the worl The followi Archer family

1710.
Mar. 5th. Paid
12th. Paid
18th. Paid
George
John
John
Mills,
26th. Paid
May 5th. Paid
8th. Given
July 11th. Paid
20th. Paid
23d. Paid

TABLE XVII.—Showing the expenses and earnings of three families of agricultural laborers at Claphill, in Bedfordshire, England, in 1795.—Continued.

Expenses by the week.	No. 1.—Four persons.	No. 2.—Six persons.	No. 3.—Six persons.
EARNINGS PER WEEK.			
Man, average.....	£ s. d.	£ s. d.	£ s. d.
Woman, average.....	0 7 6	0 8 0	0 7 6
Children, average.....	0 1 6	0 0 0	0 1 6
Children, average.....	0 0 0	0 2 6	0 4 0
Total per week.....	0 9 0	0 10 6	0 11 0
Total per year.....	23 8 0	27 6 0	33 16 0
EXPENSES PER ANNUM.			
For provisions, as above.....	20 11 8	32 2 5	30 8 10
For rent.....	1 15 0	1 10 0	1 10 0
For wood.....	7 10 0	0 13 0	1 12 6
For clothing.....	1 11 6	1 11 6	2 2 0
For sickness.....	0 5 0	0 5 0	0 5 0
Total expenses per annum.....	25 13 2	36 1 11	35 18 4
Total earnings per annum.....	23 8 0	27 6 0	33 16 0
Deficiency *.....	2 5 2	8 15 11	2 2 4

* Harvest earnings not included; they go a great way toward making up deficiencies.

No. 1.—Elddest child, 3 years; youngest a baby.

No. 2.—One girl 10, second 8; two others under 5 years. This family has a large garden and keeps a pig. The parish allows 1s. a week.

No. 3.—Elddest girl 13, other girl 10, two boys under 5 years. The laborer is allowed by his master barley at 3s. bushel.

EXTRACTS FROM THE HALLIWELL COLLECTION OF MANUSCRIPTS.

Below are presented a few extracts from a large collection of bills, accounts, and inventories, illustrating the history of prices between the years 1650 and 1750, presented to the Smithsonian Institution in 1852, by James Orchard Halliwell, esq., of Brixton Hill, near London, and now embraced in the Library of Congress. The collection comprises about seven thousand separate documents, bound in fifty-four volumes, and intended as materials for a projected work on the history of prices. The design of preparing such a work having been abandoned, the collector of these valuable manuscripts presented them "to the people of the United States, who, beyond all others," says he, "are most likely to produce a writer on the history of commerce willing to make use of materials which will strikingly illustrate the immense commercial progress the world has achieved during two centuries."

The following entries, culled from the household account-book of the Archer family, illustrate the rates of wages in 1710.

EXPENDITURES FOR LABOR.

1710.		£ s. d.
Mar.	5th. Paid George Hill for 4 weeks work.....	0 9 6
	12th. Paid Goodman Mills for 2 days' work.....	1 8
	15th. Paid Wm. Judge 6 days.....	9 0
	George Hill 6 days and $\frac{1}{2}$	5 5
	John Heath 6 days and $\frac{1}{2}$	2 2
	John Fisher 6 days and $\frac{1}{2}$	2 2
	Mills, serving Whisler, 7 days.....	6 8
May	26th. Paid ye tayler for making my coat.....	1 6
	5th. Paid my br. for 2 weeks to ye workmen.....	3 17 1
July	8th. Given ye carpenter as drew ye draught of ye farm-house.....	1 1 6
	11th. Paid Wm. Austin for half a years washing.....	6 0
	20th. Paid Whisler and his man, one day.....	2 6
	23d. Paid for making 34 qr. and 6 bushells of malt.....	9 7 0

1710.		£	s.	d.
July	25. Paid Booth for finding the ale.....	0	10	4
	26th. Paid Tom Johnson's wife for mackling my shirts and mending my br's shirts.....		8	0
	27th. Paid ye washerwoman for 2 days.....		0	6
	30th. Paid Mrs. How for doing my gown.....		7	0
Aug't	28th. Paid Horwood's bill 37 weeks' work.....	10	12	0
	29th. Paid Rose for 9 days' washing.....		2	6
Oct.	12. Paid the tayler for 4 dayes' work.....		4	0
	23d. Paid Rose for 12 days' washing.....		3	0
Nov.	3d. Paid John Dore 2 weeks' work.....		10	0
Dec'r	8th. Paid George Hill half a year's wages.....		2	10
	Paid Alice half a year's wages due to her 29th September.....		2	10
	Paid Home for 5 weeks' work.....		1	5
	Paid Mr. Rawlins, for surveying the woods and mensuring ye brewhouse.....	66	15	0

PRICES IN 1710 AND 1711.

From the same source the following entries are selected as examples of the prices of a large number of commodities purchased between June 21, 1710, and August 21, 1711:

1710.		£	s.	d.
June	21. Paid for six bottles of wine and white bread.....	0	12	6
	22. Paid for 2 qr. and a half of oates.....	2	10	0
	25. Paid for 3 yards of ribbon.....	0	3	6
	26. Paid for a tin sauce pan.....	0	0	6
	28. Paid for six yards of lace.....	1	3	0
	Paid for a salmon and bread.....	0	6	6
	29. Paid for a side of mutton.....	0	8	6
July	6. Paid for a looking-glasse and 2 knives.....	0	7	6
	Given Robin to buy a whip.....	0	5	0
	14. Paid for 4 groce of corks.....	0	8	0
	15. Given Greeve's maid for a pig.....	0	5	0
	17. Paid for 7 chickings.....	0	2	4
	Paid for crawfish and trouts and graylings.....	0	4	6
	Paid for more crawfish.....	0	1	4
	19. Paid for anchoves, one pound.....	0	1	8
	Given for a shoulder of vension.....	0	5	0
	Paid ye postman for letters.....	0	1	6
	21. Paid Daniell Heathecoat for a sheep.....	0	13	6
	24. Given White's man for a lamb.....	0	5	0
	25. Paid for 5 couple of rabbits.....	0	5	0
	27. Paid ye washer woman for 2 dayes.....	0	0	6
Aug.	1st. Paid for 2 couple of rabbits and a pd. of capers.....	0	3	6
	Paid for a sheep, weight 75 pound.....	0	15	6
	3d. Given Mr. Ward for 2 shoulders of vension.....	0	5	0
	5th. Paid for a watch-case, and paid for cleaning the 2 clocks.....	0	19	0
	6th. Paid for 10 ducks.....	0	5	0
	7th. Paid for Sue Eyre's gloves.....	0	1	0
	10th. Paid for 6 pd. of butter.....	0	2	3
	Paid for two couple of rabbits.....	0	2	0
	Paid for a bushell of salt.....	0	2	8
	Paid for 2 dozen and 9 orringes.....	0	8	6
	Paid for masheroomes.....	0	3	6
	14th. Paid for a pair of shoes.....	0	2	6
	Given ye Duke of Devonshire's Keeper and his man for a buck.....	0	2	6
	15th. Given for two pair of stockings.....	0	5	0
	17th. Paid for 6 pd. of butter.....	0	2	3
	Paid for 14 pd. bacon, at 5d. ½ peny.....	0	6	5
	Paid for a salmon.....	0	5	6
	18th. Paid Mary Vears for carrying water.....	0	3	4½
	20th. Paid Mr. Charles Bagshaw for 16 qr. of oates.....	11	4	0
	Paid Robert Scholar for 6 bushells of wheat.....	1	18	0
	Paid ye tayler for a buck.....	0	0	6
	Paid for a handkerchief.....	0	3	0
	23rd. Paid for 2 pair of shoes.....	0	7	0
	Paid Daniel Heathecott for a calf.....	0	13	6
	Given to Ward and his man for a buck.....	1	4	0

		£	s.	d.
1710.				
Sept.	1st. Given a mald for a pig.....	0	2	4
	6th. Paid for this dayes bread.....	0	1	2
	11th. Paid ye miller for 5 bushells of barley.....	0	15	0
	Given Sr. Philip Gell's boy for a side of venison.....	0	5	0
	25th. Paid Mr. Axwood for 2 qr. of oates.....	1	5	0
	Paid for a coach glase.....	1	5	0
	Given for a lute.....	0	2	0
Oct.	3rd. Paid for 2 geese.....	0	3	0
	Paid for 8 qr. of oates, at 13s. and 4d. per.....	5	6	8
	4th. Paid for 2 dayes bread.....	0	3	6
	5th. Paid for 2 quarts of white wine.....	0	4	0
	Paid ye brassier for a sauce pan and candlestk.....	0	5	6
	6th. Paid for mending ye windows.....	0	1	6
	Paid for 3 couple of rabbits and mending ye warming-pan.....	0	4	0
	6th. Paid for a peck of potatoes.....	0	0	6½
	9th. Paid for an Apron for Jack.....	0	2	6
	Paid for 6 pd. of butter.....	0	2	3
	Paid for 12 chickings.....	0	3	0
	13th. Paid for setting 2 hares.....	0	5	0
	23rd. Paid for 5 dozen of soape.....	0	5	0
	Paid for 2 pd. of brisketts.....	0	3	6
	29th. Paid for 11 partridges.....	0	3	8
	Paid for a pair of shoes.....	0	4	0
	31st. Paid ye Duke of Devon quitt rent.....	1	10	0
	Paid for boyled wheat.....	0	1	0
Nov.	1st. Paid Mr. Bosley for curing my eye.....	1	12	3
	Given Mr. Bosley for letting me blood.....	0	5	0
	4th. Paid Tho. Johnson, ye miller, for 15 loads of malt and 5 bushells and a half of barley.....	21	2	0
	6th. Paid for 2 ounces of miltnege.....	0	1	0
	Paid for 3 couple of rabbits.....	0	2	0
	Paid for 16 pd. of butter.....	0	6	0
	7th. Paid Tom Eyre for 38 st. of bacon.....	0	17	0
	9th. Paid my mother her first rent.....	26	8	9
	10th. Paid for 2 pecks of apples.....	0	2	8
	Paid John Dale for 5 pair of stockings.....	0	16	3
	Paid for 4 pair of gloves.....	0	8	0
	Paid for a wheelbarrow.....	0	5	0
	Paid for starch and indigoe.....	0	1	6
	Paid for 3 ells of Holland.....	0	2	0
	10th. Paid Mrs. Buxton for 33 yds. of cloath.....	1	17	6
	Paid for half a dozen of brooms.....	0	10	06
	Given Mr. Ward's man for 2 shours. of ven.....	0	5	00
	16th. Paid for a hind qr. of mutton.....	3	00	
	Given to the poor of Bakewell.....	02	10	00
	22d. Paid for a pair of leading-strings.....	6	00	
	25th. Paid my sister Carter for my stays.....	10	00	
	30th. Paid for lace for 2 heads and ruffles.....	07	03	03
Deer.	2d. Paid for a hatt at Dunstable.....	8	00	
	Paid for a pair of bodice.....	15	00	
	Paid the coachman as carried my deer down into Essex.....	09	00	
	5th. Paid Robin for a weekes board wages.....	7	00	
	Paid for a gown and coat for dear Willy.....	5	15	03
	6th. Paid for a buckle for little Will.....	4	06	
	Paid for a pair of earrings.....	03	00	00
	Paid for playthings for ye child.....	02	06	
	Paid Mr. Burchett for ye picture.....	12	18	00
	Paid for a vessell of heer.....	5	00	
	8th. Paid for my handkerchift and 2 girdles.....	01	01	00
	10th. Paid my aunt Gell's interest due at Michaelmas 1710.....	20	15	00
	Paid for a barrel of beer.....	5	00	
	Paid for 3 pair of gloves for ye child.....	03	00	
	Paid for paper and wax and ink.....	01	01	00
	17th. Paid for 2 lobsters.....	03	03	
	19th. Paid for a common-prayer book and St. Austine's Meditations.....	01	05	00
	and for wine and beer, and a cart and porter, and for musterd, and for bringing billets.....	17	06	
	22d. Paid for a set of wheels for ye chariot.....	05	00	00

1710.		£	s.	d.	
Decr.	23.	Paid Martin for a coach glase.....	0	16	00
		Paid for shoeing ye mabe.....		02	00
		Paid for a pair of patenings and clogs.....		08	06
		Paid for a tin basket for plates.....		05	00
		Paid for a dozen pair of gloves.....	01	04	00
	26th.	Paid for a dozen of sope plates.....		17	00
		Paid for 2 box irons and a candlestick.....		15	00
		Paid for a pair of slippers.....		07	00
		Paid for wash balls and sweet water.....		17	00
	26.	Paid for a dozen of mops.....		11	00
		Paid Mr. Bright's bill for ye horses standing 25 night.....	19	00	00
		Paid for making a gown and pettycoate, and scouring it.....	01	10	00
	28th.	Given Parson Sherley's man.....		05	00
		To Dr. Cook for my illness.....	11	16	06
1711.					
Jan.	ye 12th.	Paid for 2 pair of stockings and 3 mettings.....		18	00
	15th.	Paid all our men for a yeare's washing to this day twelvemonth.....	04	04	00
	ye 25th.	Given R. for going to Newbury when I was ill.....		10	00
		Paid for 6 pd. and $\frac{1}{2}$ of cells.....		02	02
	26th.	Paid for 12 bottles of wine from Smith's.....	01	10	00
	27.	Paid for 6 pair of mittings and patches.....		14	00
	31st.	Paid Robin for a pair of boots.....		10	06
		Paid Mary Hassell for 9 pd. of butt.....		05	06
Feb.	2d.	Paid for 3 wild ducks.....		01	06
		Paid Dr. Cook to return to London.....	11	00	00
	11th.	Paid J. Winkwork for 2 pair of shoes for myself, and a pair of boots for Johnathan.....		15	00
		Paid Frank Fisher for 2 ducks and a drake.....		01	06
	11th.	Paid for 2 large plumb-cakes.....	3	10	0
		Pd. for boxes to put ym. in.....	0	2	0
		Pd. ye carryour for bringing ye watch up.....	0	0	6
		Paid for bringing it from ye inn.....	0	0	3
		Pd. for one glass for ye spectacles.....	0	0	6
	16th.	Paid for a letter.....	0	0	3
	17th.	Paid for mending ye gold watch.....	3	0	0
	25.	Paid for a letter.....	0	0	3
		Paid for a pr. of white sattin shoes for little master.....		2	0
		Paid for 2 pr. of stockings for little master.....		2	0
		Paid for a pr. of clowded wosted.....		10	6
Mar.	15th.	Paid for an ounce and $\frac{1}{2}$ of gold thred, at 6s. 8d.....		10	0
		Paid for 3 qrs. of a yeard of plain muslin and starching.....		6	3
	20th.	Paid for a pattern for an apron.....		1	0
	24th.	For 6 pound of tobaccoe and a box.....		12	6
		Paid for a peice of diaper tape.....		1	0
	24th.	Paid for 1 peice of narrower ditto.....	0	0	8
		Paid for $\frac{1}{2}$ a hundred of needles.....		0	6
		Paid for a hatt and a silver edging to it.....		9	0
	29th.	Paid for 2 bottles of Doctr. Bifield's drops.....		5	0
		Paid for another hatt and silver edging.....		9	0
	31st.	Paid for a baby ready dressed.....		10	6
Apr.	1st.	Paid for a peice of rich silke for a pr. of shoes and facing.....		3	6
		Paid for 2 brass knockers for a dore and a hatch.....		17	0
		For 12 pd. of tobaccoe and a 16 pd. box.....	1	4	9
	6th.	Paid for little master's white tammy coat.....		10	0
	9th.	Paid for 2 hundred of sparagnase and a basket.....		5	0
	23.	Paid for 4 yds. $\frac{1}{2}$ of brocaded silke for mastr. coate.....	2	5	0
	24.	For $\frac{1}{2}$ a pd. of pack thred.....		0	6
May	5th.	Paid for a new lid for an old box to send ye coat in.....		0	2
	6th.	Paid for a dozen of kid gloves.....	2	10	0
	ye 13.	Paid for ye loadstone.....	2	10	0
	ye 22.	Paid for 2 pd. of colly.....		12	0
	ye 26.	Paid for a pair of white satting shoes of little master.....		2	0
May	ye 26th.	Paid for a guilt correll.....	1	9	0
June	ye 2d.	Paid for 11 yds. of rosett, at 4s. 3d. ye yd.....	2	6	6
	ye 5th.	Paid Willett for druggett, and Durant for a sute of clothes.....	2	19	0
		Paid ye mantowoman's bill for making ye gown and coate, &c.....	1	1	0
	8th.	Paid for a pr. of wosted stockins for Mr. Archer.....		6	6
	24th.	Paid for a new telliscope.....	1	4	0
July	7.	Paid for ye oring flowers and ye bottle.....		5	9

		1711.
July	22.	For
Augt.	1st.	Paid
	4th.	Paid
		Paid
	5th.	Paid
		Paid
	6th.	Paid
	12th.	Paid
	18th.	Paid
	29th.	Paid
		Paid
	31st.	Paid
Sep.	10th.	Paid
	15th.	Paid
	21st.	Paid
		Paid

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buys a periwig t
tations, for abo
Man," and at sa
10s. for his wife,
ing are but a few

		1710.
June	18.	Given to
		Given to
	21.	To my d
July	6.	Given a
	12.	Given M
		Given of
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		Given y

* It is not unlikely
dence to the contrary

1711.		£	s.	d.
July	22. For making six shirts for Mr. Tho. Eyer, and buttons.....	2	0	10
Augt.	1st. Paid for a yd. and $\frac{1}{2}$ of white damask for ye pettycoates.....	9	0	0
	4th. Paid for a piece of tape.....	0	9	0
	5th. Paid for a new lid for ye box to send ye stays in.....	18	0	0
	6th. Paid for a dirkin of sope.....	1	6	0
	12th. Paid for 3 qrs. and $\frac{1}{2}$ of cherry and scarlett silk for robeings, &c.,	5	6	0
	18th. Paid Mrs. Cousin's bill for ye 2 gowns and pettycoate.....	2	6	0
	29th. Paid for 3 ells of Holland, at 6s. 4d.....	18	0	0
	31st. Paid for $\frac{1}{2}$ a doz. of cherry collared silk stockings.....	1	4	0
	10th. Paid for a q. of a pt. of pomatum and pott.....	0	8	0
Sep.	15th. Paid Mary Lincoln for bringing ye mantoo from Pickadilly.....	2	6	0
	21st. Paid for a strong box.....	3	0	0
	Paid for cord and paper to pack ye Box up.....	0	5	0

MISCELLANEOUS EXPENDITURES.

The following entries, which, like those that precede, have been culled from the household account-book of the Archer family, are presented not so much on account of their statistical value as for the illustrations which many of them furnish of social and domestic life at the period to which they relate. The fact that Mr. Archer, a country gentleman of good estate, gives the cook an extra five shillings "for dressing two dinners" when his tenants "paid their rent at Coopersale," and varying sums for extra trouble on other occasions, indicates a due appreciation of that domestic's position in the household, and suggests that the state of her* temper may have had something to do with the quality of her dinners. That it was found expedient to treat her with consideration is further indicated by an entry which records the payment to her of 2s. 6d. "for saving the suet." As an incentive to economy, this method was, no doubt, found to be far more effective than verbal exhortations. Indeed, Mr. Archer appears to have found it an incentive to various other virtues, for we find him paying 5s. to Robin and Jack "for coming home sober;" 9s. to Tom and Jonathan "for saying their catechism;" 8s. to Jonathan and Will "for reading four Sunday nights;" 2s. 6d. "to the schoolers at Wickham," to encourage them in their studies, no doubt, and 5s. "to Katty for teaching Willy his prayers." One feels a shade of disappointment, however, in finding that on the same day that he makes this last payment he gives 11s. to his brother John "to play at cards." On the 21st of January, 1711, he pays "Betty" £1 1s. 6d. for looking after him "in the small-pox;" on the 27th of the same month he pays 7s. 6d. to a barber for shaving his head; and on the 29th of March he buys a periwig for 19s. Perhaps his illness had led him to serious meditations, for about this time he expends 8s. 6d. "for 3 Whole Dutys of Man," and at sacrament he contributes as much as 10s. for himself and 10s. for his wife, to whom he always refers as "my dear." The following are but a few out of many hundreds of similar entries:

1710.		£	s.	d.
June 18.	Given to lame soldiers.....	0	2	0
	21. Given to our tenant's servants.....	0	9	0
July	6. To my dear and myself.....	2	3	6
	12. Given a poor woman.....	0	0	6
	Given Mr. Winterton's maid for ye use of ye cradle.....	0	5	0
	Given old Elston's maid and 2 men.....	0	10	0
	13. Given Goody Top.....	0	2	6
	Given her mother.....	0	2	6
	Given ye poor people.....	0	2	6

* It is not unlikely that the cook was a male, since the record affords no positive evidence to the contrary.

		£	s.	d.
1710.				
July 17.	Given ye ringers at Blakewell.....	1	1	6
19.	Given Mrs. Buxton's maid.....	0	5	0
21.	Given at Chatsworth, for seeing ye house.....	0	6	0
26.	Given to see ye gardens at Chats.....	0	7	6
Aug. 26.	Given Robert Stayley, the fidler.....	0	2	6
6th.	Given at ye sacrament.....	0	5	0
7th.	Given a woman as brought a pig.....	0	2	6
13th.	Given nurse and James for being blooded.....	0	2	0
15th.	Given Betry for dressing ye dinner.....	0	2	6
	Given Robin for breaking ye horse.....	0	2	6
23rd.	Given Shepard, ye fidler, and a poor man.....	0	3	0
25th.	Given Jonathan for reading.....	0	0	6
29th.	Given to Parson Firm.....	0	10	0
Sept. 8th.	Given to 10 girls as brought a cheese.....	0	4	0
22nd.	Given ye ringers at Wirksworth.....	0	10	0
25th.	Given to ye servants at Hopton.....	3	8	3
	Given more to ye servants.....	0	2	6
Oct. 11th.	Given to a maid as brought a pr. of stockings.....	0	2	0
14th.	Given Annie Twigg for dear little Wm.....	0	5	0
30th.	Lost at shuffleboard, and given Jack and Tom.....	0	4	0
Nov. 10th.	Given Wm. Bassford for going to Derby, and Jn. Cope for putting out his shoulder.....	0	10	0
1711.				
Jan'y 21st.	Given to Betty for looking after me in the small-pox.....	01	01	06
	Brother Frank's allowance for Oct. last, and Dr. and apothecary money.....	17	04	06
Feb. 27th.	Paid ye barber for shaving my head.....	07	06	
6th.	Paid James, for to buy mourning and liverys and hatts and breeches.....	40	00	00
8th.	Paid Mrs. Cheveley for to buy mourning for me.....	25	00	00
12th.	Paid for 2 blunder busses.....	2	00	00
	Paid Frank Fisher for 2 woodco.....	02	00	
21st.	Paid for a suit of cloathes for my dear.....	3	15	00
	Paid for a hatt and lace.....	1	00	00
25th.	Paid Lovetock, for making my dear's cloaths.....	1	09	09
Mar. 3d.	Paid for 2 turkeys of T. Butcher.....	05	00	
8th.	To Dr. Cook for dear little Willm.....	*2	03	00
12th.	Paid for 2 wigs.....	1	12	00
15th.	Given nurse for looking after dr. Willy when he had ye small-pox.....	1	1	6
18th.	Given James for buying my horse.....	1	1	6
	Paid for ye horse.....	10	0	0
	Given ye cook for saving ye snet.....	2	6	
	Paid Wm. Whitehorn for a s'doy of beef.....	5	0	
26th.	Paid my sister Carter part of her money, so yt ye interest must not go on.....	50	0	0
27th.	Paid for ye Queen's tax for Benham.....	13	4	
	Paid for 3 Whole Duty's of Man.....	8	6	
	Given Robin for selling ye horse.....	2	6	
29th.	Paid for a perrywig.....	19	0	
Apr. 1st.	Paid for a hatt for little Willy, and for letters.....	8	00	
	Given Mr. Packer's man for a dog.....	5	00	
2d.	Paid John Newton for ye poor's rate to Easter.....	3	4	00
10th.	Given Johnathan for coming home sober.....	0	1	00
12th.	Paid for Cambden's Brittain.....	2	10	00
16.	Paid Edward Young for ye window tax.....	1	5	00
	Given to ye schoolars at Wickham.....	2	06	
	Paid Jn. Webb ye Queen's tax and gaol money.....	8	9	03
	Paid Mr. White for measuring land.....	1	0	03
22d.	Given Robin for bringing the writtings safe.....	5	00	
May 19th.	Given Jn. Cox for cowenubers.....	2	06	
20th.	Paid Mr. Web for 16 gossens.....	1	4	00
	Paid Mr. Lyte for ye 2 guns.....	6	6	08
23d.	Paid ye women for picking stones.....	1	06	
31st.	Paid Robin for letters and bath waters.....	4	00	
June 8th.	Given ye cooper's wife for sitting up with Tom.....	5	00	
11th.	Given Robin and Jack for coming home sober from my cousin Packer's.....	5	00	

* The superfluous cyphers, which appear in the original, are omitted in subsequent, as some have been in preceding, entries.

1711.				
June 11th.	Gi			
13.	Pa			
24.	Gi			
July 11th.	Pa			
12.	Pa			
18th.	Gi			
	Gi			
	Pa			
	Pa			
23.	Pa			
30.	To			
Aug. 9th.	Pa			
	Pa			
16.	Pa			
23.	Pa			
Sept. 6.	Los			
	Gi			
23.	Gi			
25.	Pa			
Oct. 12.	Gi			
28.	Gi			
Nov. 5.	Gi			
	Gi			
1711.				
8th.	Pa			
23.	Pa			
	Pa			
	Pa			
26.	Pa			
	Pa			
28.	Pa			
Dec. 4.	Gi			
8th.	Pa			
15th.	Gi			
	Gi			
18th.	Pa			
19.	Pa			
20th.	Gi			
	Gi			
23d.	Pa			
	Pa			
	Gi			
26.	Pa			
	of			
	Gi			

Below are gi
of the Halliwell

Bread and beere...
Wine and oranges...
A neck and breast...
A breast of veale...
A shoulder of mutton...
Six chickens...
Sparrow grass...
Pheasant eggs...
Fyre...

To servants...
BLACK BOY, CHIEF

£	s.	d.		£	s.	d.
1	1	6	1711.			
0	5	0	June 11th.	Given James for disappointing him when Jack was to go away...	10	0
0	6	0	13.	Paid for 2 barrels of gunpowder.	1	1
0	7	6	24.	Given Frank Adams for strawberries.	2	0
0	2	6		Given Tom and Jonathan for saying their catechism.	9	0
0	5	0	July 11th.	Paid for mucking my br. John's shirts.	6	0
0	2	6	12.	Paid Robin for going down with Strowd to be cured of ye farey.	4	0
0	2	0		Paid for collyflower.	6	0
0	2	6	18th.	Given where wee dined.	10	0
0	2	6		Given at Queen's Colledge.	2	0
0	3	0		Paid for lacing ye men's hats.	5	6
0	0	6		Paid for ye lace and buttons.	19	6
0	10	0	23.	Given my br. John what he lost at cards.	11	0
0	4	0	30.	Paid Mrs. Webb for 6 ducks.	2	6
0	10	0		To the surgeon for letting me blood.	10	9
3	8	3		Paid for a chair for little Willy.	6	6
0	2	6	Aug. 9th.	Paid for a sissors case and penknife.	1	7
0	2	0		Paid for a purse and a pair of buckles.	1	16
0	5	0	16.	Paid for silver buttons for my dear's frock.	1	12
0	4	0	28.	Paid for 2 pair of stays.	17	12
0	10	0		Paid for 3 seals.	10	0
1	01	06	Sept. 6.	Lost at cards and given Jack.	7	6
7	04	06		Given Mr. Dimsdale's man for 2 hares.	4	0
07	06		23.	Given James for an apron, and to learn to do up napkins.	15	0
00	00		25.	Paid Mary Young for four geese.	10	0
00	00		Oct. 12.	Given Jonathan and Will for reading four Sunday nights.	8	0
00	00		28.	Given ye cook for the parson's supping here twice.	5	0
00	00		Nov. 5.	Given Humphrey Fisher, now he is ill of the small-pox.	10	0
00	00			Given Jonathan and Will for reading.	2	0
00	00		1711.			
00	00		8th.	Paid Dr. Cook to return up to London.	100	0
00	00		23.	Paid Robin for the cloaths yt. were Jack's.	5	0
00	00			Paid for 4 aprons for Betty Mills.	9	0
00	00			Paid Robin for a razor.	3	0
00	00		26.	Paid a plumber for a pump to our house.	2	4
00	00			Paid James for his old leather breeches for Jonathan.	10	0
00	00		28.	Paid for a bottle of cinnamon water.	14	6
00	00		Dec. 4.	Given Tom to buy him spurs and a whip.	2	6
00	00		8th.	Paid Richard Kimber for mending odd things.	2	0
00	00		15th.	Given Katty for teaching Willy his prayers.	5	0
00	00			Given my br. Ju. to play at cards.	11	0
00	00		18th.	Paid the man as brought ye child's stays from London.	1	0
00	00		19.	Paid for bricks to do the washing with.	10	0
00	00		20th.	Given the carrier's man for his Xmas-box.	5	0
00	00			Given the cook for dressing 2 diners when the tenants paid their rent at Coopersale.	5	0
00	00		23d.	Paid for 4 bottles of wine.	19	0
00	00			Paid for pipes and tobacco.	1	6
00	00			Given at ye sacrament, my dear and myself.	1	0
00	00		26.	Paid Mr. Pool two small bills he has brought in twice—the carrier of Eping is one, and I don't know ye other.	18	0
00	00			Given old Sole's prentice for his Christmas-box.	5	0

Below are given a number of miscellaneous accounts forming a part of the Halliwell collection:

A tavern bill, 1675.

	£	s.	d.
Bread and beer.	16	4	
Wine and oranges	15	4	
A neck and breast of mutton and broth.	5	0	
A breast of veale	4	0	
A shoulder of mutton and sallot.	3	6	
Six chickens	7	6	
Sparrow grasse	2	0	
Pocht eggs	1	0	
Fyre	2	0	

To servts.	£2	16	8
BLACK BOY, CHELMSFORD, May 15th, 1675.		5	0

Mr. John Moore's bill—1676.

	£	s.	d.
Ye 26th of December.			
Owinge for lodgings.....	16	0	
For a sroude.....	10	0	
For a necke of mutton and all other things.....	7	8	
For flaggetts.....	1	0	
For a barrall of call.....	1	4	0
For a pound of tobaccoc and pipes.....	2	6	
For moer drink.....	2	6	
For ye woman searchers.....	1	6	
For links.....	3	0	
Ye porter.....	1	0	
For call and beer and bred and posset drink in ye tiew of his siknes.....	8	0	
For ye man that lookt after him in his siknes.....	5	0	
Ye washerwoman.....	1	2	
Ye sum tis.....	4	3	4
The clark's fees.....	19	0	
Total	5	2	4

Disbursements—1675.

	£	s.	d.
Aug. 10th. Paid unto John Swallow for mending 2 suites of clothes of my master's.....	2	8	
17. Given unto Thomas Jackson by my master's order flor tobacco pipes.....	1	2	
21st. Paid unto Mr. Boniface, the barber, for trimming my nr.....	1	6	
25th. Paid for a quarter of a pound of tobacco.....	9		
27th. Paid for mending my master's go'sshoe.....	2		
Sept. 11. For a letter by the post unto Valentine Broughton.....	3		
For clemme tobacco-pipes.....	2		
Oct. 11th. Paid John Swallow for mending my master's wastecoate and doublett.....	6		
11. For a Gazette.....	1		
For 2 pounds of candles.....	11		
Paid for a bottle of scurvy grasse.....	3		
Disburs'd in the whole	0	17	10

Bps. Storford—Feb. ye 1st, 1675.

	£	s.	d.
1 horse 6 nights' hay.....	4	0	
15 bushell of oats.....	2	0	0
One bushell 3 pecks of beens.....	7	0	
Half a bushell of maunt.....	1	4	

Bott off Judith Gresham—No. ye 9, 1706.

	£	s.	d.
1 pair of shamey gloves.....	3	6	
5 yds. half off fine plain muslin, at 9sh.....	2	9	6
1 white gause handkercheiff.....	3	6	
1 black flann with India sticks.....	4	6	
2 yds. and half off lustring flor a hood, 7sh.....	17	6	
1 broad crape hood.....	11	6	
1 black girde.....	1	4	
1 black florbelo apron.....	15	6	
2 white koles and 3 wiers.....	2	6	
Making 5 suits of night cloths.....	7	6	
Making 3 pair of double ruffles.....	3	0	
Making 3 long tuckers.....	2	6	
1 white sarsnet hood.....	10	6	
2 yds. of ribin flor ye apron.....	6		
5 yds. and quarter off muslin flor 2 heacs, and 7 pr. of ruffles.....	1	14	0
Starching the 5 yds. off muslin.....	2	6	
2 yds. 3 quarters off fine lawn.....	1	19	0
4 yds. and half off fine cambrick for a cornet sute.....	3	3	0
4 yds. off muslin flor 2 aprons.....	1	14	0
Starching ye muslin.....	2	0	

Making ye apron
3 yds. half off c
1 white silk gir
1 blue stick flar
6 yds. off white
6 yds. off fine p
6 yds. off plain p
4 yds. off lace fl
1 yd. and quarte

March 6th. Pa
19th. Pa
27th. Pd
28th. Vir
25th. For
For

April 4th. Pai
14th. Pai
19th. Pai
23d. Pai
21th. Pai
25th. Pai

May 13th. For
24th. Pai

June 2d. Pai
July 5th. Pai

Paid
12th. Paid
15. Paid
Paid
Paid
15. Paid
Paid

Bought of James

1 pair of fine Chin
1 pair of blew Chi
4 China chocelet e
2 ditto chocelet cu
4 small china bottl
1 china teapot....
3 pair bottles and
12 delf saucers ...

1 pair small bottles
9 faulty chocelet at

Agreed to a bolt [a]

Due to me upon the
Deer, 31st. For a lar
For ride
For 3 sh
For dsh
For 2 tur

	£	s.	d.
Making ye aprons	£	s.	d.
3 yds. half ell off white Spanish	0	8	6
1 white silk girdle	4	9	
1 fine stick flau with gauze	1	4	
6 yds. off white and silver ribb	16	0	
6 yds. off fine plain ground lace, at 4 ^{sh}	1	13	0
6 yds. off plain ground flou night cloths, at 2 ^{sh}	13	4	0
4 yds. off lace flou ruffles, at 1 ^{sh}	8	8	0
1 yd. and quarter off fine lace flou ye bosome	3	7	6
	17	6	

Laid out for Madam Archer—1711.

	£	s.	d.
March 6th. Paid for six bottles of Hungary water	0	7	6
19th. Paid for 2 yds. 3 qrs. of plain muslin, at 8s. ye yd.	1	2	0
27th. Pd. for 3 qrs. and 1 of one striped muslin	1	5	3
28th. Virginia tobacco, 12 pd. and a box	1	10	4
25th. For making 2 headed night heads	4	0	
For making 2 day heads, single laps	3	4	
For making 6 headed tuckers	1	6	
April 4th. Paid for a past bord box	5	6	
11th. Paid for 8 o. and qr. of clowded wosted, at 8d. ye ounce ..	3	8	
19th. Paid for a cheese of 12 pd. back 6 oz.	16	0	
23d. Paid for a pr. of pumps	6	0	
24th. Paid for 2 yds. of white sateen for a hood	7	0	
25th. Paid for 2 pr. of shummy gloves	6	8	
For 5 pr. of black leather gloves	1	0	
May 13th. For 1,000 of ye best stuff pins	3	0	
24th. Paid for a dozen of oranges	2	6	
For a doz. of lemons	3	6	
June 2d. Paid for a pr. of ereinges	1	4	0
July 5th. Paid for a pr. of Bohe tea	6	6	
For a yd. of best black lute string	1	0	
12th. Paid for 2 new glasses for ye spectacles	1	0	
15. Paid for 300 of wallnuts to pickell	1	0	
For ye basket woman for bringing ym home	1	6	
For ye Christian Hero	1	6	
15. Paid for boyling ye silver buttons	2	0	
For drying ye night gowne lying			

Sir John Newton's bill—1701.

Bought of James Lund and Lluellin Aspley, at the Crane in the Poultry, March 29, 1701.

	£	s.	d.
1 pair of fine China jars, painted with gold	1	6	0
1 pair of blew China Routwaggons	1	8	0
4 China chocelet cups and 4 saucers, in colors	13	4	
2 ditto chocelet cups and 2 two saucers	8	0	
4 small china bottles	3	0	
1 china teapot	3	0	
3 pair bottles and 3 faulty cups	2	6	
12 delf saucers	4	0	
1 pair small bottles with gold	4	7	10
9 faulty chocelet and tea cups, in colors	3	0	

Agreed to a bolt [abate] for the upper porell

A poulterer's bill,

	£	s.	d.
Due to me upon the ballance	13	10	
Decr. 31st. For a lamb and pluck	8	0	
For 1 lb of veal and head, at 2 ^d p. pound	8	9	
For 3 shell ducks and 2 widgions	2	10	
For dish fish	5	0	
For 2 turkeys	4	6	

	£	s.	d.
For 8 geese.....	0	16	0
For 200 hundr. oysters.....		4	0
For a curlew.....			9
Jan. 1st. For a turkey.....		2	6
For 6 pell. butter.....		2	6
For eggs.....		2	6
Paid for hire of a large tray.....		1	0
Paid for looking after yo bacon.....		2	0
4th. For 2 ducks and a teal.....		1	11
6th. For a dish fish.....		6	3
For mustard seed.....		2	0
For 4 pullets.....		2	8
8th. For 2 teal.....		4	0
	£4	16	0

Christmas boxes, 1711.

Reed. 16 06.

	s.	d.
December 26th. Watchman, warts, turncock, and brewer's men, each.....	2	6
Dustman.....	2	0
3 baker's men, coachmaker's man, newswoman, cornehandler's man, the post, gardner's man, and clerk, each.....	1	0
Chimney-sweeper.....		6
Butcher's man, saddler's man, taylor's boys, locksmith's men, farmer's man, foreign postman, and Mr. Gover's son, each.....	1	0
	14	0

Work dun for Mrs. Ann Pegg Oct. ye 10th, 1706.

	£	s.	d.
Washing a suite of night-cloas and ruffles.....	0	0	5
Washing two heads, 6d.; one sheet of pines, 4d.....	0	0	10
Quarter and $\frac{1}{2}$ of boland for 2 pr. of mittins.....	0	1	8
3 yards $\frac{1}{2}$ of riben, 2d., to bind ym.....	0	0	10
Washing a suite of night-cloas.....		3	
2 yds. $\frac{1}{2}$ ell of scarlet edging, 6 yd. for her workt.....	1	3	$\frac{1}{2}$
A black silk apron 46; sawing silk, 2d.....	4	8	
$\frac{1}{2}$ of an ounce of thred, 2 $\frac{1}{2}$ needles, 2d.....		4	$\frac{1}{2}$
Washing and dresing her best lacet head and ruffles.....		10	
2 yds. $\frac{1}{2}$ of white riben, 13d. yd.....	4	3	$\frac{1}{2}$
A black and white fann, 14d.; a paper of patches.....	1	8	
$\frac{1}{2}$ ell of black riben, 3 powder.....		5	$\frac{1}{2}$
4 yds. of yellow riben, 2d. yd.; 3 nailles of broad $\frac{1}{2}$		10	
3 halfe sheets of pines.....	1	0	
Washing and dresing a plane head and ruffles.....		8	
5 nailles of stript cambriek 10d. yd.....	3	1	$\frac{1}{2}$
Making, starching, and dresg. her night cloas.....	1	4	
Making and starching her ruffles, 6d.; tape, 1d.....		7	
2 yds. of black and white riben, 17d. yd.....	2	10	
Making one shift, one apron, and 3 tuckers.....		10	
yd. $\frac{1}{2}$ of muslin in an apron 46 yd.....	5	0	$\frac{1}{2}$
$\frac{1}{2}$ and $\frac{1}{2}$ of spotted cambriek for single ruffles.....	1	10	$\frac{1}{2}$
5 nailles of plane muslin for tuckers, and one pr. of ruffles.....	1	8	$\frac{1}{2}$
Holand tape for shifts, tuckers, and apron.....		4	
Washing and dresing 2 heads, 13d.; washing a suite of nitcloas, 3d.....	1	3	
Washing and dresing a head and 4 pr. of ruffles.....	1	2	
Washing 2 suites of night-cloas.....		6	
$\frac{1}{2}$ a sheet of pines 3d.; washing and dresing a head, 6d.....		9	
Washing a suite of night-cloas, 3d.; and $\frac{1}{2}$ pd. of powder.....		5	
Washing and dresing yr. best head and ruffles.....		10	
Washing and dresing a plane head, 6d.; one sheet of pines, 6d.....	1	0	
Washing her 2-stript night-cloas and ruffles.....		6	
Washing 2 suites of plane night-cloas, 6d.; thred 2 $\frac{1}{2}$		8	$\frac{1}{2}$
	2	4	11

The following
the kinds of goods
in London will
times have paid

Mem^m of the

Double damask
for women's wear
Russel damask
white, and a few
Black crapes,
Shalloones, son
ional coultors, and
Cressed serges,
Duffits of a good
Flannels sorted
must be fine, from
Welch and Ker
Some druggets
Some sad could
Low-prised cloth
Wide briches-
English and Du
Strond waters.
A course sort of
with the same flo
Ozenbrigg's wh
Plain muslins o
Shear muslins,
Striped muslins
Low prised boll
Hambro dowlas
A sortible pareo
Gold and silver
Silke gloves, bla
Bla. silke gauze.
Silke and thread
Mohair coats and
Broad and narrow
Broad and narrow
Ordinary writen
A sortint. of fast
all ye summer, wt
A parcel of the l
23 of the former.
Hollands duck is
Cordage sorted a
Powder is worth
Ambros Crowley's
Seythes and sickle
Spanish iron, wor
Swedes, ditto, £3
Lead, in piggs, £
Lead, in barres, w
Shott, sorted, viz
worth upwards of 2
Grocery-ware, viz
Currant and figgs
Spice, sorted, viz
in small casks, worth
A parcel of hatts,
NOTE.—What goods
Londo.) 150 to 150
trially wanted when

The following "mem^o" may interest the merchants of Boston, showing as it does the kinds of goods most in demand 168 years ago. The statement that "goods well bt. in London will fetch 110 to 150 p. c. advance" will cause regret that "ye good old times" have passed away:

Mem^o of the most staple goods in general at Boston, in New Engl^d, ye 4th Sber, 1706.

Double damasks, mock, do., but few, if any, toys, and all other fashionable stuffs for women's wear.

Russel damasks, sort'd, viz, a few with red and white flowers, most of blue and white, and a few grave, modest coulers.

Black crapes, wch. cost abt. 40 or 45 apce.; most of the former.

Shalloons, sort'd, viz, blue, red, and lemo. colr., pretty fine, and other graver, fashional coulers, and some black.

Cressed serges, wch. cost abt. 35/apce., first cost.

Duffils of a good steel blue, and no other coulers.

Flannels sort'd, viz, some yellow, some blue and red, most white, and some of them must be fine, from 13 to 18 per yard, first cost.

Welch and Kendal cottons, blue, red, and a few white.

Some druggets of grave coulers.

Some sad could. serges, mixt. wth. blue and white, of 1½ yd. wide.

Low-pressed cloths, of a drab coulr., from 5 to 8 cost; most of the former.

Wide briches-ticking, with fine, narrow, bright-blue stripes; narrow, ditto.

English and Dutch checks, few of them high priced.

Strond waters, blue and red; most of the former; costs 2/6 or 3/4 pr. yd.

A course sort of caicoes, abt. ½ ell wide, flowd. with red and white flowers, and some with the same flowers of 1½ or yard wide.

Ozenbrigg's white and brownie.

Plain muslins of different finenesses, shaded, of 1½ yard wide.

Shear muslins, fit for headdresses and neckcloths.

Striped muslin, a few.

Low priced hollandes to sell here for abt. 3 to 5 an ell.

Hambro dowlas of different finenesses.

A sortable parcel of pinus packt. up by themselves in barrls. or trunks.

Gold and silver thread and twist.

Silke gloves, bla. and could.

Bla. silke gauze.

Silke and thread laces.

Mohair coats and breast buttons; halfe of the latter, and of each some black.

Broad and narrow gartering.

Broad and narrow alamode is still much wanted; ye last sold was at 12 per ell.

Ordinary writing-paper costs about 5 or 6 a reame.

A sortint. of fashionable flowd. silkes, from 4 to 6, or 2 a yard cost, will sell well all ye summer, wth. some good bla. flowd. silke amongst it.

A parcel of the best and largt. wool-cards, halfe thicks, blue, red, and sad coulers; 23 of the former.

Hollandes duck is worth here £7 to £7 10, more or less, as in goodness.

Cordage sort'd as pr. memo. 70 per c. here.

Powder is worth here £14 a barrl.

Ambros Crowley's nailes sort'd as hereafter mentioned.

Seythes and sickles of the best makers', good goods.

Spanish iron, worth here £40 per pr. tun.

Swedde, ditto, £31 to £35 per tun.

Lead, in piggs, £25 pr. tun.

Lead, in barrs, worth £26 to 27 pr. c.

Shott, sort'd, vizt, goose, one-halfe; ye other ½, duck, pigeon, and bird, is now scarce worth upwards of £50 pr. tun.

Grocery-ware, vizt, raisins, solis, new, and in half barrls, £5 10 pr. c. here.

Currant and figgs in ye caskes are imported in if possible.

Spice, sort'd, vizt, 100 lb. of nutmegs, 25 lb. of cloves, 6 lb. of mace, 5 cwt. of pepper in small caskes, worth here now 3 pper lb.

A parcel of hatts, sort'd, vizt, cits and castors, cloth or Carolina hatts.

NOTE.—What goods have no price affixt to them will fetch here (acing well bt. in London.) 140 to 150 p. advance, and more, if any perticulars happen to be extraordi-

inally wanted when they arrive.

THE ERA OF MACHINERY.

The inventions which distinguished the latter part of the eighteenth century inaugurated a new era in productive industry. The new devices for spinning, already referred to, were used at first in connection with water-power; but it was not long before the steam-engine was brought into requisition to give them increased efficiency and a wider sphere of operation. Once successfully applied to the moving of machinery, this great motor seemed to stimulate the inventive faculties of man to preternatural activity; and one labor-saving device was quickly followed by another, until a great proportion of all manufacturing industry, was largely performed by the aid of machinery.

This great change in the methods of production—a change which has progressed steadily from the latter part of the last century to the present time—was inaugurated in Great Britain, and it was there that the new system received its earliest and most signal development. Augmenting to a prodigious extent the aggregate product of labor,* it necessarily gave rise to a vast increase in the aggregate wealth of the community; and in this increase the working-classes have undoubtedly shared to a considerable extent, though in a degree not at all comparable to that in which the wealthier classes have been benefited. Indeed, each new application of machinery was a source of temporary inconvenience, or even of severe distress, to the particular class of workmen whose manual labor it superseded.

But the most important bearing of the new methods of production upon the relations between labor and capital and the condition of the working-classes grew out of the necessity which they created for associated industry, and for large establishments, carried on by accumulated capital. Nowhere is this more forcibly illustrated than in the manufacture of textile fabrics, which from time immemorial had been in an eminent degree a household industry. The language of Wordsworth—

"Maids at the wheel, the weaver at his loom,
Sat blithe and happy"—

would doubtless have answered almost equally well to describe an ancient Egyptian household in the era of the pyramids, or the occupations of an ordinary Lancashire family in the middle of the eighteenth century. Almost every farm-house and cottage in the manufacturing districts of England had its spinning-wheel,† which furnished in-door occupation for women and children, while the men were engaged in the labors of the field. The invention of the fly-shuttle in 1738 had very much increased the rapidity with which weaving could be done, and the business of spinning was thus stimulated to great activity, the earnings of spinners being unprecedentedly large. While the textile industries were in this condition Hargreaves invented the spinning jenny,‡ and Arkwright the spinning-frame, sometimes called the water-frame or throstle,§ and a few years later these were followed by a still more elaborate machine,|| in which the operations of both of them were combined. So great was the superiority of the new machines that the old-fashioned

* It is calculated in Kennedy's "Rise and Progress of the Cotton Trade" that, as early as 1815, one person, aided by machinery, could produce as much as two hundred cottage spinners could have produced in 1700.

† In many cases several.

‡ About 1764.

§ Patented in 1769.

|| The "mule," invented by Samuel Crompton in 1775.

wheel was quite as a household still held its place, the rapid increase in the just referred to and other out when these stages, with looms, ever, was one water or steam weavers, which spinning-machinery to the bunnies afford the work

The triumph in weaving, as to give place to man who had the housewife fireside, were in their places and their hours of the sound of it

The concentration of manufacturing by the high products. "Y a pound brought shillings. The were eagerly by the poor—of lo it must have been to the p these the man enormous profit had taken possession manufacturers summer a reason mean time vast capital thus man which enterprise from every side in conjunction added impetus produced its transformation

The comprehensive greatly facilitated present day. In question in its part that the new manufacturing and for tal." The full significance a little reflection used, is meant in

wheel was quickly banished from the field of competition, and spinning, as a household industry, was practically at an end. Weaving, however, still held its place, and was even stimulated to extraordinary activity by the rapid increase in the product of yarn which followed the inventions just referred to. In the manufacturing districts of Lancashire, barns and other out-buildings were quickly converted into loom-shops; and when these no longer sufficed to meet the new demand, weavers' cottages, with loom-shops attached, arose on every side. The era, however, was one of rapid change, and ere long the power-loom, worked by water or steam, began to compete with the hand-loom. The wages of weavers, which under the first impulse communicated by the new spinning-machinery had risen to an unusual height and attracted large numbers to the business, gradually sank to a pittance, scarcely sufficient to afford the workpeople the most wretched subsistence.

The triumph of machinery, however, had been only a question of time. In weaving, as in spinning, separate domestic industry was compelled to give place to collective industry in large establishments. The workman who had pursued the even tenor of his way at his own loom, and the housewife who had plied her busy task over the wheel at her own fireside, were compelled by the force of irresistible circumstances to take their places along with hundreds of others in "the mill," and to regulate their hours of labor, as well as their meals and their hours of rest, by the sound of its peremptory bell.

The concentration of capital, which was necessary to the prosecution of manufacturing industry under the new system, was greatly facilitated by the high prices which manufacturers at first obtained for their products. "Yarn of a quality which in 1815 was sold for three shillings a pound brought in the infancy of the manufacture as high as thirty shillings. The British milled muslins which, when first manufactured, were eagerly bought up by the rich at \$2.50 a yard, are now offered to the poor—of less durable quality, however—for six cents a yard."* So it must have been in many other industries, for the public were accustomed to the prices they had paid for the products of manual labor, and these the manufacturers could readily undersell, while retaining an enormous profit for themselves. It was not till machine-made goods had taken possession of the market that the competition between rival manufacturers brought prices down to a proper level and gave the consumer a reasonable share in the reduced cost of production. In the mean time vast fortunes had been rapidly accumulated, and to the new capital thus made available for manufacturing purposes was added that which enterprises yielding such magnificent pecuniary results attracted from every side. Thus the industrial revolution inaugurated by Watt, in conjunction with Hargreaves, Arkwright, and Crompton, gained added impetus with each year's progress, and with marvelous rapidity produced its transforming effects upon economic and social conditions.

The comprehension of the nature and effects of that revolution will greatly facilitate a correct understanding of the labor question of the present day. Indeed, it is out of that revolution mainly that the labor question in its present form has grown. It has already been remarked that the new methods of production created a necessity "for associated industry and for large establishments carried on by accumulated capital." The full significance of this fact may not at once be apparent, but a little reflection will make it so. By "accumulated capital," as just used, is meant masses of capital vastly in excess of the average posses-

* Autobiography of R. D. Owen, p. 13.

sions of individuals, even in the most prosperous communities—masses so large that the possession of one such mass by any individual implies, as its necessary counterpart, the comparative poverty of scores or even hundreds of others, and their dependence upon the one for employment.

When industry was carried on in small separate establishments, a steady and industrious workman might reasonably hope to accumulate the means of setting up in business for himself, and thus the workman of this year might next year be numbered among the employers. Theoretically this is so still, for it is a common boast in our own country, at least, that the avenues to wealth and the honors of official life are open to all. Circumstances, however, are sometimes stronger than the laws, and inexorably deny what the laws very freely permit. It is quite evident that the number of industries which may be prosecuted by separate individuals on a small scale, and which may be started with such an amount of capital as a working-man can save out of his wages, is now comparatively small, and that it is steadily diminishing as the sphere of machinery extends. One may still see the shoemaker's shop, with its modest array of tools and its little stock of leather, representing a total capital of a few hundred dollars, or even less; but the sphere of such shops is now comparatively limited, and the proportion of boots and shoes made by machinery in large factories is increasing year by year. In like manner one may still see the shop of the blacksmith, the wheelwright, the carpenter, and the cabinet-maker; but in all of these and in other trades, the amount of work executed in large establishments by the aid of machinery is immense, and is constantly augmenting.

It is hardly necessary to say that this is not referred to as a thing to be regretted. The vast increase in man's productive powers which machinery has brought with it is an incalculable blessing; it would not be wise, however, to close our eyes to the incidental evils—temporary in their character, it is to be hoped—by which this blessing is accompanied. The alarmists who imagined that machinery, by doing the work which had been done by human hands, would leave the hands without employment were not long in learning from experience and observation how groundless were their fears. What machinery has done is not, if we except occasional temporary consequences of its introduction, to deprive men of employment, but to change the conditions under which they work. Except in the co-operative enterprises, which within a few years past have been successfully carried out, its effect has been to divide all that large portion of society employed in connection with it into two distinct and, in respect to their circumstances, widely separated classes, the one consisting mainly of a few very rich employers, the other embracing a multitude of employes, who, if not absolutely very poor, are at least extremely poor in comparison with the members of the other class.

This wide contrast of conditions is probably one of the causes of the discontent of the working-classes; but the principal cause, both of this discontent and of their aggressive attitude toward capital, is to be found in the fact that to the great mass these conditions appear to be practically permanent. The journeyman mechanic who could see a prospect that within ten years he might himself become the owner of a shop was not disposed to feel or act unkindly toward a class of which he hoped so soon to become a member, viz, toward the employers; but to the operative the possession of a factory is a thing so remote from probability that it scarcely enters into his wildest dreams of future success. So it is in all the industries carried on in those great establish-

ments, against sphere, is each

It is thus that working-people of different class apart furnished the of interests, it has that combination try and greatly working-classes gave rise to an has been a mar improvement in ingmen. The l not connected v tively rare, and sickness or old ing share of the that the last-me of reconciling m pendence which reach of the mas associations of w ings those aggre tion of industry can do this and and business m operatives like a necessity.

But the consid unions and strike of the more num per of its deve measures to whic of Argyle, in Chap interesting facts a tem began under was made availa

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And now, for the fr under the working of The mill-owners colle of all ages. In very n for their accommodati tiring agency of mach factory system had no whole generation were ignorance, and of mor of Parliament with a turer, to whom the ne the elder Sir Robert P natural effects of the r the slow progress of ne

ments, against which the competition of little shops, in any extended sphere, is each year becoming more difficult.

It is thus that machine-labor has imparted to the great body of the working-people the cohesion and the common sentiments of a permanent class apart from the class of employers. But while it has thus furnished the occasion for their combination in defense of their common interests, it has at the same time contributed in another way to render that combination powerful and efficient. By creating gregarious industry and greatly extending the sphere of urban life, it afforded to the working-classes enlarged opportunities for mutual intercourse, and thus gave rise to an unwonted degree of intellectual activity. The result has been a marked increase in popular intelligence and a corresponding improvement in the methods and purposes of combination among workmen. The breaking of machinery and the "raffling" of workmen not connected with trades-unions are now happily becoming comparatively rare, and mutual benefit, such as relief out of society funds in sickness or old age, together with co-operation, is attracting an increasing share of the attention of the working-class. There is reason to hope that the last-mentioned form of combination may yet afford the means of reconciling machinery and associated labor with that personal independence which they at first seemed likely to place quite beyond the reach of the mass of workmen. By the union of many small sums, associations of workmen may succeed in forming out of their own earnings those aggregations of capital which are necessary to the prosecution of industry with the aid of the best modern appliances. If they can do this and also supply out of their own ranks efficient oversight and business management, the great capitalist, towering among his operatives like a mountain among hillocks, will cease to be an industrial necessity.

But the consideration of this subject, co-operation, as well as of trades-unions and strikes, must be postponed until something has been said of the more immediate effects of the factory system during the earlier period of its development, and of the public questions and legislative measures to which those effects gave rise. Upon these points the Duke of Argyle, in Chapter VII of his "Reign of Law," presents some highly-interesting facts and reflections. After observing that the factory system began under the old motive-power of water before the steam-engine was made available, he continues as follows:

Very soon the course of every mountain stream in Lancashire and Yorkshire was marked by factories. This again had another consequence. It was a necessity of the case that such factories must, generally, be situated at a distance from pre-existing populations, and, therefore, from a full supply of labor. Consequently they had to create communities for themselves. From this necessity, again, it arose that the earlier mills were worked under a system of apprenticeship. The due attendance of the requisite number of "hands" was secured by engagements which bound the laborer to his work for a definite period.

And now, for the first time, appeared some of the consequences of gregarious labor under the working of natural laws, and under no restrictions from positive institutions. The mill-owners collected, as apprentices, boys and girls, youths and men, and women, of all ages. In very many cases no provision adequate, or even decent, was provided for their accommodation. The hours of labor were excessive. The ceaseless and unrelaxing agency of machines kept no reckoning of the exhaustion of human nerves. The factory system had not been many years in operation when its effects were seen. A whole generation were growing up under conditions of physical degeneracy, of mental ignorance, and of moral corruption. The first public man to bring it under the notice of Parliament with a view to remedy, was, to his immortal honor, a master-mannufacturer, to whom the new industry had brought wealth, and power, and station. In 1802 the elder Sir Robert Peel was the first to introduce a bill to interfere by law with the natural effects of the unrestricted competition in human labor. It is characteristic of the slow progress of new ideas in the English mind, and of its strong instinct to adopt



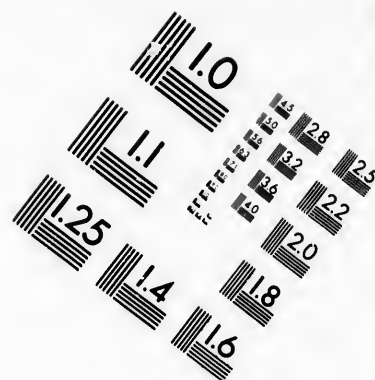
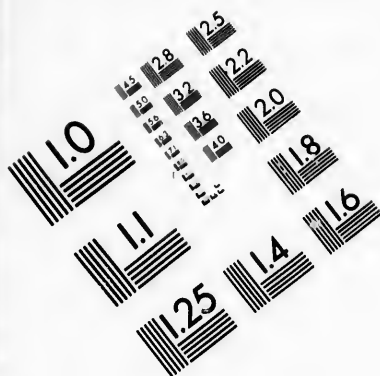
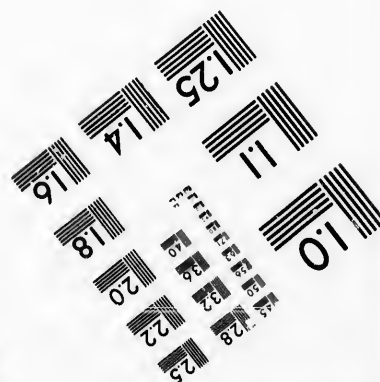
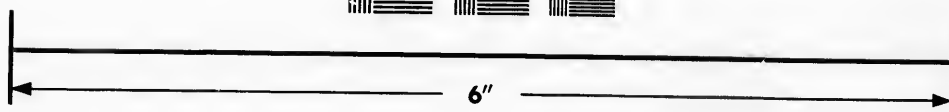
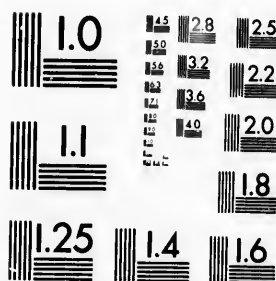


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no measure which does not stand in some clear relation to pre-existing laws, that Sir Robert Peel's bill was limited strictly to the regulation of the labor of apprentices. Children and young persons who were not apprentices, might be subject to the same evils, but for them no remedy was asked or provided. The notion was, that as apprentices were already under statutory provisions, and were subjects of a legal contract, it was permissible that their hours of labor should be regulated by positive enactment. But the Parliament which was familiar with restrictions on the products of labor, and with restrictions of monopoly on labor itself—which restrictions were for the purpose of securing supposed economic benefits—would not listen to any proposal to regulate "free" labor for the purpose of avoiding even the most frightful moral evils. These evils, however great they might be, were the result of "natural laws," and were incident to the personal freedom of employers and employed. In the case of apprentices, however, it was conceded that restrictions might be tolerated. And so, through this narrow door the first of the factory acts was passed. It is a history which illustrates, in the clearest light, the sense in which human conduct, both individually and collectively is determined by natural law. If Watt's steam-engine had been invented earlier—if mills had not been at first erected away from the centers of population, in order to follow the course of streams—if, consequently, the evils of the factory system had not begun to be observable in the labor of apprentices, there is no saying how much longer those evils might have been allowed to fester without even an assertion of the right to check them. The act of 1802,* though useless in every other sense, was invaluable at least in making this assertion.

Meanwhile Watt's great invention had been completed. And now a new cycle of events began. When the perfected steam-engine became applicable to mills, it was no longer always cheaper to erect them in rural districts; on the contrary, it was often cheaper to have them in the towns, near a full supply of labor and a cheap supply of fuel. With this change came the abandonment of the system of apprenticeship. It was now "free" labor which more and more supplied the mills. But this only led to the same evils in an aggravated form. Children and women were especially valuable in the work of mills. There were parts of the machinery which might be fed by almost infant "hands." The earnings of children became an irresistible temptation to the parents. They were sent to the factory at the earliest age, and they worked during the whole hours that the machinery was kept at work. The result of this system was soon apparent. In 1815, thirteen years after he had obtained the act of 1802, Sir Robert Peel came back to Parliament and told them that the former act had become useless; that mills were now generally worked not by water, but by steam; that apprentices had been given up, but that the same exhausting and demoralizing labor from which Parliament had intended to relieve apprentices was the lot of thousands and thousands of the children of the free poor. In the following year, 1816, pressing upon the House of Commons a new measure of restriction, he added that unless the legislature extended to these children the same protection which it had intended to afford to the apprentice class, it had come to this, that the great mechanical inventions which were the glory of the age would be a curse rather than a blessing to the country. These were strong words from a master-manufacturer, but they were not more strong than true.†

* 42 and 43 George III, cap. 73.

† Prominent among those who labored to bring these evils to the attention of Parliament and the country was Robert Owen, himself a wealthy and successful manufacturer, though more widely known at a later period for his extreme opinions on social questions. His son, in his recently published volume entitled "Threading My Way," gives the following account of his observations during a journey which he made with his father through England and Scotland in 1815 for the purpose of collecting evidence touching the condition of children employed in the cotton, woollen, linen, and silk factories of the kingdom:

"The facts we collected seemed to me terrible almost beyond belief. I ot in exceptional cases, but as a rule, we found children of ten years old worked regularly fourteen hours a day, with but half an hour's interval for the mid-day meal, which was eaten in the factory. In the fine-yarn cotton-mills, (producing from 120 to 300 hanks to the pound,) they were subjected to this labor in a temperature usually exceeding 75°; and in all the cotton-factories they breathed an atmosphere more or less injurious to the lungs because of the dust and minute cotton fibers that pervaded it.

"In some cases we found that greed of gain had impelled the mill-owners to still greater extremes of inhumanity, utterly disgraceful, indeed, to a civilized nation. Their mills were run fifteen, and, in exceptional cases, sixteen hours a day, with a single set of hands; and they did not scruple to employ children of both sexes from the age of eight. We actually found a considerable number under that age.

"It need not be said that such a system could not be maintained without corporal punishment. Most of the overseers openly carried stout leather thongs, and we frequently saw even the youngest children severely beaten.

Thus began the debate, how ends with the restrictive measures were against those who the total abundance compared with opposition, was lectual concept. Some of the abolitionist interest, which they called children as they played capacities of the had the best and against interference.

Now, in what to say, it was in the whole country there was another powerful motive, careful than other desire of gain, which were arising in his children were.

On the other hand, masters. The children, the eager for enterprise, which were arising in his children were.

Nor were the against any attempt of individual competition not tion. In Belgium along the new power would involve a be available when the whole mill; Outside of certain reduction of production of profit was would destroy the still free from such the working-class existing hours of must arise out of

"We sought out noting their narrow dreams. In some either cripples or times by brutal a years without se-

"When we exposed and daughters to fathers were out for lack of bread, abuse of the infant be formed human-

"In London, in dence he had collected factories of children employed at ten a to introduce this bill dragged through mutilated and cor-

* This was very the debate of Feb-

Thus began that great debate which in principle may be said to be not ended yet—the debate, how far it is legitimate or wise to positive institutions to interfere for moral ends with the freedom of the individual will. Cobbett denounced the opposition to restrictive measures as a contest of “mammon against mercy.” No doubt personal interests were strong in the forming of opinion, and some indignation was natural against those who seemed to regard the absolute neglect of a whole generation, and the total abandonment of them to the debasing effects of excessive toil, as nothing compared with the slightest check in the accumulations of the warehouse. But the opposition was not in the main due either to selfishness or indifference. False intellectual conceptions, false views, both of principle and of fact, were its real foundation. Some of the ablest men in Parliament, who were wholly unaffected by any bias of personal interest, declared that nothing would induce them to interfere with the labor which they called “free.” Had not the working-classes a right to employ their children as they pleased? Who were better able to judge than fathers and mothers of the capacities of their children? Why interfere for the protection of those who already had the best and most natural of all protections? Such were some of the arguments against interfering with free labor.

Now, in what sense was this labor free? It was free from legal compulsion; that is to say, it was free from that kind of compulsion which arises out of the public will of the whole community, imposed by authority upon the conduct of individuals. But there was another kind of force from which this labor was not free—the force of overpowering motive operating on the will of the laborers themselves. If one parent, more careful than others of the welfare of his children, and moved less exclusively by the desire of gain, withdrew his children at an earlier hour than others from factory-work, his children were liable to be dismissed and not employed at all.

On the other hand, motives hardly less powerful were in constant operation on the masters. The ceaseless, and increasing, and unrestricted competition among themselves, the eagerness with which human energies rush into new openings for capital, for enterprise, and for skill, made them, as a class, insensible to the frightful evils which were arising from that competition for the means of subsistence, which is the impelling motive of labor.

Nor were there wanting arguments, founded on the constancy of natural laws, against any attempt on the part of legislative authority to interfere with the “freedom” of individual will. The competition between the possessors of capital was a competition not confined to our own country. It was also an international competition. In Belgium, especially, and in other countries, there was the same rush along the new paths of industry. If the children's hours of labor were curtailed, it would involve of necessity a curtailment also of the adult labor, which would not be available when left alone. This would be a curtailment of the working-time of the whole mill; and this would involve a corresponding reduction of the produce. Outside of certain limits this is not by any means a necessary inference. No similar reduction of produce would arise in foreign mills. In competition with them the margin of profit was already small. The diminution of produce, from restricted labor, would destroy that margin. Capital would be driven to countries where labor was still free from such restrictions, and the result would be more fatal to the interests of the working-classes of the English towns than any of the results arising from the existing hours of work. All these consequences were represented as inevitable. They must arise out of the operation of invariable laws.

“We sought out the surgeons who were in the habit of attending these children, noting their names and the facts to which they testified. Their stories haunted my dreams. In some large factories from one-fourth to one-fifth of the children were either cripples or otherwise deformed, or permanently injured by excessive toil, sometimes by brutal abuse. The younger children seldom held out more than three or four years without severe illness, often ending in death.

“When we expressed surprise that parents should voluntarily condemn their sons and daughters to slavery so intolerable, the explanation seemed to be that many of the fathers were out of work themselves, and so were, in a measure, driven to the sacrifice for lack of bread; while others, imbruted by intemperance, saw with indifference an abuse of the infant faculties compared to which the infanticide of China may almost be termed humane.

“In London my father laid before several members of Parliament the mass of evidence he had collected, and a bill which he had prepared forbidding the employment in factories of child workers under twelve years of age, and fixing the hours they might be employed at ten a day. Finally he obtained from the elder Sir Robert Peel a promise to introduce this humane measure in the House of Commons. * * * The bill dragged through the house for four sessions, and when passed at last it was in a mutilated and comparatively valueless form.”

“This was very forcibly explained, both by Sir Robert and by his son, Mr. Peel, in the debate of February 23, 1818.

Such were the arguments, urged in every variety of form and supported by every kind of statistical detail, by which the first factory acts were vehemently opposed.

And, indeed, in looking back at the debates of that time we cannot fail to see that the reasoning of those who opposed restriction on free labor met with no adequate reply. Not only were the supporters of restriction hampered by a desire to keep their conclusions within the scope of a very limited measure; not only were they anxious to repudiate consequences which did legitimately follow from their own premises, but they were themselves really ignorant of the fundamental principles which were at issue in the strife. Their conclusions were arrived at through instincts of the heart. The pale faces of little children, stunted and outworn, carried them to their result across every difficulty of argument and in defiance of the alleged opposition of inevitable laws. And yet, if the supporters of the factory acts had only known it, all true abstract argument on the subject was their own. The conclusions to which they pointed were as true in the light of reason as they felt them to be true in the light of conscience.

The debate resulted in the passage of the act of 1819, (59 Geo. III, c. 63,) which, being the first measure restricting the labor of unapprenticed children, was, properly speaking, the first of the factory acts. This act, however, as well as one passed in 1825, remained practically a dead letter for want of adequate enforcing clauses, and it was not until the passage of Lord Ashley's bill in 1833, establishing a stringent system of government inspection, that any progress was made in mitigating the evils which the factory system had developed. Speaking of Manchester in 1832, Sir J. P. K. Shuttleworth says:

The population employed in the cotton factories rises at 5 o'clock in the morning works in the mills from 6 till 8, and returns home for half an hour or forty minutes to breakfast. This meal generally consists of tea or coffee, with a little bread. The tea is almost always of a bad, and sometimes of a deleterious quality. The operatives return to the mills and workshops until 12 o'clock, when an hour is allowed for dinner. Among those who obtain the lower rate of wages this meal generally consists of boiled potatoes. The mess of potatoes is put into one large dish, melted hard and butter are poured upon them, and a few pieces of fried fat bacon are sometimes mingled with them, and, but seldom, a little meat. Those who obtain better wages add a greater proportion of animal food to this meal at least three times in the week, but the quantity consumed by the laboring population is not great. The family sits around the table, and each rapidly appropriates his portion in a plate, or they will plunge their spoons into the dish, and with an animal eagerness satisfy the cravings of their appetites.

The population nourished on this aliment is crowded into one dense mass in cottages separated by narrow, unpaved and almost pestiferous streets, in an atmosphere loaded with smoke, and the exhalations of a large manufacturing city. The operatives are congregated into mills and workshops during twelve hours in the day, in an enervating, heated atmosphere, which is frequently loaded with dust or the filaments of cotton, or impure from constant respiration, or from other causes. They are drudges who watch the movements and assist the operations of a mighty material force, which toils with an energy ever unconscious of fatigue. The state of the streets powerfully affects the health of their inhabitants; sporadic cases of typhus chiefly appear in those which are narrow, ill-ventilated, unpaved, or which contain heaps of refuse or stagnant pools.

The following passages, referring to the same subject, are taken from a small volume on the Progress of the Working-Class, the joint production of Messrs. J. M. Ludlow and Lloyd Jones:

Let it be recollected that the evils of such a state of things pressed no less on the weak woman, the helpless child, than on the man. "From the whole of the evidence laid before us," say the commissioners of 1832, "we find first, that the children employed in all the principal branches of manufacture throughout the kingdom work during the same number of hours as the adults." "In some rare instances," they say elsewhere, "children begin to work in factories at five years old. It is not uncommon to find them there at six. Many are under seven, still more under eight; but the greatest number are under nine. From sheer fatigue, the poor creatures would go supperless to bed, be unable to take off their clothes at night, or to put them on in the morning. Pains in the limbs, back, loins, and side," say the commissioners, "are frequent. The frequency and severity of the pain uniformly bear a strict relation to the tender age of the child and the severity of the labor. Girls suffer from pain more commonly than boys, and

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up to a more advanced age." Again, "The effects of labor during such hours are in a great number of cases permanent deterioration of the physical constitution, the production of excessive fatigue, and the partial or entire exclusion (by reason of useful habits, or of profiting by those means when afforded."

"The deformities produced," says Mr. Robert Baker, one of the inspectors of factories, who, from 1828 to 1832, was, as a medical practitioner in Leeds, professionally engaged in the daily and nightly visitation of several factories, "consisted of in-lane, flat-foot, and curvature of the spine. The first of these deformities was familiarly known in the manufacturing districts as the 'factory leg.' There was scarcely a thoroughfare in any of them where they were not to be seen." Another gentleman whom he quotes, Mr. S. Smith, senior surgeon of the Leeds Infirmary, says: "In 1832 I had frequent occasion to pass through a district at noon, when the hands were leaving work for dinner. A large majority of them were pale, thin, emaciated, down-hearted looking creatures, showing no disposition to mirth and cheerfulness. At the proper age the hips were wide but sharp and angular, the shoulders pointed, the head not held up, but a considerable stoop."

That an education worthy of the name was impossible for a population under such conditions, results avowedly from the statements of the commissioners of 1832. Factory-workers were in those early days, for the most part, grossly ignorant. Even the fine spinners, who were the best paid, were only distinguished from the rest by their extravagant riotousness.

Ignorant themselves, what wonder if they cared little to educate their children, saw in them too often only instruments for money-making—means of self-indulgence. Hideous instances might be quoted from the blue-books of the driving of mere infants to the mill by their parents, simply that they might live in riotous idleness out of the fruit of their children's earnings. But the first great struggle of the factory-reformers was less for education than for its necessary condition—the relaxation of overtoil for the child—and hence the former subject appears only in a subordinate rank among the grievances detailed in the earlier reports. What, in fact, education must have been in 1832, appears thus best from such documents as the reports of the inspectors of factories from 1839 to 1843, when overwork was to some extent stopped, and the educational machinery of the factories acts was already in operation. Thus, in 1843, Mr. Leonard Horner was able to report that in an area of eight miles by four, comprising the large borough of Oldham and that of Ashton, for a population of 105,000, there was not, at the date of his then last quarterly report, one public day-school for the children of the humbler ranks.

What were the amusements of the masses thus overworked, ill-fed, ill-housed, left for the most part uneducated? Large numbers of working people attended fairs and wakes, at the latter of which jumping in sacks, climbing greased poles, grinning through horse-collars for tobacco, hunting pigs with soaped tails, were the choicest diversions. An almost general unchastity—the proofs of which are as abundant as they would be painful to adduce—prevailed among the women employed in factories, and generally throughout the lowest ranks of the working population. But drink was the main spring of enjoyment. When Saturday evening came, indulgences began, which continued till Sunday evening. Fiddles were to be heard on all sides, and limping men and pale-faced women thronged the public houses, and reeled and jiggered till they were turned, drunk, and riotous, into the streets at most unseasonable hours. On the Sunday morning the public houses were again thronged, that the thirst following the indulgence of the night might be quenched. When church hour approached, however, the church-wardens, with long staves tipped with silver, sallied forth, and, when possible, seized all the drunken and unkempt upon whom they could lay their hands, and these, being carefully lodged in a pew provided for them, were left there to enjoy the sermon, while their captors usually adjourned to some tavern near at hand for the purpose of rewarding themselves with a glass or two for the important services they had rendered to morality and religion. In fact, sullen, silent work, alternated with noisy, drunken riot, and Easter and Whitsuntide debauches, with an occasional outbreak during some favorite "wakes," rounded the whole life of the factory worker.

The ordinary artisan of the workshop at the same period is described as a far different man, having had more education in childhood, and more time for study after commencing a trade. Still, he was apt to be intemperate, and in the highest-priced trades many men only began their week on a Thursday. Nevertheless, there were many good influences to be found in the workshop. "There were grave men, who employed their leisure hours in reading or study; entomologists, florists,

botanists, students in chemistry and astronomy; men there were—politicians, dabblers in theology—who, when work was not actively on foot, kept the conversation among their fellows from sinking into inanity or vice, or who discouraged such practical joking as was mischievous or painful. But these men were exceptional, and sometimes, notwithstanding their studies, they were as fond of a glass as their most graceless neighbors.”

“Moreover, as invention after invention brought new trades into the factory system, as the war of competition raged fiercer and fiercer, the numbers of these outlying trades were becoming always fewer and weaker in the midst of the swelling mass of factory workers; and if the strenuous efforts of many of them tended to pull that mass up, its weight was, in turn, always tending to drag them down.”

But with the reform acts of 1832, and Lord Ashley's measure in regard to factories in 1833, there commenced an era of improvement. It would be interesting to trace the history of British legislation, in regard to labor and the laboring class, from that time to the present, but this would be too long a task. The following passage, however, from the work of Messrs Ludlow & Jones, already cited, will serve, without specifying particular laws or the dates of their passage, to give a good idea of the aggregate of legislative work in the interest of the class under consideration which was accomplished by the British Parliament between the years 1832 and 1867:

The reform acts of 1832 found the factory workers, under twenty-one, in the cotton trade, only protected from night-work between 8.30 p. m. and 5.30 a. m.; those under eighteen restricted to twelve hours' labor, or nine on Saturdays; children under nine forbidden to be employed. Eighteen hundred and sixty-seven sees the workers in all the leading branches of our textile industry, cotton, woolen, worsted, hemp, flax, tow, linen, silk, when worked under steam power, enjoying the reduced hours of ten and a half a day, with a Saturday half-holiday after 2 p. m. If children are allowed to work at eight years of age, provision is made for their education. Various other branches of industry, such as print-works, bleach and dye works, and lace factories, and processes connected with the protected manufactures, have been brought, with slight variations of detail, into the system; and finally, though by a measure which has not yet had time to produce any effects on a large scale, a number of other manufactures and employments; whilst an efficient system of inspection has been instituted to see the system carried out.

The reform acts of 1832 found our mines and collieries worked, in great measure, by women and children—those degraded, those crushed by the labor. Eighteen hundred and sixty-seven sees female underground labor absolutely prohibited, as well as boy labor unless educated, in coal or connected iron-stone mines, under ten; otherwise, both in these and in all other mines, under twelve; whilst here also a system of inspection is at work, powerfully aided by the independent action of the workers themselves.

To say nothing of chimney-sweeps and bakers, the reform acts of 1832 found our sailors almost without protection in purse, health, or safety. Eighteen hundred and sixty-seven finds a vast code in existence which endeavors to secure all three; and although palpably insufficient in many respects, (especially through the exclusion of the coasting trade from various of its provisions,) shows at least a vast advance in public consideration for the merchant seamen.

The legislation in force in 1832, allowed the working classes no banking facilities except through the pawnbroker or the private savings-bank, no legalized field of associative self-help but the friendly society; to which all federative expansion was denied. Eighteen hundred and sixty-seven finds the savings-bank system more efficient in itself, yet largely supplemented by the post-office savings-bank, which stakes the credit of the state on the safety of the poor man's deposit; finds the loan society, the benefit building society, the industrial or provident society, recognized and regulated by law, the large friendly societies with branches or harmless oaths or tests brought within its pale, the trade society struggling for recognition, and last, not least, the association of the worker to profits allowed without the risks of partnership.

In 1832, sanitary science, as distinct from curative medicine, may be said to have been unknown, and the only protection to life against other than personally injurious action, to have lain in the common law of nuisance, and the building acts of the metropolis, and of a few large towns; 1867 sees abroad a very flood of sanitary legislation. In every place large enough to maintain a local board, the right to pure air, pure

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water, safe and wholesome dwellings, sweet and well-ordered streets, and public spaces, is, in fact, recognized by law. Many special facilities and provisions have been enacted for the construction of dwellings for the poor classes, and providing them with open spaces for recreation.

In 1832, the right of the English citizen, as such, to education, was wholly ignored, the classes able to contribute somewhat themselves for the purpose, who frequent our National British, and other assisted schools; whilst district schools for the pauper child, certified industrial schools for the vagrant and disorderly, reformatory schools for the criminal, tend alike to convert the useless or the burdensome into useful members of society. The Mechanics' Institute of the earlier period has been able to develop itself and to obtain some legal protection. Legal facilities have been given for the establishment of free libraries, museums, and schools of art. The inventive powers of the working-class have been stimulated by the copyright of designs acts, by an amended patent-act, by the protection given to articles exhibited at industrial exhibitions.

Eighteen hundred and thirty-two knew only a newspaper-press shackled in a hundred ways, operating under the constant terror of the common informer, weighed down by stamp-duties, advertisement-duties, and paper-duties. Eighteen hundred and sixty-seven sees that press absolutely free from all imports, the stamp only remaining as the price of an optional privilege. Notwithstanding the initiation of commercial reform by Huskisson, the reform acts of 1832 left the whole trade of the country and the industry of the workman doubly fettered by a mischievous fiscal system which enhanced at once the cost of consumption and of production, taxed safety, cleanliness, providence, light; whilst leaving the income of the rich untouched. Eighteen hundred and sixty-seven sees every necessary of life, every element of production, either free or subject to moderate duties; the window-tax gone, with the soap, brick, and timber duties; the duty on fire insurance greatly reduced; property and incomes directly charged to the state.

In 1832, the post-office was a burden on communication; it is now the most beneficent civil institution in the country.

In 1832 the association of capital, except by special privilege, did not, so to speak, exist. In 1867 almost every form of commercial association is practicable, under the joint-stock companies acts. Limited liability has enabled the working-class to contribute their small capital to the increase of the productive power of the country, and, by a late act, has practically been extended from the company to private establishments. In 1832 the stamp duties threw the ordinary legal transactions of the workman, the expenses of justice, the enforcement of his legal claims, practically out of the pale of the law. The reduction of the former on the one hand, the establishment (or rather revival) of the county court on the other, have, by 1867, brought both within it. The compensation for accidents act has created a new civil right of especial importance to his class.

In 1832 the poor laws were pauperizing and degrading the whole country. In 1867, although the right to live is more fully than ever recognized, the growth of pauperism has at least been stopped, if the evil plant remains far still from being uprooted.

The above extract contains a general outline of British legislation in the interest of the working classes from 1832 to the beginning of 1867. The laws affecting workmen and their relations to their employers, which have been enacted since the latter date, may be noticed in somewhat greater detail. That which first claims attention is the measure known as the "factory acts extension act of 1867," which bears date August 15 of that year. This act extends the operation of the factory acts to several large and important industries not previously included within their scope. It provides that, in addition to the establishments defined as factories in previous acts, the meaning of that word shall be so extended as to include blast-furnaces, copper-mills, iron-mills, foundries, and also the following:

1. Any premises in which steam, water, or other mechanical power is used for moving machinery employed—
 - a. In the manufacture of machinery;
 - b. In the manufacture of any article of metal, not being machinery;
 - c. In the manufacture of India rubber or gutta-percha, or of articles made wholly or in part of either of these substances;
2. Any premises in which is carried on the manufacture of glass, paper, or tobacco, book or letter-press printing; and,

3. Any premises, whether adjoining or separate, in the same occupation, situate in the same city, town, parish, or place, and constituting one trade-establishment, in which fifty or more persons are employed in any manufacturing process.

Under the provisions of this act no child, young person, or woman may be employed in or about any factory on Sunday, subject to modifications as regards blast-furnaces. No boy under twelve years of age and no female may be employed in any part of a glass-factory in which the process of melting or annealing glass is carried on. No child under eleven years of age may be employed in grinding in the metal trades. In the manufacture of glass no child, young person, or woman may be allowed to take his or her meals in any part of the factory where the materials are mixed, or (in the manufacture of flint-glass) where the work of grinding, cutting, or polishing is carried on. The owner of an establishment may be required to provide a fan or other apparatus to ventilate his building and free it from dust, the inhalation of which would be injurious to the work-people. He is also required to put in proper condition any grindstone worked by steam or other mechanical power, which is so faultily fixed as to be likely to cause bodily injury to the grinder using the same, and a failure to comply with this requirement subjects him to the same penalties incurred by a failure to properly fence machinery under the factory act of 1844.

Her Majesty's principal secretaries of state are empowered to modify certain of the provisions of this act with regard to the necessities of particular trades.

Another act of the same date (August 15, 1867) authorizes Her Majesty, or one of her principal secretaries of state, to grant licenses for councils of conciliation or arbitration for the adjustment of differences between masters and workmen, when petitioned so to do by a certain number of the masters and workmen in any particular trade in any borough or place. Such councils must consist of a chairman and not less than two nor more than ten masters and workmen, to be elected by the masters and workmen respectively of the trade for which the council may be constituted. Such councils are empowered to settle disputes which otherwise would involve prosecutions and proceedings in court or before the magistrates, but not to fix rates of wages or hours of work.

The "agricultural gang's act" of August 20, 1867, was designed to remedy or mitigate certain well-known abuses connected with the hiring of women, young persons, and children, by contractors called "gang-masters," to be employed in agricultural work on lands not owned or occupied by the employer. It came into force on January 1, 1868, and applies to England only.

Under its provisions no child under eight years of age may be employed in an agricultural gang, females may not be employed in the same gang with males; nor may any female be employed under a male gang-master, unless a female licensed to act as "gang-master" is present with the gang.

No person is allowed to act as a gang-master unless he has obtained a license granted by two or more justices in divisional petty sessions on due proof that he is a person of good character and fit to be intrusted with the management of an agricultural gang. No license may be granted to any person who is licensed to sell beer, spirits, or any other excisable liquor.

The penalties under this act consist of fines and withdrawal of license, and all such penalties may be recovered summarily.

The "workshop regulation act" of August 21, 1867, came into opera-

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tion on January 1, 1868, and applies to the whole of the United Kingdom. It forbids the employment of any child under eight years old "in any handicraft," which word it defines as meaning "any manual labor, exercised by way of trade, or for purposes of gain, in or incidental to the making any article or part of an article, or * * * the altering, repairing, ornamenting, finishing, or otherwise adapting for sale, any article." It does not permit the employment of any child (person under thirteen years of age) in any handicraft more than six and a half hours in any one day, which hours must be between 6 a. m. and 8 p. m. No young person (person between thirteen and eighteen years of age) or woman (female of eighteen years or upward*) may be employed in any handicraft during any period of twenty-four hours more than twelve hours, out of which not less than one and a half hours must be allowed for meals, and the employment must take place between 5 a. m. and 9 p. m. No child, young person, or woman may be employed in any handicraft on Sunday, or after 2 p. m. on Saturday, except in establishments where not more than five persons are employed in making articles to be sold by retail on the premises, or in repairing articles of a like nature to those so sold.

No child under eleven years of age may be employed in grinding in the metal trades or in fustian cutting.

The willful infraction of the above provisions subjects an employer to a penalty not to exceed three pounds, and the parent or person deriving any direct benefit from the labor of the person employed to a penalty not to exceed twenty shillings.

In every workshop where grinding or other process is carried on, whereby dust is generated and inhaled by the workmen to an injurious extent, the local authority or the inspector of factories may require the owner of the workshop to provide, within a reasonable time, a fan or such other mechanical appliance as may, from time to time, be approved by one of Her Majesty's principal secretaries of state, for the purpose of mitigating the evil mentioned.

The enforcement of the above provisions is intrusted mainly to the local authorities, it being left to the option of the inspectors of factories whether or not to visit and inspect any workshop.

Every child employed in a workshop must attend a school, having a properly-qualified teacher, at least ten hours in each week that he is so employed, and no time spent at school on Sundays, or before 8 a. m., or after 6 p. m., or in excess of three hours at any one time or of five hours in any one day, may be counted as a part of the ten hours demanded by the act.

In connection with the legislation of 1867, "the masters and servants' act" of that year, requires notice, as one which has caused much dissatisfaction among workmen, whose principal objection to it is founded on the fourteenth section of the law, which makes breach of contract on the part of the workman a criminal act, whereas on the part of the employer it is only an offense against civil law. In presenting this matter to the consideration of the home secretary in November, 1873, Mr. George Howell, secretary of the Trades-Union Parliamentary Committee, referred to the provision in question as follows:

This is quite an exception in the law of contract, and does not apply to contracts of any other description. Whatever interest may be involved in any other breach of contract, it is not dealt with criminally; but, under this law, if a man commits a breach of contract, and the magistrate thinks there are some aggravating circumstances con-

* The definitions of "child," "young person," and "woman," are those adopted in this particular act.

needed with it, this man is liable at any moment to be dragged off to prison as a common felon for absenting himself from work. * * * The impossibility of applying the master and servants' act to breaches of contract committed by employers leads me to say, that, although this act was designed to be perfectly fair to both sides in its operation, it is not so, because it is impossible to prosecute employers. We admit that the act has had most beneficial results, and that the number of cases has diminished enormously since its enactment, for which we feel sincerely thankful; but we still think that the provision to which we object is not in accordance with the spirit of modern legislation, and that, if such a provision was ever necessary, it was only necessary when the people were less educated than they are now. If the law of contract be allowed to rest on its own basis, as a matter of equity between man and man, it may be trusted to accomplish all the purposes which justice requires.

An act "to provide better dwellings for artisans and laborers," which bears date July 31, 1863, was designed "to make provision for taking down or improving dwellings occupied by workmen and their families which are unfit for human habitation, and for the building and maintenance of better dwellings for such persons." It provides for the official inspection of such dwellings, and contains provisions to compel the owners of buildings so occupied to comply with its requirements.

The "wages attachment abolition act" of 1870 (July 14) provides that after its passage no order for the attachment of the wages of any servant, laborer, or workman shall be made by the judge of any court of record or inferior court.

A similar act "to limit wages arrestment in Scotland" is dated August 9, 1870. It provides that from and after January 1, 1871, the wages of all laborers, farm-servants, manufacturers, artificers, and work-people shall cease to be liable to arrestment for debts contracted subsequent to the passage of the act, unless such wages exceed twenty shillings per week, when the surplus over that amount may be arrested, but if the costs of such arrestment exceed the amount recovered they are not to be charged against the debtor.

The "factory and workshop act" of August 9, 1870, extends the definition of "factory" as enacted in the act of August 15, 1867, so as to make it include print-works, *i. e.*, works in which figures, patterns, or designs are printed upon any woven or felted fabric, (not being paper,) and bleaching and dyeing works, or "any premises, whether in the open air or not, in which the processes of bleaching, beetling, dyeing, calendering, finishing, hooking, lapping, and making up and picking any yarn or cloth of any material, or the dressing or finishing of lace, or any one or more of such processes, or any process incidental thereto, is carried on." To all such establishments the regulations of the act of August 15, 1867, in respect to factories as there defined, with certain modifications appended in a schedule, are extended.

An act dated May 25, 1871, exempts persons professing the Jewish religion from penalties incurred in respect of young persons and females professing the said religion working on Sundays, provided that the establishments in which such employment takes place are closed on Saturday up to sunset.

The trades-union act of June 29, 1871, provides that the purposes of any trades-union shall not, merely because they are in restraint of trade, be deemed to be unlawful, so as to render any member of such trades-union liable to criminal prosecution for conspiracy or otherwise, or to render void or voidable any agreement or trust. But nothing in this act shall enable any court to entertain any legal proceeding instituted with the object of directly enforcing or recovering damages for the breach of any of the following agreements:

1. Any agreement between the members of such union as to the conditions on which any members of such union shall or shall not sell their goods, transact business, employ, or be employed;

2. Any agreement between the members of a trades-union;
3. Any agreement between the members of a trades-union, in the rules or regulations of such union, to discharge or receive on a responsibility of the union money, registry, and alterations in such union, requires each accounts, including for each; apply under it, but a quarter session of a court of such combinations relations between workmen, or laborers, on the conditions on which they had not been employed, reason of some of the act in question.
4. Any agreement between the members of a trades-union, to receive on a responsibility of the union money, registry, and alterations in such union, requires each accounts, including for each; apply under it, but a quarter session of a court of such combinations relations between workmen, or laborers, on the conditions on which they had not been employed, reason of some of the act in question.
5. Any agreement between the members of a trades-union, to receive on a responsibility of the union money, registry, and alterations in such union, requires each accounts, including for each; apply under it, but a quarter session of a court of such combinations relations between workmen, or laborers, on the conditions on which they had not been employed, reason of some of the act in question.

The act further authorizes such unions to exceed one branch of a union in its territory, received on a responsibility of the union money, registry, and alterations in such union, requires each accounts, including for each; apply under it, but a quarter session of a court of such combinations relations between workmen, or laborers, on the conditions on which they had not been employed, reason of some of the act in question.

- Another act known as "the act to provide for the better regulation of the working-classes" is punishable with a fine not exceeding three months' imprisonment.
- (1) To use violence or to threaten the peace of the country.
 - (2) To threaten the peace of the country.
 - (3) To molest or view to coerce such a man, to quit his employment or work.
 - (4) Being a member of a trades-union or of a combination or of a conspiracy or of a temporary or permanent association.
 - (5) Being a member of a trades-union or of a combination or of a conspiracy or of a temporary or permanent association.

For the purpose of another person

- (1) If he persists in his conduct.
- (2) If he hides or deprives him of, or

2. Any agreement for the payment by any person of any subscription or penalty to a trades-union;
 3. Any agreement for the application of the funds of a trade-union—
 - a. To provide benefits to members, or
 - b. To furnish contributions to any employé or workman not a member of such trades-union, in consideration of such employé or workman acting in conformity with the rules or resolutions of such trades-union, or
 - c. To discharge any fine imposed upon any person by sentence of a court of justice; or
 4. Any agreement made between one trades-union and another; or
 5. Any bond to secure the performance of any of the above agreements.
- But none of the above agreements are to be deemed unlawful.

The act further makes provision for the registry of trades-unions, authorizes such unions to purchase or lease buildings and land, not to exceed one acre, (and for the purposes of this section makes every branch of a trades-union a distinct union;) vests the property of each union in its trustees, whom it makes responsible for moneys actually received on account of such union, and no further; prescribes the responsibility of the treasurer, and his punishment for withholding from the union money which he holds in trust for it; provides regulations for registry, and requires each union to place a copy of its rules and of any alterations in or amendments to the same in the hands of the registrar; requires each union to submit to the registrar an annual statement of its accounts, including the several objects of expenditure and the amount for each; applies the summary jurisdiction acts to all offenses committed under it, but under certain prescribed regulations allows an appeal to quarter sessions; provides that no interested person shall act as a member of a court of appeal, and defines the term "trades-union" as meaning such combination, whether temporary or permanent, for regulating the relations between workmen and masters, or between workmen and workmen, or between masters and masters, or for imposing restrictive conditions on the conduct of any trade or business, as would, if this act had not been passed, have been deemed an unlawful combination by reason of some one or more of its purposes being in restraint of trade. The act in question also repeals the trades-unions' funds acts of 1869.

Another act, bearing the same date as the last, (June 29, 1871,) and known as "the criminal law amendment act," has been, and still is, a source of much dissatisfaction and bitter complaint on the part of the working-classes of the United Kingdom. This act makes it an offense punishable with imprisonment, with or without hard labor, for not exceeding three months, to do any one of the following acts:

- (1) To use violence to any person or any property.
- (2) To threaten or intimidate any person in such a manner as would justify a justice of the peace in binding over the person so threatening or intimidating to keep the peace.
- (3) To molest or obstruct any person in the manner defined by this section, with a view to coerce such person—
 - (1) Being a master, to dismiss or cease to employ any workman; or, being a workman, to quit any employment, or to return work before it is finished;
 - (2) Being a master, not to offer, or, being a workman, not to accept, any employment or work;
 - (3) Being a master or workman, to belong to any temporary or permanent association or combination;
 - (4) Being a master or workman, to pay any fine or penalty imposed by any temporary or permanent association or combination;
 - (5) Being a master, to alter the mode of carrying on his business, or the number or description of any persons employed by him.

For the purposes of this act a person is deemed to molest or obstruct another person in any of the following cases:

- (1) If he persistently follow such person about from place to place.
- (2) If he hide any tools, clothes, or other property owned or used by such person, or deprive him of, or hinder him in, the use thereof.

(3) If he watch or beset the house or other place where such person resides, or works, or carries on business, or happens to be, or the approach to such house or place; or if, with two or more persons, he follow such person in a disorderly manner in or through any street or road.

It is provided that no one shall be punished for doing or conspiring to do any act merely on the ground that such act restrains or tends to restrain the free course of trade.

Offenses committed under this act are to be prosecuted under the summary-jurisdiction acts, appeals being allowed under certain defined conditions.

In an interview with the home secretary, in November, 1873, Mr. Howell referred to the criminal law amendment act, as follows:

We ask that the entire act may be repealed. It has caused heart-burnings on the part of the workmen such as no other law has. We feel, moreover, that none of the prosecutions under that act can justify its continuance. Most of them have been unjust and the punishments have been much more severe than the act itself warranted. We feel that if it be necessary really to provide some remedy against particular offenses, for instance, "rattening," this can be provided for in another act dealing with "malicious injury to property," and applying to the whole country; and violence to the person can also be provided against in another act dealing with "offenses against the person." The criminal law amendment act being a special act directed against workmen in unions, we feel that we have a right to ask the government to remove it. Even if it were just in its principles, it is so intricate and involved, and has been so variously interpreted, that none of us are safe.

An act dated August 16, 1871, and entitled "The industrial and provident societies act amendment," is designed to facilitate the erection of houses, cottages, or other buildings on land held by such societies, and gives them certain new powers to build, sell, lease, mortgage, &c.

The "factory and workshop act" of August 21, 1871, takes the duty of enforcing the workshop acts of 1867 to 1871 from the local authorities, and imposes it upon the inspectors and subinspectors of factories. It forbids the employment after January 1, 1872, of any female under sixteen years of age, or any child under ten years, in the manufacture of bricks and tiles, (other than ornamental tiles.) It requires that any accident causing loss of life to any one employed in a factory, and any accident produced by machinery, or by explosion, or escape of gas, or steam, or metal, if of such a nature as to prevent the person or persons injured by it from returning to their work in the factory within forty-eight hours after its occurrence, shall be made known to the proper authority. It provides that all offenses under the factory acts of 1833 to 1871, inclusive, may be prosecuted and the penalties therefor recovered summarily. In certain cases, where the nature of the business carried on in any class of factories or workshops is shown to depend on the weather or the season of the year, and where it is consequently necessary to employ young persons of fourteen years of age and upward and women at certain times of the year for a longer period than is allowed by the factory act's extension acts of 1864 and 1867, or the workshop-regulations act of 1867, one of Her Majesty's principal secretaries of state is authorized to make and publish certain defined exceptions to the provisions of the laws in question.

The act of August 6, 1872, "to make further provision for arbitration between masters and workmen," authorizes the appointment, by mutual agreement between masters and workmen, of an arbitrator or of arbitrators, and of an umpire to act in cases of disagreement between the arbitrators, for the settlement of disputes between masters and workmen. An agreement under this act is made mutually binding upon the master and the workman, upon the master or his agent giving a printed copy of the agreement to the workman, and the workman accepting the

same; provided that the agreement shall not be binding upon the master and workman until the expiration of forty days after the date of the agreement.

An agreement made between a master and workman, or service in a factory, or mutually agreed upon, shall not be binding upon the master and workman until the expiration of forty days after the date of the agreement.

The agreement shall not be binding upon the master and workman until the expiration of forty days after the date of the agreement.

The agreement shall not be binding upon the master and workman until the expiration of forty days after the date of the agreement.

Further provision is made for the taking of evidence in cases of disputes, &c.

The "coal-mining act" of August 21, 1871, takes the duty of enforcing the coal-mining acts of 1867 to 1871 from the local authorities, and imposes it upon the inspectors and subinspectors of coal-mines. It forbids the employment after January 1, 1872, of any female under sixteen years of age, or any child under ten years, in the manufacture of bricks and tiles, (other than ornamental tiles.) It requires that any accident causing loss of life to any one employed in a factory, and any accident produced by machinery, or by explosion, or escape of gas, or steam, or metal, if of such a nature as to prevent the person or persons injured by it from returning to their work in the factory within forty-eight hours after its occurrence, shall be made known to the proper authority. It provides that all offenses under the factory acts of 1833 to 1871, inclusive, may be prosecuted and the penalties therefor recovered summarily. In certain cases, where the nature of the business carried on in any class of factories or workshops is shown to depend on the weather or the season of the year, and where it is consequently necessary to employ young persons of fourteen years of age and upward and women at certain times of the year for a longer period than is allowed by the factory act's extension acts of 1864 and 1867, or the workshop-regulations act of 1867, one of Her Majesty's principal secretaries of state is authorized to make and publish certain defined exceptions to the provisions of the laws in question.

A boy of twenty years of age or upwards, who has completed his apprenticeship, shall not be employed in any mine for more than twenty hours in any one week; that as a part of the agreement, the master shall give to the workman a copy of the agreement, and the workman accepting the same.

Every boy of twenty years of age or upwards, who has completed his apprenticeship, shall not be employed in any mine for more than twenty hours in any one week; that as a part of the agreement, the master shall give to the workman a copy of the agreement, and the workman accepting the same.

same; provided that the workman may give notice to the master, within forty-eight hours after receiving a copy of the agreement, that he will not be bound by it; in which case the agreement, as between such master and such workman, is to be of no effect.

An agreement entered into between a master and a workman is to be binding upon each of them during the continuance of the contract or service in view of which it was made, and so long thereafter as they mutually consent to employ and serve without having rescinded it, or until the expiration of any notice (not to exceed six days) of an intention to cease employing or serving, where such notice has been made a part of the agreement.

The agreement may provide that the parties to it shall, during its continuance, be bound by any rules therein contained, or to be made by the arbitrators, arbitrator, or umpire, as to the rate of wages to be paid, the hours or quantities of work to be performed, or the conditions or regulations under which work is to be done, and may specify penalties to be enforced by the arbitrators, arbitrator, or umpire, for the breach of any such rule.

The agreement may also provide for referring to the arbitrator, arbitrators, or umpire certain disputes arising out of infractions of law, and upon his or their hearing and determining the same, no other proceeding can be taken before any other court or person for the same matter; but, if the disagreement or dispute is not so heard and determined within twenty-one days from the time when it arose, the jurisdiction of the arbitrators, arbitrator, or umpire ceases, unless the parties have consented in writing, since the disagreement or dispute arose, that it shall be exclusively determined by the arbitrators, &c.

Further provisions of the act relate to the procedure of the arbitrators, the taking of evidence, and the power to compel the attendance of witnesses, &c.

The "coal-mines regulation act" of August 10, 1872, applies to mines of stratified iron-stone, mines of shale, and mines of fire-clay, as well as to coal-mines. It prohibits the employment of any boy under ten years of age, or any woman or girl of any age, underground in such mines. It permits the employment of boys between ten and twelve years of age, when specially allowed by one of Her Majesty's secretaries of state in view of a necessity due to the thinness of the seams, but not for more than six days in a week, and not for more than six hours in a day, if employed more than three days per week; and in any case not more than ten hours in a day.

A boy of twelve years of age, or a "male young person" under the age of sixteen, may not be employed below ground, in any mine to which the act applies, for more than fifty-four hours in any one week, or more than ten hours in any one day.

Every boy of from ten to twelve years of age, allowed to be employed in mines as mentioned above, is required to attend school for at least twenty hours in every two weeks. Elaborate and stringent provisions are enacted to prevent the violation of this section or any evasion of either the letter or the spirit of the requirement. Thus the school-attendance must not be in the evening, or on Sunday, nor must it exceed three hours at any one time, or five hours in any one day, or twelve in any one week; that is, any time in excess of these periods will not be counted as a part of the twenty hours every two weeks required by the laws. The forging or counterfeiting of a certificate of school-attendance, or the use of a forged or counterfeit certificate, is made punishable with three months' imprisonment, with or without hard labor, and the neglect of

a parent to send his boy to school incurs a penalty not to exceed twenty shillings for each offense. There are other provisions intended to prevent the sending of a boy to an incompetent teacher, one of which is that the government inspector of mines for the district in which the boy is employed may declare a teacher disqualified to issue certificates, subject, however, to an appeal on the part of the teacher to the education department.

With respect to the employment of women, young persons, and children *above* ground in connection with such mines, it is provided that (1) no child under ten years of age shall be so employed, and every child so employed is subject to the regulations (as to hours of labor and school-attendance) mentioned above as applying to boys of from ten to twelve years of age. The regulations with respect to "male young persons" under sixteen years of age are applied to every woman and child employed *above* ground at the mines, and no woman, young person, or child may be so employed between the hours of 9 at night and 5 the following morning, or on Sunday, or after 2 p. m. on Saturday. The intervals for meals allowed to such persons must not be less than half an hour to each period of employment exceeding five hours, or less than one and one-half hours to every period of employment exceeding eight hours.

As a safeguard against accident, it is provided that the person in charge of any engine or apparatus used in going into or coming out of the mine shall be a male of at least eighteen years of age.

Wages must not in any case be paid to persons employed in or about a mine at any public house, or other place where spirituous or fermented liquors are kept for sale.

The act requires that in communication with every seam, with certain defined exceptions, in which persons are employed in mining, there shall be at least two shafts or outlets, separated by natural strata of not less than ten feet in breadth, communicating with each other by a passage at least four feet wide and three feet high, and each provided with proper apparatus for raising or lowering the persons employed in the mine.

Every mine coming under the provisions of this act, with certain specified exceptions, is required to be under the control and daily supervision of a properly qualified manager, (who may be the owner or agent of such mine, but must not be a contractor for getting the mineral in such mine, or a person in the employ of such contractor,) and such manager, though nominated by the owner or agent, must also be provided with a certificate of competency granted by a board of official examiners, and must be registered as having such certificate. A certificate of service, however, showing the requisite past experience in the management of a mine or mines is allowed as an equivalent for a certificate of competency granted under this act. A certificate of either class may be canceled if its holder, upon a proper inquiry, be convicted of incompetence or gross negligence.

Provision is made for the appointment of inspectors of mines, who must be free from certain specified disqualifications calculated to interfere with their disinterestedness, and who shall have the right to enter and inspect any mine to which the act applies, and to see that the act is complied with; and they must also notify the owner, agent, or manager of the mine of any cause of danger not provided against in the rules, but which they may discover in the course of their inspections.

Where the owner, agent, or manager of a mine is unwilling to comply with the requirements of the inspector in regard to a matter not pre-

scribed in selected by the manager of the mine to which that may be whose decision of the arbitration a practical mines.

The act of placing the mine in employment and sides of points touched by neglectful prisonment intended to requiremen-

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scribed in the act, the case is to be referred to two arbitrators, one to be selected by the inspector and the other by the owner, agent, or manager of the mine, and neither of them to be interested in the mine to which the arbitration relates. To settle any points of difference that may arise between them, the arbitrators are to select an umpire, whose decision on matters referred to him is to be final, as also is that of the arbitrators on the general case. Every arbitrator must either be a practical mining engineer or a person accustomed to the working of mines.

The act embodies a series of rules in relation to ventilation, the fencing of places (shafts, &c.) not in use, the withdrawal of workmen from the mine in case of danger, the use of safety-lamps and other lights, the employment of gunpowder in blasting, the securing of the shafts, roofs, and sides of a mine, the daily inspection of mines, and various other points touching upon the safety of the persons employed therein. Willful neglect of precautions necessary to safety incurs the penalty of imprisonment. A large part of the act consists of careful provisions, intended to secure its own enforcement and to prevent evasion of its requirements.

The "metalliferous mines regulation act," bearing the same date as the above, applies to all mines excluded from the operation of that law. Under the provisions of this act no boy under twelve years of age, and no girl or woman of any age, may be employed in any mine below ground. No boy of twelve years of age and under thirteen years, and no young person of from thirteen to sixteen years of age may be employed in a mine below ground for more than fifty-four hours in any one week, or more than ten hours in any one day. An interval of not less than eight hours must be allowed for rest between the period of employment on Friday and the period of employment on the following Saturday, and in other cases the interval between periods of employment must not be less than twelve hours, except in the case of boys and young male persons whose employment is at such a distance from their ordinary place of residence that they do not return there during the intervals of labor, and who are not employed more than forty hours in any week. In such cases an interval of eight hours must be allowed between each period of employment. The period of each employment is deemed to begin at the time of leaving the surface and to end at the time of returning to the surface. The regulations in regard to the payment of wages and precautions against accidents have a general similarity to those provided in the "coal-mines regulation act."

The last important act of the series known as "the factory acts" is that of July 30, 1874, entitled "An act to make better provision for improving the health of women, young persons, and children employed in manufactures, and the education of such children, and otherwise to amend the factory acts." This act, which came into operation on the 1st of January, 1875, provides that in every factory to which it applies, the period during which children, young persons, or women may be employed shall be either the period between 6 a. m. and 6 p. m. or the period between 7 a. m. and 7 p. m.

Where the period between 6 a. m. and 6 p. m. is adopted, a child, young person, or woman shall not be employed except between those hours, and shall not be employed continuously for more than four and a half hours without an interval of at least half an hour for a meal. Between the hours of 6 a. m. and 6 p. m. on every day except Saturday, two hours shall be allowed for meals, of which time at least one hour shall be before 3 p. m. On Saturday, a child, young person, or woman

shall not be employed in any manufacturing process after 1 p. m., or for any purpose whatever after 1½ p. m.; and if, on that day, the time allowed for meals be less than one hour, the time for quitting work shall be half an hour earlier than the hours just named.

The provisions in regard to factories in which the period of employment is from 7 a. m. to 7 p. m. are similar to those above, with such changes of time as are necessary in consequence of the difference in the hours for commencing and quitting work.

In factories to which this act applies, the children may be employed either in morning and afternoon sets, or, on alternate days, for the whole day. When the former plan is adopted, a child who, on any day except Saturday, is employed in the forenoon, shall not be employed after dinner on the same day; nor shall any child be employed on Saturday for two successive weeks, or in any week in which, on any other day, he has been employed more than five hours. Children so employed in factories must attend school, as directed by section 38 of the factory act of 1844.

When children are employed on alternate days, they may be employed during the same hours and with the same hours for meals as young persons and women, but must not be employed on two successive days, and must attend school as provided in section 31 of the factory act of 1844.

After January 1, 1876, in the case of factories to which this act applies, a person of the age of thirteen years and under fourteen years shall be deemed to be a child and not a "young person," unless he has obtained from the proper authorities a certificate of having attained such standard of efficiency in reading, writing, and arithmetic as may from time to time be prescribed. During the year 1875 a child may not be employed in a factory if he is under the age of nine years, and after the expiration of that year he may not be employed if he is under ten years of age. The three last provisions do not apply to persons who may be lawfully employed in factories before the time when they go into effect.

The enactment of the factory act of 1850, or any previous act, which authorized the employment of any child in the silk manufacture during longer hours than those authorized in the case of a child in any other factory to which this act applies, with certain exceptions during the first two years of its operation, are repealed.

Various provisions of a minor character, as well as those details which are intended to secure the enforcement of the act and to guard against the evasion of its requirements, are omitted.

Another act of the same date as the last, entitled the "hosiery manufacture and wages act," was directed against a custom which had prevailed among employers in the hosiery manufacture of letting out knitting-frames and machinery to the artificers employed by them and the deducting of rents for these frames from the wages of such artificers. The act provides, among other things, that all wages in the hosiery manufacture shall be made payable in net amounts, without any stoppages or deductions whatever, except for bad and disputed workmanship.

Another measure adopted during the same session of Parliament was the "workingmen's dwellings act" of August 7, 1874, which is intended to enable municipal corporations to grant or lease land belonging to them to parties binding themselves to erect thereon dwellings of the class to which the act applies. This act relates only to England and Wales.

Among the measures for which the British workingmen are now ask-

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ing, in addition to the repeal or modification of the two obnoxious laws above named, may be mentioned the amendment of the trades-union and conspiracy acts; the reconstruction of the small-penalties act on the principle that imprisonment should only be used as a means of enforcing payment after all other means have failed; the modification of the law in relation to summary jurisdiction and the qualification of magistrates and jurors respectively, including a reduction in the qualifications of the latter and payment for jury service; an alteration in the law so that workmen or their families may be able to sue employers in event of injury or death from accidents due to negligence; a further extension of the factory and workshop acts, an act to prevent truck, and an act for the protection of seamen's lives by preventing the sending of ill-found and unseaworthy vessels to sea.

TRADES-UNIONS IN THE UNITED KINGDOM.

The legislation of Great Britain for the regulation of factories, mines, and workshops, so far at least as it authorizes or forbids the employment of any person or prescribes the hours during which any person shall labor, has been confined, as has been seen in the foregoing summary, to the protection of "children, young persons, and women." The theory of the legislature has been that adult men were capable of making their own terms with their employers, and that there was, consequently, no occasion for the law to interfere with their agreements, further than to enforce such contracts as workman and employer might voluntarily enter into. Entering, upon these conditions, into the contest with capital, the workmen, in steadily increasing numbers, have sought to gain additional strength by combinations formed among the members of particular trades, and sometimes even by mutual support and assistance among the members of different trades. Such combinations have sometimes been temporary, having been formed for the accomplishment of special purposes, after the attainment of which, or the failure to attain them, they have ceased to exist as associations. But the most common form of combination in recent times, for trade purposes, has been the organization of those permanent societies generally known as trades-unions.

Combinations for trade purposes have, indeed, existed in Great Britain and elsewhere in Europe for many centuries; such, for example, as the medieval guilds and trades-companies. These, however, differed very widely from the modern trades-unions, the medieval trades-companies consisting both of employers and workmen, while the guilds were originally formed for the protection of life and property in an age when the state was less successful than at present in the performance of that duty. One of their purposes undoubtedly was to strengthen the urban populations at a time when feudal nobles were accustomed to levy tolls upon commerce and exact heavy contributions from the cities and towns. In the times of the Plantagenets the two great mercantile guilds of London and Bordeaux were co-extensive with their municipal corporations, and were sufficiently powerful to show considerable spirit and independence, even in their dealings with royalty itself. As the guilds increased in power, they became exclusive, and in some cases various classes of workmen were debarred from membership. One regulation required that a workingman should "purge himself by abstinence from work for at least a year and a day" before he could enter the sacred chamber of the guild. This sometimes led to the formation of separate associations of tradesmen in one town, which, however, was in some cases followed by a re-union into one guild, such as took place in 1284 at Berwick-on-Tweed.

the other, and which at the same time collected these laborers into large groups and brought them into constant association with each other, it was almost inevitable that such organizations should spring into existence. To the circumstances just mentioned must be added another which strongly contributed to the progress of association among working people. The new industrial methods had gathered them in vast numbers into the towns where manufactures were established, and where, being unable to cultivate a garden or to keep a cow, a pig, or a few chickens or geese, they were wholly dependent upon employment in their own particular industry; and when, through a collapse of trade, this industry failed to furnish them with work, they were liable to be reduced to a condition of pitiable helplessness and of deep distress. Accordingly many societies were organized for the purpose of mutual assistance and relief, and it was in such friendly purposes that many of the trades-unions had their origin. Indeed, mutual relief in sickness, accident, or lack of work, still forms an important feature among the objects to which a majority of the trades-unions are devoted.

Up to 1824, when the coalition act of 1800 was repealed, these associations were illegal, and such as existed were obliged to conduct their proceedings in secrecy. Since that time they have grown very rapidly, although even as late as 1871 the law prohibited them from taking any action calculated to interfere with the free course of trade—such, for instance, as interfering between their members and the employers in regard to rates of wages or hours of labor.

The following list comprises the names of the associations represented in the National Trades-Union Congress held at Liverpool in the latter part of January, (January 18 to 23, inclusive,) 1875, with the number of members in each:

Alliance Cabinet-Makers' Association	1,900
Altrincham Trades Council	450
Amalgamated Beamers, Twisters, Drawers' Society, Blackburn	900
Amalgamated Tailors	14,000
Amalgamated Boot and Shoe Makers	5,511
Amalgamated Wood-Turners, Sawyers, and Shuttle-Makers	1,100
Amalgamated Society of Engineers	44,000
Amalgamated Council of Woolen Operatives, Yorkshire	430
Amalgamated Association of Cotton-Spinners	14,200
Amalgamated Association of Miners	45,000
Amalgamated Society of Railway Servants	20,000
Amalgamated Iron and Steel Workers	20,000
Amalgamated Operative Bakers, Liverpool District	400
Amalgamated Society of Carpenters and Joiners	13,030
Amalgamated Trades Council of Bury	1,250
Birmingham Trades Council	9,000
Blackburn Card-Room Operatives' Association	1,200
Bolton Trades Council	2,000
Boiler-Makers and Iron-Shipbuilders	15,000
Brick and Tile Makers, North Stafford	150
British Plate-Spoon and Fork-Filers' Society	100
Bury Trades Council	1,250
Chester Trades Council	500
Crewe Trades Council	1,000
Dressers, Dyers, and Finishers	1,761
Dundee United Trades Council	8,000
Durham Colliery Mechanics	2,300
Durham County Colliery Engineers' Association	1,573
East Lancashire Power-Loom Weavers' Amalgamated Association	16,000
East London Operative Society of French Polishers	200
Edge-Tool and Wool-Shear Grinders' Society	254
Edinburgh United Trades Council	10,000
Executive Council Millers' Association	400
Federal Union of Agricultural Laborers	30,000
Filesmiths' Union of Sheffield	3,000

Fire-Iron Workers, Birmingham and District.....	250
Friendly Society of Operative Cabinet-Makers, &c., of Great Britain.....	1,950
General Alliance of Operative House Painters.....	5,000
General Union of Carpenters and Joiners.....	9,701
General Union of Basket, Skip, and Hamper Makers.....	700
General Union of Tin-Plate Workers.....	1,250
Glass-Bottle Makers, Yorkshire.....	1,000
Glasgow United Trades Council.....	140,000
Gravesend and Vicinity Trades Council.....	200
Hollow-ware Pressers, Potteries.....	700
Iron-Founders' Society of England, Ireland, and Wales.....	12,075
Kent Agricultural and General Laborers' Union.....	9,500
Leeds and District Trades Council.....	4,000
Leicester Section of National Amalgamated Union of Operative Riveters and Finishers.....	1,200
Leicester Trades Council.....	3,170
Lincoln Trades Council.....	500
Liverpool Brick-Makers' Society.....	400
Liverpool Operative Ship-Painters' Benefit Association.....	800
Liverpool No. 2 Branch Operative House-Painters.....	300
Liverpool and Vicinity United Trades Council.....	5,760
Liverpool Sail-Makers' Association.....	408
Liverpool Amalgamated Boot-Makers' Center Men's Men.....	180
Liverpool United Shipping Trades Council.....	2,610
Liverpool Coopers' Friendly Trade and Burial Society.....	400
Liverpool Shop Assistants' Union.....	620
Liverpool Rope-Makers.....	120
Liverpool Mast and Block Makers.....	152
Liverpool Tin-Plate Workers' Society.....	210
London Amalgamated Society of Tin-Plate Workers.....	500
London Consolidated Bookbinders.....	830
London Trades Council.....	13,731
Manchester and Salford Trades Council.....	10,000
Mersey Ship-Joiners' Association.....	500
Mersey Shipwrights' Association.....	1,020
Miners' National Association.....	140,000
National Agricultural Laborers' Union.....	60,000
National Amalgamated Union of Operative Boot and Shoe Riveters and Finishers.....	4,000
National Association of Nut and Bolt Makers.....	2,000
National Association of Operative Plasterers.....	3,300
National Flint-Glass Makers of Great Britain and Ireland.....	2,000
National Union of Working Women.....	300
National United Association of Rope and Twine Spinners of Great Britain and Ireland.....	1,600
Nottingham and Neighborhood Association of Organized Trades.....	3,000
Nottingham Amalgamated Society of Lace-Makers.....	2,500
North Stafford Engineers' Association.....	500
Oldham Amalgamated Trades Council.....	3,500
Oldham Operative Cotton-Spinners' Provincial Association.....	2,002
Operative Bricklayers' Society.....	3,750
Operative Bricklayers, Sheffield, Manchester Order.....	6,200
Operative Stone-Masons' Society.....	24,000
Provincial Typographical Association.....	3,800
Razor-Blade Grinders, Sheffield.....	200
Rotary Power Framework Knitters.....	650
Scissors-Grinders, Sheffield.....	206
Seamens' Protective Society, Liverpool.....	2,800
Sheffield File-Grinders.....	300
Sheffield Trades Council.....	4,000
Sheffield United Steel-Melters' Association.....	600
South Yorkshire Colliery Operatives' Association.....	3,200
Stalybridge Trades Council.....	1,200
Steam-Engine Makers' Society.....	3,850
Stockport Power-Loom Weavers.....	2,500
United Kingdom Society of Coach-Makers.....	7,040
United Kingdom General Post-Office and Telegraph-Service Benefit Society.....	
United Journeymen Brass-Founders' Association of Great Britain and Ireland.....	1,750
United Operative Masons' Association of Scotland.....	10,652
Walsall and District Trades Council.....	800

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Warrington Filesmiths' Union	390
West End London Cabinet-Makers	400
West Surrey District of the Federal Union of Agricultural Laborers	
Wolverhampton Trades Council	1,300

It will be seen that this gives a total of 919,842 members, from which some deductions must be made for duplicate representation.* After making these allowances it will be quite safe to say that the aggregate membership of the trades-unions represented in the congress† did not fall short of 800,000.

AMALGAMATED SOCIETY OF ENGINEERS.

The growth of trades-unionism will, however, be best illustrated and its present position most clearly indicated by presenting statistics of a few of the larger associations. One of the most important and compactly organized of these bodies, though not now the largest in point of numbers, is the "Amalgamated Society of Engineers, Machinists, Millwrights, Smiths, and Pattern-makers," more commonly known, however, as the "Amalgamated Engineers." This great association, numbering at the close of 1874 about 45,000 members, grew out of a "friendly union of mechanics," which was formed in Manchester about the year 1826, or within a short time after the repeal of the coalition act. In its present form, however, it has existed only twenty-four years, or since 1851. Its growth during that period is exhibited by the following table, showing the number of its members, the amount of its accumulated fund, and the average amount per member, at the close of each year, from 1851 to 1873, inclusive:

TABLE I.

Year.	Number of members.	Balance on hand at close of year.			Amount to each member.		
		£	s.	d.	£	s.	d.
1851	11,829	21,705	4	11½	1	16	8
† 1852 (June)	11,617	1,721	2	11			
1852 (December)	9,737	5,382	1	3½		11	0½
1853	10,757	17,812	16	7	1	13	1½
1854	11,617	20,202	11	9	1	14	9½
1855	12,553	35,695	1	11	2	16	10½
1856	13,405	43,207	18	3½	3	4	5½
1857	14,299	47,947	4	10½	3	7	0½
1858	15,194	30,353	12	1½	1	19	10½
1859	17,790	36,831	19	8	2	1	4½
1860	20,935	60,198	1	6	2	17	6
1861	22,862	73,398	1	0½	3	4	2
1862	24,234	67,615	16	6	2	15	9½
1863	26,058	67,410	3	8	2	11	8½
1864	28,815	86,947	15	0	3	0	4½
1865	30,984	115,357	13	10½	3	14	5½
§ 1866	33,007	138,113	8	3	4	3	8½
1867	33,325	125,263	2	7	3	15	2
1868	33,474	98,699	2	1½	2	18	11½
1869	33,539	76,176	7	10	2	5	1½
1870	34,711	82,467	6	11½	2	7	6½
1871	37,790	116,326	6	7½	3	1	6½
1872	41,075	158,313	15	10½	3	17	1
1873	42,382	200,923	1	6½	4	14	9½
1874	44,000						

* Some of the city "trades councils" above mentioned comprise branches of trade-organizations separately represented.

† Some of these unions have branches in the colonies and in foreign countries.

‡ 1852 was the year of the great lock-out.

§ The effect of the panic of 1866 and the industrial prostration of the succeeding years is visible in a falling off in the society's funds.

The following table shows the amounts expended for beneficial purposes by the Amalgamated Society of Engineers during the twenty-three years from 1851 to 1873, inclusive, with the amount expended for each purpose, and the average amount of expenditure per member:

TABLE II.

Class of benefit.	Amount expended.			Average per member.		
	£	s.	d.	£	s.	d.
Donations to members *	561,827	0	0	24	11	8½
Relief in sickness	252,441	0	0	9	18	9½
Superannuation	89,856	0	0	2	19	11½
Accidents	22,800	0	0	18	8½	
Funerals	80,687	0	0	3	3	7½
	1,007,611	0	0	41	12	9
Benevolent grants, (nineteen years)	20,553	0	0	13	8½	
Assistance to other trades, (twenty years)	11,830	0	0	11	7	
Total	1,039,994	0	0	42	18	0½

* By "donations" is meant the stated pecuniary assistance rendered to members when out of work.

The following table shows the expenditures of the same association for the year 1873, with the different objects of expenditure and the average amount per member:

TABLE III.

Objects of expenditure.	Aggregate.			Amount per member.		
	£	s.	d.	£	s.	d.
Donations, fares to situations, and beds to non-free members.	13,645	11	5½	6	5½	
Contingent benefit	1,916	18	0	10½		
Sick benefits, stewards and medical certificates	18,022	5	9	8	6	
Superannuation benefit	9,477	18	11	4	5½	
Accidents, &c., per twenty-third rule*	1,800	0	0	10½		
Funerals	6,567	10	2	3	1½	
Grants from benevolent fund	1,436	16	8	8½		
Printing, stationery, emblems, postage, and parcels.	3,950	0	8½	1	10½	
Branch-officers, executive council, secretaries, treasurers, auditors, banking expenses, delegations, and bonds of security.	6,276	12	11	2	11	
Rents, rates, coal, and gas	1,343	16	2½	7½		
Purchasing new property, including club-boxes, locks for ditto, &c.	118	13	2½	0½		
Telegrams, bad coin, &c.	567	6	9½	2½		
Grants to other trades	694	0	0	4		
Grants to London trades council, trades parliamentary committee, gas-stokers' defense fund.	58	6	8	0½		
	65,875	17	5½	1	11	1
Unacknowledged remittances	1,324	0	0			
	67,199	17	5½			

* The twenty-third rule relates to assistance to members in emigration, and will be noticed hereafter.

At the end of each year in England each in New York in Malta, 2 in the average number of members having 458, in the association, a less than two continue all the time. The American aggregate membership, to each city, Albany City, Albany, Chicago, River, (Mass.), New York City, Pittsburgh, Pa., Schenectady, S. is omitted.

The income of the members of money donated for the year, as 5s. 8½d. to add already given, (about 826 in U.S.) An applicant (with a few special) worked five years of wages in the person of "stead" from certain special having lost a limb subject to fits, or imperfect vision.

The fee for admission the member, rising the fee at 40 years from each member member, the contribution at the amount

Every "free member" circumstances satisfied donation of 10s. per thirty weeks, and obtained, making a provided the member receiving "short draw" "full donation" the trade, and at employed; nor can any fourteen weeks in any employment through to donation until he branch of the trade,

At the end of 1873 this society had 358 branches, of which 259 were in England and Wales, 39 in Scotland, 11 in Ireland, 7 in Australia, 1 each in New Zealand, Queensland, and the East Indies, 5 in Canada, 1 in Malta, 2 in Turkey, 1 in France, and 30 in the United States. The average number of members to each branch at the date mentioned was a fraction over 118; the largest branch (located at Crewe, in Cheshire,) having 458, and the smallest only 6. Under the revised rules of the association, adopted May 25, 1874, a branch cannot be organized with less than twelve members, and the local councils have the power to discontinue all existing branches having not more than ten members.

The American branches (*i. e.*, those in the United States) comprise an aggregate membership of 1,405, or an average of 47, less a small fraction, to each branch. They are located at the following places: Allegheny City, Altoona, Atlanta, Bloomington, (Ill.), Boston, Brooklyn, Buffalo, Chicago, Cleveland, Detroit, Dunkirk, Elizabethport, (N. J.), Fall River, (Mass.), Louisville, Nashville, Newark and New Brunswick, (N. J.), New York City, (two branches,) Omaha, Paterson, (N. J.), Philadelphia, Pittsburgh, Port Huron, (Mich.), Providence, Rochester, San Francisco, Schenectady, Saint Louis, and a town in New Jersey, the name of which is omitted.

The income of the society during the year 1873 from the regular payments of members and other sources (including £3,851 14s. 6d. as interest on money deposited in bank) was £109,809 3s. 2d. Its expenditures for the year, as already shown, were £67,199 17s. 5½d., leaving £42,609 5s. 8½d. to add to the surplus fund, which was thus swelled to the figure already given, namely, £200,923 1s. 6¾d., or an average of £4 14s. 9¾d. (about \$26 in United States paper currency) per member.

An applicant for admission into this society must not be under 21, (with a few specified exceptions,) or over 40 years of age. He must have worked five years at his trade, and must be earning the ordinary rate of wages in the district in which he is employed. He must also be a person of "steady habits and good moral character," and must be free from certain specified physical disabilities, such as being deaf or dumb, having lost a limb, or two entire fingers off one hand, being ruptured, subject to fits, or obliged to use glasses at his work in consequence of imperfect vision. A member who wittingly proposes an ineligible candidate for membership is liable to a fine of £1.

The fee for admission to membership varies according to the age of the member, rising gradually from 15s., the fee at 25 years of age, to £3, the fee at 40 years of age. The regular contribution is 1s. per week from each member; but when the accumulated fund falls below £3 per member, the contribution is increased by such sum as will sustain the fund at the amount named.

Every "free member" in good standing, who is out of work under circumstances satisfactory to the branch to which he belongs, receives a donation of 10s. per week for fourteen weeks, 7s. per week for the next thirty weeks, and a further sum of 6s. per week until employment is obtained, making a total of £19 18s. in any period of fifty-two weeks, provided the member should be out of employment so long. A member receiving "short donation" of either 7s. or 6s. per week cannot again draw "full donation" without having worked four successive weeks at the trade, and at the ordinary wages of the shop in which he is employed; nor can any member receive the "full donation" for more than fourteen weeks in any period of fifty-two weeks. A member losing his employment through drunkenness or disorderly conduct is not entitled to donation until he has been again employed eight weeks at his own branch of the trade, and at full wages.

A "free member" on donation may obtain a "traveling card" from the secretary of his own branch of the society, and on complying with certain prescribed regulations, may receive his donation from the secretaries of branches situated in the different towns or cities to which he may go in search of work. A "non-free member," who has paid the whole of his entrance money, and is not more than 10s. in arrears, is allowed 8d. for a bed in each town or city to which he may travel; and where there are three or more branches, he may be furnished with a bed for three nights. The secretary of a branch in any town to which the traveler goes must direct him to any place where he thinks it likely he may find employment; and the officers of a branch have discretionary power to detain a member a few days, if they see a prospect of obtaining employment for him.

A member, being a pattern-maker, a millwright, or a machine-joiner, registered for "tool-benefit" and losing tools by fire, upon satisfactory proof of his loss, receives compensation therefor, though not to exceed £10. The amount is raised by an equal levy on the registered members of the above-mentioned departments of the trade.

Any free member,* when visited by mental disease, bodily sickness, or lameness, (not occasioned by drunkenness or disorderly conduct, or any disease improperly contracted,) receives 10s. per week for twenty-six weeks, and 5s. per week so long as he continues ill, making a total of £19 10s. in fifty-two weeks.

When the funds of the society are £23, and upward, per member, exclusive of permanent investments, if $7\frac{1}{2}$ per cent. of the members are out of employment, a limited number of the unemployed members may be assisted to emigrate to the amount of £6; but no member shall be allowed the benefit of this rule unless the number of unemployed members of the society in the place to which he wishes to emigrate is below $7\frac{1}{2}$ per cent.

Any "free member," not more than 16s. in arrears, who, through losing a limb or having one disabled by accident or otherwise, or through blindness, imperfect vision, apoplexy, epilepsy, or paralysis, may be rendered permanently unable to follow any of the departments of the trade, provided his disability is not the result of intemperance or other improper conduct, will receive the sum of £100; subject to the condition that the amount must be refunded if at any future time the member is able to resume work.

A member in good standing who is not less than fifty years old, and who through the infirmities of age is unable to obtain the ordinary rate of wages, is entitled to a superannuation benefit, varying according to the length of time he has been in the society, as follows:

To members of less than twenty-five years' standing, 7s. per week.

To members of twenty-five years' and less than thirty-years' standing, 8s. per week.

To members of thirty years' and less than forty years' standing, 9s. per week.

To members of forty years' standing and upward, 10s. per week.

These payments are continued during the life of the member. A member of not less than eighteen years' standing in the society and not less than fifty years old, if disabled by any of the causes above mentioned as giving a title to the "accident benefit" of £100, may take his choice between that and the superannuation benefit.

* This regulation is not applicable to a class of members who, on account of defective health on entering the society, have not been admitted to the "sick benefit," and have paid 2d. a week less than other members.

On the death of a member £12 is paid for funeral expenses. Her funeral expenses, traveling in search of work, and if his widow is unable to maintain £6 of the same.

The salaries of the secretaries vary according to the number of branches to which they belong, or to the number of branches secretaries of a branch committee, having 360 members as well as *passant*, that is, eligible to the same.

One of the members is to the finding of the member and drawing of the money every day; either kept at home or there are several "vacant-book" charge of it, and a fine of 7s. 6d. with coal and gas.

Any member required to give notice of the branch a fine of 5s. A member, or neglecting from donation, a factory reason for

Any secretary of the district, must so out of employment he considers the members so sent is fare is also paid however, is not remove to another from donation, a penalty. The transmission of locality to another agency, both for its branches extend

One of the societies of which, in a fine of 10s. for of expulsion for moreover, requiring men (they being

On the death of a free member who is not more than 16s. in arrears, £12 is paid to his widow, next of kin, or legal representative, for his funeral expenses. On the death of a member's wife, he receives £5 for her funeral expenses, leaving £7 for his own. If a member die while traveling in search of work, and his remains cannot be removed to his own home, the branch of the society nearest the place of his death is to take charge of the funeral, the expense of which must not exceed £6; and if his widow, nominee, or next of kin, apply for the surplus, (the remaining £6 of this "funeral benefit,") it is to be paid.

The salaries of officers (*i. e.*, of those to whom salaries are allowed) vary according to the number of members in the branch to which they belong, or to the nature and extent of their duties. Thus the salary of a branch secretary varies from £1 10s. per annum—the sum allowed for a branch comprising ten members—to £12 15s. in the case of branches having 360 members, the rules providing minutely for all intermediate numbers as well as for all in excess of 360. It may be noted here, *en passant*, that no member who keeps a public-house, or beer-house, is eligible to the position of branch secretary.

One of the most useful regulations of the society is that which relates to the finding of employment for members. A member out of employment and drawing "donation benefit," is required at stated times (usually every day) to sign a book known as "the vacant-book," which is either kept at the branch office, or, in the case of large towns where there are several branches, at some central office. In Manchester the "vacant-book" is an institution of such importance that the officer in charge of it receives a stated salary of £2 2s. per week, with an allowance of 7s. 6d. per week for a messenger, and has rent-free quarters, with coal and gas, at the society's office, where he is required to reside.

Any member who knows of a vacancy, either present or prospective, is required to give information of it within twenty-four hours to the secretary of the branch to which he belongs, and failing to do so is liable to a fine of 5s. A member on donation benefit refusing to accept employment, or neglecting to apply when informed of a vacancy, is suspended from donation until he obtains employment, unless he can show a satisfactory reason for his conduct.

Any secretary on receiving notice that men are wanted in a particular district, must send to that district any members of his branch who are out of employment and in receipt of donation or contingent benefit, if he considers them qualified for the vacant positions. The fare of members so sent is paid, and if they fail to obtain situations, their return fare is also paid to their own place of residence. The amount allowed, however, is not to exceed £1 10s. Any member on benefit refusing to remove to another place in order to obtain employment is suspended from donation, and, in some cases, may also be subjected to some further penalty. The regulations in regard to the "vacant-book" and the transmission of information in regard to vacant situations from one locality to another constitute the society a most effective intelligence-agency, both for particular localities and for the entire field over which its branches extend. Some other societies have similar regulations.

One of the society's rules is directed against piece-work, the acceptance of which, in shops where it has not already been introduced, incurs a fine of 10s. for the first offense, of 20s. for the second, and the penalty of expulsion for the third. Any member taking work by the piece is, moreover, required to share in equal proportions with his fellow-workmen (they being members) all that he earns over the regular weekly

wages; and any member working for or under any piece-master, and not receiving an equal share in any such surplus is required to leave his employment.

Any member boasting of his independence toward his employer or employers in consequence of his membership in this society is subject to a fine of 2s. 6d. for the first offense, 5s. for the second, and 10s. for the third or any subsequent repetition of the offense.

The above is only a brief statement of some of the leading provisions of the constitution or rules of the Engineers' Association. Many minor regulations for special cases, as well as the provisions in regard to the care and investment of funds, the equalization of funds among the branches, or, more properly, the annual settlement between debtor and creditor branches, the election, qualification, and duties of officers and committeemen, along with various other matters of minor importance, are omitted. The governmental organization of societies of this class is, however, illustrated to some extent in the abstract of the rules of the Amalgamated Society of Carpenters and Joiners, to be presented below.

AMALGAMATED SOCIETY OF CARPENTERS AND JOINERS.

The following table shows the number of branches, number of members, and cash balance of the Amalgamated Society of Carpenters and Joiners of Great Britain, Ireland, and America,* at the end of each year from 1860 to 1874, inclusive:

TABLE I.

Years ended December 31.	Number of branches.	Number of members.	Cash balance on hand.		
			£	s.	d.
1860	20	618	321	3	2½
1861	32	650	593	12	0½
1862	38	949	849	8	10
1863	53	1,718	2,042	11	3
1864	81	3,279	4,566	10	0½
1865	134	5,670	8,320	13	7
1866	187	8,002	13,052	4	3½
1867	203	8,022	15,153	11	2½
1868	218	8,736	17,179	16	1
1869	224	9,305	17,626	14	0½
1870	236	10,178	17,568	19	4
1871	242	9,764	16,829	7	1
1872	226	11,236	19,849	8	6½
1873	242	12,789	30,450	11	2½
1874	265	13,890	†38,125	0	0

The following table shows the expenditures for benefits of the Amalgamated Society of Carpenters and Joiners for the year ended December 31, 1873, and for the sixteen and one-half years from the organiza-

* This association has 265 branches, of which 231 are in England and Wales, 11 in Ireland, 5 in Scotland, 14 in the United States, and 4 in Canada. The branches in the United States comprise 417 members. Of the 14 branches, 2 are in New York, and 1 each in Albany, Baltimore, Boston, Chicago, Cleveland, Fall River, Newark, Philadelphia, Pittsburgh, Saint Louis, San Francisco, and Washington, D. C. The returns from the United States in the monthly report for January, 1875, represent the state of trade as "bad," "dull," or "slack," with the exception of San Francisco, where it is reported "good," and Newark, as "improving." The returns from the English and Welsh branches generally report trade as "moderate," while those from the Irish are chiefly unfavorable.

† The cash balance for 1874 may be subject to a slight correction.

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tion of the society in June, 1860, to the same date, with the average cost per member on each account:

TABLE II.

Items of expenditure.	Expenditures for year ended December 31, 1873.	
	Aggregate for the society.	Average per member.
Donations	£ s. d.	s. d.
Tools	3,085 0 0	4 19
On account of sickness	566 0 0	10½
On account of funerals	5,865 0 0	9 2
On account of accidents	1,243 0 0	1 11½
To superannuated members	300 0 0	5½
On account of trade privileges	97 0 0	1½
Benevolent grants	2,964 0 0	4 7½
Grants and loans to other trades	455 0 0	8½
Total	155 0 0	3
Total	11,745 0 0	

Items of expenditure.	Expenditures for 13½ years ended December 31, 1873.	
	Aggregate for the society.	Average per member.
Donations	£ s. d.	£ s. d.
Tools	45,947 0 0	7 00 9½
On account of sickness	4,286 0 0	13 1½
On account of funerals	40,503 0 0	6 4 4½
On account of accidents	7,831 0 0	1 4 0
To superannuated members	3,790 0 0	11 7½
On account of trade privileges	617 0 0	1 10½
Benevolent grants	17,436 0 0	2 13 5½
Grants and loans to other trades	3,254 0 0	9 11½
Total	720 0 0	2 2½
Total	121,477 0 0	

The objects of this society, as defined in its own rules, are to raise funds for the advancement and protection of the trade; for the mutual support of its members in case of sickness, accident, or superannuation; for the burial of members and their wives; assisting emigration; replacing tools lost by fire, water, or theft; and for assistance to members out of work; also to form a contingent and benevolent fund for the purpose of granting assistance in cases of extreme distress not otherwise provided for in the rules.

Each branch of the society is to appoint its own officers and conduct its own affairs, and no branch is to have more than three hundred members.

On the first meeting-night in April, July, and October, the income and expenditure of the past quarter, and at the first meeting in January the income and expenditure for the past year, must be read over by the auditors and submitted to the meeting in presence of both the old and new officers; and in no case may the old officers leave before the report has been read over.

In any large town or district where there are two or more branches, they may hold conjointly a special summoned meeting of their branches whenever occasion requires; and all resolutions passed at such meetings must be entered on the minutes of each branch. They are also made binding upon the several branches in the district, and cannot be altered, rescinded, or set aside except by consent of a majority of the members present at another summoned meeting of the district branches.

Upon any question which under the rules of the society is required to be decided by the votes of a majority of its members, these votes must be taken at summoned meetings of all the branches; and the numbers voting on each side must be transmitted to the general secretary, who must add them up and publish the results to the branches, the question being determined by a majority of all the votes cast and not by a majority of the branches.

The entrance-fees vary from 7s. 6d. (when the candidate is under twenty-five years of age) to £1 15s. (when he is forty-four years of age and under forty-five.)

Candidates for membership must be in good health, must be good workmen and have worked five years at the trade, must be persons of steady habits and good moral character, and not less than twenty-one nor more than forty-five years of age. They must not belong to any other trade society or enter one after their admission into this. No person may be admitted who has acted contrary to the interests of the trade or has been excluded from any other society for misconduct, unless such restitution be made or such satisfaction given to injured parties as may be ordered by the executive council of the society or by the branch to which the candidate seeks admission.

To be entitled to all the benefits of the society a member must pay a contribution of 1s. per week and 3d. per quarter to the contingent and benevolent fund. A contribution of 9d. per week and 3d. per quarter to the contingent and benevolent fund entitles a member to all the benefits except that for the sick.

All moneys subscribed by the members of the society become the property of the society generally, and not of the branches to which the members respectively belong;* and any branch leaving the society forfeits its share in the general fund.

Whenever it is found that the funds of the society have sunk below an average of £1 per member, the executive council has the power to assess upon each member such sum as is necessary to raise the funds to the amount just mentioned. Special levies may also be made for other purposes, in cases of emergency; but such a levy on the society at large requires the consent of two-thirds of the members present at special meetings of the branches held to determine the question; and local levies require the consent of a majority of the members present at a special meeting of the local branch or branches, as well as the approval of the executive council of the society.

Special committees are elected by the separate branches, (or by the combined branches of a district in which there are two or more,) for the management of trade movements in connection with strikes, lock-outs, &c.; and special auditors are elected for the management of the accounts in such movements, which are kept entirely distinct from the ordinary accounts of the society.

The principal authority in the association is vested in a general council, consisting of sixteen members, each representing one of sixteen dis-

* This is also a rule of the Operative Stone-mason's Society, and of some other associations.

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tricts into which the territory over which the society extends is divided, and each being elected at an appointed time by a majority of the votes cast in meetings of the several branches within the district which he represents. Each branch may send to the general secretary the name of some eligible member within the district in which it is situated, to be submitted to the various branches within the district as a candidate for the general council. The nominations are to be made about three months before the election, and a list of the candidates proposed is sent to all the branches by the general secretary. The election for members of the general council takes place once in three years, and if a vacancy occurs during the term for which the council holds office, it is filled by the candidate who, at the preceding election, received the next to the highest vote.

The general secretary is elected by a majority of the votes cast in all the branches within the association. He is paid the expense attendant upon moving himself and his family from the place where he resides to the general office, where he is furnished with a rent-free residence, and receives a salary of not less than £3 per week, with certain other allowances for special services and for assistance.

An executive council, consisting of six members, elected by the branches situated within a radius of twelve miles from the general office, is invested with a degree of supervision over that office and over the business of the secretary, as well as with the power of determining various questions affecting the society at large.

The general council, whose members are from all parts of the kingdom and from foreign countries, meets only once in three years, except in special emergencies; and alterations in the rules of the association can only be adopted at alternate triennial meetings. All such alterations must be submitted to the votes of the members in the branch meetings, and any change in the objects of the society, as set forth in its first rule, requires the consent of three-fourths of the members. On minor matters, the general secretary is authorized to obtain the views of the general council, by letters addressed to its several members. In cases of emergency the general council is authorized to hold meetings without awaiting the attendance of the member representing the American district.

The benefits offered by the society may be summarized as follows:

Unemployed (or donation) benefit, 10s. per week for twelve weeks, and 6s. per week for twelve weeks more; for leaving employment under circumstances satisfactory to the branch or to the executive council, 15s. per week; tool benefit to a member of not less than six months' standing, not to exceed £5; sick benefit, for twenty-six weeks, 12s. per week, and 6s. per week thereafter as long as illness continues; funeral benefit, £12, or to a member of only six months' standing, £3 10s.; accident benefit, to a member totally disabled, £100, and to a member partially disabled, £50; superannuation benefit to a member of twenty-five years' standing, 8s. per week for life, and 7s. per week for life to a member of eighteen years' standing; emigration benefit, £6; other benefits in the nature of benevolent grants, according to circumstances in cases of distress. It may be remarked here that the rules and the governmental organization of this society are regarded as being among the best possessed by any of the trades-unions. The regulations in regard to vacant-book are similar to those of the engineers.

ASSOCIATED CARPENTERS AND JOINERS OF SCOTLAND.

In the report of this society for the twelve months ended October 31, 1874, the number of its members is stated at 5,781, of whom 5,224 were

subscribers to all its benefits, the remaining 557 not being subscribers to the fund provided for sickness, superannuation, and funeral benefits. Its expenditures for the several objects for which it is constituted, as well as for rents, taxes, salaries, &c., during the twelve months just named, were as follows :

	£	s.	d.
Sick-allowances.....	1,843	0	0½
Bonuses to three disabled members.....	150	0	0
Funeral-allowances.....	518	0	0
Tools compensation.....	372	11	11½
Strike-allowance.....	409	5	6
Grant to agricultural laborers' union.....	50	0	0
Victimized allowance*.....		15	3½
Hall rents.....	399	18	9½
Taxes and hall expenses.....	81	4	6
Stationery and postage.....	126	14	11
Printing and advertising.....	415	4	0½
Carriage of parcels.....	6	9	3
Doctors' accounts.....	1	19	6
Lost time.....	11	10	8
Branch boxes, &c.....	12	3	11
Delegations.....	26	18	7
Law expenses.....	6	3	9
Expenses of joint meetings.....	51	8	8½
Salaries and commissions.....	827	15	7½
Total.....	5,314	3	0½

The income of the society for the year ended as above exceeded the expenditure by £1,441 5s. 3¾d. This increases the accumulated fund to £9,071 8s. 8¾d., of which £7,554 5s. 6d. belong to the trade account, and £1,517 3s. 2½d. to the benefit account. The number of members added to the society during the past year was 774, and, according to a statement presented by the secretary, it now comprises nearly one-half of the members of the trade in the districts in which it has branches, the total number of journeymen in those districts being 11,836, while the membership of the society is 5,781.† The secretary calls attention to the fact that during the year several trades have had protracted strikes, while the members of some societies, notably the agricultural laborers, have been compelled to fight for the right of determining whether they should be union men or not. In some of the trades wages have been reduced, but among the joiners the changes that occurred during the year were usually favorable to the workmen. The secretary estimates that there has been an average rise of 2s. a week in journeymen's wages, while several of the society's branches have obtained a reduction of hours. The only disputes with employers during the year were those of Dumfries, Dunfermline, Perth, and the Clyde. The latter was short and decisive, lasting but a few days; but the one at Dumfries was protracted and bitter, continuing for a month.

This society was organized and a code of rules for its government adopted at a conference of delegates from the carpenters and joiners of the principal places in Scotland, which was held at Edinburgh in September, 1861. The rules have since undergone three revisions, the last having been completed in August, 1873. The society is divided into two sections, which may be called respectively the "trade section" and the "benefit section," although some of the allowances made to members of the trade section might very properly be classed as benefi-

* The "victimized allowance" is one which the rules provide for the benefit of members discharged from their situations for acting as delegates, or otherwise serving the association. It is a regular payment, equal to the wages lost. The "victimized allowance" in 1873, exceeded £100.

† The number of apprentices in the same districts is 3,310.

cial allowance and the death fee is from per week for emergency must be at

On the lock-out, or member" sments, receive work continuing theft, is ent provided it tool-chest, his full ent disabling hi an essential accident sh duct. The per week for and then 5s. the death of or next of k tered) is £5, wife, if it has benefit is 3s. years' stand fifteen years not allowed wages of the in which he c

The various executive committee their possessions branches not ing to prescribe require, provi in accordance executive committee such bank or than £500 nor the name of the ing secretary, in the name of sponding secret be elected by society at large days after suc trustees of the eight branches submitted to the from the work and two trustees

* At intervals of society shall be the of three miles from committee, which c

special allowances. The fee for admission into the trade section alone, is 5s., and the dues 3d. per week. For admission into the benefit section the fee is from 2s. to 10s., according to age of applicant, and the dues 4d. per week. Besides these payments, members are liable to special levies for emergencies or to make up deficiencies in the funds; but such levies must be authorized by the vote of the society.

On the occasion of a cessation of work in consequence of a strike, lock-out, or any cause regarded by the society as adequate, each "free member" so thrown out of work, upon conforming to certain requirements, receives an allowance of 12s. a week as long as the stoppage of work continues. A "free member" losing his tools by fire, water, or theft, is entitled to an allowance equal to the value of the tools lost, provided it does not exceed £20; and he is also entitled to the value of a tool chest, not, however, in excess of £2. Every member who has paid his full entrance-fee is entitled to a bonus of £50 in case of any accident disabling him from ever again resuming his regular employment. It is an essential condition, however, to the allowance of this benefit, that the accident shall not have been caused by intemperance or improper conduct. The allowance in sickness is 12s. per week for thirteen weeks, 9s. per week for thirteen weeks more, 7s. per week for twenty-six weeks, and then 5s. per week while illness continues. The funeral allowance on the death of a member is £12, to be paid to his wife, nominee, trustee, or next of kin. The allowance on the death of a wife (if sue be registered) is £5, which, however, is not allowed on the death of a second wife, if it has been drawn on the death of the first. The superannuation benefit is 3s. 6d. per week to a member over fifty years of age and of ten years' standing in the society, and 5s. per week to one who has been fifteen years in the society. The claim to superannuation, however, is not allowed as long as the member can earn more than half the usual wages of the locality in which he is employed, in any business or calling in which he can obtain employment.

The various branches of the association are required to forward to the executive committee as often, at least, as once a quarter, all moneys in their possession not needed for their immediate local expenditure; and branches not having sufficient funds for the latter purpose may, according to prescribed forms, call upon the same committee for what they require, provided, of course, that it be money to which they are entitled in accordance with the rules of the society. All moneys sent to the executive committee and not immediately wanted are to be deposited in such bank or banks as may be agreed upon, a portion (not to be less than £500 nor more than £1,000) to be deposited as a working fund in the name of the association, three trustees, and the central corresponding secretary, and the remainder to be deposited as "a sinking fund" in the name of the association, eight trustees, and the central corresponding secretary. The three trustees of the "working fund" are to be elected by the central branch* and their names submitted to the society at large. If no objection be lodged against them within fourteen days after such submission, their election is to be valid. The eight trustees of the "sinking fund" are to be elected respectively by the eight branches having the largest number of members, and their names submitted to the society, as in the other case. No money can be drawn from the working fund except by the central corresponding secretary and two trustees, and none can be drawn from the sinking fund without

* At intervals of three years elections are held to determine what branch of the society shall be the "seat of government;" and the branches situated within a radius of three miles from the branch elected have the prerogative of electing the executive committee, which consists of nine members, who hold office for one year.

the signature of the same officer and six trustees; and the trustees are to sign no order for drawing money without a letter from the executive committee, signed by the chairman, authorizing them to do so. The society each year elects an auditor who serves for three years, so that there are three auditors, whose respective terms of office terminate at yearly intervals. Besides auditing the accounts of the society at the end of each year, these officers are required to assist the central corresponding secretary in making up "an abstract of whatever may be considered of interest to the society, either as a *résumé* of the past year or as a guide to future proceedings."

No part of the funds of the association can be applied to any purpose other than those set forth in the rules, except by a three-fourths majority of all members voting in meetings of the branches specially called after due notice for the determination of the question.

No alteration can be made in the rules (or laws) of the society without the assent of two-thirds of the members; and in years when a delegate meeting is held all proposed alterations must be first submitted to such meeting, and by it (it at all) submitted to the society. No delegate meeting may "abrogate any of the principles of the society," (*i. e.*, the allowance on cessation of work, the insurance of tools, or the accident, sickness, superannuation, or funeral benefit,) except by the consent of three-fourths of the members, which votes must be registered accordingly.

THE AMALGAMATED TAILORS' SOCIETY.

The following table shows the principal items in the expenditures of the Amalgamated Tailors' Society from May to December, 1869, and each year from 1870 to 1873 inclusive, together with the number of members, the average expenditures per member, the number of members in receipt of sick and traveling benefits respectively, and the number of deaths of members and members' wives:

	1869.	1870.	1871.	1872.	1873.	Total for entire period.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Expenditures on account of sick benefit	901 6 7	1,847 12 7	1,931 12 10	2,177 7 8	2,037 7 10	10,095 7 6
Average per member on account of sick benefit	4 8	9 2½	7 8	5 6	4 9	.....
Expenditures on account of funerals	261 0 0	576 8 2	767 9 9	998 7 8	1,420 18 6½	4,034 4 1½
Average per member on account of funerals	1 3½	2 10½	3 4	2 2½	2 5½	.....
Expenditures on travelers' account*	202 5 6	262 18 6	236 2 8	426 16 0	641 4 1½	1,739 7 1½
Average per member on travelers' account*	1 6½	1 3½	11½	11½	1 0½	.....
Expenditures on account of trade benefits, strikes, and lock-outs	45 8 4	200 16 7	55 1 6	283 17 6	622 5 9	1,207 9 8
Average per member on same account	2½	1 0	2½	7½	1 0½	.....
Number of members at end of year	3,994	4,006	4,914	9,061	112,385	.....
Number of members receiving sick benefit	5	550	658	756	1,122	3,086
Number of members receiving travelers' benefit	298	167	252	381	668	1,768
Number of deaths of members and members' wives	36	91	102	140	169	558

* Members traveling in quest of employment.

† To these expenditures may be added an item of £225, granted to other associations in 1873, the first year that the society had set apart a contingent fund for that purpose.

‡ The number of members at the close of 1874, as shown in the list of associations represented at the annual trades congress, was, in round numbers, 14,000.

§ Not furnished.

The aggregate 12s., and the 92d., leaving added to a half year, makes

The terms are as follows: an entrance years, 5s.; 1 years, 15s.

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1. To improve m bers and the trade well-considered bas experience.

The aggregate income of this association for the year 1873 was £13,513 12s., and the aggregate expenditures for the same year, £11,448 14s. 9½d., leaving a balance of £2,394 17s. 2½d. on the year's account; which, added to a balance of £1,609 14s. on hand at the close of the previous year, makes the total accumulated fund £7,004 11s. 2½d.

The terms of admission into the Amalgamated Tailors' Association are as follows: Young men in the last year of their apprenticeship pay an entrance-fee of 1s.; tailors, under 25 years old, 2s. 6d.; under 30 years, 5s.; under 35 years, 7s. 6d.; under 40 years, 10s.; under 45 years, 15s. From 45 years old up to 50 the increase in the entrance-fee is at the rate of 2s. 6d. per year. Tailors over 50 years of age may enter the society, but not as members entitled to all its benefits. The payment of an entrance-fee of 5s., a regular contribution of 3½d. per week, and the usual quarterly subscription to the management and contingent funds entitles them to trade and traveling benefits, and on their death a "funeral benefit" of £4 is paid to their next of kin or nominee lawfully appointed.

The entrance-fee for persons not desiring to participate in the "sick-benefit" is as follows:

For tailors under 30 years of age, 2s. 6d.; not under 30 but under 40 years, 5s.; not under 40 but under 45 years, 7s. 6d.; not under 45 but under 50 years, 10s.

In the case of new branches entering the association the members are required to pay the current quarterly subscription and an entrance-fee according to age as follows:

Members under 25 years of age, 2s. 6d.; not under 25 years of age but under 30, 5s.; not under 30 years of age but under 50, 7s. 6d.

To entitle a member to full participation in all benefits the regular payments are 6d. a week, 4d. a quarter to management, and 1s. per annum (payable in the month of June) to "a contingent fund," which is devoted to the furtherance of the principles of association. Members not wishing to participate in the sick-benefit pay 3½d. per week, and to the management and contingent funds the same as other members.

On quitting employment, under circumstances satisfactory to the branch or to the executive council, a member receives 12s. per week. The "sick-benefit" for the first thirteen weeks is 10s. per week; for the second, 8s.; for the third, 6s.; for the fourth, 4s.; afterward (while illness continues,) 2s. 6d. per week. The superannuation-benefit, to members of twelve years' standing, is 2s. 6d. per week for life, and 5s. per week for life to members of twenty years' standing. The traveling benefit is 1s. 4d. per day in each branch for not exceeding sixty days in the year, or to 1s. per day and a bed.

The general management of the affairs of the association is vested in an executive council consisting of nine members, among whom are included the president and secretary. The ordinary executive functions devolve chiefly on the last two officers, but the executive council meets once a quarter, and may be convened more frequently if circumstances require it. The members of this council, including the president and secretary, are elected biennially at conferences composed of delegates from the branches, the number of delegates being proportioned with more or less exactness to the number of members to be represented. The objects of the association are thus stated in a recent address of the executive council to the operative tailors of the kingdom:

1. To improve morally, socially, and pecuniarily the means and position of our members and the trade generally, by forming a fund by contributions of our members on well-considered bases, and from statistics of those associations who have prospered by experience.

2. To provide a safe and profitable investment for the contributions and subscriptions of our members against sickness, disease, and death, as well as economizing the strength and power of unity for the welfare of our trade, always seeking an amicable settlement of trade-disputes rather than resorting to the two-edged weapon of settlement by strikes. This is accomplished by raising capital or funds that may be available in case just and conciliatory measures fail, and then, and then only, resorting to those measures which our unity and strength, combined with accumulated funds, can accomplish, our system combining all the facilities of exchange in investing our labor to profitable advantage, and insurance and friendly societies for benevolent purposes.

3. To promote the intellectual and material benefit of our members and the trade generally, by providing means of social intercourse and discussion of topics for the elevation of the trade generally.

4. To afford means of carrying out the repeal of all laws that have so hurtfully affected the position of workmen hitherto, and to free labor from restrictive influence, at the same time fostering habits of prudence and forethought.

5. By means of our rules, encouraging those who may have the welfare of the trade at heart, to become ornaments to our calling, and leaders to a better and more elevated position of our class.

In the same address it is claimed that during the year 1873 "wages were advanced and trade privileges obtained in no less than fifty-four cities and towns in England and Wales," and that in 1874 (up to November,) "no less than fifty-six more cities and towns," where the society has branches, "obtained advantages in the same direction."

SOCIETY OF OPERATIVE MASONS.

The following table contains a condensed statement of the expenditures of the Society of Operative Stone-Masons from September 24, 1840, to November 23, 1873, specifying the different items of expenditure, and also distinguishing between expenditures for trade purposes and expenditures for beneficial objects:

1. Expenditures for trade purposes:

To strike pay.....	£56,867	11	7
Gifts to other trades.....	3,305	8	8
Loans.....	400	0	0
Delegations in general.....	10,256	3	11
Total for trade purposes.....	70,730	4	2

2. Expenditures for benevolent purposes:

Sick allowance.....	£51,828	0	9½
Funerals.....	40,253	14	4½
Travelers*.....	54,453	14	9
Surgeons' fees.....	2,789	15	10
Gifts for charitable purposes.....	515	14	3
Hospital subscriptions.....	2,941	1	0
Disabled members (197).....	17,941	0	0
Friends of 103 members killed.....	5,100	0	0
Orphan children.....	292	9	6
Master and workmen's acts†.....	32	16	0
Superannuation of members.....	8,636	13	1½
Legal expenses in defending prosecuted members.....	3,483	6	1½
Total for benevolent purposes.....	191,268	2	9
Grand total.....	261,998	6	11

From this statement it appears, therefore, that during the thirty-three years which it covers the expenditures for benevolent purposes exceeded the expenditures for strikes and other trade purposes by £120,537 18s. 7d.

* Members traveling in search of work.

† These two items might perhaps have been classified with the expenditures for trade purposes.

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This society is formally known as "The Friendly Society of Operative Masons of England, Ireland, and Wales." Its members have the option of contributing to the trade-fund alone, or to that and to any one or more of the benefit-funds in the advantages of which they may wish to participate. The entrance-fee to the trade department is 2s. 6d.,* and the contributions 6d. per week. For admission to the trade and sick fund the fee to a person under 24 years of age is 2s. 6d.; over 24 and under 28, 5s.; over 28 and under 32, 7s. 6d.; over 32 and under 35, 10s. Persons over 35 years of age are not admitted to this section of the society. The contributions to the sick-fund are 4d. per week. On the death of a member in good standing his widow, nominee, or next of kin receives £12 for his funeral expenses. On the death of a member's wife (provided he has paid 1s. for her registration and 6d. per quarter in addition) he receives £10; but a wife over forty years of age cannot be registered for this benefit.

The payment of 4s. 1d. a week to a children's fund entitles a member to £2 on the death of a child; but still-born children, or children born out of wedlock, are not included in this allowance.

The superannuation-benefit is as follows:

To members of ten years' standing	5s. per week.
To members of fifteen years' standing	7s. per week.
To members of twenty years' standing	9s. per week.
To members of twenty-five years' standing	10s. per week.

The sick-benefit is 12s. per week for twenty-six weeks, and 6s. per week until recovered; but disease incurred by fighting, drunkenness, or other immoral conduct, is excluded from this benefit.

The accident-benefit is £100 to a member permanently disabled in connection with the prosecution of his trade, or while transacting society-business, unless the accident disabling him was incurred by his own misconduct, drunkenness, or willful neglect. In case of accidental death occurring to a member under similar circumstances, his widow, nominee, or next of kin is entitled to £50 from the society's funds. An allowance of £50 is also provided for cases of paralysis or permanent loss of vision.

The benefit to members traveling in search of work varies from the provision of a bed alone up to a bed and 1s. 3d. a day, according to the standing of the member and the circumstances of the case; each case, however, being distinctly provided for in the rules.

In cases of "legal disputes" with employers, (*i. e.*, disputes entered into in accordance with the rules of the society,) members suspending work are allowed 12s. per week from the society's funds, and any delegate or officer of the society who is discharged in consequence of his holding such a position is allowed 18s. per week, provided that he have not used abusive language toward the employer or foreman.

When the members of the society in any town or locality desire to obtain better terms from their employers, the rules require that they shall use "their utmost endeavors, by correspondence, interviews, or a conference, consisting of an equal number of employers and employed," to arrive at "an amicable agreement;" and "only after all such means have failed to secure the desired alteration shall they be justified in suspending work."

When a desire for an advance of wages, a reduction of working-hours,

* The fees for re-admission of persons who have gone out of the society or lost their membership through failing to arrears, increase with the number of admissions, the fee for the fifth admission being 20 shillings.

or other improvement in the conditions of employment is manifested in any lodge, the secretary is required to report the fact to the central committee of the association, stating the number of members who would be thrown out of work in case of a strike, the number entitled to benefit, the state of trade and position of the society in the neighborhood, and the number of members of the lodge who voted respectively for and against an application to be sustained by the society in a strike; and no such application is to be entertained unless it has had the support of a two-thirds majority in a summoned meeting of the lodge, the votes having been formally taken by ballot. When such an application is received the central committee is to appoint a deputation from three different lodges (including the one from which the application emanates) to proceed to the locality, examine as to the state of trade, the number of members entitled to benefit, and other matters, and to make a report which is to be submitted to the various lodges in connection with the application. A vote of the society is to be taken within twenty-eight days, the question to be decided for or against the application in accordance with the majority of the votes cast. In cases where employers attempt to reduce the current rate of wages, to introduce piecework where it has been abolished, to increase the hours of labor, to infringe upon the established meal-hours, or to employ as masons persons who have not learned the trade, a two-thirds majority in a summoned meeting of the lodge to which the members affected by such an infringement belong, shall be sufficient to justify them in resisting it by a suspension of work; and in case the employer attempts to enforce the infringement before a lodge meeting can be held, the decision arrived at by a two-thirds majority of the members working for such employer is to be binding; but they must wait upon the employer or foreman before suspending work; and in all cases the central committee must be informed as to the particulars of the dispute.

The members of this society bind themselves (by voluntary offer) to give moral and material aid to other trades-associations. Any lodge applied to for this purpose is to investigate the case, and, if the cause be thought worthy of support, the amount of assistance required is to be made known to the central committee, and by them to be submitted to the society, a vote of which, in lodge meetings assembled, is to be taken within twenty-eight days.

All lodges are required to transmit weekly to the central committee any money in their possession in excess of £10 not required for their immediate local expenditures.

A printed list is to be published annually by the central committee, showing the names of members who have worked in opposition to the society, of the members (or officers) who have committed frauds or defalcations, and of members who are in arrears under local levies.

Members are prohibited from working overtime, which is condemned as a practice tending to keep other members out of employment, and members who persist in violating this rule, in opposition to their own lodge, are liable to a fine not to exceed £2. There are certain exceptions to this rule, however, in cases of accident or necessity. Where subcontracting or piecework is abolished, members are bound by these arrangements. Where working by artificial light has not been the rule, lodges are authorized to resist its introduction.

Should the funds of the society fall below £3,000, the central committee may recommend a special levy upon the members of the society, but such levy must be submitted to a vote of the society and approved by a majority before it can be carried out.

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The opinion of the society, as to a revision and reprint of existing rules, is to be taken once in three years; and when such revision is decided upon, the revising committee is to be elected by the society, the vote being taken in meetings of the lodges specially held for the purpose.

This society maintains intimate reciprocal relations with the one to be noticed next below.

UNITED OPERATIVE MASONS' ASSOCIATION OF SCOTLAND.

The total membership of this association in December, 1874, was 10,652, showing an increase of 1,208 members since December, 1873. The number of members belonging to the trade section alone was 9,990. The number belonging to both the trade and sick fund sections was 662. The expenditures for 1874 may be summarized as follows:

For trade purposes.

	£	s.	d.
Strike pay	408	0	0
Assisting men to leave strikes*	92	18	0
Wages of pickets, strike committees, and cross committees	45	12	6½
General delegations	102	11	1
Voted to Edinburgh and Leith millers	15	0	0
Voted to English agricultural laborers	100	0	0
Voted to Edinburgh Trades' Council	5	0	0
Voted to Trades-Union Parliamentary Committee	15	0	0
Total	784	1	7½

For benevolent purposes.

Sick allowance	480	0	0
Accident provisions	400	0	0
Surgeons' fees	15	14	0
Funeral allowance	1,670	0	0
Total for benevolent objects	2,566	4	0
Total for trade purposes	784	1	7½
Grand total	3,350	5	7½
Excess for benevolent objects	1,782	2	4½

The financial condition of the society on the 3d of December, 1874, is stated as follows:

In bank, December 4, 1873	£	s.	d.
Deposited since that date	7,800	18	10
Interest accrued up to 3d December, 1874	1,990	00	00
	254	12	7
Drawn out of bank during year	10,045	11	5
	445	18	10
Amount in bank December 3, 1874	9,599	12	7

* This probably means assisting men to leave localities where strikes were in progress, and go elsewhere in search of work.

	£	s.	d.
In hands of lodge treasurers.....	330	15	9½
In hands of treasurer of central committee.....	9	10	2
Value of hall in Edinburgh.....	200	0	0
Total worth of the association December 3, 1874.....	10,139	18	6½
Total worth of the association December 4, 1873.....	8,248	13	8½
Net gain during the year.....	1,891	4	10

The number of lodges in the association is about 100, with an average of over 100 members per lodge. The returns made to the central committee, by the lodge secretaries, indicate that a large majority of the men belonging to the trade in the places where the society has branches are included in its membership.

The auditing committee, in submitting their financial statement, take occasion to congratulate the society on "the steady increase of wages in the various districts, and the obtaining of such without any great sacrifice, either as regards time or money. The past year," they say, "has also been free from strikes of any great magnitude." They further observe, "that a number of lodges have taken up the apprentice question, with the apparent determination of having all who may desire to learn the trade compelled to serve a regular apprenticeship," a result which they think, "would prove an inestimable boon to the trade in future years." Referring to the combination of employers in a national federation, they say, "we must meet federation with federation;" and, although that plan has not hitherto succeeded "from the fact that the largest and strongest unions stood passively aloof" from the movement, they express the hope that a federation of trades-unions will ere long be formed, "wielding a power greater than the national federation of capitalists and employers." Referring to the movements on foot among the trades organizations to secure the repeal of the "criminal law amendment act," they ask, "Why not a movement to raise from our trades organizations a great political federation? for then, and then only, with the ballot and working as one, will class criminal legislation be swept away, and our interests receive more attention at the hands of our legislators."

In its plan of organization, benefits, and rules of action there is considerable resemblance between this society and the one last noticed, although there are many minor differences, and the contributions, fees, and allowances are not in all cases the same. The rules of the English society provide that members of the Scotch society coming to England shall be admitted free, and that members of the English society going to Scotland shall be admitted into the Scotch society on the same terms; but by a curious discrepancy the Scotch rules provide for the payment of half a crown for admission in either case. It is probable, however, that the provision in the English rules is the one finally agreed upon, these rules having been revised as late as December 24, 1874, while the Scotch rules were revised about a year earlier. In both cases conformity to the rules of the society entered is of course a condition of admission.

The two societies agree that in order to effect a mutual understanding between them, a fortnightly return of correspondence shall be established, the more especially to avert the evil tendency caused by an influx of hands from either country in case of strikes; and that a printed copy of the fortnightly returns of each society (divested of their

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financial reports) shall be regularly transmitted to the other. These two societies comprise within their ranks nearly 35,000 of the operative stone-masons of the United Kingdom.

UNITED SOCIETY OF BOILER-MAKERS AND IRON-SHIP BUILDERS.

The following table shows the expenditures of the United Society of Boiler-Makers and Iron-Ship Builders of Great Britain for the year ended December 31, 1873, and for the seven years ended at the same date, with the average cost per member on each account:

	Expenditures for year ended December 31, 1873.			Expenditures for seven years ended December 31, 1873.		
	Aggregate for the society.		Am't per member.	Aggregate for the society.		Am't per member.
On account of sickness.....	£	s. d.	s. d.	£	s. d.	£ s. d.
Relief to members traveling.....	4,622	4 0	7 5½	30,311	0 0	3 10 ¾
On account of funerals.....	1,091	4 3	1 9	19,631	0 0	2 4 ½
On account of trade disputes.....	1,118	0 0	2 3½	7,873	0 0	0 18 3
Surgeons' salaries.....	281	0 0	0 5½	3,484	0 0	0 8 1½
To superannuated members.....	1,969	10 5	3 2½	9,227	0 0	1 1 6
Salaries.....	1,122	13 2	1 9½	6,897	0 0	0 15 ¾
Fares of members to situations.....	1 153	11 2	1 10½	(*)		
Home donations.....	111	9 7	0 2½	400	0 0	0 3 1½
Bonuses.....	97	10 0	0 1½	1,457	0 0	0 3 4½
	180	0 0	0 3½	1,285	0 0	0 3 0
Total.....						

* The expenditures for officers' salaries during the seven years are not included in the return.

The number of members at the end of 1873 was 13,137; the average number of members for the seven years ended, at the same date was 8,573.

The number of members on the 30th of September, 1874, was 14,487; the number of lodges 143; and the cash balance in the hands of the association, £19,208 2s. 6d.

The benefits paid by this society, apart from relief in trade disputes, are in the form of allowances to the sick, unemployed, and superannuated, and to those laid up through accidental injuries, besides doctors' bills, funeral expenses, bonuses, and fares in going to situations.

AMALGAMATED SOCIETY OF RAILWAY SERVANTS.

This society was formed in the beginning of the year 1872, and consists of an executive council and 155 branches. In the report of the general secretary for that year, the number of members constituting said society is represented as being 17,247, with funds on hand to the amount of £2,569. This he regards as being highly encouraging. He says that after the heavy expenses which must naturally fall upon a gigantic society at its commencement, and considering the short time that many of the branches had been opened, and the number of men who, after having joined the society and obtained through its influence that which they sought, immediately abandoned it, such an accumulation of funds speaks well for the future. The improvement in the condition of many of the railway-men which the society had been able to effect in this short time speaks well for the future power of the society when its members will be increased, its funds augmented, its influence extended, and its organization completed. The executive council, he states, is decidedly opposed to strikes, being of the opinion that if railway men will only be firmly united, they will gain that to which they are entitled without having recourse to any stoppage of work.

The funds of the society are arranged under the following heads, namely:

- Delegate fund.
- Emigration fund.
- Investment fund.
- Strike fund.
- Superannuation fund.

Amount received by the society during the six months ended June 30, 1874:

For dues.....	£245 4 2
For entrance-fees.....	193 3 11

The table on the opposite page affords interesting information in regard to the condition and operation at different periods of the associations therein named.

Table showing the number of members, the income, expenditures, and funds in hand, of five important associations, with the number, character, and objects of the strikes.

Names of societies.	Date.	Total income.	Paid for benefits.	Paid for strikers.	Total expenditures.	Funds in hand.	Character of	Object of strike.
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Table showing the number of members, the income, expenditures, and funds in hand, of free important associations, with the number, character, and objects of the strikes.

Names of societies.	Date.	Number of members.	Total income.	Paid for benefits.	Paid for strikers.	Total expenditure.	Funds in hand.	Number of strikes.	Character of strikes.	Object of strikes.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.			
London Society of Compositors. ^a	1860	2,200	2,443 17 4½	875 15 6½	.....	(1)	3,006 11 8½	.....	.....	.....
	1870	3,360	5,072 9 9	4,540 2 2	1,808 1 0	7,497 3 6½	3,375 6 2½	1	Partial	To maintain existing scale of wages.
	1871	3,500	5,057 11 2½	2,985 1 8	.....	5,101 10 1	4,453 1 1	.....	.....	.....
	1872	3,700	5,152 7 1	2,279 9 7	3,854 9 10	7 7 4 3	4,436 2 10	1	General	To raise wages and reduce hours from 60 to 54 per week.
Northumberland Miners' Mutual Confidence Association. ^b	1873	3,800	6,110 12 1	2,553 5 2	.....	4,608 15 0	6,936 17 3	.....	.....	.....
	1870	2,300	.....	.....	.....	.....	9,900 0 0	.....	.....	.....
	1871	14,000	.....	.....	.....	.....	14,720 0 0	.....	.....	.....
	1872	17,000	.....	.....	.....	.....	19,000 0 0	.....	.....	.....
Iron-Founders' Society of England, Ireland, and Wales. ^c	1850	4,073	12,365 0 0	9,537 8 6½	4 4 0	11,346 0 0	405 0 0	.....	A number of unimportant ones.	Various, the strikes being engaged in by different local branches and not in any case by the society at large.
	1860	2,973	20,458 0 0	8,402 15 2	95 0 0	11,146 0 0	8,932 0 0	11	.....	.....
	1871	10,019	31,354 0 0	21,109 2 0	45 0 0	22,572 0 0	7,542 0 0	11	.....	.....
	1872	10,634	34,748 0 0	12,526 8 3	273 0 0	12,843 0 0	29,378 0 0	16	.....	.....
The Provincial Typographical Association. ^d	1873	11,312	34,141 0 0	19,430 1 9½	275 0 0	20,000 0 0	41,434 0 0	6	.....	.....
	1860	403	81 12 9	.....	85 0 6	402 8 5	58 1 5	4	.....	To resist reductions and other encroachments on the piece system.
	1869	1,473	331 17 11	.....	6 0 0	72 11 1	950 11 4	1	.....	To resist unfair working of the piece system.
	1870	2,430	1,730 0 0	.....	50 11 5	1 7 4 7	1,571 0 0	2	.....	To resist reduction of pay.
Boiler-Makers and Iron-Ship-Builders' Association. ^e	1871	2,657	2,241 0 0	.....	273 0 0	2,913 14 0	1,545 0 0	5	.....	Various.
	1872	2,402	1,810 0 0	.....	502 3 2	1,749 0 0	1,659 6 9	10	.....	Various.
	1869	4,230	19,065 0 0	97 10 0	402 12 4	75 5 2	960 15 2	5	.....	Various.
	1860	6,779	21,704 12 6	10,253 0 0	138 9 6	13,634 0 0	9,107 12 8	1	.....	To resist a reduction of wages.
1871	8,953	29,754 4 5	9,856 13 5	1,385 0 0	13,455 2 10	11,574 1 6	1	.....	To obtain an increase of wages and a reduction of the hours of labor.	
	1872	11,243	30,710 19 0	2,472 17 0	861 1 8	11,532 3 0	25,124 16 0	2	.....	To obtain an increase of wages.
	1873	30,368 16 0	32,077 1 8	251 0 2	16,159 15 0	30,178 18 0	3	.....	To obtain an increase of wages.	

NOTES ON THE FOREGOING SOCIETIES.

* *London Society of Compositors*.—The secretary of this association, in his return, states that after many vicissitudes, dating from 1816, the society settled down into substantially its present form in 1848. Since the spring of 1871, the payments of members have been 7d. a week. The prices of work have generally been arranged between the society and the masters' association, or between committees of the two associations, appointed at general meetings of the respective bodies. In 1872, however, the masters' association was broken up in consequence of a rupture with the compositors' society.

The secretary further says that from 1810 to 1866 there was no advance in compositors' prices, but that an agitation which was commenced in the latter year resulted in a rise of three shillings per week, and a reduction of hours from 63 to 60 per week, and a corresponding increase in the prices of piecework and the pay for overtime. The strike of 1870 was confined to two or three offices, whose proprietors would not adhere to the scale of prices agreed upon in 1866. The society withdrew its members and "the offices remain closed to the present time." The strike of 1872 was entered upon to secure a further rise in wages and the prices for piecework, as well as a reduction of the hours of labor from 60 to 54 per week. It was only partially successful, but the secretary states that from 1866 to 1872 inclusive, the society succeeded in raising prices about 15 per cent., concurrently with a reduction of the hours of labor from 63 to 54 hours per week, and a considerable benefit in the matter of overtime.

The item marked (1) in the table includes the purchase of government stocks to the amount of £600. That marked (3) includes £1,106 5s. and that marked (5) £1,114 10s., expended for the same purpose. These three sums must therefore be regarded as rather transferred to capital account than as forming a part of the expenditures for the years in which they occur.

The items marked (2) and (4) are unusually large, the income of the society during the years 1870 and 1872 having been swelled by special levies to meet the expenses consequent upon the strikes above referred to.

† *Northumberland Miners' Mutual Confident Association*.—This society was organized in 1863, with about 2,000 members. It has had no general strike, but in 1866 it expended about £4,000 in support of a long strike of some of its members at Cranlington. The object of this strike, which was an increase of wages, was defeated by bringing men from Cornwall to take the places of the strikers. Only one other strike of importance (lasting only a few weeks) has occurred among the members of this society, but it has contributed thousands of pounds to assist workmen in other trades who were on strike in different parts of the country.

All differences, except those of a general kind, between the members of this society and their employers, are now referred for settlement to a standing committee, (consisting of six employers and six workmen,) which had been in existence for nearly two years at the date of the above returns, and had worked satisfactorily.

The payments of members are 6d. per fortnight, and they receive 10s. per week when on strike or laid up through accident. There is also a death legacy of £2 to members' families, but no allowance in sickness.

Mr. Thomas Burt, recently elected as member of Parliament for Morpeth, has been secretary of this society since 1865, and still retains the position, although the society provides a deputy to perform the ordinary duties of the office.

‡ *Iron-Founders' Society of England, Ireland, and Wales*.—The expenditures of this society for donations, allowances for sickness, accidents, superannuation, funerals and emigration, from 1850 to 1859 inclusive, amounted to £122,714 4s. 8d. Its expenditures on the same accounts, from 1860 to 1869 inclusive, were £248,609 4s. 7½d. Expenditure on strikes are not included in these amounts.

§ *The Provincial Typographical Association*.—The secretary of this association states that the strikes in which it has engaged have had so many different objects that it is impossible to tabulate them fully. The largest expenditures have been incurred in strikes undertaken for the purpose of raising wages, but a very considerable sum has been expended in resisting reductions and other encroachments, including the introduction of an undue number of apprentices.

Up to 1873 the society had no fund for benefits other than relief to men on strikes; but there is a separate organization under the same management, the object of which is to relieve the members while traveling. The fund which that society now has on hand amounts to about £2,000, which is not included in the above table.

|| *Boiler-Makers and Iron-Ship Builders*.—This society has already been noticed.

It is to be regretted that returns could not be obtained from the Miners' National Union, numbering 140,000 members; the Amalgamated Association of Miners, numbering 45,000; the National Agricultural Laborers' Union, numbering 60,000, and the Federal Union of Agricult-

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tural Laborers, numbering 30,000; but these associations are as yet comparatively young, and probably have not settled into a uniform and systematic method of keeping and consolidating their accounts. There is probably a reason, too, why they are not disposed to be communicative as to their financial condition, for their contests with employers have been severe and protracted, in consequence of which their funds are likely to be low. The secretaries, or other prominent representatives of these associations, as well as the secretaries of the Amalgamated Association of Cotton-Spinners, (numbering 14,200,) the East Lancashire Power-Loom Weavers, (numbering 16,600,) and the Amalgamated Iron and Steel Workers, (numbering 20,000,) have been asked for information in regard to their respective societies, but no returns as yet have been received from them.

The societies just named, and those heretofore noticed, comprise all the associations, having 10,000 members or upward, which were represented at the National Trades-Union Congress held at Liverpool in January, 1875.* It has already been remarked that the number of members represented at Liverpool was not less than 800,000, after making full allowance for duplicate representation in the case of some of the city trades-councils; but there are many small organizations, and some of very considerable magnitude, which were not represented in the congress at all. One of these, the Scotch Carpenters and Joiners, has been noticed in these pages; another association of the same trade, which was also unrepresented, has its headquarters in Birmingham, and is said to comprise upward of 20,000 members. Mr. George Potter, of London,† a gentleman who is exceedingly well informed on all working-class movements in Great Britain, in a paper read before the Social Science Congress some months ago, estimated the total membership of the trades-unions of the United Kingdom as being certainly not less than 1,200,000, a number which, seeing that it is made up of men, a large proportion of whom have wives and children, represents a very considerable section of the population of the kingdom. "The coal and iron workers," says Mr. Potter, "cannot count fewer in their union than 300,000 men; but as these industries are of comparatively recent development, their unions are not yet so complete in their arrangements as in a short time they are certain to become. Still, even in those trades, wonderful progress has been made in adding provident to trade benefits. Sickmess and death and accident are provided for in most of them; and in some superannuation is added, as well as provision for widows and orphans. Time alone is needed to make all this a vast net-work of provident arrangement, by which most of the worst evils of the working-man's situation will be met and overcome. It is sometimes insisted on that the benefits held out by trades-societies to their members can only be continued for a time. Actuaries have proved this. In this matter, however, the calculations of the actuaries have not turned out to be correct. The great trades-associations have always met their obligations to their members, and with the power of levy which they possess they are not likely to fail in this in the future. They know their own business and they do it very well in their own way, with less internal disagreement and less chance of shipwreck through fraud, bad faith, or bad business tact than any other set of societies in the kingdom, whatever their object or by whomsoever worked."

*A few of the smaller societies have also been included in the above notices, as well as the Scotch Association of Carpenters and Joiners, who were not represented in the congress.

†Mr. Potter is editor of the *Beehive*, the Trades-Union organ.

This is strong commendation; but it must be frankly confessed that the study of their plan of organization, their management, their modes of making the will of their members felt in all matters of vital concern, their precautions against fraud on the part of their officers, their provisions for the discouragement of rash or hasty action in disputes with employers, their penalties for hostile or abusive language, and their carefully-guarded arrangements for mutual support and assistance, tends to impress one with a much more favorable opinion than that which is commonly received of the sobriety of conduct, capacity for business and for self-government, solid intelligence and moral status of the men who compose them.

TRADES-UNIONS.

By MR. J. S. STANLEY JAMES.

The following, forming the concluding part of an article written for this report by Mr. Stanley James, "On the condition of the working-classes of England," is inserted in this place because of its connection with the preceding chapter:

Trades-unionism in England is an established fact, and a power which, although many politicians try to shirk or avoid, it is best to openly admit. The unprejudiced observer must allow that in England trades-unions have raised workmen morally and intellectually, and have taught them a higher sense of their responsibilities. They have increased the prices and shortened the hours of labor; have educated workmen to a knowledge of their common interest and common duty, and in every sense have raised the character of English workmen. Judge Rupert Kettle, in his work on "Strikes," says, respecting the trades-unions, "They have promoted free thought and free action among the hand-working classes, and, moreover, have taught them to respect the law and rely upon moral means for obtaining what they believe to be right. We have now no bloodshed, no rioting, scarcely an angry word in the bitterest and most protracted strikes. Although we owe this salutary change partly to the improved education and the higher moral tone among the laboring class, we owe it much more to the direct and immediate influence of trades-unions." The British Quarterly Review says, "It appears pretty clear that unionism by its influence has, by slow degrees, altered for the better the condition and circumstances of British workmen."

Prior to 1824 all concerted proceedings on the part of workmen for the purpose of raising the rate of wages were punishable both at common law, and under the "combination acts," which were in force both in England and Scotland. In Scotland particularly were these restrictions imposed on workmen. In 1755 the journeymen wool-combers in Aberdeen formed themselves into a society. "Though their seeming view," said Lord Kames, "was to provide for their poor, yet under that pretext several resolutions were made cramping trade and tending to make them independent of their employers." The judgment of the court before which the men were brought was, "that such combinations of artificers, whether they collect money for a common box, inflict penalties, or make by-laws, are of a dangerous tendency, subversive of peace and order, and against law;" and so under pains and penalties the men were prohibited from continuing such society. In 1762 the court at Edinburgh found "that the defenders and other journeymen tailors of Edinburgh are not entitled to an hour of recess for breakfast, that the wages of a journeyman tailor in the said city ought not to exceed one shilling per day, and that if any journeyman tailor not retained or employed shall refuse to work when requested by a master on the aforesaid terms, unless for some sufficient cause to be allowed by the magistrates, the offender shall, upon conviction, be punished in terms of law; for arts and manufactures which are necessary to the well-being of society, must be subject to rules, otherwise it may be in the power of a few individuals to do much mischief. If the bakers should refuse to make bread, or the brewers to make ale, or the colliers to provide coals, without being subjected to any control, they would be masters of the lives of the inhabitants. To remedy such an evil there must be a power placed somewhere; and accordingly this power has long been exercised by magistrates of burghs and justices of the peace, under review of the sovereign court." With regard to the propriety of the regulations it was observed that the power to fix wages was admitted, and "it is of no purpose to fix wages without also fixing the number of working hours; and it is to no purpose to fix either if the defenders have the privilege to work or not at their pleasure."

But year by year, during this century, the old-fashioned connection of master and servant, with the quasi-feudal servility on the one hand and patronage on the other,

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has passed away, although many prejudices have survived the times when the dominant and the servient positions was rigidly maintained. Some encouragement is given to the continuance of artificial class-distinctions in England by the maintenance on the statute-book of laws passed from time to time to modify and modernize, but not to abolish, the pains and penalties by which, in barbarous ages, labor was enforced. In opposition to the law, trades-unions grew in power and strength every day. Various acts of Parliament were from time to time passed in relation to them, but it was not until 1871 that the "trades-union act" was passed, by which they were legalized. Many former disabilities are, however, continued, and secret societies are illegal. "All societies are deemed unlawful combinations the members of which shall take oaths, or engagements in the nature of oaths, or subscribe any test or declaration not to disclose its secrets." According to this law, every trades-society in the United States would be unlawful and its members liable to prosecution.

The trades-unions, acting under the old ban of illegality, have, as I have said, raised the wages and shortened the hours of labor in England. This, however, has been done too often at the loss of friendly feeling, comfort, and confidence between employer and employed. "Strikes" are a barbarous means of adjusting disputes, and much suffering and misery have thereby ensued to the men. The system of arbitration in disputes between employer and employed has, however, been inaugurated with great success. Arbitration was first proposed and carried out by Mr. Rupert Kettle, an eminent barrister, now judge of the Worcester County court. For ten years Judge Kettle has devoted his time to this subject, and has mediated with great success in many large disputes between masters and men in every part of England. Judge Kettle's services (for which he will accept no remuneration) are well known and appreciated by the workingmen, and whenever his decision has been against their claims, they have accepted it loyally and thoroughly. Arbitration is now a principal platform of many of the leading trades-unions. At the last annual conference of the National Association of Miners the following resolution was carried: "That the miners of the various districts in the association do all in their power to make arrangements with the employers to form boards of conciliation and arbitration, by which any disputes that may arise between both parties might be amicably settled, without having recourse to the barbarous course of lock-outs." The system of trade-arbitration is, in fact, now nearly a national one, and Judge Kettle has also the satisfaction of seeing it accepted in a great number of industries in France, where his system was highly commended by the Comte de Paris in his book on the labor question; and in Germany, since its advocacy by the great social economist, Schultze Delitch, and the well-known republican, Dr. Bertram.

The leaders of the trades-unions in England have now, indeed, great power. Of Halliday, Burt, Maedonald, and especially of Joseph Arch, it may be said, in the words of the Gaul Liscus to Caesar, "There are some whose influence with the people is very great, who, although private men, have more power than the magistrates themselves."

STRIKES IN ENGLAND.

Closely associated with the history of the British trades-unions, is that of those protracted and bitter struggles between workmen and employers, known as "strikes," by which the annals of labor in the present century have been especially marked. One of the earliest was the widespread and long-continued strike of the Lancashire cotton-spinners, which took place in 1810. The following particulars of that and several other strikes of British workmen are taken in a condensed form from the work of Mr. Ward on "Workmen and Wages:—"

In 1810, the spinners in the mills of Manchester, Stockport, Macclesfield, Staleybridge, Ashton, Hyde, Oldham, Bolton, and as far north as Preston, simultaneously left their work, and, had the strike continued a little longer, the whole of Scotland would have joined it. As it was, 30,000 persons were thrown out of employment; many of these paraded the streets of the above-mentioned towns during the day, shouting and hooting at the persons who, as they supposed, were inimical to their cause. Disturbances of the peace were frequent; the authorities were inefficient for the protection of property; several masters were unable to leave their mills for fear of some violent outrage; and such workmen as were obtained to supply the place of the seceders were held prisoners in the establishments where they worked. The direction of this strike was carried on by a congress at Manchester, formed of delegates from all the principal mills. During this turn-out, the men who had struck were supported by the contributions of those who were at work, and the sums so collected amounted for a considerable period to nearly £1,500 weekly, of which Manchester, alone, paid upward of £600. This fund was for some time sufficiently large to enable the congress to make a weekly payment of 12s. to the spinners who had struck; but the contributions, and consequently the allowances that flowed from them, gradually fell off, till they at length ceased altogether, and those who depended upon them were literally consigned to destitution. When the contributions of those in work, failed, such of the men as had laid by money in the days of prosperity resorted to it for support, and thus were consumed in a hopeless warfare the hard-earned savings of years of industry. The required advance of wages was not obtained in a single instance, and, after four months of protracted misery, the men returned to their work, some even accepting employment at the rate of 2d. per pound, instead of 4d., which they had been previously earning, thus submitting to a reduction of 50 per cent. on their wages, to raise which everything but existence had been staked.

In the year 1824 the spinners in Hyde turned out, much against their will, and solely at the dictation of the union. The reason given for the turn-out was, that the Hyde spinners were working for wages below the regular rate, inasmuch as they were paid 3s. 7d. per 1,000 hanks of No. 40 cotton, while in other places 1s. more was given for the same quantity of work. But the machinery on which the Hyde spinners worked was so superior, that they could, at these comparatively low prices, earn more weekly than the neighboring spinners, who, however, insisted that their Hyde brethren were paid lower wages than themselves, and, therefore, ought to turn out; whereas, it is obvious that they were paid higher wages, in fact, than were given elsewhere. The result of this strike was that the men, after enduring the greatest hardships, and having cost the combination between £3,000 and £4,000, returned to their work at the same wages which they had struck to raise.

In 1830 a strike likewise occurred of more than ordinary magnitude, and threatened at one time extreme violence on the part of the strikers. At Ashton and Staleybridge, 3,000 spinners left their work, by which 52 mills and 80,000 persons were thrown out of work for ten weeks. On this occasion it was necessary to send 1,000 additional troops to that part of the country to preserve order; and had it not been for the judicious measures of the commandant of the district, (Colonel Shaw,) great destruction of life and property, in all probability, would have taken place. The men, however, returned to their work at the same wages which they had been previously receiving.

THE PRESTON STRIKE.

The Preston strike was marked by similar features to those just noticed in the cotton-manufacture of Manchester and the surrounding locality, and ended just as disastrously to the operatives engaged in it, while at the same time it inflicted a great loss,

* The opinions of this author on the merits of the several contests are usually omitted, but where reproduced they are not always in accordance with the views of the author of this report.

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upon the community in the immediate and surrounding district. The operatives of Preston struck work on November 5, 1836. The strike lasted thirteen weeks, and the number of persons thrown idle by it were classified as follows: 660 spinners; 1,320 piecers, children employed by the spinners; 6,100 card-room hands, reelers, and power-loom weavers; 420 overlookers, packers, engineers, &c., making 8,500 persons in all. The spinners, who numbered 660, were the only parties who voluntarily left their work, and who threw the others out of employment, so that the 7,840 remaining were completely dependent upon them. The sacrifice, on the part of the piecers, reelers, overlookers, packers, and engineers was severe in the extreme, and the more severe as it was imposed upon them much against their will. The following estimate was made of the pecuniary loss to all classes of the operatives in consequence of the strike:

The wages of the 660 spinners for thirteen weeks, at 22s. 6d.	£9,652
Wages of 1,320 piecers for thirteen weeks, at 5s. 6d.	4,719
Wages of 6,520 card-room hands, weavers, overlookers, engineers, &c., for thirteen weeks, averaging 9s.	38,142
Estimated loss sustained by hand-loom weavers, in consequence of the turn-out	9,500
Estimated loss sustained by clerks, esters, mechanics, dressers, sizers, &c., in consequence of the turn-out	8,000
Total	70,013.

From which must be deducted:

Estimated amount of wages earned during the partial resumption of work, between January 9 and February 5	£5,013
Estimated value of relief given by masters	1,000
Other private charity and parish relief	2,500
Allowance to the spinners and piecers from the funds of the union	4,290
	12,803.
Leaving a net pecuniary loss, to the whole body of the Preston operatives, of.	57,210.
But, to the town at large, it may be said that the loss amounted to the whole sum of £70,013, as the deductions were mostly of a charitable nature. The loss to the masters, being three months' interest of £800,000, some of which, being sunk in capital, was not only unproductive, but was taking harm from being rendered useless, was estimated at	45,000
And the loss sustained by the shop-keepers, from loss of business, bad debts, &c.	4,086.
Making a total loss to the town and trade of Preston, in this unavailing struggle, of	107,196.

THE NOTTINGHAM STRIKES.

In February, 1811, the hosiery trade of Nottingham and the neighborhood was in an extremely depressed state, and, as a consequence, large numbers of workmen were reduced to pauperism and the most dire distress. On the 11th of March, great numbers of the country framework-knitters assembled in the market-place and expressed a determination to take vengeance on their employers who had reduced the prices paid for making stockings. Several meetings were held and the framework-knitters resolved to organize themselves, with those of Nottingham and other places, for the purpose of advancing wages and destroying such improved machinery as they supposed injurious to manual labor. Secret midnight meetings were held in various parts of the county, attended by delegates from other districts, who attributed their distress mainly to the introduction of what were then termed *wide-machines*, in some of which several stockings were woven at one time, while in others shapeless pieces were made for low-priced stockings, called *cut-ups*. Bands of the "Luddites" prowled about at night to destroy the obnoxious machines, but they were so disguised, and so organized, that very few of them were brought to justice, as compared to the number engaged in the undertaking. Upwards of 200 stocking-frames were broken in the short space of three weeks; and one manufacturer had 63 destroyed in a single night, besides other property connected with this trade. The system under which these deluded men acted was called *Luddism*, which was derived from one Luddam, a youth of Leicestershire, who, when ordered to "square his needles" by his father, a framework-knitter, took his hammer and bent them into a heap. The destructive operations of the Luddites were repeated at intervals from 1811 to 1817, in which period upwards of one thousand stocking-frames and a number of lace-machines were destroyed in the county of Nottingham, and the evil spread itself into the counties of Leicester, Derby, Lancaster, and York. In the two latter counties, the object of the Luddites was to destroy the machines which

had been introduced to diminish hand-labor, but the frame-breakers in the hosiery and lace-trades had not this grievance to complain of. The Nottingham and Leicester men, however, complained of a diminution in prices, occasioned by the repeal of the act of the 5th of Elizabeth. Until this statute was repealed the framework-knitters were paid by printed statements, drawn up by both parties, the deviation from which, in 1811, and the introduction of wide or cut-up frames, caused the riots, which continued, with various intermissions, till 1817. The plan adopted by the rioters was to assemble in parties of from six to sixty, as circumstances required, under a supposed leader, styled "General Ludd," or "Ned Ludd," as the humor might seize them; and whoever assumed either of these titles had the supreme command of the party, some of whom, armed with swords, pistols, firelocks, and other destructive implements, were placed as guards, while others, having hammers, axes, &c., entered the houses and destroyed the frames. In consequence of the continuance of these outrages, a large military force was dispatched to the locality, and two of the metropolitan-police magistrates, assisted by other officers, presided at Nottingham with the view of discovering the ringleaders; but, although a secret committee was formed and supplied with a large sum of money for the purpose of obtaining private information, no discoveries of any importance were effected, and the offenders continued their devastations with redoubled violence. A royal proclamation, however, was issued, offering £50 reward for the apprehension of any of the offenders; but this only tended to inflame the frenzy of the men, who then began to plunder the farm-houses both of money and provisions, declaring that "they would not starve while there was plenty in the land."

The number of unemployed families who were relieved out of the poor-rates in the three parishes of Nottingham, on the 30th of January, 1812, amounted to 4,248, consisting of no fewer than 15,350 individuals, or nearly one-half of the then population.

In 1813, eighteen Luddites, some of whom were guilty of murder and arson, were hung at York; and in the same year an act was passed which made it a crime punishable with death to break a stocking-frame. Seven Luddites were also transported from Nottingham, and several of the leaders in Leicestershire, in 1816 and 1817, were executed in front of the county gaol. Since that period, the framework-knitters, too miserably paid, have periodically had recourse to more temperate and more sensible measures in their endeavors to better their condition; and in 1819 those in Leicester and the neighborhood formed themselves into a union, in which those who were employed contributed to the support of the unemployed, in order to prevent the decline in wages, which had fallen nearly one-half since 1815. In this undertaking they were assisted by the contributions of the benevolent to the amount of more than £3,000, as well as by loans of money and the assistance of the principal manufacturers; and about the close of the year 1823 things began to take a turn, trade being so much improved that there was scarcely a man out of employ. The frame-knitters' union was dissolved, having distributed, during a period of four years, no less than £16,182 among the unemployed. The wages, however, of the frame-knitters continued to decline, until they reached little more than an average of 5s. per week after deducting frame-rents and other shop-charges, though certain expert hands could earn twice that sum.

In 1843, a petition, signed by upward of 25,000 framework-knitters of Leicestershire, Nottingham, and Derbyshire, was presented to the House of Commons for an inquiry into their distressed condition arising from the low rate of wages, the enormous exactions for frame-rent, the prevalence of the *truck-system*, or payments of wages otherwise than in money, and the manufacture of spurious articles called *cut-ups*. In February, 1844, Her Majesty issued a commission to inquire into their grievances. A large body of information was collected and published in a copious report. The heaviest grievance complained of in this inquiry was the *frame-rents*.

The system of frame-rents and "charges" is one of the most oppressive that can possibly be conceived. It grinds the poor stocking-weaver almost down to the dust; at least there is little left of his weekly earnings when the rents or "charges" are deducted from them. The evidence, both of masters and men, is perfectly conclusive and coincident on one point, namely, that the amount of this deduction is regulated by no fixed rule or principle; that it is not dependent upon the value of the frame, upon the amount of money earned in it, or on the extent of the work made; that it has differed in amounts at different times and at different places; that the youthful learner or apprentice pays the same rent from his scanty earnings as the most expert and skillful workman in the trade from his, of fourfold the amount, and that the practice of this "charge" has existed for upward of a century. The grievance began with the bagman engrossing the frames and letting them out to hire. It was the beginning of a powerful and crushing monopoly on the part of the masters to exercise the right to charge, on the one hand, a fixed weekly rental for the use of a tool to work with, and, on the other, to reserve to themselves the right to prevent the renter of the tool from the free and uncontrolled use of it during the time it was rented. Further, when the bagman could not find full employment, he prevented the renter of the tool from working it for other parties. He also exercised the right of

only allowing certain hours for the framing of the power of the House of Commons, the rights of the out upon bribe who had orig-

Notwithstanding they have to whenever the strikes, however their being d is necessary a security of fi-

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On the 4th fortnight's no For a time the blast-furn the contest, a were a reduc Wolverhampt reduction, and coal men, the This natural went in and g they did not r the masters' t to object to th erfully display Broomfield, and the chief emp seeing that th arrangements iron works, res shire, and Nor a ready respo to be used to to run as man quantity of 10 nittee attempt have named, v attempt to def colliers at a di as to what ma support of the the colliers at who felt that numbers thro was at its beig dle of the mon tween 4 and 5

only allowing the workmen to begin at a certain hour, and leave off work at another certain hour. To increase, moreover, his power of control, he kept on further engrossing the frames, by which he acquired the means to forestall the markets, and retain the power of making what deductions he pleased. A petition was referred to a committee of the House of Commons as long ago as 1777, in regard to these encroachments on the rights of the workmen, and they agreed that the petitioners ought to have redress, but upon bringing in a bill it was defeated by the activity and energy of the hosiers, who had organized a powerful parliamentary opposition to it.

Notwithstanding the miserable condition of the frame-work knitters, and the evils they have to contend against, strikes have done them infinitely more harm than good, whenever they have been resorted to for the removal of their grievances. General strikes, however, are very rare in the hosiery trade; the number of workmen, and their being distributed so widely about, preventing anything like the unanimity which is necessary to secure perfect organization with such a view, to say nothing of the scarcity of funds among the men.

It must, we think, be obvious that nothing can be more intolerable than the professed objects for which unions are generally formed—the maintenance of an established list of prices for labor—because, in the first place, they are powerless in controlling the influence on wages which the supply of labor ever bears to the demand for it; and, in the next, the unions have not the means of discerning the amount that the manufacturer can afford to pay for wages, as one only of the elements in the cost of production, which would leave him a profit sufficient to induce him to continue the investment of his capital in the manufacture.

In many cases, after a long struggle, and extensive injury both to masters and men, the latter have been forced to resume work on the terms they had previously turned out against, and occasionally even on less advantageous ones.

THE STAFFORDSHIRE COLLIERY STRIKE.

The narrative of the Staffordshire colliery strike is a sad tale, and soon told. It is the history of a hopeless struggle, which was generated in ignorance of the plainest economic laws, and ended as all such struggles must end, in painful discomfiture and defeat on the part of the men engaged in it.

On the 4th of July, 1864, just six years after the preceding general strike in 1858, the fortnight's notice of the masters having expired, the thick-coal men all turned out. For a time they were joined by the working engineers, and by the men employed at the blast-furnaces in the making of pig-iron; but these, after a short struggle, gave up the contest, and resumed work on the terms proposed by the masters, which were a reduction of ten per cent. The thin-coal workers in the Bilston and Wolverhampton districts did not at first join the movement, for they accepted the reduction, and were at work, when, by repeated entreaties on the part of the thick-coal men, they, too, were induced to turn out, some of them without giving notice. This naturally led to magisterial proceedings, and the thin-coal men ultimately all went in and gave notice. On the expiration of that notice, they all turned out, but they did not remain out more than a week, and three-fourths of them at once accepted the masters' terms. It will, therefore, be seen that the thick-coal men were the first to object to the terms which the masters offered; and the objection became most powerfully displayed among the men who were employed in the domestic trade at West Bromwich, and in the general trade about Dudley and Tipton. In the latter districts, the chief employer is the Earl of Dudley. Other masters took the same course, and, seeing that the men intended stoutly to contest the point, they began at once to make arrangements for getting supplies of coal for carrying on the pig-iron and the finished-iron works, respectively, from other districts. Lancashire, Derbyshire, North Staffordshire, and North and South Wales, were at once applied to. The application met with a ready response, and so great was the demand, that every description of wagon had to be used to bring the coal from those districts. The railway companies were ready to run as many special trains as the ordinary traffic would allow, so that the enormous quantity of 10,000 tons of coal was daily brought into Staffordshire. The strike-committee attempted to cut off the supplies, by sending delegates into the districts we have named, with a view to induce the colliers to refuse to get coal to be used in an attempt to defeat the men in Staffordshire. But the attempt was unsuccessful. The colliers at a distance did not believe that they had a right to dictate to their masters as to what market they should send their coal, but were ready to contribute to the support of their brethren on strike. Simultaneously with this refusal on the part of the colliers at a distance, there were evidences at home of a want of unanimity. Men who felt that their masters would ultimately win the day, returned to work in small numbers throughout the whole of the district. There were 30,000 out when the strike was at its height in September, but that number had fallen to about 18,000 in the middle of the month. To prevent these from going to work, morning meetings, at between 4 and 5 o'clock, were determined upon, and thence detachments moved off in

different directions, headed by drums and whistles. Wherever men were met on the road going to work, they were sure to be prevented from going down that day. Usually, it required much persuasion to bring about such a result, but when that failed, other means of a less agreeable character were resorted to; and when men succeeded in getting to work, unobserved, they were met as they returned, and assailed with the usual epithets of "black-leg," and the like, the presence of the police as their guard notwithstanding. A few of the more desperate resorted, for the first time in the history of a colliers' strike in Staffordshire, to the throwing of rough hand-grenades into the houses of the men who had gone to work; and as the threats became more and more vehement, the police had to interfere at the morning meetings, which were ultimately prohibited. The result was that the number of men—encouraged by two troops of lancers, who were headed by the lord-lieutenant of the county, and by the stipendiary magistrate for South Staffordshire—was quickly enlarged, and work in the pits was very soon resumed.

THE POTTERY STRIKES.

The strikes in the pottery-trade in the years 1834 and 1836, also "point a moral and adorn a tale" of more than ordinary interest in relation to workmen.

The Staffordshire potteries, as the locality is ordinarily termed, comprise parts of three parishes, and extend, from north to south, a distance of eight miles. Four of the principal towns are included within this limit, of which Burslem is the oldest in the district; and the first in rank next to this town are Hanley and Shelton, which may be said to form one town, as they are immediately contiguous to each other, and are the most populous. At the census of 1831, the population of the several towns within the parish of Stoke-upon-Trent was 35,602; in the parish of Burslem, 12,714; and in the township of Tunstall, in Wolstanton Parish, 3,673; making a total of 51,989. Since that period the population has more than doubled.*

All the processes of the manufacture of pottery are performed by manual labor, and no machinery, in the common acceptation of the term, is used. Every branch in the trade is healthy, with the exception of that employed in covering the surface of the ware with glaze, or (as it is technically called) "dipping." The regular working-time on which all calculations of wages are based is fifty-four hours per week, or an average of nine hours per day; but when goods are in great demand, the workmen are often required to make greater exertions, and the time is extended to sixty-six hours per week, or an average of eleven hours per day.

The operative potters, as a body, earn fully as good if not better wages than the workmen of any other staple trade in the kingdom, and full employment is afforded at suitable occupations to women and children. In a statement published by the chamber of commerce previous to the general strike, and circulated throughout the kingdom, there are the following remarks on the subject of the earnings of the workmen, which have been authenticated by the proper authorities:

Two or three years ago, when wages were considered low, the weekly average was from 17s. to 21s. for men, according to their skillfulness; 7s. to 9s. for women, and 3s. 6d. to 4s. 6d. for children fourteen years old. The average earnings in regular branches are now from 21s. to 25s. for men, 9s. to 12s. for women, and 4s. to 6s. for children, the labor being calculated at nine hours per day.

The operative potters, in their general character, are industrious and orderly, and possess the comforts of life to a considerable extent. For ten years previous to the strike, wages had been undergoing a progressive advance, caused in part by the operation of the potters' union, but more by an uninterrupted demand for goods, which left few skilful hands out of regular employment. At no period since the establishment of the trade was the remuneration for labor so ample as at the time of the general strike in 1836.

The first union of the workmen known in the potteries, for the purpose of regulating prices, was established in 1824. In 1825 the hands at a number of manufactories struck for an advance of wages, but during the continuance of the strike the well-remembered commercial panic of that year occurred which frustrated their endeavors, and work was resumed at the same or lower prices than those previously paid. One of the expedients of the union at that time was to commence manufacturing, and, by thus making the surplus hands a source of profit, it was thought a waste of funds would be prevented, and at the same time the competition for employment would be checked.

The union was dissolved, but its leaders met with considerable difficulty in obtaining employment, and some left the district, while others took to other occupations. One of the leaders of the union, however—a man of some mark in his way, who had subsequently changed his views on the subject—made the following observations in a letter published just previous to the strike of 1836:

"These simple facts will illustrate the nature of unions, their utter inefficiency, the factious spirit they cherish, the false principles on which they are founded, the mate-

* Journal of the Statistical Society, vol. I.

rials of which they are ordinarily composed, and the ruinous effects to which they lead. We spent nearly £3,000 to prop up a fallacious delusion; labor fell lower than ever in 1836, in consequence of the depression of trade. Many of the men were ruined and went in at any price. Many, before in comfort, dragged on a miserable existence on parish-pay, having offended their employers beyond forgiveness."

In 1834, another attempt was made at manufacturing by the workmen. A manufactory was taken at Burslem, on a lease for a term of years, and seven of the men who had accumulated property entered into engagements for the payment of the rent. A capital, amounting to £800, was advanced from the general fund, and two of the most active members of the union had the management. This concern struggled through an existence of eighteen months; the capital was entirely lost, all parties became dissatisfied with each other, and those connected with the lease were happy at being discharged from their responsibilities on almost any terms.

In November, 1834, the end of the potters' year, the workmen at ten manufactories in Burslem and Tunstall struck for an advance of wages. The advance demanded was an average of thirty-five per cent. upon the current rate.

On the 1st of March, after a stoppage of fifteen weeks, the manufactories were opened, and masters yielded to the demands of the men. The number of hands employed by the ten manufactories was at least 3,300, and the weekly amount of wages exceeded £14,000. The total loss in wages alone sustained by the workmen was estimated at £27,000. To this amount must be added the loss sustained by the masters on their dormant capital, the loss to the working colliers, and to the other branches immediately dependent upon the potters.

The workmen were naturally elated at the victory which they had achieved, and had the weakness to delude themselves with the idea that nothing could stand against their combined will. The leaders of the union assumed to regulate all matters that related to the workmen and their employers.

Further concessions were demanded from time to time, and finally the masters found it impossible to comply with these demands, and submit to the course of conduct pursued, without appearing to abandon the general interests of the trade. Therefore, in March, 1836, the great body of the manufacturers formed themselves into a society under the designation of a chamber of commerce, the professed object of which was to protect the general interests of the trade, but virtually to counteract the effect of the proceedings of the workmen.

It had already appeared, that, notwithstanding an agreement to the contrary, the workmen were enabled to effect their object, by causing the hands at any manufactory to strike until their demands were conceded. To counteract this, no other plan presented itself to the chamber than that of inserting a clause in the agreement, whereby the masters might, as a body, be enabled to suspend their manufactories whenever the workmen of any master struck, in violation of any existing contract. Such a clause was drawn up, under the sanction of high legal authority, and the masters determined on its forming part of their agreement. The contest on the part of the masters was limited to these objects—to maintain the established wages of the trade, to continue the mode of hiring from year to year, and to make an alteration in the form by adding the protective clause named. Workmen thought, however, that if the old mode of enforcing their demands was then adopted, the same result would follow; and the hands at fourteen manufactories struck work, although they were under agreement to the terms into consideration, and urged them to oppose the proceedings of their workmen. Pecuniary recompense was promised, on a scale proportionate to the relative extent of their business, until Martinmas, the time when the suspension of the whole body would offer a more formidable resistance. The workmen, week after week, deceived themselves with the hope that the masters would not continue united; that certain individuals, among those whose men had struck, would soon yield rather than sacrifice their connections; and that the secession of one would be the signal for the surrender of all the others. No change was made in this state of things until Martinmas, when sixty-four manufacturers, members of the chamber, suspended business, as they had previously resolved.

The number of hands employed at the fourteen manufactories which struck in September was 3,500, and the weekly payment of wages was at an average £2,560. The total loss to the district on this strike may be estimated at £31,163. The number of hands employed at the 64 manufactories engaged in the general strike was 15,660, and the amount of wages was at an average £11,238 per week. The loss to the whole district on this strike may be estimated at £157,442. There are in the potteries 130 manufactories, which employ 20,000 hands, and pay in weekly wages £14,400. It would thus appear that about half the total number of manufacturers were engaged in the strike; but as they were the greatest in extent of business, they employed seven-ninths of the total number of hands and paid four-fifths of the whole amount of wages.

The union was completely defeated, not having succeeded in any one of its points. On the 20th of January, 1837, twenty-one weeks from the commencement of the strike

with the fourteen manufactories, and ten weeks from the general suspension, the men resumed work. The annual hiring was retained, and the suspension clause formed part of the agreement. The extent of suffering was great, and far beyond anything that had previously been seen in the district. The payments from the union funds were very irregular and did not exceed an average of 5s. or 6s. per week for men with families; while women and children, who form a large proportion of the working population, did not receive any allowance. The privations of the workmen were great, but they bore them with a constancy worthy of a better cause. A few days before the termination of the strike a considerable number of individuals, amounting to upwards of 200, simultaneously pledged their watches and disposable articles of dress in aid of the general funds. Many of the more provident workmen, who had money in the savings-banks of the district, drew it out, either for the supply of their own necessities or to assist the union.

According to a financial statement the total loss inflicted by the strike from first to last was as follows:

Total loss to the operative potters.....	£152,816
Total loss to colliers, grate-makers, and engravers.....	19,332
Total loss to the manufacturers.....	16,462
Total.....	188,610

No outrage was committed during the strike, either on the person or property of any manufacturer. There were no tumultuous gatherings, nor indications of violence, which was highly creditable to the men. During the strike, however, many of the manufacturers were "picketed," and any individual seen to enter the manufactories incurred a fine, which was stopped from the succeeding week's allowance. Such a regulation might be necessary in support of a bad cause, but could scarcely be required in one founded upon justice; and it was surprising that men who, from their conduct, appeared to understand so well their rights, and who were so sensitive andor what was deemed oppression, should submit thus to be controlled in the operation of their own free will and perfect liberty of action.

YORKSHIRE STRIKES.

The Yorkshire strikes, as they are commonly denominated, furnish a curious and instructive chapter in the history of the manufacturing classes. In 1811, the stubbers, spinners, and weavers in the cloth trade formed a union. One of the leading firms at Leeds was the first to feel the effect of the combination. They had just completed a building on a gigantic scale intended for the weaving of fine woolen cloth. All the expensive machinery adapted for that purpose had been purchased and erected, and every necessary arrangement for commencing the business had been made, when the weavers, to the number of 210, turned out, although the wages they had been receiving were equal to those received by others of their class, and averaged 17s. a week. For some weeks the required advance in wages was resisted, until at length those men who continued at their work were subjected to such treatment, on entering and leaving the factory, that the proprietors were induced to accede to the terms proposed. The men, however, were disappointed in obtaining all the advantages they looked for, as only a sufficient number of weavers were taken back to work the looms in the old part of the establishment, leaving their newly-erected building unused. The owners soon after disposed of all the machinery it contained, and this commodious and spacious structure, 136 yards in length, stood untenanted for some time, a melancholy monument to the effect of misguided union policy. The union men, however, thought otherwise, and deemed the emptiness of the unrivaled structure a triumph of their cause. The men engaged in the various processes of finishing, as well as milling or fulling woolen cloth, joined the union; and the workmen, for a period, wielded almost irresistible power over the property of their masters.

The next step of the union was to draw up a list of wages to be paid for spinning, weaving, &c., which was published in the newspapers. This document assumed the air of a proclamation, and was headed "a scale of prices to be observed by mill-owners, manufacturers, &c.," and had appended to it regulations as to the admission of boys, and the proportion in which they were to be employed, relatively to the number of adults. The workmen were then ordered by the committee of the union to demand of their respective employers compliance with this scale of wages, care being taken that the manufacturers should be successively applied to for this purpose, in order that there might be less chance of any general resistance on their part, and that the combination might not have too much on their hands at any one time. The larger number of the masters acceded to these demands, and their names were duly published in the Leeds newspapers.

The workmen, however, with a logic peculiarly their own, contended that this scale was not a rise of wages, but only what they termed an "equalization" of them—it being a principal object of their union to compel the masters to pay every operative

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good, bad, or indifferent, an equal sum for his labor. But the workmen failed to gain, the expected advantage from this advance of wages, as the masters were prevented by the state of the market from making beyond a certain quantity of cloth, and that only of the superior qualities, while paying the advanced rate of wages; they consequently either sent their yarn to be woven in the neighboring villages, where wages were always lower than at Leeds, or stopped part of their works entirely; and thus a great many of the men were thrown permanently out of employ, who, of course, had to be supported by those who got work.

Trade, both home and foreign, was materially injured by these contests. Some of the manufacturers managed to escape the losses they would otherwise have sustained by making alterations in spinning the yarns and setting the webs. The union made new regulations to meet this contrivance, which were counteracted by fresh evasions on the part of the manufacturers, and thus a war of cunning and contrivance was carried on between masters and men, in which the latter were sometimes beaten, and in some instances they voluntarily requested their employers to return to the old system and prices. The evil of these proceedings was that the goodness of the cloth was impaired by the alteration of the gear and spinning, and the public had to pay in the deteriorated quality of the cloth they purchased, while our foreign trade was doubtless injured by these futile and absurd attempts of the workmen to raise their wages beyond the natural level. The union, however, was nothing daunted by these drawbacks. It commenced a system of interference in the management of the manufacturers' business by requiring them, in case of a contraction of their scale of production, not to discharge any of their workmen, but to supply all, in equal proportions, with the work that remained.

The tyranny of the union at length knew no bounds, and the committee, like all ignorant men in the possession of authority, for which they are totally unfit from sheer incapacity, ran riot in the exercise of power, and frequently displayed the mere wantonness of passion and caprice.

The most remarkable strike that arose from this union took place in 1833, by which over a thousand hands were thrown out of employment. The turn-out in this ended in the complete discomfiture of the men, and it forms the only instance in these trades of a manufacturer having single-handed defied the whole power of one of the most extensive unions in England, and at length gaining the victory. Every mode of annoyance which the union could devise was put in practice on that occasion. This strike was the cause of the invention of the wool-combing machine, which wholly superseded the labor of the combers, who were the chief ringleaders in the affair, and inflicted a blow on the combination from which it never afterward recovered.

ENGINEERS' STRIKE.

The Amalgamated Engineers' strike of 1851-52, was, in most respects, like other strikes, intolerant and injudicious. It was a foolish attempt to organize labor upon principles which have hitherto proved fallacious, and which, on their application, have uniformly resulted in destroying that which they assume to protect and uphold. As regards the principle which should regulate their particular class of labor—and, indeed, all labor—they do not appear to have had a very clear and just perception. The preamble to their rules is worded as though the association was simply a benefit club, or a friendly society; but as we travel on we find an ominous sentence or so, which at once throws a steady light upon the purport and intent of the body. They look upon their "vested interests," as they term them, as analogous to those of a physician who holds a diploma, or of an author who is protected by a copyright.

As regards wages and the hours of labor, the council says that the wages in a certain kind of work shall be not less than 35s. per week. The relative merits of workmanship or individual skill have nothing to do with the question; these elevated qualities must be lowered to suit the comparatively weak and unskilful, and no man shall presume to raise himself above mediocrity. They are under orders, it will be seen, in all the daily business of their lives. They work, or are idle; they earn, or are destitute; they go out or come in; they obey or disobey their employers; they prosper or suffer, according to order. If there is anything more despotic than this in the broadest socialism denounced on the continent, we have never heard of it.

After a protracted struggle between the Amalgamated Engineers and their employers, in which a good deal of ill-will was generated, the dispute virtually terminated in the unconditional submission of the men to the terms required of them.

The immediate cause of the strike was the desire on the part of the men, to abolish overtime and piecework. The effect of piecework and overtime, according to the views of the council, is that it causes redundancy of labor. There is, perhaps, never too much for all the hands there are to do it—generally too little; and if men work overtime, or increase production by piecework, they also increase the disproportion between the labor there is to be done and the number of hands to do it. Those hands, thrown unemployed upon the labor-market, become at once the competitors of the men in work

and a burden on the funds of the society to which they belong. They at the same time draw upon the resources of the workers, and enable the employer, by pitting one class against the other, to diminish those resources; and thus a universal game of "beggar my neighbor" is set up, and the broken of to-day become the breakers of to-morrow.

A more extended account than the above brief abstract of Mr. Ward's chapter on the strike of the Amalgamated Engineers in 1851-52 would, no doubt, prove instructive, but preference is given to the following history of the engineers' strike on the Tyne, prepared expressly for this report by Evan R. Jones, Esq., United States consul at Newcastle-upon-Tyne:

THE ENGINEERS' STRIKE ON THE TYNE.

Since the great Preston strike in 1854, when 17,000 cotton-operatives turned out for an advance of 10 per cent. on their wages, England has not witnessed such a determined contest between capital and labor as the engineers' strike in Newcastle and district for a reduction of the hours of labor from fifty-nine to fifty-four hours per week. It will be remembered that the cotton-operatives were unsuccessful, after enduring the hardships and privations consequent upon such a strife for thirty-six weeks; whereas the Newcastle engineers, at the end of a twenty-week strike, carried on with great ability and resolution on both sides, won the day, and completely revolutionized the labor-market of Great Britain.

The nine-hour movement had been agitated with varying zeal for many years, and on the 1st of April, 1871, it showed signs of life at the neighboring town of Sunderland, when a large number of engineers came out on a strike for the success of the enterprise. The men achieved a victory after a short struggle of four weeks and two days.

The masters on the Tyne, taking warning from the attitude assumed by the men at Sunderland, held a meeting on the 8th of April (one week after the commencement of the Sunderland strike) and pledged themselves to aid and support the Sunderland masters in resisting the demands of the men. As already shown, the employers at that town were not equal to the emergency.

On the 10th of April the Newcastle engineers held a meeting with a view of procuring aid for their fellow-workmen on strike, and to take the necessary preliminary steps toward extending the arena of struggle to include Newcastle. The workmen were in council quite frequently during the following weeks; the idea of striking for the nine-hours system was fast becoming popular, and on the evening of the 2d of May the movement assumed definite shape in a circular, which was couched in firm but respectful language, asking a reduction of the hours of labor from fifty-nine to fifty-four hours per week, and expressing an earnest desire to settle the matter "without a resort to extreme measures." This was signed by "the acting committee of the Nine-Hours League," and sent to the various employers of engineers on the Tyne, with a request that an answer might be returned before the 12th of the same month.

Upon the day following the receipt of the circular, the masters met at the Station Hotel for its consideration, Sir William Armstrong in the chair, and the proposition of the Nine-Hours League was unanimously declined in a letter addressed to the secretary of the league by the solicitors of the masters.

Both employers and employed were now organized for the coming battle, the clouds were gathering from all points of the compass, and a storm was inevitable. With all the respect which is due to the masters and to their able chairman for his efforts on their behalf, I must be permitted to compliment the men, and especially the league committee, for the sound policy which dictated most of their movements from the beginning. They evinced particular solicitude that their cause should stand well with the people, and the many stratagems which they executed during the campaign stamp them as apt politicians.

The next move by the league was a proposition to appoint six of their number to meet a like number of their employers "to try to come to some understanding," but unfortunately a small body of men had already turned out, and the masters declined the meeting, stating that they would have suggested a written communication from the league in preference to a meeting but for the fact that a strike had already taken place. This communication, like the first, reached the men through a law-firm, a course peculiarly distasteful to the men. Not only did the masters decline to meet their workmen, they would not even communicate with them, save through the medium of their legal advisers. The men were hurt, offended. The masters considered this the wisest mode of procedure. I have firmly that it precipitated the strike and added fuel to the flame.

On Saturday, May 20, the league held another meeting, and, after discussing the reply of the masters, the following resolution was passed almost unanimously:

"This meeting, feeling that the time for energetic action has arrived, recommends the

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following factories to come out on strike as soon as they have worked a legal notice, (one week): Hawthorn & Co., Forth Banks, Thompson & Boyd, Abbott & Co., Black, & Gurney."

The men now became enthusiastic in favor of the movement, and 7,500 gave in their notices, as authorized by the foregoing resolution.

The door-dealers took time by the forelock, and declared through the daily papers that in the event of a strike the staff of life would be sold for cash only.

On Wednesday, the 24th, a committee of the chamber of commerce memorialized the mayor to offer his services as a mediator to the parties in dispute in order to avert, if possible, the threatened calamity, who undertook the delicate duty. On the following day a deputation from the league waited upon him and stated their grievances and the redress sought for. The mayor next called upon the masters assembled at the Station Hotel and explained to them the position assumed by the men and suggested a meeting of six of the masters and six of the men to discuss the question in all its bearings. In answer to a question, he stated that he did not consider himself authorized to make the proposition, but believed that the men would make overtures for such a meeting did they but believe that such a proposal would be entertained by the masters. The masters had, upon the day previous, resolved that united opposition to the strike which has commenced, and the mediation of the mayor was unavailing. The employers evidently did not deem it advisable to meet the men, but stated that they would "at all times be ready to receive and carefully consider any written communication from them."

By the following Saturday, several thousands of the men, having worked the legal notice, left the various shops, not to return on Monday morning.

The men employed at the locomotive and engine works of Messrs. Robert Stephenson & Co. had not cast their lot with the engineers of the other shops, but, acting independently, applied for the nine hours' concession; their application was made known to the head of the firm at London, and elicited a kind letter, setting forth the facts bearing on the case and the reasons why it would be incompatible with the circumstances in which the proprietors were placed, and ultimately injurious to the interests of the workmen themselves, to make the proposed reduction in the hours of labor.

Mr. Stephenson, in his communication, stated that the manufacture of locomotive and marine engines had encountered severe competition at home and abroad, and to meet that competition the proprietors had submitted to an enormous increase in the expenditure of capital for the purchase of new tools and expensive machinery, which could only yield a return for the outlay while it was at work, and a consequence of the adoption of the nine-hour movement would be an immediate serious loss, as the quantity of work would be materially reduced by a shortening of the time, while the fixed charges for rent and expenses of management would remain the same. He also added that there was no probability that the competition would be diminished; and as the proprietors had, during the recent period of depression, accepted large contracts which were in themselves unremunerative, for the express purpose of keeping their men and machinery employed, the question was particularly serious in their case, as they could not fail to foresee that a decrease in the present demand would endanger the stability of the establishment itself, which had at all times consulted the best interests of the workmen.

I have thus given a brief summary of the argument adduced against the reduction of the hours of labor to show the magic of a few kind, considerate words upon the brawny sons of toil, Mr. Stephenson having always treated his men with the utmost kindness, and having abstained from joining any combination of employers in opposition to workmen. The result was that the 1,400 men employed at the works of Messrs. Stephenson & Co. never left their work for a single hour. Had the answer reached them through a law-office, things might have been different.

During the months of June and July, the officers of the league exerted themselves in procuring funds from their class, in the various large towns in the country, and in securing employment elsewhere for the men on strike. This enabled them to make more liberal distributions of money to those remaining at Newcastle. The first allowance of 3s. per man was made on the 6th of June, to the men who were the first to stop work. During the following week a general apportionment of 1s. 9d. per man was made. These money-allotments, at first trifling and irregular, were soon established as weekly payments, and steadily increased in amount, so that toward the end of July the men were receiving 4s. each and 1s. for every child. The number of men entitled to relief had by this time been reduced from something like 8,000 to 2,770. The United States obtained some first-class workmen during the progress of this strike.

During the two months specified several meetings of the workmen were held on the town moor, when the officers rendered an account to the men of their stewardship, and urged them to stand firmly to the end.

All the initiatory steps for these mass-meetings were taken with a view of creating

as much enthusiasm as possible, for quite a number of those on strike were beginning to lose that necessary element in battle, under the influence of short rations. A procession was regularly formed; numerous flags and appropriate mottoes were distributed at intervals along the line, the band struck up, and the procession moved through the principal streets to a stand previously erected on the moor.

Efforts were again made by independent gentlemen to have this difficulty between employers and employed settled. Mr. C. M. Palmer, head of the large ship-building establishment at Jarrow, offered his services as peace-maker, and masters and men were finally brought face to face, through his good offices. The meeting was held at the council-chamber, and amounted to this: The masters stated that they had a compromise to offer, providing the men would agree to vote upon its acceptance or rejection *by ballot*. The representatives of the league declined the proposition. They objected to having the masters dictate to them how the question should be decided, and here in my opinion they showed a want of confidence in the result of a secret vote. To say that they were so excessively sensitive and independent as to refuse a good proposition, simply because it came from the masters, would be to do them an injustice.

On the 2d of August, the compromise which the masters desired to submit to a vote by ballot by the men became known through the medium of large posters put in conspicuous places about the town; after stating among other things that their work would be "opened at the usual hours for the re-engagement of their men." On the following morning they proceeded to give the rules to be observed by those who would resume labor, from which I extract the following:

"Working-hours inside: The working-hours to be fifty-seven per week, arranged as may be agreed on between the employers and workmen.

"Working-hours outside: Time actually at the work or on board ship only to be reckoned. A fixed time-allowance to be added for traveling, so as to make the total hours equal to shop-hours.

"Allowances and traveling expenses to remain as at present.

"Overtime: All time over and above fifty-seven hours per week to be valued at rate and a quarter, except in case of workmen required to work all day, and the whole or a portion of the succeeding night, who will be paid at the rate of time and a half for the time worked after 10 o'clock.

"All work on Sunday to be considered special, and the hours worked to be valued as at present, with usual meal-hours."

The compromise met with decided opposition from the league, and entirely failed in its object.

The masters, still determined to combat the nine-hours movement to the end, began to look elsewhere for the labor denied them at home. Agents were sent to the manufacturing towns in this country, and to the continent, to employ engineers for the various works. A counter-plot was set on foot by the league. The various trade societies throughout the country were requested to foil the efforts of the masters. An agent was sent to Belgium to make known to the workmen of that country the nature of the struggle going on between capital and labor on the Tyne. The strife now became bitter and relentless. The masters appealed to employers of labor throughout Great Britain for material aid toward resisting the demands of the men. The league had already canvassed the country for assistance toward maintaining the struggle, which by this time was generally acknowledged to be of national importance.

The month of August was spent by the contending parties in prosecuting their respective plans, with a view of obtaining the victory.

By this time the efforts of the employers to import labor was bearing fruit. From the letter of Sir William Armstrong to the London Times, dated September 12, I find that the total number of workmen introduced to this district from England, Scotland, and the continent amounted to 1,917, to which is added 1,375, who either never left their work, had been hired on the spot, or had returned to their engagements, making in all 3,000 hands.

It is but fair to state, however, that this exhibit is qualified by Mr. Barnett, the president of the league, who says that the 1,375 hands who had either continued at work, had been engaged in the district, or had been imported from without, can only be made up by including clerks, draughtsmen, and foremen, a class which formed a very great proportion of those then at work, especially in the establishment of Sir William Armstrong and partners.

The mission of Mr. Cohn, the agent of the league on the continent, was destined to be short-lived. The authorities interfered, and he was permitted to return to London. But his failure abroad only stimulated him to extra exertions at home, and by his persuasive eloquence he induced many of the Germans, Norwegians, and Belgians to return to their native land. The masters, through their agent, had entered into a contract with the foreigners for a service of six months. It was therefore necessary that every precaution should be taken to conceal all movements preparatory to their departure from the masters and police, for by this act they were violating their contracts and were

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amenable to the law. In their endeavors to run the blockade the strangers left their trunks behind them, many having previously put themselves inside of no less than five shirts and three pairs of trousers. They usually decamped under cover of darkness, being already provided for.

During the months of August and September the masters brought actions at law against a large number of men for breach of contracts, and against a few for assault and kindred complaints. I must be permitted to add that actions for assault and disorderly conduct were of a trivial nature and rare of occurrence. Indeed, the men on strike acquitted themselves throughout the prolonged struggle in an orderly, peaceful, and highly creditable manner, and this while their places at the lathe and the anvil were being filled by strangers, while the pale cheek of the wife and the piteous cries of the child made the heart bleed, while the arm that could relieve them was doomed for a time to hang paralyzed by the workman's side.

I felt that the employers would be among the first to come forward and indorse the verdict I have pronounced.

If such injurious measures as strikes are again resorted to in this and other countries, may the noble example of the Newcastle engineers for law and for order be emulated and imitated everywhere.

Late in September the following proposition was submitted by the league to the masters, through the agency of Mr. Mundella, M. P., who had come to Newcastle to contribute his influence toward bringing a long-standing difficulty to a close:

"If our employers will concede the three hours per week reduction in our working-time, which is now in dispute between us, we, on our part, will consent to a reduction in our wages, the amount of the reduction to be settled either on mutual agreement between ourselves and employers or by arbitration."

After careful consideration, the men's offer was declined, as will be seen by the following extract from Sir William Armstrong's letter to Mr. Mundella, dated September 30:

"Our proposal is that the question should be compromised by the acceptance on the part of the men of two hours out of the five demanded, and that in lieu of the remaining three hours they should take a proportionate increase of wages. The condition of trade justifies, as we have always admitted, an advance of wages, so that the proposed advance, unlike the proposed reduction, does not conflict with the laws of supply and demand. This increase of pay would amount to 5 per cent., and would apply to every kind of skilled labor; adding the value of the two hours conceded in time, it would represent a total advance of $\frac{1}{2}$ per cent. on the wages current when the strike began."

It will be observed that Mr. Mundella's mission proved ineffectual, as had the efforts of those who had preceded him as mediators between the contending parties.

At this time the weekly distribution of money amounted to 12s. per man and a shilling extra for each child; and although that sum falls far short of being adequate to the requirements of a man who has a wife and children dependent on him for support, it shows that the financial position of those on strike had been gradually improving since the first general allotment of 1s. 9d. per man was made in the early part of June.

While the praiseworthy efforts of Mr. Mundella were still fresh upon the minds of those concerned, Mr. Joseph Cowen, proprietor of the Newcastle Chronicle, and Mr. R. P. Philipson, town clerk, gentlemen held in high esteem by their townsmen, met in secret conclave on the morning of October 5, and drew up the following articles, with fervent hopes that they would be favorably received by the disputants:

"Suppose the employers were to concede the fifty-four hours per week, the men would agree to work overtime when and to the extent required by the employers.

"The wages, both as to ordinary wages and as to overtime, to remain the same in the different factories as existed prior to the strike.

"The wages to be reckoned by the hour and quarter hour, and paid weekly at 12.15 p. m. on Saturday.

"The agreement to be for twelve months, with power to either party to determine it at the end of six months by giving one month's previous notice.

"The men to go to work on the arrangement now existing in the shops, (57 hours,) and he new terms (54 hours) to take date from January 1, 1872."

The foregoing terms were submitted to the associated masters by Mr. Philipson, and to a delegated meeting of the Nine Hours League by Mr. Cowen, on the evening of the same day, and to the great satisfaction of the entire community the terms were accepted by both parties. Matters of detail were speedily arranged, and on Thursday morning, October 12, after a strike of twenty weeks, the men returned to their labor with elastic tread, to gladden the hearts of forty thousand souls.

THE STORY OF A FEW STRIKES.

[The following article is from the Chicago Tribune.]

The Hon. A. S. Bolles, in his just published "Chapters on Political Economy," quotes from Thorntou's "Labor" and Ward's "Workmen and Wages" the figures of the cost of some famous strikes to the strikers. We reproduce them from his book, and add others:

In 1820, the Manchester spinners struck. They lost \$1,250,000 in wages before the dispute was at an end. The next year their brethren at Ashton and Staleybridge followed their example in striking and in losing \$1,250,000. In 1833, the builders of Manchester forfeited \$360,000 by voluntary idleness. In 1836, the spinners of Preston threw away \$285,000. Eighteen years afterward, their successors, 17,000 strong, slowly starved through thirty-six weeks and paid \$2,100,000 for the privilege. In 1853, the English iron-workers lost \$215,000 by a strike. Such losses marked, too, the strikes of the London builders in 1860 and tailors in 1868, and the northern iron-workers in 1865. The strike of the Belfast linen-weavers, which was ended a few weeks since by the mediation of the British Association for the Advancement of Science, cost the operatives \$1,000,000. The recent strike of the shoemakers of Chicago cost them a much larger sum than they needed as a capital for a co-operative shop of their own. After they had wasted the first sum, they tried in vain to raise the second.

We might add instance to instance to prove the enormous cost of strikes to the workman. Even when they succeed, the result rarely, if ever, pays for the money unproductively spent. When they do not, the money is of course a dead loss. It is absurd that workmen, in the face of such facts, should persist in using this two-edged weapon against their employers. In England, Messrs. Mundella's and Kettle's boards of arbitration, and the introduction of industrial partnerships between masters and men, have done much to prevent strikes. In France, the state long since established courts of arbitration for the settlement of labor quarrels. They are composed of six members, chosen by employers and employed, and a president and vice-president, who must belong to neither class. Mr. Thomas Brassey, in his "Work and Wages," says of these courts: "The result in 95 out of 100 cases brought before these tribunals is a reconciliation between the parties; and, though appeals are permitted to the superior courts of law, they are rarely made. In 1870, 28,000 disputes had been heard, of which no less than 26,800 were satisfactorily settled."

CO-OPERATION.

That a strike, so long as it is unaccompanied by violence or intimidation toward such as do not voluntarily engage in it, is a means which workmen may legitimately use in their efforts to advance their interests, must, of course, be freely admitted. But that it is a most costly and hurtful method of settling trade-disputes is a fact which workmen themselves have now very generally learned by sad experience. The chairman of the trades union congress of the United Kingdom, held at Liverpool in January, 1875, in his opening address referred to strikes as a mode of settling differences with employers which ought to be avoided by all practicable means, and resorted to only in the most extreme cases; and the same opinion, after being repeatedly indicated in the speeches of leading delegates, was substantially embodied in a resolution adopted by the assembly itself, in which fully 800,000 of the trades-unionists of the British Isles were represented. As a natural sequence to a resolution of this character was another, recommending the adoption of that system which is designed to reconcile the now conflicting interests of capital and labor by uniting the two in the same hands, namely, the system of co-operation, and expressing a cordial desire to act in harmony with the co-operators of the United Kingdom. Similar sentiments are to be met with in the documents issued by the leading trades-associations, as well as in their most influential newspaper organs; and in fact the system of co-operation itself, as a practical reality, is making rapid advancement among the working-classes.

As long ago as 1832, Mr. Babbage suggested the advantages which workmen might derive from co-operative stores. The Rochdale

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Pioneers commenced in 1843 the enterprise which has since become so celebrated. It originated in the attempt of some flannel-weavers to obtain an advance in wages, failing in which they resolved to try whether they could not make the wages they were receiving procure them a larger share of the necessaries and comforts of life by starting a store on their own account. A company of forty persons engaged, at a rent of £10 per annum, "th' owd weaver's shop" in "Tead Lane," in which they commenced business with a beggarly stock of salt, butter, and oatmeal. At the end of fourteen years they were doing a cash business to the amount of £76,000 per annum. To their original stores they have added several other departments of trade, and have now a good library of from 12,000 to 15,000 volumes.

The returns furnished to the registrars of friendly societies of England and Wales, Scotland, and Ireland, respectively, as to the industrial and provident co-operative societies in the three divisions of the kingdom, at the close of 1873, show the following results:

	England and Wales.	Scotland.	Ireland.
Number of societies.....	790	188	6
Number of members.....	340,930	46,371	464
Number of members admitted during the year 1873.....	70,360		
Number of members withdrawn during the year 1873.....	31,626		
Share-capital, amount of, at end of the year 1873.....	£3,334,104	£235,158	£1,443
Loan-capital, amount of, at end of the year 1873.....	£431,308	£64,932	£90
Cash paid for goods during 1873.....	£12,344,780	£56,130	£14,576
Cash received for goods during 1873.....	£13,651,127	£1,965,226	£16,161
Average value of stock during 1873.....	£1,430,137	£188,265	
Total expenses during 1873.....	£541,824	£67,468	£774
Interest on share, loan, and other capital during 1873.....	£152,596	£12,084	
Entire liabilities at end of 1873.....	£4,081,512	£400,590	
Reserve-fund at end of 1873.....	£83,149	£19,573	
Entire assets at end of 1873.....	£4,430,334	£462,857	
Value of buildings, fixtures, and land.....	£1,361,197	£97,869	£633
Capital invested with other industrial and provident societies.....	£337,811	£32,591	
Capital invested with companies incorpo- rated under the companies act.....	£443,724	£5,315	
Disposable net profit realized from all sources during 1873.....	£958,721	£150,302	£863
Dividend declared due to members during 1873.....	£861,961	£132,643	
Dividend allowed to non-members during 1873.....	£18,555	£3,147	
Amount allowed for educational purposes during 1873.....	£6,864	£243	

IMPORTS FROM THE UNITED KINGDOM.

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I.—Value of the principal articles imported into the United States, &c.—Continued.

Articles.	England.	Scotland.	Ireland.
Jute, manufactures of.....	\$1,564,119	\$143,885	\$349
Leather and manufactures of.....	2,199,885	3,770	...
Marble and stone and manufactures of.....	165,877	237,808	230
Metals and manufactures of.....	405,664	16,172	65
Paints.....	702,343	7,155	...
Paper materials.....	1,468,197	61,197	14,804
Silk, manufactures of.....	811,131	99,847	...
Soda and salts of.....	6,313,941	11,044	609
Straw, manufactures of.....	5,938,157	37,308	...
Tin in pigs, bars, or blocks.....	307,579	20	...
Tin, manufactures of.....	1,857,167	4,582	...
Wool, manufactures of.....	13,014,701	6,009	3,455
Zinc, &c., manufactures of.....	29,917,029	293,686	2,635
	187,671	13,618	71

II.—Table showing the value of imports of merchandise from England, Scotland, and Ireland, during the fifty-four fiscal years ended June 30, 1821 to 1874, inclusive.

Fiscal year ended—	Imports of merchandise into the United States from—		
	England.	Scotland.	Ireland.
September 30, 1821.....	\$22,535,333	\$1,292,092	\$683,471
September 30, 1822.....	32,008,946	1,889,216	800,044
September 30, 1823.....	26,018,448	1,083,133	513,313
September 30, 1824.....	26,508,758	1,025,020	491,637
September 30, 1825.....	34,188,632	1,829,461	612,372
September 30, 1826.....	24,239,992	1,096,772	672,094
September 30, 1827.....	28,522,772	1,083,101	550,129
September 30, 1828.....	30,445,167	1,021,030	711,041
September 30, 1829.....	23,532,937	1,021,215	362,511
September 30, 1830.....	23,610,609	1,382,811	341,333
September 30, 1831.....	41,723,493	1,977,430	261,564
September 30, 1832.....	31,764,223	1,580,812	401,891
September 30, 1833.....	31,784,927	1,735,136	473,162
September 30, 1834.....	33,700,452	1,398,139	274,712
September 30, 1835.....	57,763,551	1,622,818	542,890
September 30, 1836.....	73,438,793	2,372,539	308,356
September 30, 1837.....	43,412,458	1,134,410	131,776
September 30, 1838.....	35,182,511	594,665	75,162
September 30, 1839.....	63,419,634	960,183	159,689
September 30, 1840.....	32,410,827	524,927	98,319
September 30, 1841.....	45,149,477	849,575	81,921
September 30, 1842.....	33,240,500	635,050	102,700
June 30, 1843.....	11,835,404	128,816	43,335
June 30, 1844.....	40,344,122	527,229	88,081
June 30, 1845.....	41,507,531	708,187	104,857
June 30, 1846.....	43,367,419	1,220,080	85,774
June 30, 1847.....	64,975,562	1,837,041	590,240
June 30, 1848.....	57,846,550	1,639,381	288,978
June 30, 1849.....	56,146,632	1,959,320	376,793
June 30, 1850.....	71,591,705	2,746,070	293,783
June 30, 1851.....	29,513,571	2,699,710	235,938
June 30, 1852.....	60,614,353	2,365,917	152,523
June 30, 1853.....	125,489,433	4,337,909	134,116
June 30, 1854.....	149,303,577	5,220,469	259,335
June 30, 1855.....	102,323,825	3,954,591	152,293
June 30, 1856.....	117,623,773	4,131,566	89,032
June 30, 1857.....	119,404,475	7,216,111	113,453
June 30, 1858.....	83,690,980	5,160,767	115,280
June 30, 1859.....	117,685,586	7,079,005	138,517
June 30, 1860.....	132,069,411	4,697,187	923,526
June 30, 1861.....	101,743,552	2,583,524	190,834
June 30, 1862.....	74,739,710	...	...
June 30, 1863.....	*112,538,201	...	...
June 30, 1864.....	*142,291,133	...	...
June 30, 1865.....	83,240,527	1,821,206	60,691
June 30, 1866.....	196,356,036	5,845,328	74,826
June 30, 1867.....	165,162,468	7,157,862	77,598
June 30, 1868.....	125,129,899	6,795,005	87,108
June 30, 1869.....	151,231,801	7,440,251	214,963
June 30, 1870.....	144,474,890	7,441,304	246,073
June 30, 1871.....	299,075,220	11,432,688	219,423
June 30, 1872.....	234,914,322	14,311,572	487,410
June 30, 1873.....	222,917,634	14,314,770	433,814
June 30, 1874.....	166,846,132	12,166,432	1,030,229

* Including Scotland and Ireland.

EXPORTS TO THE UNITED KINGDOM.

III.—Table showing the exports of commodities, the growth or produce of the United States, to England, Scotland, and Ireland, during the fiscal year ended June 30, 1874.

Commodities.	Domestic exports from the United States to—		
	England.	Scotland.	Ireland.
Breadstuffs:			
Wheat.....	\$43, 128, 532	\$5, 861, 579	\$25, 903, 529
Wheat-flour.....	8, 612, 064	2, 441, 513	285, 215
Indian corn.....	7, 453, 130	1, 830, 460	10, 607, 607
All other.....	385, 633	105, 950	16, 666
Total.....	59, 605, 769	10, 232, 532	36, 873, 317
Cotton, raw.....	130, 952, 187	564, 810	3, 855, 303
Hair, unmanufactured.....	240, 144		
Hides, furs, and furskins.....	3, 474, 759		
Leather.....	2, 683, 174		
Naval stores.....	1, 110, 083	181, 124	134, 831
Oil.....	3, 621, 465	309, 008	43, 485
Coal, (crude and refined).....	3, 500, 376	39, 560	1, 788, 525
Animal and vegetable.....	1, 076, 640	268, 020	
Ore, argentiferous.....	255, 814		
Provisions:			
Bacon and hams.....	23, 222, 541	3, 245, 463	
Beef.....	1, 773, 483	262, 400	400
Butter.....	85, 478	85, 443	
Cheese.....	9, 120, 370	1, 083, 708	
Fish, (pickled and dry).....	390, 061		
Lard.....	3, 110, 293	589, 970	
Meats, preserved.....	404, 114		
Pork.....	1, 600, 632	179, 272	435
All other.....	61, 753	2, 010	
Total.....	39, 120, 630	5, 805, 619	825
Seeds.....	227, 186	85, 569	4, 106
Spirits of turpentine.....	1, 238, 046	61, 819	440, 554
Sugar and molasses.....	288, 071	146, 819	
Tallow.....	3, 613, 703	1, 010, 859	4, 506
Tobacco:			
Leaf.....	7, 007, 530	755, 451	9, 889
Manufactured.....	1, 251, 592	12, 738	
Timber, lumber, &c.....	3, 572, 266	756, 919	355, 569
Other unmanufactured articles.....	665, 702	50, 156	
Other manufactured articles.....	6, 023, 196	839, 822	58, 275
Total.....	276, 333, 833	21, 120, 561	43, 569, 635

NOTE.—The aggregate quantities of the principal articles exported to the United Kingdom in 1874 were as follows: Raw cotton, 903,571,772 pounds; wheat, 51,832,273 bushels; wheat-flour, 1,703,981 barrels; bacon and hams, 262,723,419 pounds; beef, 21,721,254 pounds; pork, 20,029,898 pounds; cheese, 78,552,976 pounds.

The above table not only shows the value of the cotton, but of the grain, timber, naval stores, and other crude products of our fields and forests, and of animal products, which find a market in the United Kingdom. The greater part of these may be classed as the raw materials of English manufactures, for the breadstuffs and provisions, as well as the cotton, the leather, the timber, and the leaf-tobacco, really become the elements of manufactured products.

Whether the material interests of the country would be better promoted by consuming at home a large portion of the food now exported and devoting it to the conversion of crude products into manufactured goods, is a question which will receive no consideration in these pages. Here, as elsewhere in this volume, the author contents himself with the presentation of facts, and declines entering upon the discussion of questions respecting which there are wide divergences of opinion.

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IMMIGRATION FROM THE UNITED KINGDOM.

In view of the fact that the inhabitants of the colonies which now compose the United States were, at the time of the change of government, chiefly of British birth or descent, it is not surprising that of the 5,367,229 persons of foreign birth who formed part of our population in 1870, no less than 3,119,705 were born in the United Kingdom and in the British North American possessions.

The immigration into this country from the British Islands during the fifty-four years, from 1820 to 1874, is exhibited in the following table:

Statement showing the total immigration into the United States from Great Britain and Ireland during the fifty-four and a half years ended December 31, 1874.

Periods.	England and Wales, Isle of Man, and Channel Islands.	Scotland.	Ireland.	Great Britain.*	Total.
1820 to 1830, inclusive.....	16,007	3,180	27,166	35,534	81,827
1831 to 1840, inclusive.....	7,796	2,667	29,188	34,540	82,391
1841 to 1850, inclusive.....	33,353	3,712	162,332	719,366	1,017,763
1851 to 1860, inclusive.....	57,414	28,331	748,740	836,578	1,338,093
Calendar year 1871.....	218,927	36,753	495,969	356,247	1,106,976
Calendar year 1872.....	62,325	12,115	61,461	7,814	143,937
Calendar year 1873.....	73,579	14,565	69,761	.....	157,905
Calendar year 1874.....	70,499	13,068	75,848	.....	159,325
Aggregate.....	43,969	8,765	47,688	.....	160,423
	779,139	133,095	1,718,095	1,789,079	4,419,409

* Nationality not stated; supposed to be chiefly from Ireland.

Owing to the defective returns of the nationalities of immigrants prior to the establishment of the Bureau of Statistics, the countries of nativity of large numbers who came from the British Isles were not set forth in the returns, but their place of birth designated as "Great Britain," as will appear by reference to the fifth column of the above table. From a careful analysis of some of the original papers, an approximate estimate has been made of the proportion of persons of Irish nativity who are included in the number of those "not stated," which, in addition to the 1,718,095 Irish immigrants given in the table, shows that of the 4,419,469 arriving from the British Isles in a little over half a century, upward of 2,950,000, or two-thirds, were natives of Ireland.

Of the large foreign element in the city of New York, amounting to no less than 419,094 in the census-year 1870, the natives of Ireland were 201,999, a number almost equal to the whole population of Dublin, which, in 1871, was 246,326. Indeed, if the Irish in Jersey City, Brooklyn, and other adjoining cities, which really form a part of the commercial metropolis of America, be included, the number would fully equal, if not exceed, the aggregate population of Ireland's chief city.

I.—RATES OF WAGES IN THE UNITED KINGDOM.

Before presenting the tables showing the earnings of factory-operatives in various manufacturing towns of the United Kingdom, the following statement, showing the rates of wages paid to mechanics and other skilled workmen in the metropolis, is submitted :

SKILLED TRADES IN LONDON, WEEKLY WAGES IN 1871.

Statement showing the established rates of wages obtained by members of the various trades-societies of the metropolis, in summer and winter, compiled under the supervision of Alsager Hay Hill, LL. B.

Trades.	Numbers of members.	Rate of wages.	
		Summer.	Winter.
Bakers		\$1 87	\$5 03
Basket-makers		3 63	4 84
Boat-builders		8 47	7 56
Book-binders	702	7 26	7 56
Brass-cock finishers		8 47	8 47
Brass-finishers		8 47	8 47
Bricklayers	2,386	16*	16*
Brush-makers	400	(†)	(†)
Cabinet-makers	500	7 26	7 56
Cabinet-makers, deal	450	7 99	7 99
Carpenters	4,740	9 14	9 14
Carvers and gilders	50	4 84	4 84
Coach-builders	25	9 68	9 68
Coach-makers	320	9 68	9 68
Coach-smiths	200	4 84	12 58
Coach trimmers and makers		6 05	6 05
Compositors	3,550	4 84	8 47
Cork-cutters	100	7 26	7 26
Cordwainers	3,678	(‡)	(‡)
Curriers	1,900	8 47	8 47
Engineers	33,539	{ 16* 18*	{ 16* 16*
Farriers	220	9 68	12 10
French-polishers	30	7 26	7 26
Hammermen	60	5 81	5 81
Iron founders and molders	7,372	9 20	9 20
Letter-press printers		7 56	7 26
Painters, house		14*	14*
Piano-forte-makers	400	16*	16*
Plasterers		14*	14*
Plumbers		18*	18*
Pressmen, printers'	60	7 26	7 56
Skinners	225	7 26	7 26
Steam-engine makers	100	{ 16* 18*	{ 16* 18*
Stone-masons	17,193	9 14	7 22

* Per hour.

† Piecework.

‡ Uncertain.

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Mechanics

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AVERAGE EARNINGS OF OPERATIVES.

The tables in the following thirty-six pages, which were not personally obtained by the author, but derived from official sources, exhibit the earnings of work-people in the various industries and places indicated during the year 1871. Indeed, so far as factory-labor is concerned, the figures therein given express with approximate accuracy the cost but not the hours of labor which now obtain in the United Kingdom.

The object of the following statement is not to show the specific rates of wages paid to certain operatives, but *the average earnings* of operatives of various occupations in different localities. In a very large number of occupations the hands are paid by the piece or by weight, and the actual rate of wages would not indicate the sum an operative would take home with him at the end of the week as the price of his labor. The sums stated in all these tables are, therefore, the average sums earned per week, whether the labor be paid by the day or by the piece.

COTTON MANUFACTURES.

In a fine-spinning factory at Manchester the following are the average weekly earnings of the operatives:

Hand-mule spinners, small mules*	£10 89
Hand-mule spinners, large mules*	12 10
Piecers, women	£2 18 to 2 42
Piecers, young persons	1 57
Piecers, half-finers	60
Card-grinders, men	5 08
Card strippers	4 35
Card room frames, women	2 18 to 2 90
Lap-carriers, girls	1 57
Hand reelers, girls	2 77
Mechanics	8 18

Hours of work, 59 per week.

* These men employed from 3 to 6 piecers, often members of their own families.
 † British £ sterling computed at \$4.84, and the shilling at 24 cents.

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7 26
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16*
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15*
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7 26
16*
15*
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COTTON MANUFACTURES—spinning, weaving, &c.

Occupation.	Wiltshire, Lancashire, Shire.	Manchester.	Northampton.	Blackburn.	Nottingham.	Glasgow.	Aberdeen.	Ayrshire.	Orkham.
Willowers, doblers, cotton-wool minders.	28 90						From \$1.33 to \$1.39		\$3.87 to \$5.23
Blowing or searching-room hands, men.	2 10								4 35 to 5 25
Penals in spinning-room.	2 10								6 25 to 12 10
Stripers and grinders, end room, men.	4 35								
Under-carriers, men.	8 47								\$1.93
Lap-carriers, men.	3 84								
Drawers, viz. draw-frame tenders, women.	3 14								
Shubbers, women.	3 14								
Knives, women.	3 14								
Medanias.	3 14								
Back-tenders for rovers or overenders, girls.	1 69								
Back-tenders to shubbers, girls.	1 69								
Labors about mill, oilers and greasers.	4 35								
Mule-room overlookers.	7 71								
Self-acting mule-minders, men.	2 90								
Self-acting mule piecers, young men.	2 90								
Self-acting mule little piecers, boys.	1 69								
Self-acting mule piecers, men.	1 69								
Twinders on twining frames, same as self-acting twinders.	6 77								
Throstle-room overlookers.	6 99								
Throstle-spinners, women.	2 90								
Throstle-spinners, men.	1 77								
Throstle doblers, men.	7 72								
Throstle doblers, winders, women and girls.	2 90								
Female weavers.	2 90								
Throstle-dobblers, doblers, women and girls.	2 90								
Ball-wool in warping-mills.	7 26								
Engine-tenders or engineers.	7 26								
Jobbers or lackers.	7 26								
Boomers.	5 37								
Boomers, girls and boys.	1 31								
Sizers of warp, men, full-sizers.	6 29								

Sizers of warp, men, shubbers.	6 29								
Sizers of warp, men, tapers.	6 29								
Drawers in of warp, men.	5 80								
Drawers in of warp, women.	3 63								
Knives to the drawers.	5 70								
Winders in of warp, men.	5 31								
Winders in of warp, women.	3 63								
Twisters of warp, men.	3 42								
Twisters of warp, women.	3 42								
Weavers, four looms.	3 42								

AVERAGE EARNINGS OF OPERATIVES.

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Beavers.....	7 26 to 9 68	6 59 to 8 32
Loom-tenders, girls and boys.....	86 65	6 03 to 7 74
Sizers of warp, men, bolt-sizers.....	7 74	

Sizers of warp, men, slashers.....	6 29	
Sizers of warp, men.....	6 29	
Drawers-in of warp, men.....	3 69	
Drawers-in of warp, women.....	3 69	
Twisters-in of warp, men.....	1 91	
Twisters-in of warp, women.....	5 80	5 70
Twisters-in of warp, girls and boys.....	3 63	
Wenters, four looms.....	2 42	
Wenters, two looms.....	3 14	2 54
		2 89 to 3 38
		2 66 to 2 90
		4 35 to 6 05
		3 38 to 3 63

NOTE.—The hours of work are 60 per week; the wages partly piece-work, partly day-work.
 In the foregoing and following tables of wages and prices in the United Kingdom the British shilling has been computed at 24 cents, and the pound sterling as equivalent to \$4.84 in coin. Since these computations were made the equivalent value of the pound sterling has been recognized by Congress at \$4.8665; but the difference being small, it was not deemed necessary to make a re-computation.—E. Y.]

* Boys.

DOUBLING, BLEACHING, AND DYEING COTTON THREAD.

Occupations.	Nottingham.	Paisley.	Remarks.
Overlookers, men	\$1 35 to \$6 05	\$5 38	Adults.
Bleachers, men	4 35 to 7 20	.....	Do.
Dyers or fullers, men	4 35 to 9 68	.....	Do.
Cop-winders, women	1 81 to 2 42	1 57	Do.
Doblers, women	1 34 to 2 42	1 93	Do.
Cleaners, women	1 43 to 2 35	.....	Do.
Glossers, women	2 42 to 2 60	.....	Do.
Rulers	2 24 to 2 66	2 17	Do.
Hank-winders	2 05 to 2 42	.....	Do.
Boys and girls under 14	06 to 1 57	.....	Do.

NOTE.—The hours of work are sixty per week; the wages, partly piece-work, partly day-work.

WOOLEN MANUFACTURE—SPINNING, WEAVING, ETC.

Occupation.	Rochdale.	Dewsbury.	Leeds.	Manchester.	Neighborhood of Dewsbury.	Gatcliffe.	Neighborhood of Huddersfield.
Layers on for scribblers, women	.....	\$2 00	\$2 17	.....	\$2 42 to \$2 90	.....	\$1 81
Card setters or cleaners, men	4 35 to 4 84	4 11	.....	4 11	4 59	4 11	.....
Silver-minders, girls	2 42	2 17	.....	3 14	.....	.....	.....
Condenser-minders, girls	2 42 to 2 90	.....	.....	.....	.....	.....	.....
Card-feeders, women	3 63	3 87	4 24	4 11	2 42 to 3 87	.....	4 35
Woolyers, men	4 1	5 08	.....	.....	.....	.....	.....
Woolyers, foremen, men	4 35 to 5 56	5 63	.....	2 00	.....	.....	.....
Self-acting mule-piecers, boys	1 69	1 69	1 45	1 21	.....	.....	.....
Self-acting mule-piecers, boys and girls, half-timers	69 to 81	.....	.....	.....	.....	.....	.....
Rag-grinders, men	.....	4 84	.....	.....	.....	.....	.....
Enginemakers and stokers	4 59 to 5 08	4 81	.....	.....	.....	.....	.....
Warpers	3 63 to 2 35	3 63	.....	3 38	2 90 to 4 35	6 29	.....
Power-loom trimers, men	5 80	8 47	.....	.....	5 80 to 12 10	.....	5 80
Power-loom weavers, women	3 38	3 38	.....	.....	2 42 to 4 87	3 38	2 66 to 3 87
Wool-sorters, men	6 29	6 05	6 05	.....	4 35 to 5 56	4 81	5 32 to 6 29
Fulling-millers, men	5 68	5 08	.....	5 32	6 05 to 2 47	4 35	4 81 to 5 08
Wool and piece-tyers, men	.....	5 32	.....	.....	.....	4 11	4 35
Cloth-dressers, viz., rulers, cutters, pressers, tenters, drawers	.....	5 80	5 32	5 08	.....	.....	4 81
Buriers, women	2 17	2 42	1 21	.....	2 17 to 2 90	2 90	1 93 to 2 17
Riggers and stumbers, men	.....	5 08	.....	.....	.....	.....	.....
Menders and stumbers, women	.....	3 14	.....	.....	.....	3 38	.....
Oil-extractors, men	.....	5 80	.....	.....	.....	37	4 35
Mechanics and joiners, men	6 53	7 26	.....	.....	4 35 to 7 26	.....	6 53
Rag-pickers, women	.....	1 93	.....	.....	.....	.....	.....
Hand-spinners, men	.....	5 32	6 77	.....	6 05 to 7 26	81	5 80 to 7 26
Hand-spinners, young persons	.....	.....	.....	.....	.....	45	1 45
Slubbers	5 32 to 5 56	6 29	.....	.....	.....	.....	6 53

NOTE.—The hours of work are sixty per week; the wages, partly piece-work, partly day-work.

WOOLEN MANUFACTURE—CLOTH-DRESSING.

Occupation.	Leeds.	Remarks.
Giggers	.....	.....
Do.	\$5 56	.....
Do.	4 35	.....
Machinists	.....	.....
Machinists, perpetual	.....	.....
Cloth-pressers	.....	.....
Cloth-drawers	.....	.....
Cloth tenters	.....	.....
Hand-tyers	.....	.....
Hand-reisers	3 87 and 5 32	.....
Foremen	7 98 to 8 47	.....

NOTE.—The hours of work are sixty per week; the wages, partly piece-work, partly day-work.

Overlookers,
Wind-wash
Card-jobs
Warehouses
Card-hund
Comb-hund

NOTE.

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Hand-loom
Hand-loom
Mechanics
Pattern-dra
Warehouses
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NOTE.

COMBING :
Wool-sor
Wool-sor
Gill-tent
Card-tent
Buck-wa
Comb-tent
Overlook
SPINNING :
Drawers,
Spinners,
Doffers and
Warpers,
Reelers, v
Overlook
Winders,
WEAVING :
Warp-size
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Weavers,
Overlook
Doffers and

NOTE.

AVERAGE EARNINGS OF OPERATIVES.

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WOOLEN MANUFACTURE—COMBING.

Remarks.	Occupation.	Bradford.
Adults.	Mechanics	
Do.	Wool-washers	\$4 09
Do.	Card-jobbers	3 87
Do.	Wool-house-men	4 35
Do.	Card-hands	4 11
Do.	Comb-hands	2 42
Do.		2 51

NOTE.—The hours of work are sixty per week; the wages, partly piece-work, partly day-work.

WOOLEN MANUFACTURE—CARPET-MAKING.

Occupation.	Glasgow.	Kinnaird.	D. Lam.	Neighborhood of Leeds.
Assistant dyers, men	\$4 47		\$3 85 to \$5 80	\$3 57 to \$4 35
Assistant dyers, boys	1 53		2 42 to 3 38	2 42 to 3 38
Hand-loom weavers	4 06		5 32	4 35 to 6 05
Hand-loom weavers and beamers, boys	1 04		3 38	2 00 to 4 35
Mechanics	6 29		6 29 to 7 71	
Pattern-drawers, men	6 05			
Pattern-drawers, boys	2 42			
Warehouse-workers, tenters, and sewers, men	5 32			
Warehouse-workers, tenters, and sewers, boys	1 45			
Warehouse-workers, tenters, and sewers, women	2 35			
Warehouse-workers, tenters, and sewers, girls	1 69			
Croppers, cutters, and cleaners, men	4 50			
Croppers, cutters, and cleaners, boys	1 69			
Croppers, cutters, and cleaners, women	2 17			
Croppers, cutters, and cleaners, girls	1 08			
Winders and reelers, women	2 17		1 53 to 1 80	2 42
Winders and reelers, girls	1 21			
Power-loom weavers, Brussels carpets, men		5 56		
Power-loom weavers, Brussels carpets, apprentices		1 21		
Carding and spinning, men			4 35	
Carding and spinning, ladies			4 31 to 7 71	7 26
Carding and spinning, families and children			36 to 2 42	2 00
Carders, females			21 to 2 42	
Spinners, females			1 57	2 66
		1 21		

NOTE.—The hours of work are sixty per week; the wages, partly piece-work, partly day-work.

WORSTED MANUFACTURE—SPINNING, WEAVING, ETC.

Occupation.	Kelghley.	Halifax.	Glasgow.	Bradford District.
COMBING:				
Wool-sorters, piece-work, average	\$4 06			\$6 77 to \$7 26
Wool-sorters, day work, per week	4 84	\$5 80		
Wool-washers and driers	3 03	4 35		3 87 to 4 35
Gill-tenters, women	2 42	2 29		
Card-tenters	3 14			
Back-washers	3 14			
Comb-tenters	3 28			
Overlookers	6 77			7 74 to 8 47
SPINNING:				
Drawers, women	3 42	2 20		2 17 to 2 54
Spinners, young persons	2 17	1 33	\$1 81	1 81 to 2 11
Doffers and jobbers, boys	2 17	1 93		
Warpers, by the piece-work	3 28		4 35	
Reelers, women	2 66	2 78		2 42 to 2 66
Overlookers	5 56	5 80		7 26 to 7 58
Winders, women and girls			2 78	
WEAVING:				
Warp-sizers	3 57			
Warp-dressers	5 08		2 47	5 80 to 6 29
Warp loomer and twistors, by piece	3 38			
Weavers, women	3 14	\$2 06 to 3 14	2 54	
Overlookers	5 50	5 80		7 50 to 8 22
Doffers and bobbin setters, half-timers		60		42 to 90

NOTE.—The hours of work are sixty per week; the wages, partly piece-work, partly day-work.

FLAX MANUFACTURE—SPINNING, WEAVING, ETC.

Occupation,	Leeds.	Yorkshire.	Manchester.	Ayrshire.	Dundee.	Kirkcaldy.	Forfarshire.
Overlookers	\$1 84 to \$2 48	\$4 81 to \$6 05	\$7 35 to \$9 68	.....	\$6 05 to \$8 47	.....	\$4 59 to \$5 56
Warehousemen	3 87 to 4 35	.....	.....	.....	3 63 to 6 03	.....	.....
Roughers	4 84 to 6 05	.....	.....	.....	.....	.....	.....
Hackers	1 21 to 1 57	.....	.....	.....	1 81 to 2 54	.....	.....
Sorters	4 84 to 6 05	.....	.....	.....	.....	.....	2 05
Preparers, women and girls	1 45 to 1 75	1 45 to 2 05	1 57 to 1 87	\$1 45	1 21 to 1 93	.....	.....
Spinners, women and girls	1 51 to 1 75	1 08 to 1 81	2 05 to 2 29	1 93	1 69 to 3 14	\$1 81	.....
Dofters	1 21 to 1 57	1 45 to 1 93	1 57 to 1 81	.....	.....	.....	2 17
Reelers, women	1 93 to 2 42	1 69 to 2 66	2 99	1 81	1 93 to 3 63	.....	.....
Makers-up	4 35 to 6 05	.....	.....	.....	.....	.....	2 54
Enginemcn	4 84 to 6 05	.....	.....	.....	.....	.....	4 11
Mechanics	4 84 to 7 26	.....	.....	.....	.....	.....	.....
Dressers, men .....	.....	3 87 to 5 32	7 29	5 32	.....	.....	5 80
Dressers, women .....	.....	.....	2 90	.....	.....	.....	5 32
Dressers, boys .....	.....	1 21 to 2 10	.....	.....	.....	.....	.....
Half-timers .....	.....	1 21 to 4 8	36 to 60	.....	.....	.....	.....
Carders, females .....	.....	2 05 to 2 12	.....	.....	.....	.....	60
Combers, females .....	.....	1 93 to 2 17	.....	.....	.....	.....	.....
Bundlers .....	.....	4 35 to 4 81	.....	.....	.....	.....	.....
Tacklers, men .....	.....	.....	.....	5 44	.....	.....	.....
Winders .....	.....	.....	.....	.....	1 69 to 3 63	.....	.....
Weavers .....	.....	.....	.....	.....	1 93 to 3 87	.....	2 51
Blenchers, females .....	.....	.....	.....	.....	.....	1 93	3 28
Warpers .....	.....	.....	.....	.....	.....	.....	2 66

NOTE.—The hours of work are sixty per week; the wages, partly piece-work, partly day-work.

JUTE MANUFACTURE—SPINNING AND WEAVING.

Occupation,	Glasgow.	Dundee.
Workers in preparing departments .....	.....	.....
Spinners, coarse and fine	\$1 57 to \$1 93	.....
Piecers, single frames and double	2 17 to 2 29	\$2 05 to \$2 23
Shiflers	1 08 to 1 51	1 69
Bobbin-carriers, boys	90 to 96	1 39
Winders, coarse and fine .....	.....	1 08
Reelers	1 93 to 2 05	.....
Warpers .....	.....	2 05
Packing department .....	.....	1 93
Mechanics	3 63 to 5 32	.....
Others	6 05 to 6 77	.....
Tenters .....	.....	3 75
Assistant tenters .....	.....	6 05
Weavers, girls .....	.....	4 35
Half-timers	2 42 to 2 90	2 23 to 2 66
Twisters .....	.....	48
Carders .....	.....	2 23
Rovers .....	.....	2 05
Drawers .....	.....	2 05
Feeders .....	.....	1 93
Bundlers .....	.....	1 99
.....	.....	2 66

NOTE.—The hours of work are sixty per week; the wages, partly piece-work, partly day-work.

Men employ
Boys

NOTE.

Silk-borders,
Silk-drossers
Silk-preparers
Silk-spinners
Silk-doublers
Silk-reelers,
Mechanics, m
Joiners, men
Engine-drive
Warpers, me
Children, hal

NOTE.

BLEACHING,
STITCHING
Foremen
Men

Women a
Girls and
and 18.
Half-timers

COLOR-MIXING
Foremen
Men

Boys betw
MACHINE-PR
Foremen
Printers, m

Tenters, m
Boys betw
HAND-PRINT
Foremen

Block-prim
Half-timer
AOKING AND
Foremen

Men
Girls and
and 18.

DYEING, SOAP
ING
Foremen
Dyers, me

Men
Women ab
Boys betw

FIXING, M
PACKING
Foremen
Calenders

AVERAGE EARNINGS OF OPERATIVES.

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SILK MANUFACTURE—THROWING RAW SILK.

Occupation.	Nottingham.	Manchester.
Men employed at spinning and throwing-mills		
Boys	\$3 87	\$4 11
Women and girls, doublers	\$0 96 to 2 42	1 69
Women and girls, winders of raw silk	1 81 to 2 54	2 05
Children, drawing	2 17 to 2 66	
Women, reelers	60 to 96	48
Men, overlookers	1 93 to 2 17	2 05
	4 84 to 6 77	

NOTE.—The hours of work are sixty per week; the wages, partly piece-work, partly day-work.

SILK MANUFACTURE—SPINNING WASTE SILK.

Occupation.	Yorkshire.	Manchester.
Silk-bollers, men	\$4 35	
Silk-dressers, men	6 29	
Silk-preparers, girls	2 17	
Silk-spinners, girls	2 17	\$1 93 to \$2 42
Silk-doublers, girls	2 17	1 93 to 2 42
Silk-reelers, girls	2 17	1 93 to 2 42
Mechanics, men	6 29	
Joiners, men	5 08	
Engine-drivers, men	4 35	
Warpers, men		5 80
Children, half-timers		60

NOTE.—The hours of work are sixty per week; the wages, partly piece-work, partly day-work.

BLEACHING, DYEING, AND PRINTING.

Occupation.	Manchester.	Neighborhood of Manchester.	Neighborhood of Manchester.	Kent.	Roehdale.
BLEACHING, SINGeing, AND STITCHING:					
Foremen	\$3 47	\$7 26	2 47		
Men	\$3 87 to 5 08		2 87		
Women above 18	2 17 to 2 29				
Girls and boys between 13 and 18	1 45 to 1 93	1 69	1 33		
Half-timers	1 21				
COLOR-MIXING:					
Foremen	10 89			\$9 68 to \$14 52	
Men	4 35				
Boys between 13 and 18	2 42 to 3 38				
MACHINE-PRINTING:					
Foremen	13 31				
Printers, men	10 89	10 64		7 26 to 12 10	\$8 47 to \$11 37
Tenters, men	3 87	3 87	3 87		3 87
Boys between 13 and 18	1 45	\$1 21 to 1 45	1 45	1 45 to 1 93	
HAND-PRINTING, (block):					
Foremen	6 53				
Block-printers, men	4 84				
Half-timers	72				6 05
AGEING AND STEAMING:					
Foremen	6 05	4 84 to 7 26	6 77		
Men	3 87		3 87		
Girls and boys between 13 and 18	2 17	1 93 to 4 35			
DYEING, SOAPING, AND CLEARING:					
Foremen	8 47 to 12 10			9 68 to 14 52	8 47
Dyers, men	4 11	4 11			
Men	3 87				
Women above 18	2 54 to 3 09				
Boys between 13 and 18	1 45 to 1 93	2 42			
FINISHING, MAKING-UP, AND PACKING:					
Foremen	7 26	7 74 to 8 92	7 26	7 26 to 12 10	
Calenders and starchers	3 87 to 4 11	4 35 to 4 84			

BLEACHING, DYEING, AND PRINTING—Continued.

Occupation.	Manchester.	Neighborhood of Manchester.	Neighborhood of Manchester.	Kent.	Rochdale.
FINISHING, ETC.—Continued.					
Makers-up and packers, men.....	\$4 35 to \$5 08	\$4 35 to \$4 54	\$2 05		
Women, above 18.....	2 17 to 2 90	2 42 to 3 14			
Girls and boys, between 13 and 18.....	1 69 to 1 93	1 21 to 2 17	1 33		
MECHANICS, SMITHS, JOINERS, ETC.					
Foremen.....	12 10				
Mechanics.....	7 36 to 7 74				
Joiners.....	7 71	4 59 to 7 26			
Assistants and engine-tenders.....	4 54				
Boys, between 13 and 18.....	2 42 to 2 90				
Watchmen.....	5 08				
Carters.....	4 35 to 4 51				
Book-keepers, men.....	7 50 to 8 95				
Book-keepers, boys, between 13 and 18.....	1 69				
Designers.....				\$9 68 to \$14 52	
Eng. vers.....				7 26 to 10 89	\$7 26 to \$12 10

NOTE.—The hours of work in print-works are not necessarily restricted to 60 per week; in fact they are generally rather in excess of that number. The wages are paid partly by piece-work, partly by day-work.

WARP AND SKEIN-PRINTING.

Occupation.	Manchester.	Remarks.
Designers.....		
Block-cutters.....	\$9 08	
Block-printers.....	8 47	
Warp-printers.....	6 29	
Warp-dressers.....	5 51	
Warp-dressers, between 13 and 18.....	5 08	
Warp-printers, between 13 and 18.....	2 42	
Females.....	3 39	
Color-mixers.....	2 18	
Skein-printers.....	7 26	
Skein-printers, between 13 and 18.....	6 05	
Skein-printers, under 13.....	1 91	
Ordinary printers.....	4 56	O'verlookers.

FUSTIAN DYEING AND FINISHING.

Occupation.	Manchester.	Remarks.
Sadners.....	\$5 08	
Washers.....	4 54	
Coppersmelters.....	3 87	
Whizzers.....	4 36	
Dryers.....	4 36	
Men.....	7 26	
Lads, from 13 to 15.....	1 69	Shearers, cutters, and machine-finishers.
Lads, from 15 to 17.....	2 06	Do.
Lads, from 17 to 19.....	2 50	Do.
Men.....	8 47	Hand-finishers.
Head-enders, men.....	5 57	Dressers.
Tail-enders, men.....	3 39	Do.
Men.....	7 26	Stiffeners.
Lads, from 17 to 19.....	3 39	Do.
Lads, from 15 to 17.....	2 06	Do.
Females.....	3 63	Enders and menders.

NOTE.—The hours of work in bleaching and dyeing-works must not exceed an average of 60 per week. Wages paid partly by piece-work, partly by day-work.

Skilled dye
Unskilled d
Bleachers
Hotpressers
Boys.....
Dyers, wom
Dyers, girls
Folgers and
Calico-glaze

NOTE.—T
Wages paid

Men on piece
Women on p
Young perso

Silk smallwa
Silk smallwa
Silk smallwa
Printers, won
Winders...
Makers-up...
Makers up, y
Printers, you
Half-time...

Riveters, best
Riveters, seco
Finishers, bes
Finishers, sec
Clickers, mule
Machinists, fe
Fitters, found
Last-makers.
Cloggers.....
Cutters.....

AVERAGE EARNINGS OF OPERATIVES.

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DYEING.

Occupation.	Metropolis.
Skilled dyers.....	\$5 29 to \$7 26
Unskilled dyers.....	3 87 to 5 37
Bleachers.....	3 87 to 7 74
Hotpressers and finishers.....	4 81 to 10 17
Boys.....	97 to 3 39
Dyers, women.....	2 18 to 3 63
Dyers, girls.....	97 to 1 94
Folders and ironers.....	2 18 to 2 90
Calico-glazers.....	8 47

NOTE.—The hours of work in bleaching and dyeing works must not exceed an average of 60 per week. Wages paid partly by piece-work, partly by day-work.

FUSTIAN-CUTTING.

Occupation.	Manchester.
Men on piece-work.....	\$3 42 to \$4 84
Women on piece-work.....	1 45 to 2 90
Young persons.....	97 to 1 94

NOTE.—Hours of work, 60 per week; wages paid chiefly by piece-work.

SMALL-WARE, BRAIDS, FRINGES, ETC.

Occupation.	Manchester.	Metropolis.
Silk smallware-weavers, male.....	\$1 36 to \$1 84	\$7 02
Silk smallware-weavers, female.....	3 03 to 3 87	.....
Silk smallware-winders, female.....	2 42	3 03
Platters, women above 18.....	2 90	.....
Winders.....	2 42	1 69
Makers-up.....	3 69	.....
Makers up, young persons.....	1 45	1 57
Platters, young persons.....	2 06	.....
Half-time.....	61	.....

NOTE.—Hours of work, 60 per week; wages paid by the week.

BOOT AND SHOE MANUFACTURE.

Occupation.	Metropolis.	Leeds.*	Newcastle-on-Tyne.	Ipswich.	Glasgow.
Riveters, best class.....	\$7 26	\$2 90 to \$3 47	\$4 64	.....	\$6 05
Riveters, second class.....	4 84	2 90 to 3 47	7 50	.....	6 29
Finishers, best class.....	5 29	5 08 to 9 63	.....	.....	.....
Finishers, second class.....	6 03	5 08 to 9 63	.....	.....	.....
Clickers, males.....	.....	6 05	5 32	\$1 84 to \$9 08	.....
Machinists, females.....	.....	1 94 to 3 39	3 00	.....	2 42
Fitters, females.....	.....	1 69 to 2 90	2 30	.....	.....
Last-makers.....	.....	4 84 to 7 26	.....	.....	.....
Cloggers.....	.....	.....	4 40	.....	.....
Cutters.....	.....	.....	.....	.....	5 81

* The number of hours are, for females, 54 per week, and for males, 59 per week.

CLOTHING.

Occupation.	Metropolis.	Glasgow.	Ipswich.
Overlookers, men	\$10 17		\$7 26
Cutters, men	9 20		
Busters, females, first class	2 30		2 90
Busters, females, inferior	1 47		
Machinists, females, first class	3 41		2 90
Machinists, females, inferior	2 90		
Sewers, females, first class	2 96		
Pressers, men, first class	6 61		7 26
Pressers, men, inferior	4 34		

NOTE.—Ordinary hours of work from 8 a. m. to 6 p. m., but the average is less than 60 per week.

GENERAL FURNISHING.

Occupation.	Metropolis.
Dress-making	\$2 78
Bedding	4 17
Mantel-making	2 66
Stuffing	2 80
Making up of carpets, sewing	3 87
Polishing of furniture	9 63
Upholstery, women for sewing, &c.	3 03
Making up of bonnets	4 36

NOTE.—Ordinary hours of work from 8 a. m. to 2 p. m., but the average is less than 60 per week.

MANTLE-WORK.

Occupation.	Metropolis.
Machinists, sewing:	
Experienced	\$3 63 to \$4 36
Improvers	73 to 2 42
Hand-workers:	
Piece-workers	2 90 to 4 84
Day-workers:	
Experienced	2 90 to 3 63
Improvers	73 to 2 42

NOTE.—The ordinary hours of work from 8 a. m. to 8 p. m., but the average is less than 60 per week.

STAY OR CORSET MAKING.

Occupation.	Metropolis.	Remarks.
Stay-cutters, men	\$9 68	
Stay-pressers, men	9 68	
Stay-machinists, females	3 15	
Stay-needle-hands, females	1 04	
Stay-embroiderers, females	2 66	Termed in the trade fanners.
Boners	2 18	
Eyeters, boys and girls	1 94	
Boxers, girls	1 69	
Finishers and overlookers	1 69	Sundry workers for superintending girls.
Foremen	4 84	
Fitters	3 63	

NOTE.—Ordinary hours of work from 8 a. m. to 8 p. m., but the average is less than 60 per week.

Men, cu
Men, cu
Men, cu
Females
Females
Females
Females
Females
Females

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One dress
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Three dress
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Two dress
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One millin
One millin
One millin
One millin
Six appren

NOT

Machinists,
Clerks
Boys
Needlewomen
Hat-trimmes
Finishers, n
Bodysmen
Shapers, m
Feltmen
Hatters

AVERAGE EARNINGS OF OPERATIVES.

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LINEN-COLLAR MAKING.

Occupation.	Metropolis.
Men, cutters, first class	\$8 47 to \$9 68
Men, cutters, second class	7 26 to 8 47
Men, cutters, third class	4 84 to 7 26
Females, machine-hands, first class	4 36 to 4 84
Females, machine-hands, second class	3 63 to 4 36
Females, machine-hands, third class	2 18 to 3 63
Females, ironers, first class	4 26 to 5 32
Females, ironers, second class	3 63 to 4 36
Females, ironers, third class	2 90 to 3 63

NOTE.—Ordinary hours of work from 8 a.m. to 5 p.m., but the average is less than 60 per week.

DRESS-MAKING.

Occupation.	Metropolis.	Remarks.
Two managers	Each. \$12 55	
One dress-maker	7 42	With board and lodging.
Two dress-makers	6 53	Do.
One dress-maker	6 05	Do.
One dress-maker	2 78	Do.
One dress-maker	1 03	Do.
One dress-maker	6 53	Ten only; no lodging.
Two dress-makers	6 05	Do.
One dress-maker	5 37	Do.
Three dress-makers	4 84	Do.
Three dress-makers	4 36	Do.
Seven dress-makers	4 11	Do.
Three dress-makers	3 87	Do.
Two dress-makers	3 51	Do.
Two dress-makers	3 39	Do.
Thirty-four dress-makers	3 14	Do.
Two dress-makers	2 90	Do.
Fourteen dress-makers	2 ..	Do.
Five dress-makers	2 ..	Do.
Four dress-makers	2 16	Do.
One dress-maker	1 91	Do.
Three dress-makers	1 66	Do.
One milliner	1 45	Do.
Two milliners	6 05	With board and lodging.
One milliner	4 64	Do.
Three milliners	3 51	Do.
One milliner	2 34	Do.
One milliner	2 22	Do.
One milliner	1 85	Do.
One milliner	1 49	Do.
Six apprentices	1 39	Do.

NOTE.—Ordinary hours of work from 8 a.m. to 5 p.m., but the average is less than 60 per week.

HAT AND CAP MAKING.

Occupation.	Metropolis.	Manchester.	Glasgow.
Machiners, hands	\$3 63		
Clerks	4 84		
Boys	1 21		
Needlewomen	2 42		\$2 54
Hat-trimmers, women and girls	2 90	\$2 42 to \$4 54	2 66
Finishers, men	\$7 26 to 9 68	7 26 to 14 52	
Bodymen	7 26 to 9 68	7 26 to 12 10	
Shapers, men	9 68 to 14 52	9 68 to 19 36	
Feltmen		8 71 to 10 89	
Hatters			8 47

NOTE.—Hours of work 60 per week.

FEATHER-MAKING.

Occupation.	Metropolis.	Remarks.
Men	\$4.1 to \$6.65	According to ability.
Men, slanders	7.25 to 12.10	
Women, from 18	1.84 to 3.87	
Girls under 16	57 to 1.69	

MANUFACTURE OF ARTIFICIAL FLOWERS.

Occupation.	Metropolis.
Men	\$1.84
Boys	1.31
Women	3.39
Girls	97

IRON-MANUFACTURE.

Occupation.	Middlesborough.	Neighborhood of Middlesborough.	Darlington.
BLAST-FURNACE:			
Keepers	\$12.28	\$12.28	\$12.88
Chargers	9.31	9.31	10.44
Sluggers	7.62	7.62	\$6.77 to 7.19
Mine-fellers	7.19	7.19	} 5.44 to 6.17
Coke-fellers	5.64	5.92	
Lime-fellers	5.64	5.64	
Enginemmen	8.47	\$5.02 to 9.31	
Weldermen	\$4.35 to 4.84	4.84 to 6.77	.....
Laborers	4.03	4.35 to 5.32	.....
Masons	5.08 to 6.05	4.35 to 7.98	.....
PUDDLING-FORGE:			
Puddlers	10.50	.....	10.28
Shinglers	13.31	.....	.....
Laborers	3.63 to 5.56	.....	3.32 to 4.23
Weightmen	4.35 to 5.80	.....	.....
RAIL-MILL:			
First heating	10.28	.....	10.89
Second heating	13.79	.....	14.52
Rollers	21.05	.....	15.73
Roughers and cutters .....	.....	.....	9.68
Roughers and cutters at blooming .....	.....	.....	9.68
Changing and pulling out	6.05	.....	.....
Boysmen	7.29	.....	.....
Wheeling iron	7.17	.....	.....
Piling iron	6.41	.....	.....
Sawing rails	9.43	.....	.....
Straighteners	6.29	.....	5.68 to 7.25
Weightmen	4.84 to 6.05	.....	.....
Laborers	3.63 to 5.80	.....	.....
PLATE-MILL:			
Heaters .....	.....	.....	12.70
Loaders and general laborers .....	.....	.....	3.63 to 4.59
MERCHANT-MILL:			
Heaters	8.59	.....	.....
Rollers	12.10	.....	.....
Chargers	9.63	.....	.....
Laborers	3.63 to 4.59	.....	.....
Weightmen	6.05	.....	.....
Smiths	4.84 to 7.01	4.59 to 6.53	} 4.59 to 8.71
Smiths' strikers	4.59 to 5.02	4.35 to 4.84	
Boiler-smiths	4.35 to 8.29	6.77 to 7.01	
Fitters	4.11 to 7.01	5.89 to 6.77	
Pattern-makers	5.89 to 6.77	5.02 to 6.53	4.47 to 6.41
Folgers	7.01	.....	.....
Molders	4.11 to 6.77	.....	.....
Laborers	2.11 to 7.25	.....	.....

NOTE.—The average number of hours about 50 per week.

NOTE.—In 2 hours are worked per day.

AVERAGE EARNINGS OF OPERATIVES.

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IRON-MILLS.

Occupation.	Manchester.
Photographers.....	
Painters' underhands.....	\$8 47
Painters.....	4 35
Rollers.....	13 10
Rollers' assistants.....	12 10
Rollers' boys.....	6 05
Run and non-straighteners.....	2 42
General laborers.....	7 26
	3 87

NOTE.—The number of hours about 59 per week.

IRON-FORGING.

Occupation.	Manchester.
Forgemen.....	\$29 04
Forgemen.....	8 70
Laborers.....	4 84
Smiths, heavy.....	33 88
Smiths, light.....	6 43
Painters.....	6 43
Tinners.....	6 77
Mechanics.....	5 32

NOTE.—The number of hours about 59 per week.

IRON-FOUNDING.

Occupation.	Manchester.
Iron smiths.....	\$1 37
Iron smiths.....	1 29
Iron smiths.....	1 29
Iron smiths and turners.....	1 29
Iron smiths.....	1 31
Iron smiths.....	1 31
Iron smiths.....	1 37
Iron smiths.....	1 45
Iron smiths.....	88
Iron smiths.....	72
Iron smiths.....	64
Iron smiths.....	1 26
Iron smiths.....	68
Iron smiths.....	1 05

NOTE.—Number of hours about 59 per week.

ENGINEERING, BOILER AND AGRICULTURAL MACHINE MAKING.

Occupation.	Manchester.	Suffolk.	Essex.	Lincoln.	Gl'asgow.
Good engine-fitters.....	\$8 33	\$9 68			\$5 80 to \$6 53
Agricultural fitters.....		6 05			
Good engine-smiths.....	7 26	10 16	\$5 80		5 33 to 6 77
Agricultural smiths.....		\$6 65 to 7 26	5 80	\$6 72	5 08 to 7 26
Boiler-makers.....		10 29		6 72	
Good mechanics (i. e. woodmen).....	7 74	9 60		6 53	
Iron and brass molders.....		8 70	6 29	6 77	
Painters.....		4 35		5 32	
Day-work laborers.....		2 90	\$3 39 to 3 63	3 63	3 63 to 3 87
Pattern-makers.....	8 70		8 93	6 77	6 29 to 7 26
Patterners.....	7 26				
Hammermen.....	4 35		3 39		4 11

NOTE.—In Manchester the average is less than 60 hours per week. In the eastern counties the full hours are worked.

LOCOMOTIVE-ENGINE MAKING.

Occupation.	Glasgow.
Fitters and fashers	\$6 05
Turners, shapers, planers, and slotters	6 05
Drillers	3 87
Erectors and boiler-mounters	6 53
Pattern-makers	6 77
Iron and brass molders	7 10
Coppersmiths	6 77
Grinders	7 50
Boiler-makers	6 53
Smiths	6 25
Forgemen	8 47
Laborers	3 63
Hammermen	4 11

NOTE.—The above wages are all average rates, many men being paid both higher and lower, according to ability. The hours of work average about 57 per week.

BOLT, NUT, AND RIVET MAKING.

Occupation.	Glasgow.
Bolt-makers, good	\$9 77
Bolt-makers, common	5 80
Nut-makers, large	7 26
Nut-makers, small	6 05
Rivet-makers	5 80
Screwers of bolts	\$9 72 to 1 69
Bolt-makers' strikers	3 63
Rivet-cutters	1 69
Rivet picker-out	1 21
Turner	6 77
Fitter's apprentice	2 17

LOCK AND SAFE MAKING.

Occupation.	Metropolis.
First-class mechanics, known as tool-makers and engineers	\$10 16 to \$3 31, per 60 hours.
Good fitters	\$7 26 to \$1 94, per 60 hours, piece-work.
Laborers in mechanics, employed to fit up or put together what is made by machine—were unskilled labor	\$4 55 to \$8 47, for 60 hours.
Boys and youths	\$1 45 to \$3 14
Women, employed to work automatic machines	\$2 17 to \$3 14, as the law allows.

NOTE BY PROPRIETORS.—Our system is exceptional to all others in this trade, by reason of the parts of the work being prepared by machinery similar to Enfield. Unfortunately, the best men only work about two-thirds time; consequently, they take only a part of what they earn. The hours of work are 60 per week.

SHIPBUILDING AND MARINE ENGINEERING.

Occupation.	Glasgow.	Metropolis.
SHIPBUILDING-YARD:		
Blacksmiths	\$6 05	\$2 71
Angle-iron smiths	6 29	9 43
Hammermen	3 75	
Riveters	\$5 68 to 5 32	\$2 56 to 7 26
Platers and fitters	5 80 to 7 01	5 80 to 9 19
Cutlers	5 32	8 71
Helpers or laborers	3 28	5 08
Rivet-boys	1 69	1 45 to 2 17
Carpenters and boat-builders	6 53	8 71
Joiners	6 53	7 98
Blacksmiths	5 80	6 71
Painters	7 32	7 23
Riggers	6 49	7 26

SHIPBUILD-
Machin
Boers
ENGINE-W
Drugg
Plater
Joiner
Blacks
Hamm
Fitters
Iron-ty
Machin
Labor
BOILER-W
Plater
Rivete
Blacks
Hamm
Holder
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Head puddl
Ordinary pu
Lifter-up, bo
Forgeman
Forge labor
Armor-plat
Pattern-mak
Roller, head
Roller, labor
Farmacem
Spring-fitter
Laborer to th
Wire-drawer
Wire-cleaner
Rod-rollers
Sheet-rollers

Forgers, doubl
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Hardeners...
Wardhouse-w

Forgers, doubl
Forgers, singl
Cutters.....
Hardeners...
Secure's, won
Grinders.....

SPRING-KNIFE
Spring-kn
Pen and p
TABLE-KNIFE
Table-knif
Table-blac
Table-blac
RAZOR-WAXE
Razor-cutl
Razor-grin
Razor-forg

AVERAGE EARNINGS OF OPERATIVES. SHIPBUILDING AND MARINE ENGINEERING—Continued.

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Glasgow.	Occupation.	Glasgow.	Metropolis.
\$6 05	SHIPBUILDING-YARD—Continued.		
6 05	Machinists.....	\$5 68	
3 87	Boilers.....	3 33	
6 53	ENGINE-WORKS:		
6 77	Draughtsmen.....	8 92	
7 60	Pattern-makers.....	6 11	\$8 71
6 77	Joiners.....	6 53	7 98
7 50	Blacksmiths.....	6 53	8 71
6 35	Hammermen.....	3 87	5 92
6 35	Fitters and fushers.....	5 86	8 22
8 47	Iron-turners.....	6 05	8 71
3 63	Machinists.....	5 50	
4 11	Laborers.....	3 32	4 35
	BOILER-WORKS:		
	Platers and fitters.....	6 47	8 71
	Riveters and calkers.....	5 41	7 26
	Blacksmiths.....	6 25	
	Hammermen.....	3 75	
	Holders on and laborers.....	3 44	
	Rivet-boys and blowers.....		1 31

SHEFFIELD TRADES.

Occupation.	Amount per week.
IRON AND STEEL MANUFACTURE.	
Head puddler.....	\$39 04 to \$19 40
Ordinary puddler.....	6 53
Lifter-up, boy.....	1 69
Forgeman.....	12 10 to 14 52
Forge laborer.....	4 11 to 4 81
Armor-plate laborer.....	6 53
Pattern-maker.....	8 47
Roller, head.....	21 78 to 22 04
Roller, laborer.....	4 81
Furnacemen, laborer.....	5 89
Spring-fitters.....	14 52
Laborer to the above.....	7 26
Wire-drawers.....	9 68
Wire-cleaners.....	4 81
Roll-rollers.....	12 10 to 14 52
Sheet-rollers.....	
EDGE-TOOL MANUFACTURE.	
Forgers, double, (of which the forger receives \$10.89 and the striker \$6.05, or \$12.10 and \$184, respectively.).....	16 91
Grinders, with apprentice.....	13 31
Grinder, single-handed.....	10 89
Hardeners.....	6 77
Warehouse-women.....	2 17
FILE MANUFACTURE.	
Forgers, double-handed, (divided in like proportion with earnings of edge-tool forgers).....	19 36
Forgers, single-handed.....	9 68
Cutters.....	7 26
Hardeners.....	8 22
Scourers, women.....	2 42
Grinders.....	9 68
CUTLERY MANUFACTURE.	
SPRING-KNIFE CUTLERY:	
Spring-knife cutler, (average, probably, \$6.35).....	3 63 to 8 47
Pen and pocket blade grinder.....	7 26 to 7 74
Pen and pocket blade forger.....	7 26 to 8 47
TABLE-KNIFE CUTLERY:	
Table-knife cutler, (average, probably, \$6.77).....	4 81 to 9 68
Table-blade grinder.....	7 26 to 14 52
Table-blade forger.....	7 26 to 12 10
RAZOR MANUFACTURE:	
Razor-cutler.....	6 05 to 6 77
Razor-grinder.....	8 47
Razor-forger.....	7 26

SHEFFIELD TRADES—Continued.

Occupation.	Amount per week.
CUTLERY MANUFACTURE—Continued.	
SCISSORS MANUFACTURE:	
Forgers	8 4 to \$7 74
Files	6 05 to 8 47
Borers and flushers	6 05 to 8 47
Grinders, glazed	6 53 to 9 08
Grinders, polished-work (with a boy, a grinder will earn from \$2.90 to \$6.95 per week extra)	7 26 to 11 61
Dressers, women	1 69 to 3 38
Burnishers, women	1 69 to 2 90
SAW MANUFACTURE:	
Saw-makers, distal	6 77 to 7 98
Saw-makers, piece-workers	6 05 to 12 10
Saw-grinders	9 68 to 11 52
Saw-handle makers	4 81 to 7 26
Scutlers, women	2 17 to 2 90
Warehouse-women	2 17 to 2 90
SILVER AND ELECTRO-PLATE MANUFACTURE.	
Silversmiths	8 47
Metal smiths	8 17
Stamper	8 71 to 9 68
Bufflers, men	6 77
Warehouse-women	2 90
Warehouse-girls	1 45 to 1 69
Burnishers, women	2 90
Burnishers, girls	61 to 97

The above rates are taken in all cases under the condition that a full week is worked. There are in Sheffield a very large number of small masters, who live from hand to mouth, and who, perhaps, are not always able to supply work to their men during the first day or two of the week. On the other hand, there are a still larger number of operatives who decline to work, under any circumstances, on Monday, and very often on Tuesday, and who prefer the minimum of work capable of providing the bare necessities of life.

There are again some branches of the Sheffield trade so depressed, from various causes, that with the best intention a good workman can hardly get a living, after deducting from his wages his rent and wear and tear of tools.

There are thus three causes constantly in operation, especially in periods when trade is fluctuating and uncertain, which tend clearly to diminish the average rate of wages in this locality, as given in the foregoing pages.

NOTE.—The number of hours worked in Sheffield is about 58 per week.

WIRE-WORKING.

Occupation.	Manchester.	Remarks.
Weavers	\$8 71	
Drawers	9 43	
Winders	2 17	
Stitchers	3 14	
Dandy-makers	12 10	
Engineers	4 11	
Mechanics	4 81	
Weaving apprentices	1 69	1 69 for the first four
Drawing apprentices	1 45	as in last three years
Boys	1 05	they \$3.63 (average) and the ditto \$4.59.

COPPER-MILLS.

Occupation.	Manchester.
Laborers	\$1 11
Furnacemen	7 26
Hammer-men	6 05
Rolling-men	5 81
Tube-drawers	5 02
Boys over 16 years of age	2 42
Boys under 16 years of age (full time)	1 69

Body-makers
Carriage-makers
Painters
Wheelers
Smiths
Piecemakers
Strikers
Women

The boys
last year.

Joiners
Masons
Bricklayers
Plasterers
Laborers
Superior labor
Painters
Plumbers and
Slaters

Cabinet-makers
Furniture-makers
French polishers
Painters
Gilders
Upholstery sewers
Turners
Chair-makers
Joiners
Carvers
Decorators

Clock-makers, fine
Clock-makers, small

AVERAGE EARNINGS OF OPERATIVES.

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COACH-BUILDING.

Occupation.	Manchester.
Body-makers.....	
Carriage-makers.....	\$0 78 to \$0 68
Painters.....	6 78 to 8 71
Wheeler.....	6 78 to 8 23
Smiths.....	6 78 to 10 68
Piecemen.....	7 29 to 9 68
Strikers.....	5 81 to 6 29
Women.....	3 87
	1 84 to 2 42

The boys serve for seven years. Their wages begin at 3 shillings per week and end at 10 shillings in the last year.

BUILDING TRADES.

Occupation.	Metropolis.	Manchester.	Bradford.
	<i>Cents per hour.</i>	<i>Cents per hour.</i>	<i>Per week.</i>
Joiners.....	16	14 1/2	\$0 61
Masons.....	16	15	7 26
Bricklayers.....	16	15	7 26
Plasterers.....	16	15	7 26
Laborers.....	16	15	7 26
Superior laborers and scaffolders.....	9 1/2	8 1/2	4 81
Painters.....	10 1/2	8 1/2	6 61
Plumbers and glaziers.....	15	11	6 77
Slaters.....			6 77

NOTE.—In the metropolis 564 hours per week.

CABINET MAKING AND UPHOLSTERY.

Occupation.	Manchester.	Metropolis.
Cabinet-makers.....	\$7 74 to \$8 22	\$7 26 to \$10 89
Upholsters.....	7 88	7 26 to 12 10
French polishers.....	0 77	7 26
Painters.....	11 cts. per hour	8 47
Gilbers.....	7 26 to 7 74	8 47
Upholstery sewers.....	2 90	3 38
Turners.....		7 26 to 10 89
Chair-makers.....		7 26 to 12 10
Joiners.....		9 19
Curvers.....		7 26 to 12 10
Decorators.....		9 19

NOTE.—Sixty hours per week.

CLOCK MAKING.

Occupation.	Metrop.
Clock-makers, first class.....	\$7 26 to \$9 68
Clock-makers, second.....	6 05 to 6 77

NOTE.—The hours of work are 58 per week.

POTTERY.

Occupation.	Metropoli.	Manchester.	Newcastle-on-Tyne.	Edinburgh.
Hollow-ware potters.....	\$7 26			
Printers.....	7 26		\$5 81	\$5 81
Overmen.....	6 78			
Throwers.....	8 71	\$8 47	5 81	6 65
Turners.....	6 29		6 78	
Sagger-makers.....	8 71		7 26	
Dish-makers.....	7 26			
Plate and saucer makers.....	5 08			
Laborers.....	4 84		\$3 42 to 2 90	
Transferrers, women.....	1 01			
Lathe-turners, women.....	4 36		1 69 to 1 91	1 45
Warehouse women.....	2 90			\$2 42 to 3 39
Boys, full time.....		1 19		
Boys, half time.....		60		
Temperers of clay.....		3 87		
Pottiers.....		5 32		
Slip-makers.....			12 10	
Mold-runners, boys.....			97 to 1 09	
Blasuit-firers.....			10 69	4 81
Gloss-firers.....			7 50	5 81
Dippers.....			7 74	
Jar-makers, women.....			1 04 to 2 18	
Jar-makers, girls.....			1 45 to 1 69	
Jar-finishers, girls.....			1 69 to 1 91	

BRICK-MAKING.

Occupation.	Kent.	Remarks.
Brick-molders.....	\$6 53	All brick-making operations are paid at per 1,000 bricks, so that the wages can only be averaged.
Brick sorters and loaders.....	6 05	
Barrow-men.....	\$4 36 to 5 08	
Carpenters and bricklayers.....	5 81	
Shipwrights.....	6 53	
Engineers.....	8 71	

GLASS-MAKING.

Occupation.	Metropoli.
Founders.....	\$8 76
Spacemen, (whose duty it is to fill the crucibles).....	8 64
Kilnmen.....	8 40
Cutters.....	8 40
Cutters' assistants.....	6 21
Grinding-men.....	9 12
Grinding-boys.....	1 92
Smoothing-men.....	7 20
Smoothing-women.....	2 40
Polishing-men.....	8 40
Polishing-boys.....	2 40

NOTE.—The hours of work are about 50 per week.

SOAP AND CANDLES.

Occupation.	Metropoli.
Copper sidemen.....	\$5 79
Tallow-melters.....	5 76
Candle-pounders.....	4 80
Carmen.....	\$6 24 to 7 20
Boys.....	1 20 to 2 40

Pressmen
Grinders
Hoppers
Boys
Stokers
Coners
Carpenters
Yard-men
Blacksmiths

Millers
Skilled labor
Ordinary labor
Yards over
Boys under

Sulphuric acid
Working re
Manufactur
Laborers
Bricklayers
Joiners
Millwrights
Curtmou
Reelmen
Coopers
Sawyers
Brick-maker
Furnacemen
Engineers
Boiler-maker
Blacksmiths
Plumbers
Alumina
Founders, (in

Blasuit-baking
Blasuit-baking
Blasuit-baking
Bread-baking

AVERAGE EARNINGS OF OPERATIVES.

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OIL MILLS AND REFINERY.

Occupation.	Metropolis.
Pressmen	\$7 20 to \$8 40
Grinders	4 00 to 4 80
Hoppermen	1 00 to 5 50
Boys	3 12 to 3 41
Stokers	5 50 to 6 72
Carpenters	7 20 to 7 80
Yard-hands	8 61
Blacksmiths	7 20
	7 12

NOTE.—The hours of work are 60 per week.

RICE-MILLS.

Occupation.	Metropolis.
Millers	\$5 80 to \$7 20
Skilled laborers	5 80 to 6 20
Ordinary laborers	4 25 to 5 18
Youths over 18 years of age	7 28 to 4 11
Boys under 18 years of age	1 45 to 2 42

CHEMICAL WORKS.

Occupation.	Newcastle-on-Tyne.	Manchester.
Sulphuric acid manufacture	\$6 58	
Working reverberatory furnaces	6 22	
Manufacturing chloride of lime	6 24	
Laborers	4 35	\$3 61
Bricklayers	6 20	5 92
Joiners	6 05	6 65
Millwrights	6 20	
Cartmen	4 59	4 71
Reelmen	6 05	
Coopers	6 05	5 80
Sawyers	5 32	
Brick-makers	4 81	6 05
Pharmacemen		6 20
Engineers		6 05
Boiler-makers		5 92
Blacksmiths		5 92
Painters		7 26
Masons		7 13
Founders, (molders)		

BREAD AND BISCUIT MANUFACTORY.

Occupation.	Glasgow
Biscuit-baking, men	\$1 69 to \$7 26
Biscuit-baking, boys	72 to 1 45
Biscuit-baking, girls, (packing)	72 to 2 17
Bread-baking, men	2 90 to 7 44

BREWERY.

Occupation.	Essex.
Stores, men	\$1 53
Stores, boys	1 08
Tun-rooms, men	4 23
Cask-washers, men	4 11
Cask-washers, boys	1 45
Stagemen	5 08
Hop-room men, &c	4 59
Watchmen	7 04
Stablemen	4 24
Dray and van-men	5 56
Engine-drivers	6 53
Carpenters and painters	6 29
Coopers	7 98
Coppersmiths	10 16
Millwrights, &c	10 16
Blacksmiths	9 65
Harness-maker	7 26
Wheelwright	7 74
Laborers to coppersmiths, millwrights, &c	4 43

In the metropolis mechanics average \$7.31 per week; laborers average \$7.01 per week.

PRESERVED MEATS, FRUITS, FISH, PICKLES, ETC.

Occupation.	Metropolis.
Packers, men, piece-work	\$7 02
Corkers, men, piece-work	7 50
Labellers, women, piece-work	60 per day.
Men, day-work	5 08
Boys, day-work	\$1 15 to 2 42
Women, day-work	48 per day.

SPIRIT DISTILLING.

Occupation.	Glasgow.
Engineers	\$7 25
Firemen	4 35
Millers	5 32
Coopers	6 05
Maltmen	4 59
Laborers	\$1 11 and 3 87

TOBACCO AND CIGARS.

Occupation.	Metropolis.	Metropolis.	Metropolis.	Edinburgh.	Glasgow.
Cutters	\$4 05 to \$4 47		\$6 29 to \$6 53		
Driers or pan men	4 30 to 7 26				
Women-strippers	2 99 to 3 63				
Boys-strippers	1 69 to 4 81	\$2 42 to 2 90			
Spinnars	6 05 to 8 17		7 26		\$9 65
Packers	3 63 to 6 05				
Machine-boys	1 21 to 4 36				
Cigar-makers		2 42 to 3 63			
Cigar-makers, best hands		7 26 to 9 68			
Sorters		6 05 to 7 26			
Stem-makers and sifters			5 08 to 6 05		
Workmen				\$4 47	
Girls feeding machines				5 57	8 33
Girls preparing tobacco for machines				1 84	
Boys at presses				\$9 73 to 1 15	
Half-timers				97 to 36	\$9 60 to 1 09
					30 to 20

Hours of work variable—about 56 per week. In Boston wages vary from 48 cents to \$10.01 weekly.

Skilled wor
Laborers ..
Women ..
Young pers
Children, in
Pan men ..
Bleachers ..
Rag-sorters
Paper-sorter
Washers off
Machine, boy
Rag-engineer

Water-color
Flock-printer
Metal-printer
Boys

Finishers ..
Forwarder, di
Forwarder, so
Blocker, first
Blocker, second
Polers, female
Sewers, female
Collator, female

Envelope-entire
Envelope-entire
Envelope-stamp
Envelope-stamp
Envelope-stamp
Envelope-stamp
Envelope, black

With few excep
to give more to
the persons emp
or dinner and h

Casters ..
Rubbers ..
Pressers ..
Boys

AVERAGE EARNINGS OF OPERATIVES.

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PAPER MAKING.

Occupation.	Kent.	Kelghley.	Durham.	Glasgow.	Manchester.
Skilled workmen	\$1 81 to \$6 29	\$6 05	\$4 84 to \$5 32	\$6 05
Laborers	3 63 to 4 35	1 11	.....	.....	.....
Women	1 63 to 3 11	2 66	1 45 to 2 17	3 87	.....
Young persons	96 to 3 32	\$1 81 to 2 99	1 45 to 2 17	2 17	.....
Children, half-timers .....	.....	48 to 56	.....	1 21	.....
Run men .....	.....	.....	.....	.....	.....
Bleachers .....	.....	.....	.....	.....	\$1 35
Rag-sorters, women .....	.....	.....	.....	.....	4 35
Paper-sorters, women .....	.....	.....	.....	.....	2 42
Washers off, men .....	.....	.....	.....	.....	2 42
Machine, men .....	.....	.....	.....	.....	1 35
Machine, boys .....	.....	.....	.....	.....	5 89
Rag-engineers .....	.....	.....	.....	.....	2 99
.....	.....	.....	.....	.....	5 89

PAPER STAINING.

Occupation.	Metropolis.	Lancashire.
Water-color printers, piece-work	\$4 50 to \$6 00	.....
Block-printers, piece-work	7 20 to 7 52	.....
Metal-printers	7 20 to 7 52	.....
Boys	1 20	\$1 20
Paper-stainers .....	.....	2 40
Laborers .....	.....	3 81

BOOK-BINDING.

Occupation.	Metropolis.
Finishers .....	.....
Forwarder, first class	\$3 68
Forwarder, second class	8 71
Blocker, first class	7 74
Blocker, second class	7 74
Folders, female, piece-work, earn	7 25
Sewers, females, piece-work, earn	\$2 90 to 4 81
Collator, females, earn	2 42 to 3 87
.....	2 60 to 3 30

ENVELOPE MAKING.

Occupation.	Metropolis.
Envelope-cutters, men	\$6 05 to \$9 20
Envelope-embosers, women	2 42 to 1 81
Envelope-stampers, plain, women	1 81 to 3 63
Envelope-stampers, colored, women and youths	2 90 to 6 78
Envelope-folders, women	1 81 to 5 32
Envelope-machine hands, girls	1 21 to 3 63
Envelope, black borderers, women and girls	1 21 to 7 45

With few exceptions, all persons employed in this trade are paid piece-work, which renders it impossible to give more than an approximation of the wages, as so much depends upon the ability and experience of the persons employed. The hours of work are, as a rule, from 9 a. m. to 7 p. m., with intervals of one hour for dinner and half an hour for tea.

TYPE FOUNDING.

Occupation.	Metropolis.
Casters .....	.....
Rubbers	\$6 77 to \$7 98
Dressers	4 35 to 5 80
Boys	7 98
.....	1 21 to 2 42

NOTE.—Average about 55 hours per week.

LETTER-PRESS PRINTING.—PROVINCIAL RATES OF WAGES.

Towns.	Wages.			News price prices per 1,000 ems.				Number of hours per week.				Overtime per hour.		
	Jobbing.	Weekly news.	Daily news.	Weekly.		Daily.		Jobbing.	Weekly news.	Daily news.	Daily news.	Weekly news.	Daily news.	Overtime per hour.
				Printer.	Milion.	Nonpareil.	Brevier.								Milion.	Nonpareil.
Barnsley.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16
Barnsley.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16
Bradford.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16
Chorlton.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16
Derby.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16
Doncaster.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16
Leeds.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16
Manchester.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16
Newcastle-on-Tyne.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16
Sheffield.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16
Sunderland.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16
York.....	6 7 1/2	4 2 1/2	4 2 1/2	4 10	12 12	12 12	23 50	42 50	55 50	21 12	21 12	21 12	21 12	16

Composi-
Pressmen
Machine-
Boys...

Skinner's...
Sheepers...
Curriers...
Enamellers...
Glove and...
Tanners' b...
Jobbers' b...
Dyers' boy...
Dyers' boy...
Wool-rug d...
Wool-rug d...
Women c...
Warehouse...
Warehouse...
Mechanics c...

Rope-yarn h...
Twine-spin...
Twine-spin...
Machine-spin...
Machine-spin...
Machine-spin...
Rope-makers...
Rope-makers...
Carmen...
Van-boys...
Warehouse-m...
Engine-drive...
Blacksmith...
Carpenter...

Reed-makers...
Reed-makers...
Reed-knitting...
Reed-knitting...
Reed-knitting...

Skilled workm...
Skilled workm...
Skilled workm...
Ordinary work...
Ordinary work...
Lads...
Boys...
Women...
Girls...
Threaders, male...
Mixers, male...
Vulcanizers, m...
Fashers, male...
Mechanics' hon...
Lath-hands, m...

AVERAGE EARNINGS OF OPERATIVES.

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LETTER-PRESS PRINTING.

Occupation.	Weekly wages.
Compositors	\$9 68
Press-men	8 82
Machine-men	9 08
Boys	1 45

TANNING AND CURRYING.

Occupation.	Metropolis.	Remarks.
Skinner.		
Shorrers and finishers	\$9 12	
Curriers	8 88	
Emmellers and japanners	7 92	Piece-work.
Glove and leather finishers and dyers	7 08	
Tanners	5 52	
Tanners' boys	5 52	
Jobbers	2 64	
Jobbers' boys	5 04	
Dyers	5 26	
Dyers' boys	5 76	
Wool-rug dressers	2 88	Day-work.
Wool-rug dressers' boys	5 76	
Women employed in sewing skins	2 88	
Warehouse and stable men	5 62	
Warehouse and stable boys	5 28	
Mechanics employed in repairs, &c.	1 92	
	7 41	

LOPE-MAKING.

Occupation.	Metropolis.	Manchester.
Rope-yarn hand-spinners		
Twine-spinners, men	\$6 53	\$5 37
Twine-spinners, boys	7 26	
Machine-spinners, men	1 21	77
Machine-spinners, boys	5 81	
Machine-spinners, females	2 18	
Rope-makers, (by aid of machinery,) men	1 69	
Rope-makers, (by aid of machinery,) lads 5 to 15 years	5 32	
Carmen	2 42	
Yarn-boys	4 81	
Warehouse-men	1 91	
Engine-driver	5 32	
Blacksmith	6 78	
Carpenter	6 29	
	5 81	

REED AND HEALD MAKING, ETC.

Occupation.	Manchester.
Reed-makers, men	
Reed-makers, boys, (full time)	\$7 26
Heald-knitting, women	1 45
Heald-knitting, girls (full time)	2 90
	1 45

INDIA-RUBBER MANUFACTURE.

Occupation.	Metropolis.	Manchester.
Skilled workmen, class A.	\$9 68 to \$14 52	
Skilled workmen, class B.	7 50 to 9 68	
Skilled workmen, class C.	6 29 to 7 26	
Ordinary workmen	5 08 to 6 04	
Ordinary workmen	3 87 to 4 84	
Lads	2 00 to 3 38	
Boys	1 45 to 2 42	\$1 21 to \$1 03
Women	2 18 to 4 38	2 90 to 3 39
Girls	1 45 to 2 18	97 to 1 45
Threaders, male		4 84 to 5 08
Mixers, male		3 87 to 4 36
Vulcanizers, male		4 11
Finishers, male		3 67
Mechanized hands, male		5 08
Laths-hands, male		2 90 to 3 39

LUCIFER-MATCH-MAKING.

Occupation.	Manchester.	Remarks.
Chip-box makers.....	\$0 64	Half-timers, girls.
Chip-box makers.....	2 04	Full-timers, females.
Match-box makers.....	2 46	Do.
Machine-frame fillers.....	2 62	Do.
Match-box fillers.....	1 94	Do.
Old hands in match department.....	64	Half-timers, boys.
Old hands in match department.....	60	Half-timers, girls.
Old hands in match department.....	1 94	Full-timers, females.
Old hands in match department.....	3 63	Full-timers, males.
Wax vesta and fusee makers.....	2 38	Full-timers, females.
Wax vesta and fusee makers.....	85	Half-timers, boys.
Match-cutting, men.....	1 09	Full-timers, males.
Match-cutting, men.....	4 36	Do.
Sawyers, laborers, &c., in yard.....	1 36	Do.

NOTE.—The hours of work are 60 per week.

FANCY-BOX-MAKING.

Occupation.	Metropoli.
Paper colorers.....	\$2 90
Cutters, piece-work.....	9 08
Scorers, boys.....	1 14
Block and case hands.....	4 25
Plain work.....	\$2 60 to 2 99

NOTE.—These are about the average wages for good hands all the year.

CARTRIDGE-MAKING.

Occupation.	Metropolis.
Laborers, by time, from.....	\$4 36 to \$6 71
Laborers, by piece, from.....	6 78 to 9 20
Work-girls, by time, from.....	2 42 to 4 00
Work-girls, by piece, from.....	1 94 to 4 00

BRUSH-MAKING.

Occupation.	Leeds.	Metropoli.
Par-handers.....	\$7 29	.....
Hair-hands.....	6 65	8 47
Painters.....	9 68	10 00
Finishers.....	6 78	.....
Borders.....	7 29	.....
Apprentices.....	2 18	.....
Women.....	2 18	\$2 18 to 4 36
Girls.....	1 07	1 00
Boys.....	1 08	.....

AVERAGE
hours a
Compl
the costSPINNING:
Preparers,
Spinners,
Reelers,
Hacklers,
Mechanics,
Overlookers,
Laborers.WEAVING:
Winders,
Warpers,
Weavers,
Overseers.IN BLEACHING:
Men.....
Women.....
Lads andSPINNING:
Preparers,
Preparers,
Spinners,
Spinners,
Tailors,
Reelers, w
Reelers, g
Hacklers,
Hacklers,
Hacklers,
Mechanics,
Mechanics,
Overlookers,
Laborers, w
Winding, w
Winders, w
Winders, p
Warpers, r
Warpers, r
Warpers, r
Warpers, r
Weavers, v
Overseers,
AssistantIN BLEACHING:
Men.....
Women.....
Lads and b
Girls.....

AVERAGE WAGES OF OPERATIVES.

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RATES OF WAGES IN THE UNITED KINGDOM.

AVERAGE RATES OF WAGES paid to persons employed in manufactures and trades, and the hours of labor, in various towns and their neighborhoods, in the United Kingdom in 1872. Compiled from returns communicated to the statistical department of the board of trade by the council and secretaries of the several chambers of commerce, &c.

LINEN AND FLAX MANUFACTURE.

BELFAST AND NEIGHBORHOOD.

Occupation.	Rates of wages— per day.	Hours of labor— per day.
SPINNING:		
Preparers for spinning, women.....	\$0 24 to \$0 39	10
Spinners, women.....	25 to 32	10
Reelers, women.....	24 to 30	10
Hacklers, men.....	20 to 24	10
Mechanics, men.....	1 45 to 1 21	10
Overhuckers, men.....	21 to 1 03	10
Laborers, men.....	21 to 26	10
WEAVING:		
Winders, women.....	23 to 42	10
Warpers, women.....	26 to 42	10
Weavers, women.....	26 to 42	10
Pressers, men.....	1 45 to 1 09	10
IN BLEACH-FIELDS:		
Men.....	72	10
Women.....	58	10
Lads and boys.....	28	10

DUNDEE AND NEIGHBORHOOD.

	Per week.	
SPINNING:		
Preparers for spinning, women.....	\$1 45 to \$2 42	60
Preparers for spinning, lads and boys.....	1 24 to 1 93	60
Spinners, women.....	1 93 to 3 39	60
Spinners, girls.....	72 to 1 45	60
Twist-ers, women.....	2 05 to 2 39	60
Reelers, women.....	1 93 to 3 39	60
Reelers, girls.....	86 to 1 21	60
Hacklers, men.....	1 57 to 2 51	60
Hacklers, women.....	96 to 1 57	60
Mechanics, men.....	4 36 to 7 26	60
Warehousemen.....	3 39 to 6 05	60
Overhuckers, men.....	5 75 to 8 17	60
Laborers, men.....	2 90 to 4 11	60
WEAVING:		
Wind-ers, women.....	1 63 to 3 63	60
Wind-ers, girls.....	46 to 1 21	60
Warpers, men.....	4 81 to 6 05	60
Warpers, women.....	2 18 to 3 95	60
Warpers, lads and boys.....	1 69 to 1 97	60
Weavers, women.....	1 93 to 1 87	60
Over-pressers, men.....	6 05 to 8 17	60
Assistant over-pressers, men.....	4 81 to 6 05	60

Per day.

IN BLEACH-FIELDS:		
Men.....	72 to 36	10
Women.....	58 to 32	10
Lads and boys.....	24 to 12	10
Girls.....	24 to 8	10
	21 to 30	10

* Per piece-work.

JUTE MANUFACTURE.

DUNDEE AND NEIGHBORHOOD.

Occupation.	Rates of wages per week.	Hours of labor per week.
SPINNING:		
Preparers for spinning, women.....	\$2 00 to \$2 18	60
Preparers for spinning, lads and boys.....	1 27	60
Spinners, women.....	2 12 to 2 24	60
Spinners, lads and boys.....	1 39	60
Spinners, girls.....	1 39	60
Twil-ters, women.....	2 21	60
Reelers, women.....	2 54	60
Hacklers, men.....	3 51	60
Hacklers, lads and boys.....	1 69	60
Mechanics, men.....	5 81	57
Ward-housemen.....	5 32	60
Overlookers, men.....	5 51 to 7 26	60
Laborers, men.....	4 36	60
WEAVING:		
Winders, women.....	2 18 to 3 39	60
Warpers, women.....	3 63 to 4 84	60
Beamers, men.....	2 39 to 2 90	60
Weavers, women.....	2 47	60
Overseers, men.....	5 57	60
Tenters, men.....		60

WOOLEN MANUFACTURE.

DEWSBURY AND NEIGHBORHOOD.

Occupation.	Rates of wages per week.	Hours of labor per week.
PREPARING WOOLEN CLOTH, ETC.:		
Wool-sorters, men.....	\$6 29	50
Wool-scourers, driers, &c., men.....	4 36	50
Dyers, men.....	5 68	50
Dyers, foremen, men.....	9 68	50
Tenizers and williers, men.....	4 69	50
Scribblers, foremen, men.....	10 89	50
Scribbler, feeders, women.....	2 90	50
Sinblers, men.....	2 90	50
Sinblers, piecers, lads and boys.....	2 18	50
Condenser-minders, women.....	2 18	50
Spinners, men.....	2 90	50
Spinners, piecers, lads and boys.....	2 26	50
Spinners, foremen, men.....	2 18	50
Warpers and beamers, men.....	5 08	50
Warpers and beamers, women.....	3 14	50
Healders, lads and boys.....	2 90	50
WEAVING, ETC.:		
Weavers, men.....	4 81	50
Weavers, women.....	3 87	50
Weavers, lads and boys.....	3 87	50
Weavers, girls.....	3 87	50
Weavers, foremen or timers, men.....	2 90	50
Knotters and sewers, women.....	8 47	50
Buriers, women.....	2 96	50
Millers, men.....	2 96	50
Millers, foremen, men.....	4 81	50
Manager, men.....	8 47	50
DRESSING AND FINISHING WOOLEN CLOTH, ETC.:		
Dressers or giggers, men.....	14 52	50
Dressers or giggers, lads and boys.....	4 41	50
Cutters, men.....	3 87	50
Cutters or croppers, men.....	2 77	50
Cutters or croppers, lads and boys.....	4 41	50
Cutters or croppers, women.....	2 42	50
	2 42	50

DRESSING

Presses
Presses
Burlers
Drawers
Brushes
Engines
Engines
Mechanics
Laborers
Ward-housemen

IRON-FOUND

Iron-mol
Iron-mol
Joiners,
Grinders
Grinders
Pattern-m
Pattern-m
Pattern-m
Timmen,
Blacksmith
Blacksmith
Blacksmith
Engine-f
Engine-f
Millwright
Molders,
Pleniers,
Turners,
Screwers,
Hammer-
Strikers,
Borers, m
Slotters,
Turner-m
Founders,
Engine-m
Drillers,
Carters, m
Lebocers, m

FILE-MAKING

Forgers of
Strikers, m
Forgers of
Grinders, m
Grinders, l
Cutters, m
Cutters, m
Cutters, m
Cutters, m
Hard-ners,
Hardeners,

AVERAGE WAGES OF OPERATIVES.

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WOOLEN MANUFACTURE—Continued.

DEWSBURY AND NEIGHBORHOOD—Continued.

Occupation.	Rate of wages per week.	Hours of labor per week.
DRESSING AND FINISHING WOOLEN CLOTH, ETC.—Continued.		
Press-setters, men.....	55 32	50
Press-setters, lads and boys.....	51 7	50
Barbers, women.....	51 05	60
Drawers, men.....	52 68	60
Drawers, lads and boys.....	52 42	60
Brushers, men.....	53 32	60
Brushers, lads and boys.....	53 39	60
Enginemmen, men.....	8 47	60
Enginemmen, lads and boys.....	3 63	60
Mechanics, men.....	7 02	60
Laborers, men.....	4 84	60
Warehouse-men.....	5 32	60

IRON AND STEEL MANUFACTURE.

SHEFFIELD AND NEIGHBORHOOD.

Occupation.	Rate of wages per week.	Hours of labor per week.
IRON-FOUNDERS, ETC.:		
Iron-molders, men.....	\$7 71 to \$8 23	50 to 57½
Iron-molders, lads and boys.....	5 42	60
Joiners, men.....	5 32 to 6 75	5½ to 60
Grinders and glaziers.....	5 32 to 12 10	50 to 7½
Grinders and glaziers, lads and boys.....	2 42	50
Pattern-makers, men.....	7 26 to 9 68	55½ to 60
Pattern-makers, lads and boys.....	1 45	60
Pattern-makers' assistants, men.....	4 26	58½
Tinmen, men.....	6 75	5½
Blacksmiths, men.....	7 26 to 7 74	5½ to 60
Blacksmiths, lads and boys.....	1 45	60
Blacksmiths, helpers, men.....	4 60 to 5 81	5½ to 60
Engine-fitters and turners, men.....	7 26	5½
Engineers, men.....	7 26	5½
Millwrights, men.....	7 26	5½
Molders, men.....	7 26	5½
Plenars, men.....	7 26	5½
Turners, men.....	7 26	5½
Screwers, men.....	7 26	5½
Hammermen.....	4 36	5½
Strikers, men.....	8 23	5½
Borers, men.....	4 60	5½
Slotters, men.....	5 11	5½
Furnace-men in forgo.....	6 20	5½
Founders, men.....	7 26	5½
Engine-men.....	7 71	5½
Drillers, men.....	4 81	5½
Carters, men.....	5 08	5½
Laborers, men.....	51 cts. per day.	5½
FILE-MAKERS:		
Forgers of file, 12 inches and upward, men.....	4 36	5½ to 5½
Strikers, men.....	8 71 to 9 93	48 to 56
Forgers of files under 12 inches, men.....	7 26 to 7 47	48 to 56
Grinders, men.....	6 05 to 8 47	50 to 60
Grinders, lads and boys.....	8 71 to 14 64	50 to 60
Cutters, men.....	5 32	50 to 60
Cutters, lads and boys.....	4 54 to 5 81	50 to 60
Cutters, women.....	3 96 to 3 63	50 to 60
Cutters, girls.....	2 15 to 3 63	50 to 60
Hardeners, men.....	1 63 to 2 96	50 to 60
Hardeners, women.....	6 53 to 7 74	50 to 60
	3 12	50 to 60

IRON AND STEEL MANUFACTURE—Continued.

SHEFFIELD AND NEIGHBORHOOD—Continued.

Occupation.	Rate of wages per week.	Hours of labor per week.
HORSE-NAIL MAKERS:		
Horse-nail makers (forgers) by machinery, men.....	\$5 32	54
RAZOR-MAKERS:		
Strikers, men.....	5 81	48
Forgers, men.....	7 26	48
Grinders, men.....	7 26	48
Scissors, men.....	5 08	48
Whetters, men.....	5 21	48
SAW-MAKERS:		
Makers, men.....	6 23	51
Grinders, men.....	7 71	51
Handle-makers, men.....	6 53	51
SCISSOR-MAKERS:		
Forgers, men.....	\$4 54 to 7 74	55
Grinders, men.....	6 05 to 8 71	47
Grinders, lads and boys.....	2 42 to 5 32	47
Filers, men.....	5 02 to 7 39	47
Filers, men, lads, and boys.....	2 42 to 3 63	45
Finishers, men.....	6 05 to 8 47	50
Dressers, women.....	1 69 to 3 15	50
Burnishers, women.....	1 69 to 2 90	50
SPRING-KNIFE MAKERS:		
Grinders, best work, men.....	7 26 to 8 71	48
Forgers, best work, men.....	7 26	48
Cutlery, best work, men.....	4 36 to 7 26	51
Scal and spring makers, best work, men.....	6 53	51
TABLE-KNIFE MAKERS:		
Forgers, men.....	8 71	48
Strikers, men.....	6 17	48
Grinders, men.....	5 81	48
Hafters, men.....	5 21	51
STOVE-GRATE FITTERS AND FENDER-MAKERS:		
Molders, men.....	8 23	50
Molders, lads and boys.....	2 90	50
Fitters, men.....	7 26	50
Fitters, lads and boys.....	2 42	50
Grinders, men.....	12 10	50
Grinders, lads and boys.....	2 90	50
STEEL-MAKING:		
Converter.....	7 26 to 8 47	50 to 72
Converter's laborer.....	4 60	50 to 72
Melter.....	8 23 to 24 20	50 to 72
Puller-out.....	6 78 to 8 47	50 to 72
Coker.....	4 60 to 5 33	50 to 72
Forge-man and tilter.....	8 71	50 to 72
Rod-roller.....	10 16	50 to 72
Rod furnace man.....	5 08	50 to 72
Sheet roller.....	9 68	50 to 72
Sheet-furnace man.....	7 26	50 to 72
Teemer.....	9 68	50 to 72
Pot-makers.....	9 68	50 to 72
Laborers.....	4 36	50 to 72
Boys.....	1 84 to 4 36	50 to 72

NEWCASTLE AND NEIGHBORHOOD.

	Per ton.	Per day.
PUDDLING:		
Highest rate.....	\$3 15	10
Lowest rate.....	2 39	10
Average rate.....	2 60	10
PLATE-ROLLING:		
Rolling.....	*\$1 00 to 1 77	10
Heating.....	*07 11	10
Charging.....	*24	10
Shearing.....	*7 to 8 1	10

* Extras are paid on these prices for best qualities.

HAIR-ROLLING
Rolling
Heating
Cutting
IRON-FOUND
Iron-mold
Joiners
Pattern-m
Turners
Blacksmith
Blacksmith
Engine-f
Roller-m
Millwright
Planers
Turners
Screwers
Drillers
Apprentice
Carters
Laborers

IRON-FOUND
Iron-mold
Joiners, m
Pattern-m
Blacksmith
Engine-f
Engine-f
Roller-m
Roller-m
Engineers,
Engineers,
Engineers,
Planers, m
Planers, m
Turners, m
Turners, m
Screwers, m
Finishers, m
Finishers, m
Hammer
Strikers, m
Borers, m
Sloters, m
Turnace-m
Engine-m
Carters, m
Porters, m
Laborers, m

AVERAGE WAGES OF OPERATIVES.

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IRON AND STEEL MANUFACTURE—Continued.

NEWCASTLE AND NEIGHBORHOOD—Continued.

Hours of labor per week.	Occupation.	Rates of wages per ton.	Hours of labor per day.
52½	BAR-ROLLING:		
48	Rolling	\$0 68 to \$1 00	10
48	Heating	50 to 90	10
48	Cutting down	32	10
48	IRON-FOUNDERS, ETC.:		
48	Iron-molders	Per day.	
48	Joiners	\$1 13	
48	Pattern-makers	1 13	
48	Timmen	1 05	
48	Blacksmiths	63	
48	Blacksmiths' helpers	\$0 97 to 1 21	
48	Engine-fitters and turners	68 to 73	
48	Boiler-makers	97 to 1 21	
48	Millwrights	1 21	
48	Plumbers	1 13	
48	Turners	97 to 1 05	
48	Screwers	57 to 1 21	
48	Drillers	73	
48	Apprentices	60	
48	Carters	16 to 29	
48	Laborers	80	
		32 to 73	

DUNDEE AND NEIGHBORHOOD.

	Per week.	
IRON-FOUNDERS, ETC.:		
Iron-molders, men	\$7 96	57
Iron-molders, lads and boys	1 41	57
Joiners, men	5 57	57
Pattern-makers, men	5 57	57
Blacksmiths, men	5 81	57
Engine-fitters and turners, men	5 60	57
Engine-fitters and turners, lads and boys	5 75	57
Boiler-makers, men	1 50	57
Boiler-makers, lads and boys	5 69	57
Engineers, men	1 91	57
Engineers, lads and boys	5 57	57
Plumbers, men	2 90	57
Plumbers, lads and boys	5 44	57
Turners, men	1 21	57
Turners, lads and boys	5 93	57
Screwers, men	1 59	57
Finishers, men	3 57	57
Finishers, lads and boys	5 44	57
Hammer-men	2 90	57
Strikers, men	3 57	57
Borers, men	3 57	57
Slotters, men	3 57	57
Furnace-men	5 32	57
Engine-men	4 60	57
Carters, men	4 24	57
Porters, men	4 23	57
Laborers, men	3 15	57
	3 63	57

Per d.y.

10
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10

SHIP-BUILDING, (OF IRON.)

NEWCASTLE AND NEIGHBORHOOD.

Occupation.	Rate of wages— per day.	Hours of labor per day.
SHIP-BUILDERS:		
Moulders.....	\$1 21	10
Fitters.....	\$1 05 to 1 09	10
Chippers.....	73 to 81	10
Riveters.....	1 17	11
Platers.....	65 to 1 33	10
Calkers.....	57	10
Carpenters.....	1 13 to 1 17	10
Helpers.....	65 to 1 07	10
Smiths.....	97 to 1 17	11
Joiners and carvers.....	1 09 to 1 21	11
Painters.....	73 to 1 14	10
Drillers.....	73 to 81	10
Sawyers.....	1 09	10
Strikers.....	52 to 77	10
Boys.....	21 to 49	10
Laborers.....	63 to 73	10

BELFAST AND NEIGHBORHOOD.

SHIP-BUILDERS, (IRON.)		
Ship-smiths.....	\$0 97 to 21 09	10
Strikers or helpers.....	54	10
Sawyers.....	1 07	10
Joiners.....	1 09	10
Ship-carpenters.....	1 13	10
Laborers.....	52	10
Platers and boiler-makers.....	1 09	10
Angle-iron smiths.....	1 09	10
Riveters.....	1 04	10
Holders-up.....	65	10

DUNDEE AND NEIGHBORHOOD.

	Per week.	
IRON-SHIP BUILDERS:		
Molders.....	\$7 26	57
Builders.....	6 78	57
Fitters.....	6 78	57
Chippers.....	5 48	57
Riveters.....	6 05	57
Platers.....	\$6 53 to 7 02	57
Calkers.....	5 21 to 6 29	57
Carpenters.....	5 21	57
Helpers.....	3 87	57
Boiler-makers.....	7 26	57
Smiths.....	6 78	57
Engineers.....	6 78	57
Joiners and carvers.....	6 29	57
Platers.....	6 78	57
Drillers.....	4 36	57
Sawyers.....	6 29	57
Strikers.....	3 87	57
Boys.....	1 45	57
Laborers.....	3 87	57

ROPE AND T
Rope-yar
Rope-yar
Twine-sp
Twine-sp
ROPE, SAIL,
Rope-mak
Rope-mak
Sail-mak
Sail-mak

PORCELAIN:
Clay-maker
Throwers,
Throwers,
Turners, m
Turners, m
Handlers, m
Pressers, m
Figure-mak
Figure-mak
Modelers, m
Modelers, m
Saggar-mak
Biscuit-firer
Biscuit-plac
Glost-firer
Glost-plac
Kiln-firer
Kiln-firer
Painters, m
Painters, m
Emmellers, v
Emmellers, v
Burnishers, v
Warehouse-
Engravers, n
Apprentices
Office heads

EARTHENWARE:
Clay-makers,
Clay-makers,
Throwers, m
Turners, m
Handlers, m
Pressers, m
Molders, m
Saggar-maker
Biscuit-firer
Biscuit-placer

AVERAGE WAGES OF OPERATIVES.

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ROPE AND SAIL MAKING.

BELFAST AND NEIGHBORHOOD.

Occupation.	Rate of wages per week.	Hours of labor per week.
ROPE AND TWINE SPINNERS:		
Rope-yarn spinners, men.....	\$1 00 to \$1 36	30
Rope-yarn spinners, lads, and boys.....	73 to 1 01	
Twine-spinners, men.....	4 36 to 6 65	30
Twine-spinners, lads, and boys.....	6 53 to 7 71	30
ROPE, SAIL, AND SAIL-CLOTH MAKERS:		
Rope-makers, men.....	57 to 2 42	30
Rope-makers, lads, and boys.....	57 to 2 42	30
Sail-makers, men.....		
Sail-makers, lads, and boys.....		

EARTHENWARE AND PORCELAIN MANUFACTURE.

WORCESTER AND NEIGHBORHOOD.

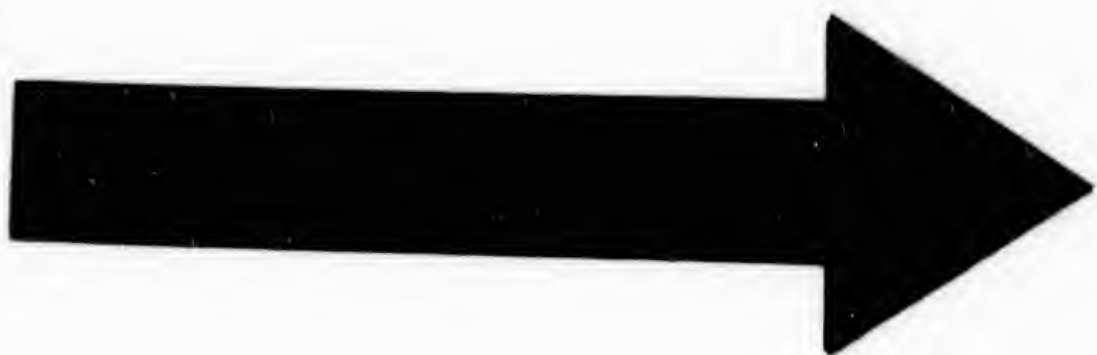
Occupation.	Rate of wages per week.	Hours of labor per day.
PORCELAIN:		
Clay-makers, men.....	\$5 81	11
Throwers, men.....	9 68	11
Turners, lads and boys.....	3 21	11
Turners, men.....	3 68	11
Turners, lads and boys.....	1 81	11
Handlers, men.....	5 26	11
Pressers, men.....	\$7 26 to 9 68	11
Figure-makers, men.....	7 26 to 12 10	11
Figure-makers, lads and boys.....	12 10	11
Modelers, men.....	9 68 to 13 21	11
Modelers, men.....	7 26 to 8 71	11
Singer-makers, men.....	7 26	11
Biscuit-firers, men.....	7 26	11
Biscuit-firers, men.....	9 68	11
Glaze-firers, men.....	4 35 to 4 81	11
Glaze-firers, men.....	10 16	11
Kiln-firers, men.....	6 05	11
Painters, men.....	6 05	11
Gilders, men.....	7 26 to 19 36	11
Enamellers, women.....	6 05 to 8 71	11
Enamellers, girls.....	2 42 to 3 30	11
Burnishers, women.....	48 to 1 21	11
Burnishers, girls.....	1 23 to 2 99	11
Warehousemen.....	48 to 1 21	11
Engravers, men.....	4 84 to 7 26	11
Apprentices.....	6 05 to 9 08	11
Office heads and attendants.....	Not stated.	11
	\$103 80 to 726 00 per annum.	11

NEWCASTLE AND NEIGHBORHOOD.

Occupation.	Per day.
EARTHENWARE:	
Clay-makers, men.....	*\$1 45
Clay-makers, women.....	48
Throwers, men.....	*1 21
Turners, men.....	97
Handlers, men.....	*1 45
Pressers, men.....	*1 21
Modelers, men.....	*1 21
Singer-makers, men.....	*1 21
Biscuit-firers, men.....	*1 21
Biscuit-firers, men.....	11 91
Biscuit-firers, men.....	*57

* Rates paid for piece-work.

† Rates paid for day-work.



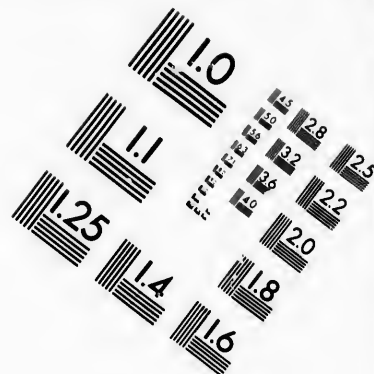
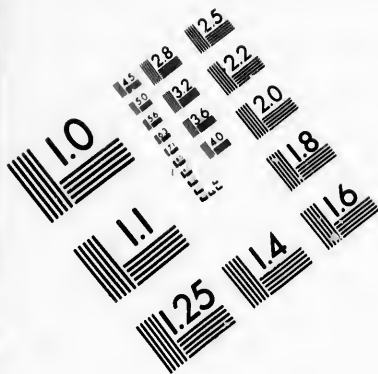
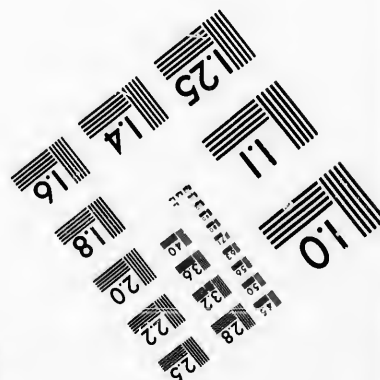
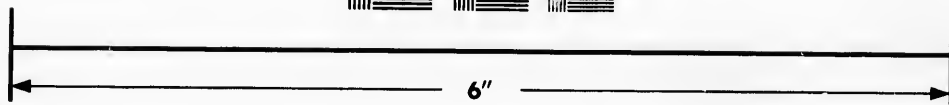
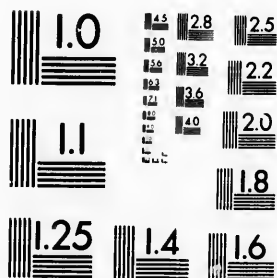


IMAGE EVALUATION TEST TARGET (MT-3)



Photographic
Sciences
Corporation

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EARTHENWARE AND PORCELAIN MANUFACTURE—Continued.

NEWCASTLE AND NEIGHBORHOOD—Continued.		
Occupation.	Rate of wages per day.	Hours of labor per day.
EARTHENWARE—Continued.		
Printers, men	*\$1.09	10 ¹
Printers' transferers, men	*.48	10 ¹
Glost-fir-men, men	11.21	8
Glost-placers, men	*.97	10
Enamellers, men	*1.94	10
Enamellers, girls	*.21	10
Kiln-men, men	*.97	10
Warehousemen, men	.97	10 ¹
Warehousemen, women	.96	10 ¹
Warehousemen, girls	.90	10 ¹
Palaters, women	*.73	8
Palaters, girls	*.24	10
Burnishers, women	*.60	9
Laborers, men	.81	10 ¹
Laborers, women	.36	10 ¹
Laborers, lads and boys	.10	10 ¹
Laborers, girls	.29	10 ¹
Gilders, men	*1.91	10 ¹
Potters, men	*1.21	10 ¹

CHEMICAL MANUFACTURES.

NEWCASTLE AND NEIGHBORHOOD.

Occupation.	Rate of wages per day.	Hours of labor per day.
CHEMICAL WORKS:		
Foremen	\$1.41	10
Time-keepers and weighers, men	.81	10
Enginemakers and brakemen, men	.93	10
Fir-men, boiler-men, &c., men	.89	10
Sulphuric-acid makers, men	1.09	10
Sulphate of soda makers, men	1.17	10
Sulphate of soda makers, lads and boys	.36	10
Crude-soda makers, men	1.09	10
Crude-soda makers, men	1.09	10
Crude-soda makers, lads and boys	.36	10
Crystals of soda makers, men	1.13	10
Crystals of soda makers, men	.89	10
Bicarbonate of soda makers, men	.89	10
Bleaching-powder makers, men	1.25	10
Fire-brick makers, men	.97	10
Fire-brick makers, lads and boys	.48	10
Common-brick makers, men	.81	10
Common-brick makers, lads and boys	.48	10
Tile-makers, men	.85	10
Blacksmiths, men	1.09	10
Blacksmiths, lads and boys	.36	10
Millwrights, men	1.13	10
Millwrights, lads and boys	.36	10
Joiners, men	1.09	10
Joiners, lads and boys	.36	10
Plumbers, men	1.21	10
Plumbers, lads and boys	.36	10
Bricklayers, men	1.13	10
Bricklayers, lads and boys	.36	10
Masons, men	1.21	10
Laborers, men	.73	10
Cartmen, men	.81	10
Keelmen, men	.15	10
Saw-mill men	1.09	10
Coopers, men	1.21	10
Coopers, lads and boys	.73	10

* Rates paid for piece-work.

† Rates paid for day-work.

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Smiths.
Laborers

BREWERS;
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Coopers
Carpente
Laborers

AVERAGE WAGES OF OPERATIVES.

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BOOT AND SHOE MAKING.

NEWCASTLE AND NEIGHBORHOOD.

Hours of labor per day.	Occupation.	Rate of wages per week.	Hours of labor per day.
11 09	10 1/2		
*48	10 1/2		
11 21	8		
*97	10		
11 94	10		
*21	10		
*97	10		
107	10 1/2		
136	10 1/2		
120	14 1/2		
*73	8		
*24	10		
*10	9		
81	10 1/2		
36	14 1/2		
10	10 1/2		
29	14 1/2		
1 04	10 1/2		
1 21	10 1/2		
BOOT AND SHOE MAKERS:			
	Foremen, men.....		
	Cutters, men.....	\$3 47	9 1/2
	Hand-sewn workers, men.....	5 81	9 1/2
	Riveters, men.....	5 08	9 1/2
	Finishers, men.....	6 05	9 1/2
	Filters, women.....	7 74	12
	Machinists, women.....	2 90	9 1/2
	Apprentices, lads and boys.....	3 39	9 1/2
	Apprentices, girls.....	1 21	9 1/2
		1 21	9 1/2

BELFAST AND NEIGHBORHOOD.

Hours of labor per day.	Per day.	
1 41		
81		
93		
89		
1 09		
1 17		
36		
1 09		
36		
1 13		
89		
89		
35		
97		
48		
81		
48		
85		
08		
36		
1 13		
36		
09		
36		
21		
26		
1 13		
36		
21		
73		
81		
15		
09		
21		
73		
BOOT AND SHOE MAKERS:		
	Closers, men.....	\$0 70
	Closers, women.....	48
	Bootmen, men.....	97 to 1 21
	Shoemen, men.....	97 to 1 21
	Ladies'-men, men.....	97 to 1 21
	Jobbers, men.....	97 to 1 21
	Binders, men.....	97 to 1 21
	Makers, men.....	97 to 1 21
		Do.
		Do.
		Do.
		Do.
		Do.
		Do.
		Do.

BREWING.

NEWCASTLE AND NEIGHBORHOOD.

Hours of labor per day.	Occupation.	Rate of wages per week.	Hours of labor per day.
1 41			
81			
93			
89			
1 09			
1 17			
36			
1 09			
36			
1 13			
89			
89			
35			
97			
48			
81			
48			
85			
08			
36			
1 13			
36			
09			
36			
21			
26			
1 13			
36			
21			
73			
81			
15			
09			
21			
73			
BREWERS:			
	Mash-house men and others.....		
	Uppermen.....	25 08	12
	Upper cellarmen.....	12 10	12
	Malt-house men.....	6 53	12
	Upper drymen.....	5 08	12
	Under drymen.....	7 26	12
	Coopers.....	5 08	12
	Carpenters.....	6 53	12
	Smiths.....	6 77	12
	Laborers.....	6 77	12
		3 63	12

BELFAST AND NEIGHBORHOOD.

Hours of labor per day.	Per week.	
1 41		
81		
93		
89		
1 09		
1 17		
36		
1 09		
36		
1 13		
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48		
81		
48		
85		
08		
36		
1 13		
36		
09		
36		
21		
26		
1 13		
36		
21		
73		
81		
15		
09		
21		
73		
BREWERS:		
	Mash-house men.....	
	Uppermen.....	\$3 59
	Upper drymen.....	3 39
	Coopers.....	\$4 84 to 7 26
	Carpenters.....	7 26
	Laborers.....	2 90
		72
		72
		72
		72
		72

* Rates paid for piece-work.

-work.

BUILDING TRADES.

BELFAST AND NEIGHBORHOOD.

Occupation.	Rates of wages per day.	Hours of labor per day.
BUILDING TRADES:		
Foremen.....	\$1 33 to \$2 42	10
Masons.....	1 21	10
Masons' laborers.....	60	10
Bricklayers.....	1 21	10
Bricklayers' laborers.....	60	10
Joiners.....	1 21	10
House carpenters.....	1 21	10
Plasterers.....	1 21	10
Plasterers' laborers.....	1 21	10
Stone-cutters.....	60	10
Slaters.....	1 21	10
Painters.....	1 21	10
Plumbers.....	1 21	10
Common laborers.....	48	10

GAS-WORKS.

BELFAST AND NEIGHBORHOOD.

Occupation.	Rates of wages per day.	Hours of labor per day.
GAS-WORKS:		
Gas-makers.....	\$0 87 to \$1 09	10
Stokers.....	85 to 1 09	10
Retort-men.....	85 to 1 09	10
Engineers.....	1 01	10
Joiners.....	1 05	10
Bricklayers.....	1 13	10
Smiths.....	1 13	10
Pipe-layers.....	60	10
Lamp-lighters.....	60	10
Laborers.....	60 to 48	10

NEWCASTLE AND NEIGHBORHOOD.

	Rates of wages per week.	Hours per day.
GAS-WORKS:		
Gas-makers.....	\$8 23	12
Stokers.....	8 23	12
Retort-men.....	8 23	12
Engine-men.....	8 23	12
Joiners.....	7 74	12
Bricklayers.....	6 53	10
Smiths.....	7 25	10
Pipe-layers.....	6 29	10
Gas fitters.....	5 81	10
Lamp-lighters.....	6 1	10
Laborers.....	3 27
	4 30

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Tanners ...
Carriers ...
Beam-men ...
Strap-make
Laborers...

Tanners, men
Tanners, lad
Beam-men, m
Beam-men, h
Shed-men, m
Shed-men, la
Laborers.....

AVERAGE EARNINGS OF OPERATIVES.

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HAT-MAKING.

BELFAST AND NEIGHBORHOOD.

Occupation.	Rate of wages per day.	Hours of labor per day.
HATTERS, SILK:		
Body-makers, men	\$1 21	10
Silk-finishers, men	1 21	10
Tipper-off, men	2 02	10
HATTERS, FELT:		
Body-makers, men	97 to 1 21	10
Proofer, men	1 21	10
Blockers, men	1 21	10
Dyers, men	97	10
Finishers, men	97	10
Crown-sewers, women	1 45	10
Trimmers, women	24 to 32	10
Cap-makers, women	20 to 24	10

LEATHER MANUFACTURE.

BELFAST AND NEIGHBORHOOD.

Occupation.	Rate of wages per week.	Hours of labor per week.
Tanners	\$3 00	60
Curriers	Paid by piece.	60
Beam-men and shed-men	3 63	60
Strap-makers	2 63	60
Laborers	\$2 43 to 2 66	60

NEWCASTLE AND NEIGHBORHOOD.

Occupation.	Per week.	*Per day.
Tanners, men	\$3 08	10
Tanners, lads and boys	1 45	10
Beam-men, men	6 65	11
Beam-men, lads and boys	2 18	10
Shed-men, men	6 17	11
Shed-men, lads and boys	2 18	10
Laborers	4 36	10

* For every day except Saturday, when the hours of labor are 6½.

SOAP-BOILING.

BELFAST AND NEIGHBORHOOD.

Occupation.	Rate of wages per week.	Hours of labor per week.
Soap-boilers		
Assistant soap-boilers	\$2 00 to	\$5 08
Foremen		3 14
Carters		3 08
Laborers		3 11
		2 90

NEWCASTLE AND NEIGHBORHOOD.

Soap-boilers	per annum (£318)	\$1,055 12	69
Assistant soap-boilers		5 81	69
Foremen		4 60	69
Engine-drivers		5 81	69
Joiners, one man, two lads and boys		6 77	69
Foremen joiners		12 10	69
Carters		6 29	69
Warehousemen		5 08	69
Laborers, men	4 00 to	5 32	69
Laborers, lads and boys		4 36	69
Watchmen	2 18 to	3 87	69
		4 84	69

* Per annum. † Per the three.

SEAMEN'S WAGES.

PORT OF HULL.

Occupation.	Rate of wages per month.
Masters	
First mate	\$5 08 to \$121 00
Second mate	38 72 to 42 40
First engineers	53 24 to 33 84
Second engineers	33 88 to 58 08
Stokers	16 94 to 24 20
A. B. seamen	14 52 to 24 90
Ordinary seamen	9 08 to 24 20
Boys	17 42

PORT OF DUNDEE.

Masters	
First mate	\$18 40 to \$26 80
Second mate	24 20 to 38 72
	14 52 to 29 04
First engineers	Per week, \$13 31
Second engineers	8 47
Stokers	6 22
A. B. seamen	Per month, \$14 52 to \$16 94
Ordinary seamen	2 42 to 12 10

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WAGES IN IRON-MILLS.

Before proceeding to investigate the rates of wages in the iron manufacture of Great Britain in July, 1872, the author had several interviews with Walter Williams, esq., who supplied him with letters to the most distinguished iron-masters of England and Wales. In subsequent interviews both in England and the United States, and by frequent correspondence, Mr. Williams has afforded information of great value, especially in regard to the cost of labor in the Cleveland, the South Staffordshire, and the Welsh iron-mills. Finding that the prices of labor in iron-mills then and subsequently prevailing were by no means established—the mutations from the standard of 1871 being nearly as frequent as those of the mercury in the thermometer, or the price of stocks on 'change—the author postponed from time to time the compilation of the data he had at command, until the present period, in order to furnish the latest schedule agreed upon by masters and men. It is probable, however, that before the figures in the following tables meet the eyes of readers, such other changes may occur as to render them then inaccurate, and they may, therefore, fail to fully represent the actual earnings of mill-operatives at that later period.

STANDARD WAGES.

To show a few of the changes that have occurred in the wages of mill-hands, it may be stated that the standard wages in the north of England iron-trade which were adopted and printed in 1871, underwent an addition of 6*d.* per ton on puddling prices, and 5 per cent. on other wages was made in October, 1871; a further addition of similar amount in April, 1872, and still further additions in 1872, making a total advance of 20 per cent. from standard rates. In some parts of England, such as South Staffordshire, the aggregate advance amounted to 30 per cent. on the fixed rates. Having reached the maximum the wages gradually declined, until, in October, 1874, they were established at an advance of 12 per cent. on the standard prices of 1871, which are given in the tables on the following pages. The price for puddling, which in 1871 was 9*s.* 6*d.*, has, after various changes, been fixed at 10*s.* 9*d.* (\$2.60 United States gold) per ton.

Under date of Stafford, October 25, 1874, Mr. Williams writes:

I send you a printed list with all particulars at the standard rates. To these add 12 per cent. These rates represent not only the north, but Staffordshire and all the mid-land counties and Scotland. Wales is 25 per cent. to 27½ per cent. lower. Blast-furnacemen's wages would not be covered by a rate of 5*s.* 6*d.* to 6*s.* per ton on common iron, and 8*s.* to 9*s.* per ton, 2,240 pounds, on best iron and cold blast.

Advices from Wolverhampton state:

At a meeting of representative iron-masters and iron-workers held at this place October 2, 1874, a new rate of wages to be paid to the workers of finished iron was adopted. Puddlers are now paid 10*s.* 9*d.* per ton, and mill-men's wages in like proportion. This rate is based upon the average net selling prices, during the past quarter, of finished iron in the north of England, and of the bars sold by twelve selected firms in South Staffordshire. The reduction in puddlers' wages is 1*s.* per ton, and in mill-men's wages 10 per cent. This settles the wages question in England for another quarter. The reduction has been cheerfully submitted to by the men, and has afforded satisfaction to the employers. The former looked for a fall in wages of 12½ per cent., and even 15½ per cent. was not thought too much, while the latter were scarcely prepared for more than 7½ per cent.

NORTH OF ENGLAND IRON-TRADE.

Standard wages in September, 1871.

PUDDLING-MILLS.

Description of work.	Baldkove, Vaughan & Co., Wilton Park.	Hopkins, Gilkes & Co.	Darlington Iron Company.	Stockton Malleable-Iron Com- pany.
Twisting—				
Gray pig.....	9s. 6d. per ton.	9s. 6d. per ton.	9s. 6d. per ton.	9s. 6d. per ton.
Mottled pig.....	8s. 6d. per ton.	8s. 6d. per ton.	8s. 6d. per ton.	8s. 6d. per ton.
White.....	8s. 6d. per ton.	8s. 6d. per ton.	8s. 6d. per ton.	8s. 6d. per ton.
Gray, mottled, and white, mixed.....	9s. 6d. per ton.	9s. 6d. per ton.	9s. 6d. per ton.	9s. 6d. per ton.
Weldings and wheeling metal to put down.....	4s. 2d. and 4s. 6d. per day.	2d. on pig-iron.	2d. on pig-iron.	10s. per ton.
Underhands' wages.....	2s. 6d. to 3s. 1d. per shift; 3d. per shift for full heats, paid by the company.	3s. 6d. per shift.	3s. 6d. per shift.	3d. per ton, including breaking.
Allowance for working level hand trains of with masons for repairing furnaces.....	Contract, 5d. per ton.	6d. each full heat.	6d. per shift.	6d. per shift of full heats.
Puddlers paid for balls made from scraps for feeding.....	4s. 9d. per ton.	3s. 6d. per ton.	3s. 6d. per ton.	Masons, 5s., and laborers, 2s. 9d.
Scrapping out wood or other bottoms. Heating coal bottoms for slabs, &c.....	2s. 6s. 7d. per ton.	2s. 7d. per ton.	2s. 7d. per ton.	Same as puddled iron on weight rolled.
Re-heating puddled blooms for rail tops &c.....	1s. 8s. 7d. per ton.	1s. 8s. 7d. per ton.	1s. 8s. 7d. per ton.	2s. 10d. per ton.
Assistance given by firm in half-ir- on, &c.....	1s. 2d. per ton.	1s. 2d. per ton.	1s. 2d. per ton.	2s. 11d. per ton.
Help found by furnaceman on proceed- ing, and wages of each man.....	Firm pay chargers and pullers out at 3s. 2d. per day.	1s. 18d. firm finding help; 1s. 3s. 6d. when two high pullers and one boggy men at 3s. 5d. for reheating.	Doubled lumps, 1s. 12d.	2s. 3d. per ton; no assistance found.
Hammering puddled balls—	Header finds one boy at 1s. and piles when hammering scrap.	Boy at reheating furnaces; boy at reheating furnaces.	All chargers and boggy men at reheating and scrap furnaces; one boy, 3s. 6d. per shift.	One at 3s. 5d. and one at 1s. 1d.
Trebles and fours.....	9s. 1d. per ton.	9s. 1d. per ton.	9s. 1d. per ton.	10d. per ton.
Hammering—	11s. 5d. per ton.	11s. 5d. per ton.	11s. 5d. per ton.	1s. 12d. per ton.
Ball-furnace piles.....	1s. 18d. per ton.	1s. 18d. per ton.	1s. 18d. per ton.	1s. 12d. per ton.
Assistant given by firm in boggy- ing or otherwise.....	6s. 0d. per ton.	6s. 0d. per ton.	6s. 0d. per ton.	10d. per ton.
Rolling—	All boggy men from hammers at double and one helper when double at 2d.	All boggy men, excepting from scrap-furnaces.	All boggy men from hammers and rolls, 3s. 6d. per shift.	One boy at each hammer, at 2s. on 1s. 1d. per day.
Ordinary puddled bars.....	9s. 0d. per ton.	9s. 0d. per ton.	9s. 0d. per ton.	10d. per ton.

Ordinary scrap bars.

Broad puddled bars.....	9s. 0d. per ton.
Broad scrap bars.....	9s. 0d. per ton.
Slab pieces.....	9s. 0d. per ton.
Do, all labor and assistance at rolls.....	1s. 12d. per ton.
Dragging out and stratching.....	10d. per ton.

WAGES IN ENGLAND.

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Ordinary scrap bars. By weight.	9.9d. per ton.	All boysmen from hammers at 3s. 3d., and one helper when hammering at 3s. 2d.	9.9d. per ton.	All boysmen from hammers at 3s. 3d., and one helper when hammering at 3s. 2d.	9.9d. per ton.	One boy at each hammer, at 2s. or 1s. 11d. per day.
Side piece.	1s. 11d. per ton.					
Do rollers find all labor and assistance at rolls.	1s. 11d. and squares.					
Dragging out and straightening.	2s. 2d., 3s., and 2s. 11d. per day.					
Weighting puddled and scrap bars for weightmen.	4s., 3s. 11d., and 4s. 2d. per day.					
Are puddled bars weighed before or after rolling, or when, what deduction is made for connection with the puddling which are not included in the above.	Before; 8 pounds per cwt. deducted.					
Coal and ash working.	Shaping forges, 3s. 10d., 3s. 11d., 4s., 4s. 4d., 3s. 8d., and 3s. 2d.; hot and cold, 3s. 8d., 3s. 7d., 3s. 2d., and 3s. 1d.; rolling, 3s. 8d., 3s. 2d., 2s. 10d., 3s. 7d., and 3s. 2d.; bogeying from shears, 3s. 4d., 3s. 7d., and 3s.; general labor, 3s. 4d., 3s. 7d., 3s. 8d., 3s. 1d., 3s., and 1s. 3d.; softening, 1 1/2d. per ton, long weight, 1 1/2d. per ton, and 1s. 4d.					
Tap-work.	3s. 4d.					
Repairing puddlers' tools.	4s. 4d., 3s. 11d., 3s. 1d., and 2s. 11d.					

EAR AND ANGLE MILLS, 12-INCH.

Description of work.	Bidekew, Vaughan & Co., Mid- Cheshire.	Palmer's Ship-Building and Iron Company.	Darlington Iron Company.	J. Abbott & Co.
First heating— Angles, T-iron, and flats.	Angles and bar-iron, (below 50 pounds and above) 1s. 11.7d. per ton.	Drafting angles, all sizes rolled in the mill down to 11 by 11, and rounds and squares above 11 inches and flats to 2 inches. Angles 13 by 11 inch and under, flats under 2 inches, and rounds and squares under 1 inch, 2s. 4.2d. per cwt. Re-heating any size necessary, 3s. 4.1d. less 5 per cent., including first heating.	Flats, above 1 inch, 2s.; flats 1 inch and under, 2s. 4.1d.	Angles and T-iron, 2 inch and above, 2s. 4.1d. and 2s. 4.1d. less 5 per cent. to 10 inch, 2s. 4.1d. and 2s. 4.1d. less 5 per cent. squares under 1 inch; flats, angles, and T-iron under 2 inch, 2s. 6.5d.
Rounds and squares.	2s. 4.3d. per ton, includes all flats below 50 pounds.	2s. 7.1s. per ton; includes all flats below 50 pounds.	2s. 4.1d.	2s. 2.4d.
Fish plates, beam plates, also and Ladger rails, (sizes not in above).	1s. 11.1d. per ton; plus above 50 pounds.	1s. 11.1d. per ton; plus above 50 pounds.	2s. 4.1d.	2s. 2.4d.

Standard wages in September, 1871.—Continued.
BAR AND ANGLE MILLS, 12 INCH.—Continued.

Description of work	Bolckow, Vaughan & Co., Mid- dleborough.	Palmer's Ship Building and Iron Company.	Darlington Iron Company.	J. Abbott & Co.
Receiving to rollers. Assistants paid by firm, and wages of each. Assistants paid by firm in heating, and wages of each.	2s. 1d. per day. When working piles above 150 pounds, 2 shillings at 2s. 6d. and 1 shilling out at 2s. 6d.	Door-drawer at 1s.; when pile exceeds 200 pounds, firm pays two charges at 3s. per shift.	2s. 6d. per shift. 1 boy at 1s. per shift. Peggy boys and help to charge above 200 pounds.	Done by farmacemen. One boy each. Above prices include delivering to rolls.
Rolling off— Angles, T-iron, and flats.	Angles and bar-iron, (piles 50 pounds and above,) 2s. 8 1/2d. do. do. 3s. 1 1/2d. per ton; includes all 3s. 9 1/2d. below 50 pounds. 4s. 3d. 5s. 8 1/2d. per ton; piles 50 pounds and above.	Angle-iron, all sizes rolled in mill down to 11 by 11 inch to and including 1 inch, and 2 inch, 2s. 7 1/2d. 15 per cent. Angles 11 by 11 and under, flats under 2 inch and rounds and squares un- der 1 inch, 3s. 4d. and 15 per cent.	11 1/2d. 11 1/2d. 1s. 1 1/2d. 1s. 1 1/2d. 11 1/2d.	Angles and T-iron, 2 inch and above; rounds and squares, 1 to 11 inch, and flats, 2 to 3 1/2 inch, 12s. 12d. Bells and squares, 11 inch; flats, angles, and T-iron, under 2 inch, 3s. 10 1/2d. 3s. 11 1/2d.
Rounds and squares (14 to 3 inch, 3 and 15 1/2 and 13 1/2 in. 1 and 11 1/2 in.)	For piles 50 pounds and above: 2s. 8 1/2d. per ton; catch- up, 6s. 6d. per ton; catch- up roughing, 1s. 2d.; hooking- up, 1s.; catching at finishing, 2s. 1d.; 2 boys on piles, each, all per day. Boy on plate straightening at 1s. 4d. per day.	Roller pays all help at rolls 4s. 4d. and 15 per cent. includ- ing first heating.		All labor at rolls. 3s. 8d.
Assistants paid by roller, and wages of each. Rolling reheated iron—angles, &c.	11 1/2d. per ton	Two boys on each shift on plate at 1s. 3d. 1s. and 10 per cent., and 3d. per ton on make for removing scrap.	Receiving to rolls, 2s. 6d.; catch- ing at, finishing, 3s.; hooking up, 2s. 6d.; per shift. 10 1/2d.	Done by rollers. 1s. 2d.
Labor or assistance given by firm, and wages of each man.	Paid by roller, except boy, at 1s. 4d. as above.	Dragging out and hot straight- ening, 3s. per day.	Dragging out and hot straight- ening, 3s. per day.	Done by rollers.
Cutting down, wheeling, and piling.	4s. and 2s. 6d. per day	Sawing, 2 at 1s. each 1 at 3s. 8d.	Time at 3s. 6d. and 4s. per shift. Time at 3s. per day.	Time, 3s. 8d. 1s. 1s.
Dragging out and hot straightening.	do.	do.	Time	
Sawing.	do.	do.		
Cropping.	do.	do.		
Wheeling.	do.	do.		
Loading.	do.	do.		

BAR AND ANGLE MILLS, 16 INCH.

Description of work.	Bolckow, Vaughan & Co., Mid- dleborough.	Fry, Ineson & Co.	Hopper, Radcliffe & Co.

Standard wages in September, 1871—Continued.

TRAIL AND HEAVY ANGLE MILLS.

Description of work.	Dolekew, Vaughan & Co., Wilton Park.	Hopkins, Gilles & Co.	Furlington Iron Company.	Stockton Company.
Size of train 2000 tons— First heating— Second heating— First heating— Second heating— Rails.	21 inch. 13; occasionally 14 4. Above 45 pounds per yard, 1s. 7d.	18 inch. 13 mill; 5 angle 4 rail; 2 angle Above 46 pounds per yard, 1s. 7d.; 46 pounds and under, 2s. 3d.	20 inch 12 4. Above 46 pounds per yard, 1s. 7d.; 46 pounds and under, 2s. 3d.	20 inch. 14. 50 pounds and upward, 1s. 7d.
Angles Workmen a loss for rails consumed they pay for the saws. Second heating— Rails.	Don't make angles All had rails made Above 45 pounds per yard, 9d.	2s. 3d., all sizes 2 1/2 per cent. on rails made Above 46 pounds per yard 9d.; 46 pounds and under, 1s. 1d.	Don't make angles 2 1/2 per cent. on rails made Above 46 pounds per yard, 1s. 11d.; 46 pounds and under, 1s. 11d.	Don't make angles. All had rails made. 50 pounds and upward, 9d.
Angles Assistants paid by furnacemen and wages of each man. Bloom and catching, rail-piles	Don't make angles Boys light by day; furnacemen pay lighting. Bloom 2s. 2d.; catching 1 1/2d.; boy assisting, 1s. 1d. per day.	1s. 1d., all sizes Boy, at 1s. per day; furnacemen pay lighting. Bloom and catching, 3d.	Boy, at 1s. per day; furnacemen pay lighting. D. H., 3d.; F. B., 3d.; and 40 pounds, 5d. per ton. Rolling, 4d.; catching and rolling, 1 1/2d.; rollers looking after, 2d.; 20 pounds, 2s. 6d., and 40 pounds, 2s. 12d.; roller pays all help.	Boy, at 1s. per day; furnacemen pay lighting. Bloom and catching, 3 1/2 d.
Rolling rails, including roughing and catching at roughing.	Roughing and catching, 6s. 2d.; rollers, 11s. 6d.; rollers looking after, 2s. 6d. per week.	Roughing and catching, 7d.; rolling, 4d.; 46 pounds and above, 1s. 1d.; 20 pounds, 2s. 5 1/2d., including all labor.	Roughing, catching, and rolling, 1s. 4d.; roller pays all help.	Roughing, catching, and rolling, 1s. 4d.; roller pays all help.
Cutting down— Wheeling and piling rails.	Piling, at 4s. 2d. and 4s. 10d.; 1s. 3d. per furnace wheeling 1s. 3d.; 1 1/2d. per furnace for wheeling slabs.	9d., cold	16 inch mill, D. H., 8d.; 16 inch mill, F. B., 9d.; 20 inch mill, F. B., 9d.; all cold.	1 shearmen, at 5s. 3d. per day; 1 helper, at 4s. 7d. per day; 1 roller, at 4s. 7d. per day; 1 piler, at 4s. 6d. per day; 1 piler, at 3s. 4d. per day. Saw as rails.
Angles. Charging first heating. Pushing out to first heating	11d. 2 men, at 3s. 1d. 3 men, at 2s. 8d.	11d. 2 men, at 3s. 1d. 2 men, at 2s. 6d.	16 inch mill, D. H., 8d.; 16 inch mill, F. B., 9d.; 20 inch mill, F. B., 9d.; all cold.	1 shearmen, at 5s. 3d. per day; 1 helper, at 4s. 7d. per day; 1 roller, at 4s. 7d. per day; 1 piler, at 4s. 6d. per day; 1 piler, at 3s. 4d. per day. Saw as rails.

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Receiving to heating rolls. Drawing from heating to second heating. Charging to second heating. Pulling out to second heating. Receiving to finishing rolls. Charging and drawing angles. Drawing from rolls. Throwing to filers. Hot filing. Sawing. Hot straightening. Drawing to bank. Hammering. Cold filing and dressing. Pitching at fire. Punching for fish. Notching. Loading. Cold straightening rails.	9 men, at 5s. 7d. per day; 1 man, at 6s. 3d. per day; 1 man, at 3s. 1d.; boy, men help. 3 men, at 3s. 8d. 1 man, at 5s. 7d. per day. 3 men, at 3s. 6d., pull from rolls to saw and from filers to bank. 2 saw, at 4s. 11d., throw into saw, at 4s. 7d. 1 man, at 5s. 7d. per day. 4 men, at 4s. 8d., hot straightening and piling on bank. Included in dressing. 1 1/2d. per ton. Pitching, 2 1/2d. per rail. Punching for fish. Notching and dressing, 5d. per ton, extra notching, 7 1/2d. 2 1/2d. for delivery; 2 1/2d. to stock.	1 man, at 1 1/2d. 2 men, at 1 1/2d. each. See above. 1 man, at 1 1/2d. 1s. 1d. includes cable, boy. Drugging to saw; hot straightening; hot filing; piling and notching; cold filing and dressing; hammering; heading; cold straightening; hot men complete the work; tractor touch the rails after leaving the rolls, except cold straightener. Piling at bank, 1s. 10d.; 1d. from stock, 3d. per ton; 10d. stock, 3d. per ton.	16 inch mill D. H. 8 1/2d.; 16 inch mill, F. B. 9d.; 20 inch mill, D. H. 5 1/2d.; 20 inch mill, F. B. 5s.; all cold. 5 men, at 3s. 1d. 2 men, at 3s. 6d.	D. H. 11d.; F. B. 11d. D. H. 11d.; F. B. 11d. 3 men, at 2s., help to run cable-logger. 1 man at machine, at 2s. per shift. D. H. 11d.; F. B. 11d. 3 men, at 4s. 6d. per day. Helped by assistant sawyer. Included in rate below for cold straightening. Sawing 36 to 42 pounds, F. B. and D. H. 8 1/2d. per ton; 42 to 44 pounds, 6d. per ton; 44 to 46 pounds, 5d. per ton; all D. H. and F. B. included 2d. per rail for all rails saved. Done by sawyers. Included in contract below. Cold filing included to contract. 4 1/2d. per rail, including cutting. 3 1/2d. per ton. 3d. per ton. 1d. per ton.	1 man, at 2s. 8d. 1 man, at 3s. 2d. Charging, 2 at 2s. 5d.; drawing, 2 at 3s. 1d. 1 man, at 5s. 1d.; 1 man, at 3s. 11d. Included in hot straightening. Included in dragging. Rails, 2 at 5s. 2d. per day; including filing; 2 at 4s. per day. 2 or 3 men, at 4s. 3d. per day. 2 1/2d. per rail. 3 1/2d. per ton. Punching and notching, 5d. per ton; piling, 3d. per ton. Cold rails, 6d. per ton. 5 1/2d. per ton. 8d.
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Standard wages in September, 1871—Continued.
PLATE-MILLS.

Description of work.	Edelwey, Vaughan & Co., Wilton Park.	Yease, Hutchinson & Co.	Consett Iron Company.	Palmer's Iron Company.
Size of train. First heating—plates on sand-beds.	2 mills, 24 inch. From 3 in. thick to 1,200 pounds. 2s. 6 1/2d. per ton; below 1 in., 2s. 2 1/2d. per ton.	22 inch. 3s. per ton rolling off, up to 10 cwt. 3s. 5d., less 5 per cent. 3s. 4d., less 5 per cent., in addition to first heating; 6s. 3d., less 5 per cent.	1 mill, 22 inch; 5 mills, 24 inch. 3s. 2d. rolling off.	22 inch. 2s. 7 1/2d. and 1s. per cent. to 10 cwt.
Sheets, single, 3-16 and under. Second heating—plates.	From 3 inch to 1,200 pounds, 2s. 7 1/2d. per ton, includes first heating; 1s. per day clipping plates.	3s. 5d., less 5 per cent. 3s. 4d., less 5 per cent., in addition to first heating; 6s. 3d., less 5 per cent.	3s. 7 1/2d. 4s. 5 1/2d., includes first heating.	Half-price extra.
Allowances for heavy or extra plates.	About 1,500 pounds, 4s. 2 1/2d. per ton, on first and second heat- ing.	1s. to 20 cwt., price and quarter; 20 cwt. to 1 ton, price and half; 1 ton, price and three-quarters.	No specified amount.	Over 10 cwt., half-price extra; first heating, half-price to first and second heating rates; 1s. per ton, includes pulling out.
Charging.	3 men, at 3s. 7d. per day, includes pulling out.	6 boys per shift, at 1s. 4d. each.	In wash-heating mills, 2 furnace- men pay 3 loads at 1s. 4d. each. 4s. 8d. per day paid by firm; 9d. when working extra furnace, 9d. when working extra furnace, above; in heavy mill the pays 2 men on each shift as above.	1 boy at 2 furnaces, at 1s. 1d. door- drawing. Man 6 five.
Help given by firm, and wages of each man. Assistance paid by furnacemen, and wages of each. Boys.	1 boy, at 1s. per day. Paid by rollers.	Paid by rollers.	Firm pays rollers 2s. for each shift, who finds all boys.	
Rolling off plates— Ordinary prices.	6s. below 1 inch. 4s. 2 1/2d. up to 1,500 pounds.	4s. per ton, less 5 per cent. up to 15 cwt. From 15 to 20 cwt., price and quarter; over 20 cwt., price and half.	3s. 10 1/2d. per ton.	3s. 2 1/2d. and 1s. per cent.
Double plates.	10s. per week, each mill, for turning rolls; stamping plates, 2s. per day. 2s. per ton.	Time; men at 4s. 7d. per day and boys at 2s. 3d.	4s. 9 1/2d. and 15 per cent.	Over 15 cwt., half-price extra.
Rolling sheets, singles, 3-16 and under.			4s. 6d. and 15 per cent.	1s. 6d. and 15 per cent.
Cutting down, wheeling, and piling.			Wheeling, 4s.; when working extra, 9d. extra, and piling 4s. per day; when working extra, 1s. extra.	

Shearing plates.	2s. 3 1/2d. per ton, includes mark- ing, shearing, and cut- ting scraps.	2s. 6d. per ton, less 5 per cent. marking, shearing, and cut- ting scraps, includes lifting.	In 4 mills, 2s. 4 1/2d. per ton, firm finding 2 men, at 3s. 8d. per day, and 4 mill, 2s. 5d., and 2 men at 1s. 5d. per day. Both these rates are for plates.
Number of hands paid by firm, and amount to each.	None, except for very heavy plates, when laborers assist.	2 men, at 3s. 8d. per shift, at each mill.	2s. and 15 per cent. marking, lift- ing, and shearing.

WAGES IN ENGLAND.

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Cutting down, wheeling, and piling ... 2s. per day; 2s. per ton	Wheeling, 4s.; when working extra, 5d. extra, and piling 4s. per day; when working extra, 1s. extra.	Time: men at 4s. 7d. per day and boys at 2s. 3d.	2s. 6d. per ton, loss 5 per cent, marking, shearing, cutting scraps, includes lifting; 2 men, at 3s. 9d. per shift, at each shears, and extra help for special plates. Includes cutting up; firm pays 8s. per shift for wheeling away. Time: 2 men, at 2s., and 1 boy, at 1s. per day for weighing 8d. per ton, includes putting on machine. Time: bricklayers, 5s. per day; laborers, 3s. per day. Inspector, 30s. per week.	In 4 mills, 2s. 4d. per ton, firm pays; in No. 4 mill, 2s. 8d. per day; in No. 4 mill, 2s. 4d. and 2 men at 5s. per day. Both these prices include all labor, except men as above. Except wheeling, for which firm pays. 3s. 10d. per day. 2d. per ton on plates made. Coal and sand, wheeling and clearing out ashes and sand, 1s. 5d. and 1s. 8d. per furnace on make.	2s. and 15 per cent, marking, lifting, and shearing. Firm pays 1 man wheeling, at 2s. 6d., and 2 boys cutting, at 2s. 6d., at each shears. Time: 4s. 6d. per day. 5d. and 10 per cent, per ton. 4d. per ton. Inspector to each mill, at 4s. 3d. per day; coal, ash, and rap per ton, 6d.; 6d. and 10 per cent, on make.
Shearing plates	2s. 2d. per ton, includes marking, lifting, shearing, and cutting scraps. None, except for very heavy plates, when laborers assist. Shearing includes cutting scrap and wheeling to scrap-shears; pay 2s. 9d. per day for wheeling scrap to scrap-shears, and 2 at 10s. per week, for 2 mills. By contract, 1s. per ton, long weight. Contract, 3d. per ton on make. Inspecting plates before delivery, 1 man, at 2s. 6d. per week; 1 man, at 1s. per day, testing plates; slagging out furnace, 4s. 2d. per furnace; wheeling sand, 2s. per day.				
Number of hands paid by firm, and amount to each. Does shearing include cutting up the scrap and wheeling? If not, what is paid for this? Weighing Loading Terms of arrangement with masons for revetting furnace Additional wages paid in plate-mill					

SOUTH STAFFORDSHIRE.

Standard wages paid in forges and mills.

[The wages paid September, 1873, are 30 per cent. in advance of the figures in the following table.]

Description of work.	No. 1.	No. 2.	No. 3.	No. 4.
SCRAP.				
Puddling—				
Gray pig-iron.....	9s. 6d. per ton.....		9s. 6d. per ton; } 2s. extra for best	{ 9s. 6d. per ton. do. } do. }
White.....	do.....		do.....	10s. 6d. per ton. do. } do. }
Mild.....	do.....		do.....	10s. 6d. per ton. do. } do. }
Plate-iron.....	2s. per ton.....		2s. and 1s. extra for best iron.....	2s. 3d. per ton.
Extra paid puddler for doubles.....	6d. per ton, reduced.....			
Rolling heavy iron.....	2s. 5d., and 1s. per cent. added.....			
Re-heating puddled blooms for rail.....	1s. 7d., and 1s. per cent. added.....			
Hot-rolling puddled blooms—				
Singles.....	1s. 6d. per ton for large-sized bars; 9-inch bars, 1s. 9d. per ton; and 1d. per inch above, bars; 3d. after.....	1s. 2d. per ton.....	1s. 4d., 5 per cent. added.....	1s. 7d. per ton.
Doubles.....			1s. 2d., 5 per cent. added.....	1s. 10d. per ton.
Trebles.....			2s. 11d.....	2s. 3d. per ton.
Squeezing.				
Rolling ordinary puddled bars.....	11d. per ton, all sizes.....	6d. per ton.....	1s. 9d. per ton, 1d. per ton extra for 18-inch bars.....	2s. 3d. per ton. No. 1, 1s. 11d.; 3-inch bars, 4d. per ton.
Rolling ordinary bars.....	3s. 4d.....	2d. per ton.....	4s. 3d., 20 per cent. added.....	3s. 11d.
Weighting puddled and scrap bars.				
Small bars, &c., extra 2 in. rounds each, 4s. 3d. and 10 per cent. below; general price in small mills, 6s. 3d. for larger sizes.....		Guido mill for 4-inch and up-ward, 4s. 3d. and 10 per cent. below; general price in small mills, 6s. 3d. for larger sizes.....	Drawing doors, 6d. per ton extra; 1st, 2nd, 3rd, and 5 per cent. small squares and squares up to 4½ inch, under iron, round and square, 5s. 5d., and 5 per cent.; small merchant, another mill, 6s. 3d., 5 quarts ale per fortnight.....	3s. 3d., T and angle; 3s. 8d., 6 by 4½ T rounds and squares up to 4½ inch.
Extra for large sizes.		Laborers to assist in heavy iron. Guido mill 1½d. per pair; merchant mill 6d. per pair.....	5 quarts ale per fortnight.....	1s. per pair; 2s. 6d. T-rolls; 2s. and 2s. 6d. rolls.
Changing rolls.			5 quarts ale per fortnight.....	8s.
Rolling ordinary plates.	3s. 10d. to 4 cwt.....	6s. 7d.....	5 quarts ale per fortnight.....	

Extra for large sizes.....

10d. per ton extra above 4 cwt.; extra above 7 and 10 cwt.

5s. 6d. and 1d. per cent. above 4 cwt.; 10d. doubled; 1s. 3d. annualing.

10d. and 5 per cent. on sizes above 224 pounds.

1s. on 400 lbs. and upward; for large plates 4s.; rolling 3s.; square, 2s. 6d. per ton above 22-

Furnace-men in plate-mill

1s. per ton, less 10 per cent.

2s. per ton

Paid by roller and 2d. per ton

1s. on 400 lbs. and upward; for large plates 4s.; rolling 3s.; square, 2s. 6d. per ton above 22-

Extra for large sizes Changing rolls	3s. 10d. to 4 svt.				Is. per pair; 2s. 6d. T-rolls; 2s. and 6s. 10d. rolls.
Rolling ordinary plates	3s. 10d. to 4 svt.				8s.
Extra for large sizes Changing rolls	3s. 10d. to 4 svt.				Is. per pair; 2s. 6d. T-rolls; 2s. and 6s. 10d. rolls.
Rolling ordinary plates	3s. 10d. to 4 svt.				8s.
Extra for large sizes Changing rolls	3s. 10d. to 4 svt.				Is. per pair; 2s. 6d. T-rolls; 2s. and 6s. 10d. rolls.
Rolling ordinary plates	3s. 10d. to 4 svt.				8s.

ROTARY PUDDLING.

It may not be amiss in this connection to refer to the introduction, with apparent success, of mechanical puddling, effecting as it will by its labor-saving process a very considerable reduction in the cost of puddling. Mr. Bell, who has recently been examining the process as conducted in American furnaces, says he believes—

That rotary puddling will ultimately be achieved, and it may be the result of some modification of the apparatus invented by Mr. Danks. Whenever hand-puddling is superseded by mechanical means, Mr. Danks will deserve great credit for the assistance he has already rendered, not only in perfecting the furnace itself, but in devising other appliances required in manipulating large masses of iron.

Mr. Jones, the superintendent of the Erinus works, says:

The fettling for the furnace and the materials used for the same are no longer questions of difficulty, and in this respect we have no drawback. We line the furnace after each heat with best tap, Pottery mine, purple ore, and Spanish ore; suitable proportions are mixed in a grinding mill and then used in the furnaces. Fettling can be procured suitable to any district, where the difference in the quality of the pig-iron mostly necessitates a variation in the fettling ingredients.

With regard to the mechanical imperfections of the Danks machines, they have been of a serious character. The repairs have been very costly, and the loss of output, by reason of frequent stoppage, has affected the cost of production most unfavorably. It became apparent that unless the mechanical construction of the furnace was such as to insure regularity of work, it was hopeless to expect satisfactory returns. A new furnace of a different construction was built. It is a double-cased wrought-iron furnace, hooped with steel, and is water-jacketed. There is a constant flow of water to and from the water space, and the water at the outlet pipe is kept at from 60° to 100° Fahr., in fact, perfectly cool. This double-cased furnace has maintained its mechanical accuracy, which it is almost impossible that a single-cased furnace can do, owing to the effects of expansion and contraction. The firing of the new furnace is done in the usual manner. It will not be necessary to describe in detail the improvements of this machine. Mr. James Jones claims that it has been designed and constructed after all the weak points of its forerunner have been carefully considered. The directors are so satisfied with the work done by this machine that they have ordered five more, and six sets of new engines to drive them. In designing the engines the same amount of care has been taken. They are over-head double-cylinder engines; the wearing parts have been carefully designed, and nothing in strength or in the detail is left unprovided for, so as to assure continuous and satisfactory working.

Pig-iron refined in Thomas's cupola is used. The chemical effect is to remove a part of the silicon and phosphorus, and in the furnace the fettling stands better. The weight of the charge is 14 cwt.

No heat takes more than 35 minutes to puddle. The heat is removed in a single ball, and squeezed or shaped into a piece about 4 feet long by 15 inches diameter. It is then cut up at the same heat and taken to reheating furnaces, where it is reheated, hammered and rolled into bars. The Erinus Company are now making angles, bulbs, bars, and tees, with no other iron than Cleveland.

Three relays of men are employed at the machines, and work eight-hour shifts.

The present consumption of coal is for actual puddling $2\frac{1}{2}$ cwt. to the ton of bars. Of fettling (half bought and half from first heating or mill furnaces) 9 cwt. to the ton of bars. The yield of bar from pig is 20 cwt. of pig to 20 cwt. of bars. The whole quantity of coal used to the ton of bars, including reheating, is under 20 cwt. The price we pay the puddlers is at present 3s. 2 4-10d. per ton long weight, they paying their own underhands. The whole wages of every kind, including cupola-refining and reheating, is under 20s. per ton of bars.

It is intended to increase the charge to one ton.

The experiment of working this charge has frequently been made, and the time required for puddling never exceeds forty minutes. The number of heats will be the same as at present, viz., six in eight hours, and it is simply by the increase of the weight of the charge that the quantity will be raised from 500 to 500 tons. The actual puddling of the six heats will take up four hours for fettling, repairing, cleaning grate-bars, &c.

We find that it takes the same coal to puddle a ton as to puddle 14 cwt., and as the time consumed in charging, drawing, fettling, and squeezing will be the same as at present, it is obvious that the increase of the charge to a ton is the proper course. We have no doubt that we shall be able to bring the consumption of coal for puddling down to 7 cwt. to the ton of bars, and the whole of the coal consumed in the puddling department to 15 cwt., and we anticipate that the wages will not exceed 15s. on the ton of bars, which will include all labor charges in the puddling department.

Puddling in
Puddling in
Puddling in
Puddling in
Puddling in
Puddling in
Puddling in
Puddling in

Shingling...
Doubling for
Doubling for
Rolling forgo

Heating and
1 inch, ro
Plates and
Bars, 11-16
Bars, 9-16
Bars, 7-16
Bars, 5-16
Plats, unde
Plats, unde
Plats, unde
Plats, 11-16
Plats, 4 an
Billets....

Heating and ro
All bars, ro
Bars, 3 to 4
Bars, 4 to 5
Bars, above
Bars, under

Heating and rol
Plates from
Plates from
Plates from
Plates from
Plates from
Plates from

Hammermen:
Yorkshire sh
Yorkshire sh
Yorkshire sh
Yorkshire sh
Furnacemen:
Yorkshire sh
Yorkshire sh
Yorkshire sh
Yorkshire sh

WAGES IN ENGLAND.

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YORKSHIRE.

Wages paid at Monk Bridge Iron-Works, and elsewhere in Leeds consular district.

Description of work.	Per ton, at—	
	Monk Bridge Iron-Works, July, 1872.	Leeds Consular District, September 1, 1872.
PUDDLING.		
Puddling iron to helve-hammers	£. d.	s. d.
Puddling iron for 12-inch	13 6	13 6
Puddling iron for molds, doubled	14 6	14 6
Puddling iron for 9 and 10 inch bars, in 3 balls	14 6	14 6
Puddling iron for 9 and 10 inch bars, doubled	14 0	14 0
Puddling borings and turnings	14 6	11 6
Puddling borings and turnings for 12-inch	12 6	12 6
Puddling iron to steam-hammers	13 6	13 6
Puddling borings and turnings	13 0	13 0
Puddling bunched turnings	12 0	12 0
	11 0	11 0
HELVE-HAMMERS.		
Shingling		
Sampling for 10-inch bars	*1 10	2 4
Doubling for 10-inch bars	*1 11	2 6
Doubling for molds	*2 6	3 3
Rolling forge-bars	*2 6	3 3
	*1 0	1 3
ROD-MILL.		
Heating and rolling bars:		
1 inch, round and square, and flats 1½ inches and above		
Flats under 1½ inches, bars under 1 inch round	15 0	7 6
Bars, 11-16 and 1, round and square	15 6	8 3
Bars, 9-16 and 1, round and square	16 6	9 9
Bars, 7-16 and 1, round and square	18 0	12 0
Bars, 5-16 and 1, round and square	11 0	16 6
Flats, under 1 inch thick	116 0	24 0
Flats, under 1 inch broad	17 3	10 10
Flats, under 1 inch thick and 1 inch broad	17 3	10 10
Flats, 11-16 and 1, 2 and 3, 4 and 5	18 9	13 1
Flats, 1 and 3-16, 1 and 1	110 0	15 0
Billets	116 0	24 0
	13 3	4 10
14-INCH BAR-MILL.		
Heating and rolling:		
All bars, round and square, to 3 cwt., and all flats 1 to 6 inches broad	15 0	7 6
Bars, 3 to 4 cwt.	16 0	9 9
Bars, 4 to 5 cwt.	18 0	12 0
Bars, above 5 cwt.	19 6	14 3
Bars, under 1 inch thick	16 6	9 9
PLATE-MILL.		
Heating and rolling:		
Plates from piles 1 to 4 cwt.		
Plates from piles 5 to 6 cwt.	13 0	12 0
Plates from piles 6 to 7 cwt.	19 6	14 3
Plates from piles 7 to 8 cwt.	112 0	18 0
Plates from piles 8 to 9 cwt.	111 6	21 9
Plates from piles 9 to 10 cwt.	116 6	21 9
	119 6	29 3
	121 6	32 3
STEAM-HAMMERS.		
Hammermen:		
Yorkshire slabs, under 700 pounds	7 6	7 6
Yorkshire slabs, 700 to 1,000 pounds	10 0	10 0
Yorkshire slabs, 1,000 to 2,000 pounds	12 0	12 0
Yorkshire slabs, above 2,000 pounds	11 0	14 0
Turnacemen:		
Yorkshire slabs, under 700 pounds		
Yorkshire slabs, 700 to 1,000 pounds	6 9	6 9
Yorkshire slabs, 1,000 to 2,000 pounds	7 6	7 6
Yorkshire slabs, above 2,000 pounds	10 0	10 0
	12 0	12 0

* Add 30 per cent.

† Add 50 per cent.

NORTH STAFFORDSHIRE.

Wages paid at the Biddulph Valley and Norton Iron-Works, North Staffordshire, August 31, 1872.

Description of work.	Per ton.	Description of work.	Per ton.
Puddling:	s. d.	Rolling and heating:	s. d.
Nobbling	12 6	Ordinary plates	16 1
Doubbling	13 6	Faggotting plates	19 8
Castings	14 6	Reheating plates	19 8
Rivet-iron, (best)	14 6	Extra-large plates, (over 17 cwt. finished, or 5 feet wide, half circles) ...	132 2
Heating:		Rolling, heating, and straightening:	
Piles	*3 0	Merchant bars	14 3
Blooms	*2 1	Under 21 pounds per foot	15 6
Shingling, steam-hammers:		Rounds and squares, 4½-inch and upward, and flats, 7 to 8 inch	16 2
Nobbling	*1 0	Rounds and squares, 7½-inch and 3½ inch, and flats under 4 by 1 inch	17 8
Doubbling	*1 6	Rounds and squares, 5-16 and 1-1 inch	111 3
Squeezing	*11	T-iron	14 2
Forge-rolling		Reheating	22 14
Brick laying, repairing furnaces:		Changing rolls, §5.00	
Forges	*4		
Mills	*3		
Cutting down for bar-mills	11 0		
Cutting down for plate-mills	18		

* With 30 per cent. on.

† With 50 per cent. on.

† Extras, with 50 per cent.

§ Per turn per fortnight.

NORTH AND SOUTH STAFFORDSHIRE.

Wages paid in forges and mills in 1872.

Puddling pig-iron, 6 heats, ordinary quality	12s. 6d. per ton of 2,640 pounds.
Puddling pig-iron, 5 heats, best quality	12s. 6d. per ton of 2,640 pounds.
Puddling pig-iron, 5 heats, extra best	1s. per ton extra.
1 to 2 cwt. of scrap-iron, per turn, allowed at full rate for puddling.	
1 to 2 cwt. for doubled-iron, two or more balls hammered together, 1s. per ton.	
1 to 2 cwt. castings	14 6 per ton.
Hammering, steam-hammer	1 4 per ton.
Hammering, steam for doubling	1 10 per ton.
Squeezers	1 0 per ton.
Forge-rolling	1 4 per ton.
Stocktaking-mills for plates	1 2 per ton.
Stocktaking-mills for bars	1 8 per ton.
Miscellaneous labor in forges, iron to forgo, coal, including ash-wheeling, mill-wrighting, smithing, &c.	7 6 per ton.
<i>In plate-mill:</i>	
Rolling and heating ordinary plates	9 4 per ton.
Rolling and heating faggotting plates	13 6 per ton.
Reheated	14 6 per ton.
Extra large and up to 5 feet wide	18 3 per ton.
Shearing and speilting, &c.	7 6 per ton.
Miscellaneous labor in mills	5 0 per ton.

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WAGES IN ENGLAND.

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SOUTH WALES.

Wages paid in iron-mills.

	Per ton.
Merchant-mill, ordinary sizes, heating, rolling	6s. 4d.
Under 2½ pounds per foot	7s. 9d.
Large rounds, squares, angles, and T-iron	9s. 4d.
Small angles and T-iron	7s. 6d.
Reheating	3s. 4d.
Seven-sixteenths and ⅝ rounds and squares, flats under 1 and ½	11s. 4d.
Miscellaneous labor in mill	5s. 0d.
Ordinary labor is from	Per day.
Engineers' wages	4s. to 5s.
Machinists	5s. 6d. to 6s. 6d.
Mill-wrights	6s. to 7s. 6d.
Coal-wheelers and ash-wheelers	5s. 6d. to 6s. 6d.
Forge and mill stocktakers	5s. to 6s.
Puddlers' underhands	4s. 6d. to 5s. 6d.
Hammermen's assistants	4s. to 5s. 6d.
Rollers' assistants	8s. to 9s.
Boys from 11 to 14 years of age	8s. to 11s.
	1s. 8d. to 3s. 4d.

Wages range in South Wales from 15 per cent. to 20 per cent. less than other parts. Men in South Wales earn, however, about as much as in England. They have more steady work, get rent cheaper, paying about 1s. per week for rooms which in England cost about 4s.; get coal for a trifle, say 3s., while no allowance is made in England.

STATEMENT OF WALTER WILLIAMS, ESQ.

When Mr. Williams was in Washington, in December, 1872, he gave the following summary of the wages which then obtained in the iron-mills of England:

For six-heat iron, 12s. 6d. in all parts of England except in Wales; less in Wales. Best, or five-heat iron, 1s. per ton extra. A man gets the same wages for five heats as he does for gray or ordinary iron.

Puddler pays to underhands 4s. to 4s. 6d., and pays one additional turn alternate weeks. For working level-hands, 6d. per day. Prize-money allowed of 5s. per fortnight where they work full time. Puddlers allowed one scrap-bail each per day, nominally one hundred-weight, generally two, and are paid at the same rates as if for puddling.

Hammering single balls and shingling, 9d. per ton; hammering double balls, 1s.; hammering three and four balls, 1s. 2d. Assistance given by the firm in conveying the metal from the furnace to the squeezers. Forge-rolling ordinary puddle-bars, 10d.; dragging out and straightening, 3d. per ton; add to all the above, except puddling, 20 per cent.

Men engaged in shearing and taking out puddle-bars from the forge, 4s. 7½d.; coal, ash, and wheeling, 5s. 3d. per day.

Rail-mills.—First heating, 1s. 11d. per ton; second heating, 11d. for rails.

Angles.—First heating, 2s. 9d.; second heating, 1s. 2½d. This is seldom done.

Furnacemen pay a shilling a day out of above wages.

In rail and heavy angle mills, when paid by the ton, including all labor, 3s. 6d. per ton.

Blooming and catching, 5½d.

Semi-skilled labor in rail and angle-mills, 5s. 3d. and 6s. 3d. per day.

All labor outside from 5s. 3d. to 6s. 3d. per day.

Rolling ordinary bars, 3s. 3d. per ton; rolling reheated iron, 4s. 6d.; all extra assistance found by the firm.

Roller finds all help at rolls at above rates.

Extra help beyond those at rolls found by firm, varying in wages from that of a man at 5s. 3d. to a boy at 2s. 10d.

WAGES IN BLAST-FURNACES.
Wages of blast-furnace men in the Stockton and Middlebrough districts.

	I. Samuelson & Co., (new works, 3 furnaces.)	Stockton Furnace Company.	Gyer's mills & Co.	Norton Iron Company.
Keepers	9s. per day, and 1d. per ton over 400, (new works, large furnaces); 7s. 6d. per ton over 200, (old works, small furnaces)	8s. large furnaces; 7s. 6d., small furnaces.	5s. 6d. per shift.	5s. 3d. per shift.
Chargers	6s. 7d. per day, and 1½d. per ton over 1,200, (large furnaces); 6s. 6d. per day, and 1d. per ton over 1,000, (small furnaces.)	5s. 9d., large furnaces; 5s. 4d., small furnaces.	6s. 2d. per shift.	5s. 2d. per shift.
Slangers	5s. 1d. per day, and 1d. per ton over 400, divided among 10 men, (large furnaces); 5s. per day, and 1d. per ton over 200, (small furnaces.)	4s. 11d., large furnaces; 4s. 7d., small furnaces	5s. 2d. per shift.	4s. 2d. per shift.
Mine-fillers	4s. 5d.; (old works, 5 furnaces, 4s. 9d.)	4s. 8d., large furnaces; 4s. 8d., small furnaces.	4s. 8d. per shift.	Do.
Furnace helpers	3s. 8d., and 1d. per ton over 400	4s. large furnaces; 4s. small furnaces.	3s. 8d. per shift.	2s. per shift.
Slagers	3s. 6d.	4s. 6d.	4s. 6d. per shift.	5s. engine-men steam-lift.
Drake-saun, hoist	3s.	4s. 6d.	4s. 6d. per shift.	4s. 2d. per shift.
Coke-fillers	3s. 9d., large furnaces; 4s. 5d. and 3 9d., small furnaces.	4s. 8d., large furnaces; 4s. 8d., small furnaces.	4s. 8d. per shift.	Do.
Limestone-fillers	4s. 3d., small furnaces.*	do.	4s. 8d. per shift, boys 2s. 6d.	3s. 6d. per shift.
Spare keepers	3s. 6d., large furnaces; 3s. 6d., small furnaces.*	3s. 6d., large furnaces; 3s. 6d., small furnaces.	3s. 6d. per shift.	4s. 2d. per shift.
Table-loaders	3s. 6d., large furnaces; 4s. 11d. and 5s. 2d., small furnaces.*	Contract.	5s. 2d. per shift.	5s. 2d. per shift.
Furnace-fillers	4s. 11d., large furnaces; 5s. 4d., small furnaces.*	Contract.	5s. 2d. per shift.	5s. 2d. per shift.
Blast engluemen	5s. 6d., large furnaces; 5s. 8d. and 5s., small furnaces.*	Contract.	5s. 3d. per shift.	5s. 3d. per shift.
Weighing chargers	3s. 6d., large furnaces; 3s. 3d., small furnaces.*	Contract.	5s. 3d. per shift.	5s. 3d. per shift.
Gasmen	3s. 6d., large furnaces; 3s. 3d., small furnaces.*	Contract.	5s. 3d. per shift.	5s. 3d. per shift.
Gasmen	3s. 6d., large furnaces; 3s. 3d., small furnaces.*	Contract.	5s. 3d. per shift.	5s. 3d. per shift.
Breaking limestone	3s. 6d., large furnaces; 3s. 3d., small furnaces.*	Contract.	5s. 3d. per shift.	5s. 3d. per shift.
Calculating kilnmen	3s. 6d., large furnaces; 3s. 3d., small furnaces.*	Contract.	5s. 3d. per shift.	5s. 3d. per shift.

All of the above, except those marked *, are paid 15 shifts for full 14, per fortnight, except fitters.
 * Old works, (5 furnaces.)

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WAGES IN ENGLAND.

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Forgemen's wages in Sheffield, England.

Dates.	Puddling, per ton of 100 pounds.			Shingling, per ton.			Rolling, per ton.		
	s.	d.		s.	d.		s.	d.	
April, 1868.....	7	0		1	0		1	0	
December, 1869.....	7	0		1	0		1	0	
October, 1871.....	7	0		1	0		1	0	
March, 1872.....	9	0		1	0		1	0	
August, 1872.....	10	0		1	0		1	0	
May, 1873.....	12	0		1	0		1	0	

WAGES IN STEEL-WORKS.

*Statement showing the average weekly earnings in 1872 of workmen in Sheffield Steel-Works.**

	£	s.	d.	U. S.
Puddlers.....	2	5	0	\$10.89
Helpers.....	1	0	0	4.84
Shinglers.....	4	0	0	19.36
Shinglers' helpers.....	1	0	0	4.84
Forge-rollers.....	4	0	0	19.36
Ball furnace-men.....	3	0	0	14.52
Ball furnace-men's helpers.....	1	0	0	4.84
Blacksmiths.....	2	0	0	9.68
Strikers.....	1	4	0	5.80
Fitters.....	1	10	0	7.26
Slotters and planers.....	1	8	0	6.78
Laborers.....	1	1	0	5.08
Engine-tenders.....	1	13	0	7.98
Firemen.....	1	9	0	7.02
Hammer-men.....	1	10	0	7.26
Ash-wheelers.....	1	0	0	4.84
Coal-unloaders.....	1	0	0	4.84
Trolley-boys.....	0	10	0	2.42

COAL-MINING.

Having presented the changes that have occurred in the earnings of men employed in the various departments of the iron industry since September, 1871, it is eminently proper to show the various mutations in the cost of production which another industry intimately connected with the former has undergone since the month of September, 1871.

COAL-FIELDS OF DURHAM AND NORTHUMBERLAND.

By way of an introduction to the subject the following extracts from a report of Mr. Jones, United States consul at Newcastle, on the "Industrial Resources of the Tyne," are submitted:

I will now consider the industrial resources of the Tyne, commencing with coal, that mineral being entitled to head the list as the chief product of the district, as the reports generally speak of this as the Northumberland and Durham district.

Carrying coals to Newcastle has ever been looked upon as impossible and absurd, in a business point of view, yet, since the present high figures have prevailed, coals have been carried to Newcastle from Hull, and latterly from Belgium, clearly proving that the coal-market of the present day is in an unhealthy condition.

* The above is the estimate of a gentleman connected with one of the largest steel-manufacturing works of Sheffield.

The coal-fields of Durham are more extensive and the mineral softer than that of Northumberland, which is hard, and in thin seams, requiring a far greater amount of skill in the working thereof than the Durham coal. The annual product is not less than twenty-eight millions of tons. The number of colliers in the Northumberland mines is about thirteen thousand, the average price for mining being 42 cents per ton. In the Durham district the number of colliers is much larger, averaging about thirty-four thousand, the price per ton for mining being 30 cents. The recent general rise in the price of coals throughout England is nowhere more striking than at Newcastle. In September, 1871, coals sold at \$2.42 per ton, and in September, 1872, the same coals were sold at \$6.05 per ton, and according to newspaper reports a contract has just been entered into in France for the supply to England of 250,000 tons.

The following statements showing the maximum and minimum cost of labor in the Durham and in the Northumberland coal-mines in 1873, also the advances and reductions made in the wages of miners, with their average earnings at various dates from April, 1871, to December, 1874, were furnished by T. W. Bunning, esq., mining-engineer of Newcastle-on-Tyne, England:

DURHAM.

Off-hand labor below ground.

[The prices include all percentages given up to December 31, 1873.]

Class of labor,	Wages per day, with house or allowance for rent.			Class of labor,	Wages per day, with house or allowance for rent.		
	Maximum.	Minimum.	Mean.		Maximum.	Minimum.	Mean.
Fore overman.....	\$2.42	\$1.51	\$1.86	Greaseys, (no house).....	\$1.27	\$0.34	\$0.83
Back overman.....	1.43	1.21	1.49	Handling-enginem.	1.65	1.25	1.45
Deputies.....	1.82	1.25	1.53	Pumping-enginem.	1.61	1.09	1.35
Timber-layers.....	1.57	1.24	1.45	Firer-men.....	1.37	.65	1.01
Master shifters.....	1.74	.97	1.35	Furnacemen.....	1.34	.67	1.01
Shifters.....	1.50	.68	1.14	Lampmen.....	1.47	.60	1.03
Chickmen, (contract work).....	2.42	1.39	1.90	Water-ladders.....	1.57	.69	1.13
Stonemen.....	1.91	1.25	1.59	Horse-keepers.....	.57	.41	.49
Master putters.....	1.37	.61	.99	Rolley-way men.....	1.91	.97	1.45
Wastemen.....	1.00	.95	1.43	Set-riders.....	1.57	.77	1.07
Helpers-up, (no house).....	1.55	.79	1.17	Onsetters' boys.....	2.30	.78	1.17
Braking inclines, (no house).....	1.43	.46	.89	Onsetters' boys.....	2.30	.78	1.54
Drivers, (no house).....	.75	.42	.59	Shaft-men.....	1.21	.40	.81
Putters, (no house).....	.07	.36	.67	Masons.....	1.78	.79	1.29
Putters-driving, (no house).....	1.21	.61	.94	Masons' laborers.....	1.11	.93	1.04
Landing-lads, (no house).....	1.35	.31	.85	Chargemen sinkers.....	1.86	1.82	1.84
Couplers, (no house).....	1.21	.36	.79	Sinkers.....	1.78	1.63	1.71
Switch-keeper, (no house).....	.89	.36	.63	Waiters-on.....	1.53	1.03	1.28
Trippers, (no house).....	.63	.21	.43	Flowers at off-hand work.....	1.69	.97	1.33

Hand-putters' average earnings, \$1.53 per day; pony-putters' average earnings, \$1.09. These workmen were all advanced and reduced at the same dates and to the same amount as miners or hewers.

Statement showing the advances and reductions made in the wages of Durham miners, together with their average earnings, at various dates since April, 1871.

Dates.	Advances.	Reductions.	Total advance above 1871 prices.	Average earnings.
First six months in 1871.....				\$1.12
January and February, 1872.....				1.25
March, 1872.....	20 per cent.....			
July, 1872.....	15 per cent.....		38 per cent.....	
December, 1872.....				1.78
February, 1873.....	15 per cent.....			
December, 1873.....				1.82
April, 1874.....		10 per cent.....	43.1 per cent.....	
November, 1874.....		9 per cent.....	30 per cent.....	
December, 1874.....				1.49

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WAGES IN ENGLAND.

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Durham coal-fields. Off-hand labor above ground.

[These prices include all percentages given up to December 31, 1873.]

Class of labor.	Wages per day with house found or rent allowed.			Class of labor.	Wages per day with house found or rent allowed.		
	Maximum.	Minimum.	Mean.		Maximum.	Minimum.	Mean.
Foremen smiths	\$1 94	\$0 96	\$1 45	Token-men	\$1 33	\$0 70	\$1 01
Smiths	1 34	1 02	1 18	Token-boys	72	24	49
Horse-shoers	1 33	1 00	1 17	Keeper on screens	1 29	60	1 07
Pick-sharpeners	1 29	78	1 29	Screenmen	1 16	66	88
Strikers	1 08	52	80	Small-wagon boy	72	28	50
Boiler-builders	1 45	1 00	1 23	Apprentice-boy	72	28	50
Foremen joiners	2 02	1 12	1 57	Waiters	48	26	37
Joiners	1 37	85	1 11	Callers	(*)	(*)	(*)
Wagon-weights	1 23	1 03	1 13	Stone-temmers	1 45	70	1 07
Tube-makers	1 27	80	1 03	Laborers	1 41	80	1 11
Sawyers	1 39	88	1 13	Horse-keepers	1 21	80	1 00
Filters	1 45	1 08	1 27	Cartmen	1 08	64	80
Changers and gratiers	1 89	1 08	1 49	Plate-layers	1 29	84	1 59
Saddlers	1 41	1 02	1 21	Plate-layers' assistants	1 10	60	85
Fishmen	1 45	96	1 21	Branch-drivers	1 31	73	96
Masons	1 55	96	1 25	Wagon-greasers, boys	60	30	45
Masons' laborers	1 21	46	83	Branch-men	1 21	82	1 01
Winding-engine-men, (8 hours)	1 71	84	1 27	Bank-riders	1 29	96	1 13
Hauling-engine-men, (8 hours)	1 33	1 33	1 33	Bank-headmen	1 14	86	1 00
Fan-engine-men, (12 hours)	1 33	1 33	1 33	Bank-bottom men	1 21	87	1 04
Locomotive-engine-men, (12 hrs.)	1 61	1 33	1 47	Coke-drawers	1 77	96	1 37
Boiler-tenders	1 33	1 00	1 17	Coke-filters, (contract)	1 98	96	1 47
Firemen, pit	1 33	76	1 05	Laborers, (contract; no allowance for house or rent)	1 94	1 12	1 53
Firemen, locomotive	1 39	86	1 13	Small-runners or loaders, (no allowance for house or rent)	1 94	50	1 22
Inspector or heap-keeper	1 72	92	1 41	Over-haulers, boys	60	34	43
Banksmen	1 85	96	1 35	Over-haulers	1 18	1 06	1 12
Putting in rails, boys	72	34	53	Stallmen	1 21	1 00	1 10
Putting in rails, men	1 53	76	1 15	Teamers	1 02	92	97
Pick-carriers	60	24	42	Laborers, (no allowance for house or rent)	1 21	64	92
Tube-cleaners	60	24	42				
Weightmen	1 59	76	1 17				

* According to time.

General advances.—The first was made in February, 1872, 12½ per cent.; the second was made in July, 1872, 10 per cent.; and the third in February, 1873, 15 per cent., making a total advance of 42.3 per cent.

Reductions.—The first was made in April, 1874, 10 per cent. on all surface labor, except engine-men, who were reduced 5 per cent. The second was made in November, 1874, 6 per cent. all round.

NORTHUMBERLAND.

General advances.—In February, 1872, the above and below ground off-hand labor was scheduled by a committee and advanced in wage, and in July, 1872, banksmen, putters, and shifters were again advanced 20 per cent.; a third advance was given to banksmen, 10 per cent., putters and shifters, 15 per cent.; making a total of 30 per cent. to banksmen, and 35 per cent. to putters and shifters.

In August, 1872, mechanics' wages were advanced 10 per cent., and in March, 1873, it was decided that 5s. per day should be the maximum. **Reductions.**—See minutes of meetings for May 1 and October 30, 1874, on page 299.

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Maximum.	Minimum.	Mean.
27	30 32	\$0 83
33	1 25	1 45
39	1 09	1 35
37	65	1 04
33	67	1 01
47	60	1 03
57	69	1 13
57	71	1 09
51	97	1 45
57	97	1 07
57	77	1 17
40	78	1 54
21	40	81
8	79	1 29
15	93	1 19
1	93	1 01
6	1 82	1 84
8	1 62	1 71
3	1 63	1 28
9	97	1 33

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Wage	Average earnings.
.....	\$1 12
.....	1 35
.....	1 78
.....	1 83
.....	1 49

Northumberland coal fields. *Off-hand labor below ground.*

[These prices include all percentages given up to December 31, 1873.]

Class of labor.	Wages per day, with house or allowance for rent.			Class of labor.	Wages per day, with house or allowance for rent.		
	Maximum.	Minimum.	Mean.		Maximum.	Minimum.	Mean.
Fore overmen	22 30	21 74	22 02	Hauling-enginemmen	21 82	21 45	21 63
Back overmen	2 02	1 54	1 79	Pumping-enginemmen	1 24	1 21	1 21
Deputies	1 82	1 63	1 75	Fir-men	1 09	1 09	1 09
Timber-lenders, (no house) ..	1 23	57 90		Farmacemmen	1 21	61 01	
Master shifters	1 22	1 25	1 51	Lampmen	1 39	69 1 01	
Shifters	1 20	73 1 20		Water-lenders	1 33	1 09	1 21
Chickmen	1 22	1 21	1 51	Horse-keepers	1 32	85 99	
Stonemen	1 04	1 51	1 72	Rolley-way men	1 86	91 1 40	
Stone-putters	1 45	1 21	1 31	Rolley-way boys	1 09	73 91	
Master wastemen	2 02	1 21	1 61	Set-riders, (no house) ..	1 21	54 88	
Wastemen	1 63	95 1 29		Onsetters	2 14	1 11	1 61
Helpers up, boys	85 48	67		Shaft lads	1 63	57 89	
Braking inclines, boys	1 21	61 91		Shaft men	2 02	1 21	1 61
Drivers, boys	61 48	54		Masons	1 39	1 11	1 22
Flatters, boys	73 41	58		Masons' laborers	1 09	74 99	
Putters driving, boys	1 21	85 1 63		Charge-men-sinkers	1 09	1 62	1 64
Landing-lads, boys	1 03	36 70		Sinkers	1 78	1 69	1 73
Couplers, boys	73 46	69		Walters-on	1 29	73 1 06	
Switch-keepers, boys	57 38	45		Hewers and shift or off-handwork	2 18	1 33	1 75
Trappers, boys	48 31	40		Hand putters			1 49
Greasers, boys	73 38	55		Pony putters			1 25

Off-hand labor above ground.

[These prices include all percentages given up to December 31, 1873.]

Class of labor.	Wages per day, with house or an allowance for rent.			Class of labor.	Wages per day, with house or an allowance for rent.		
	Maximum.	Minimum.	Mean, in U. S. gold.		Maximum.	Minimum.	Mean, in U. S. gold.
Foremen smiths	21 61	21 46	21 38	Pick-carriers, (boys)	20 92	20 26	20 59
Smiths	1 39	96 1 18		Tube-cleaners, (boys)	84 26	25	
Horse-shoers	1 27	1 06	1 46	Weightmen	1 33	84 1 08	
Pick-sharpeners	1 21	72 97		Token-men	68 68	74	
Strikers	1 68	80 91		Token-boys	68 32	59	
Boiler-builders	1 33	1 04	1 18	Keckers on screens	1 21	79 1 03	
Foremen joiners	2 01	1 08	1 55	Screeners	1 60	81 1 22	
Joiners	2 42	86 1 64		Small-wagon boys	96 32	61	
Wagon-wrights	2 42	1 12	1 77	Apparatus-boys	68 36	53	
Tub-menders	2 42	84 1 63		Waiters, (boys)	88 28	1 1	
Sawyers	2 42	96 1 13		Stone-temers	1 19	76 1 1	
Flitters	1 35	96 1 15		Laborers	1 11	72 93	
Changers and grathers	1 31	1 21	1 27	Horse-keepers	1 21	70 93	
Saddlers	1 29	94 1 11		Cartmen	96 79	1 1	
Gasmen	1 08	89 1 08		Plate-layers	1 10	72 91	
Masons	1 33	96 1 11		Plate-layers' assistants	1 10	72 91	
Masons' laborers	1 68	72 90		Branch-drivers	1 16	84 1 00	
Winding-enginemmen	1 45	1 45	1 45	Wagon-grasers, (boys)	1 16	32 74	
Pumping-enginemmen	1 69	1 45	1 57	Branch-men	1 14	84 99	
Hauling-enginemmen	1 45	1 45	1 45	Bank-riders	92 82	96	
Fun-enginemmen	1 45	1 08	1 26	Bank-headmen	1 14	88 1 01	
Locomotive-enginemmen	1 45	1 21	1 33	Bank-bottom men, (no house) ..	88 48	68	
Boiler-minders	1 57	1 10	1 31	Coke-burners	1 25	1 25	1 25
Pit-fir-men	1 24	87 1 05		Coke-drawers	1 51	1 38 1 45	
Locomotive-fir-men		89 88		Coke-fillers, (no house)	1 35	84 1 09	
Guards		96 92		Shaft-linen	1 45	80 1 13	
Inspector or heap-keeper		1 20		Teamers	1 02	88 95	
Banksmen		1 45		Laborers	1 09	32 66	
Putters-in of tubs, (boys)		40 80					

WAGES OF NORTHUMBERLAND MINERS IN 1874.

The following statement showing the earnings of Northumberland miners in 1874, was furnished by Mr. Burt:

	Maximum.	Minimum.	Mean.
Fore-overmen.....per week...	£14 52	£12 10	£13 31
Back overmen.....do.....	12 10	9 68	10 90
Deputies.....do.....	1 92	1 68	1 80
Hewers.....do.....	1 68	96	1 62
Laborers, (underground).....per day...	8 60	8 40	8 50
Laborers, (at bank).....do.....	7 20	6 00	6 60
Engineers.....per week...			
Mechanics.....do.....			

ADVANCES AND REDUCTIONS.

Statement showing the advances given and reductions made in the wages of Northumberland miners, with their average earnings, at various dates since April, 1871.

Dates.	Advances.	Reductions.	Total advance above 1871 prices.	Average earnings.
March, 1871.....				
February, 1872.....	10 per cent.			£1 33
May, 1872.....				
July, 1872.....	22 per cent.			1 47
September, 1872.....			32 per cent.	
March, 1873.....	18 per cent.			1 91
December, 1873.....			50 per cent.	
April, 1874.....			10 per cent.	2 20
October, 1874.....			40 per cent.	
December, 1874, (computed).....			20 per cent.	1 85

At a meeting of the Steam Colliers' Defense Association held May 1, 1874, it was decided that—

Putters and other underground men, now receiving 35 per cent. advance, be reduced to 27 per cent.

Trappers.—Wages reduced 1d. per day.

Drivers.—Wages reduced 2d. per day.

Banksmen now receiving 30 and 35 per cent. advance, to be reduced to 25 per cent., inasmuch as the men who have been getting 35 per cent. have been getting more than the trade allowed.

Deputies having 7s. and 7s. 6d. per day to be reduced to 6s. 6d. and 7s. Prop and choek drawing to remain unaltered.

Standard stonemen.—Fixed at 7s. per day.

Screeners.—Those who are paid by the piece to be reduced 5 per cent., and those who are paid by the day to remain as they are.

On June 30 engine-men were reduced 4d. per day.

At a special meeting held October 30, 1874, the following reductions were mutually agreed to:

Putters and others at present receiving an advance of 27 per cent. to be reduced 11 per cent., leaving an advance of 16 per cent.

Trappers.—Wages to be reduced 1d.

Drivers.—Wages to be reduced 2d.

Banksmen.—Advances to be reduced so as to leave an advance of 15 per cent.

Deputies.—Where no prop drawing to be paid, 7s.; where they draw props, 6s. 6d.; for drawing props, 6d. per score; choekles 4d. a choek.

Screeners.—Daily wage to remain as at present; piecework 10 per cent. reduction.

Mechanics.—Wages to be reduced 5 per cent.

SWANSEA AND CARDIFF

The following tables are condensed from more extended statements sea and Cardiff coal districts and in other collieries of Great Britain, England, February, 1875:

Statement showing the average earnings of workmen in Swansea

Class of labor.	Graigola.	Swansea colliery.	West Swansea.	Dunvant.
Cutters.....	\$12 40 per week.....	\$1 74 to \$2 05 per day.....	\$12 40 per week.....	\$35 00 per 4 weeks.....
Day-workmen.....	1 88 per day.....	1 30 to \$1 35 per day.....	1 30 to \$1 65 per day.....	47 16 per 4 weeks.....
Trammers.....	.....	1 08 to 1 56 per day.....	7 40 per week.....	30 00 per 4 weeks.....
Bankers.....	.....	1 85 per day.....	5 96 per week.....	30 00 per 4 weeks.....
Laborers.....	{ 88 day, outside } { 1 20 day, inside }.....	1 32 to \$1 56 per day.....	11 33 per week.....	45 48 per 4 weeks.....
Engine-men.....	1 41 per day.....	1 41 per day.....	.....	20 00 per 4 weeks.....
Carpenters.....	1 34 per day.....	1 44 per day.....	1 44 per day.....	30 00 per 4 weeks.....
Smiths.....	52 to \$0 60 per day.....	52 to \$0 75 per day.....	72 per day.....	33 60 per month.....
Strikers.....	96 per day.....	74 to 1 20 per day.....	66 per day.....	.....
Weighers.....	92 per day.....	84 to 1 32 per day.....	1 08 per day.....	.....
Hostlers.....	1 88 per day.....	1 85 per day.....	.....	.....
Firemen.....	1 20 per day.....	.....	.....	.....
Readmen.....	.....	.....	.....	.....
Tippers.....	.....	.....	.....	.....
Repairs.....	.....	.....	.....	.....
Handers.....	1 08 per day.....	78 to \$1 40 per day.....	7 40 per week.....	30 00 per 4 weeks.....
Door-boys.....	30 per day.....	32 per day.....	.....	.....
Pitmen.....	1 68 per day.....	.....	.....	.....
Stokers.....	.....	.....	.....	27 88 per 4 weeks.....
Hitchers.....	1 88 per day.....	1 28 to \$1 68 per day.....	.....	.....
Ovemen.....	1 88 per day.....	.....	.....	.....
Inclinenen.....	72 to \$0 80 per day.....	92 to \$1 02 per day.....	.....	.....
Screeners.....	30 00 per 4 weeks.....	1 08 to 1 56 per day.....	.....	.....
Masons.....	.....	.....	.....	.....

Class of labor.	Graig Merthyr.	Brynwillach.	Resolven.	Emily.
Cutters.....	\$2 31 per day.....	\$1 85 to \$1 92 per day.....	\$23 66 per fortnight.....	\$2 12 per day.....
Day-workmen.....	1 80 per day.....	1 85 per day.....	1 58 per day.....	1 80 per day.....
Trammers.....	.....	.....	1 80 per day.....	1 80 per day.....
Bankers.....	.....	1 50 per day.....	1 32 per day.....	1 32 per day.....
Laborers.....	1 20 per day.....	.....	17 06 per fortnight.....	1 08 per day.....
Engine-men.....	{ 1 78 per day, loco- } { motive-men }.....	1 56 per day.....	1 32 per day.....	.....
Carpenters.....	1 20 to \$1 32 per day.....	1 32 per day.....	16 41 per fortnight.....	1 76 per day.....
Smiths.....	1 32 to 1 56 per day.....	1 56 per day.....	16 41 per fortnight.....	1 41 per day.....
Strikers.....	52 to 78 per day.....	.....	96 per day.....	72 per day.....
Weighers.....	84 per day.....	.....	1 20 per day.....	.....
Hostlers.....	80 to \$1 14 per day.....	.....	15 48 per fortnight.....	.....
Firemen.....	2 00 per day.....	.....	1 58 per day.....	2 00 per day.....
Readmen.....	1 20 to \$1 80 per day.....	.....	1 20 per day.....	1 76 per day.....
Tippers.....	.....	.....	15 72 per fortnight.....	.....
Repairs.....	.....	.....	.....	.....
Handers.....	.....	.....	17 26 per fortnight.....	82 per day.....
Door-boys.....	66 per day.....	.....	61 per day.....	48 per day.....
Pitmen.....	.....	.....	.....	.....
Stokers.....	92 per day.....	1 56 per day.....	.....	80 per day.....
Hitchers.....	72 per day.....	.....	.....	.....
Ovemen.....	1 86 per day.....	.....	.....	.....
Inclinenen.....	1 86 per day.....	16 41 per fortnight.....
Screeners.....	1 20 per day.....
Masons.....	1 56 per day.....

WAGES IN ENGLAND.

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COAL DISTRICTS.

in regard to the wages or earnings of workmen employed in the Swan-
and were furnished by Walter Rowley, esq., mining-engineer, of Leeds,

coal district, when working full time and without restriction.

Primrose Coal Co.	Fox, Danybank, etc.	Cress-Hands and California.	Duffryn Main.
\$1 80 to \$1 92 per day...	\$1 80 per day	\$1 82 per day	\$11 53 per week.
1 68 to 1 92 per day...	1 68 per day	1 25 per day	1 80 per day.
96 to 1 80 per day...	1 26 per day	92 per day	1 08 to \$1 20 per day.
84 to 1 32 per day...	1 08 per day	1 08 per day	1 00 per day.
	{ 1 08 to \$1 20 per day, } under ground.		{ 1 41 to \$1 66 per day, } winding.
	1 20 eight-hours' turn...	1 20 per day	
96 to 1 80 per day...	1 32 per day	1 14 per day	
1 08 to 1 44 per day...	1 32 per day	1 20 per day	
	60 per day	54 per day, boys.	
	35 00 per month.		96 per day.
1 08 to 1 32 per day...	1 80 per day	1 44 per day	1 44 per day.
	1 32 per day, repairers.		2 00 per day.
	1 70 per day	1 41 per day	1 32 to \$1 62 per day.
36 to 1 08 per day...	{ 54 to \$0 60 per day, } carter-boys.	60 per day, carter-boys.	1 08 to 1 36 per day.
32 to 60 per day...	32 to \$0 60 per day...	40 per day	60 to 1 20 per day.
	1 26 per day	82 per day	48 per day.
	50 00 per month		1 68 per day.
	{ 1 14 per day, head man } at screen.		1 20 per day.
			1 20 to \$1 44 per day.
			1 28 to 1 56 per day.
			1 44 per day.
Morrison colliery, Tyrcenol.	Foxhole colliery, Park pit.	Foxhole colliery, Tirissa pit.	Western Merthyr.
\$25 00 per fortnight...	\$1 58 per day	\$1 81 per day	\$2 00 per day.
1 80 per day	1 64 per day	1 77 per day	1 68 per day.
2 06 per day	1 16 per day	1 56 per day	96 per day.
1 14 per day	1 18 per day	1 20 per day	1 66 per day.
1 80 per day	80 per day		1 32 per day.
1 56 per day	1 24 per day	1 00 per day	1 32 per day.
1 20 per day	1 16 per day		60 to \$0 96 per day.
1 44 per day	1 22 per day		1 32 per day.
	1 80 per day	1 66 per day	1 32 per day.
1 14 to \$1 80 per day...			2 00 per day.
	1 64 per day	1 77 per day	1 68 per day.
	80 per day	96 per day	1 68 per day.
	48 per day	24 per day	1 56 per day.
1 80 per day			1 44 to \$1 66 per day.
	1 06 per day	1 07 per day	66 to 72 per day.
1 60 per day	1 92 per day	1 92 per day	72 per day.
			1 56 per day.
			12 00 per week.
			1 44 per day.
			1 20 per day.
			1 80 per day, stonemen

Statement of the average earnings of workmen in the Cardiff

District.	Colliers.	Haulers.	Laborers.
MERTHYR VALLEY.			
Dowlais	\$14.40 per week; Brithdir, \$17.28.	\$2.64 per week; Brithdir, \$10.32.	\$6.72 per week
Plymouth	\$15.45 per 4 weeks.	\$34.85 under-ground, \$25 above, per 4 weeks.	.....
ABERDARE VALLEY.			
Navigation and Deep Duffryn	\$12.16 per 4 weeks.	\$1.26 per day; master, \$1.11; collier, \$1.25.	\$1.02 per day
Blaengwarr	\$15.45 per 4 weeks.	\$1.12 per day, surface; \$1.26 under ground; collier, \$1.26.	94 cents per day, surface and under ground.
Abereron, boy	\$51.50 per 4 weeks.	\$1.11 to \$1.26 per day.	\$1.02 per day, surface; \$1. under ground.
Crombach	\$2.01 per day, all seasons.	\$1.21 to \$1.32 per day; foreman, \$1.65.	98 cents per day
Werfa	\$2.20 per day; \$2.10 per night.	.....	.....
Aberdare Rhondda	\$1.75 to \$1.96 per day.	\$1.26 to \$1.29 per day.	\$1 to \$1.03 per day
Nantmelyn	\$60 per 4 weeks.	\$32.88 per 4 weeks.	\$20.48 per 4 weeks.
Powell Duffryn Company's pits.	\$2.50 per day.	\$1.26 per day; surface, \$1.02.	\$1.02 per day
RHONDDA VALLEY.			
Ferndale	\$52.64 per 4 weeks.	\$1.32 per day; colliers, \$1.36; surface, \$1.10.	\$1.06 per day; colliers, \$1.26.
Bodryngalt	\$15.52 per 4 weeks.	\$1.32 per day; foreman, \$1.50; 9 hours.	\$1.16 to \$1.26 per day; \$1.20 to \$1.36 per night.
Tylacook	\$1.68 to \$2.40 per day.	\$1.32 per day; master, \$1.60.	\$1.08 to \$1.76 per night; \$6.04 per week.
Pentre and Church	\$62.34 in headings; \$42.32 in stalls.	\$4.40 per 4 weeks.	Surface, \$1.14 per day; \$32.88 under ground.
Bute Merthyr	\$2.46 per day.	\$7.92 per week.	\$6.60 per week
Abergochs	\$42.06 per 4 weeks.	\$32.88 per 4 weeks.	\$36.12 per 4 weeks of 7 days.
2 feet 6 inches	\$26.30 per 4 weeks.		
6 feet	\$45.08 per 4 weeks.		
Llwynypia—			
Steam-coal	\$11.92 per 4 weeks.	\$8.12 per 4 weeks.	\$6.80 per week.
Houscoal	\$13.36 per 4 weeks.	\$1.32 per 4 weeks.	\$7.40 per week.
Gilfach	\$1.20 per day.	\$1.15 per day; surface, \$1.12.	\$1.20 per day; surface, \$1.10.
Coedcote	\$12.60 per 4 weeks.	\$30.48 per 4 weeks; \$25.64 per 4 weeks, surface.	.....
Dinas Main	\$47.12 per 4 weeks.	\$36.94 per 4 weeks; \$6.20 per 30 days, surface.	\$32.88 per 4 weeks.
Llwynnecllyn	\$1.86 per day.	\$1.26 per day.	\$1.56 per day
Gelli—			
Colliery No. 2	\$2.94 in headings; \$2.84 in stalls.	\$1.42, 6 days; foreman, \$1.65.	\$1.02 per day, surface; \$1.32 under ground.
Colliery No. 3	\$1.28 in headings; \$1.94 in stalls.		
Lan, not full time	\$10.08 per week.	\$1.12 to \$1.50 per day.	\$1.20 to \$1.44 per day.
Jarrandder	\$2 per day.	\$1.41 per day.	.....
Chely	\$1.92 per day.	\$1.08 per day.	.....
Powell's Llantwit	\$48.72 per 4 weeks.	\$37.40 per 4 weeks.	\$1.08 per day.
Llantwit and Black Vein	\$12.40 per week.	\$6.48 per week; boys, \$1.60.	\$3.36 per 4 weeks.
Llantwit Red Ash Company	\$2.02 per day.	\$1.31 to \$1.44 per day; surface, 60 cents.	Foreman, 4 weeks, \$1.34 per day.
Pearlhwfer	\$12.10 per week.	\$7.58 per week, under ground; \$6.56, surface.	\$6.32 per week, under ground; surface, \$5.96.
Blaenclydach	\$1.68 per day.	\$1.32 to \$1.52 per day.	\$1.12 per day.
Maesteg Merthyr—			
Seam 1	19 days, \$67.80.	\$1 to \$1.30 per day.	\$1.04 per day.
Seam 2	19 days, \$70.41.		
Seam 3	19 days, \$73.39.		
Crediffr	19 days, \$66.08.		
Dryndre	\$1.98 per day.	\$1.10 per day; boys, 70 cents.	\$1.04 per day.

coal district, when working full time and without restriction.

Tipplers.	Banksmen.	Engine-men, winding.	Firemen.	Redmen.
Drift-dirt, \$2.10 per week.	\$2.76 to \$2.64 per week.	\$2.40 to \$2.60 per week.	\$6.12 to \$6.96 per week.	
	\$2.11 per 1 weeks.	\$37.22 under ground, \$31.14 above, per 4 weeks.	\$43.91 per 4 weeks.	\$29.51 per 4 weeks.
\$1.10 per day.	\$1.50 per day.	\$50 per 4 weeks; 2 hours. They clean, fit, and repair.	\$1.86 per 6 days; 81 cents per Sunday.	\$1.56 per day.
97 cents per day.	\$1.02 to \$1.20 per day.	\$1.16 per day; hauling, \$1.25.		\$1.12 per day.
\$1.02 per day.	\$1.10 to \$1.20 per day.	\$1.50 per day; hauling, \$1.34.		\$1.34 per day.
98 cents, \$1.02, to \$1.10 per day.	98 cents to \$1.26 per day.	\$1.45, 9 days.	\$1.72, 7 days.	\$1.96, \$1.34, to \$1.43 per day.
\$1 to \$1.06 per day.	\$1.02 per day.	\$1.35, \$1.40, to \$1.42 per day.	\$1.68 per day.	\$1.48 to \$1.32 per day.
	\$28.36 per 4 weeks.	\$25.36 per 4 weeks.	\$50 per 4 weeks.	\$41.44 per 4 weeks.
\$1.14 per day.	\$1.28 per day.	\$1.56 per day.	\$1.86 per day.	\$1.32 per day.
\$1.01 per day.	\$1.14 to \$1.23 per day.	\$1.49, per day.	\$2 per day.	\$1.26 to \$1.41 per day.
\$1.16 to \$1.23, 9 hours.	\$1.25 per 12 hours.	\$25.12 per 4 weeks.		\$1.72 per 9 hours.
\$1.14 per day.	\$1.32 per day.	\$1.63 per 8 hours.	\$1.51 per day.	\$1.30 to \$1.34 per day.
\$33.36 per 4 weeks.	\$32.36 per 4 weeks.			
\$6.72 per week.	\$10.08 per week.	\$12.04 per week; hauling, \$2.54.	\$50 per annum.	\$8.12 per week.
96 cents to \$1.32 per day.		\$1.72 per day; allowed 7 days extra per month.		\$1.36 per day.
\$7.40 per week.	\$8.02 per week.	\$1.32 per day, steam.		\$1.32 per day, steam.
\$1.14 per day.	\$1.44 per day.	\$1.56 per day, house.		\$1.41 per day, house.
\$30.96 per 4 weeks.	\$36.68 per 4 weeks.	\$1.56 per day.	\$2 per day.	\$1.42 per day.
\$33.36 per 4 weeks.	\$1.32 to \$1.41 per day.	\$40.80 per 4 weeks.	\$50 per 26 days; \$43.24 per 21 days, night.	\$1.56 per day.
\$1.31 per day.		\$1.76, single turn.	\$2 per day.	\$1.56 per day.
\$1.32, 6 days.	\$1.58, 7 days.	\$1.76, 7 days; drift, \$1.54, 7 days.		\$1.48, 6 days.
\$1.12 per day.		\$1.56 per day.		
\$1.08 per day.	\$1.02 per day.	\$1.41 per day.		\$1.68 per day.
\$33.36 per 4 weeks.		\$31.68 per 4 weeks.	\$52 per 4 weeks.	
Foreman, \$7.40 per week.		Boys, \$6 per week.	\$10.20 per week.	\$2.48 per week.
\$1.34 per day.	\$1.34 per day.	\$1.50 per day.	\$2 per day.	\$1.71 per day.
\$6.32 per week.	\$6.68 per day.	\$9.36 per week.	\$10.12 per week.	\$8.84 per week.
\$1.32 per day.	\$1.20 per day.	\$1.38 per day.	\$12 per week.	\$1.56 per day.
96 cents per day.	\$1.26 per day; girls, 42 to 46 cents.	\$1.06, \$1.26, to \$1.41 per day.	\$1.68 per day.	
	98 cents per day.	\$1.02 per day.		

Statement of the average earnings of workmen in the Cardiff coal

Districts.	Hitchers.	Stokers.	Welghers.
MERTHYR VALLEY.			
Plymouth	\$22.72 per 4 weeks.....	\$21.88, under ground, per 4 weeks; \$22.02, above ground.	\$23.12 per 4 weeks.....
ABERDARE VALLEY.			
Navigation and Deep Duffryn	\$1.32 per day.....	9 hours, 98 cents; chief, \$1.02.	\$1.32, C. M.; \$1.10, Billy; \$1.10, Inop.
Blaengwaur	\$1.24 per day.....	\$1.02 per day.....	\$1.32 p day.....
Abercromboy	\$1.26 per day.....	\$1.10 per day.....	\$1.12 to \$1.32 per day..
Crombach	\$1.14, under ground, 9 days; \$1.02, surface, 1 day per week al- lowed.	.....	\$1.32 to \$1.40 per day..
Aberdare Rhondda.....	\$1.26 to \$1.40 per day.	76 cents, 96½ cents, to \$1.04 per day.	\$1.14, \$1.20, to \$1.22 per day.
Nantmelyn	\$36.43 per 4 weeks.....	\$18.52 per 4 weeks.....	\$34.03 per 4 weeks.....
Powell Duffryn Company's pits.	\$1.12 per day.....	\$1.02 per day.....	\$1.06 per day.....
RHONDDA VALLEY.			
Ferndale.....	\$1.36 per day.....	\$1.05 per day.....	\$1.32 per day.....
Bodryngalt	\$1.46 per 9 hours.....	\$1.32 per 12 hours.....	.....
Tylacoch	\$1.32 to \$1.41 per day..	\$1.14 per 8 hours.....	.....
Rhondda Merthyr	\$10.08 per week	\$8.28 per week	\$7.60 per week
Bute Merthyr.....	\$1.26 per day.....	\$1.03 to \$1.16, 28 and 29 days per month.	.....
Llwynypia.....	Steam, \$8.48 per week, 9 hours; house, \$12.40, piecework.	\$1.14 per day, extra cleaning flue.	96 cents per day, house; \$1.32, steam.
Giffach	\$1.33 per day.....	\$1.12 per day.....	\$1.24 per day.....
Coedcaw	\$1.62 per day; night, 66 cents.	\$1.02 per day.....	\$1.50 per day.....
Dinas Main.....	\$1.56 per day.....	\$1.26 per day.....	\$1.08 per day.....
Peurhiwler	\$8.24 per week	\$7.76 per week	42 cents per week
Blaenclydach .....	.....	.....	\$1.12 per day.....
Llwynellyn	\$1.50 per day.....	.....	.....
Gelli.....	\$1.54, 6 days.....	\$1.36, 7 days.....	.....
Darrandda .....	.....	\$1.38 per day.....	.....
Cilely.....	\$1.30 per day.....	.....	.....
Powell's Llantwit.....	\$1.50 per day.....	.....	.....
Llantwit and Black Vein	\$1.20 per day.....	.....	\$7.20 per week.....
Llantwit Red Ash	\$1.12 per day.....	\$1.34 per day.....	\$1.23 per day.....
Maestig Merthyr	\$1.06 to \$1.30 per day..	96 cents to \$1.16 per day.
Bryndee	\$1.12 per day; boys, 64 cents.	96 cents per day.....

WAGES IN ENGLAND.

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district, when working full time and without restriction—Continued.

Weighters.	Masons.	Horse-keepers.	Smiths.	Strikers.	Carpenters.
per 4 weeks....	\$34.04 per 4 weeks..				
C. M.; \$1.10, y; \$1.10, 1nop. o day.....	9 hours, \$1.44; la- borers, 92 cents per day. \$1.32 per day; la- borers, 94 cents to \$1.04. \$1.56 and \$1.46 per day; laborers, \$1.	\$1.08 for 6 days ... 86 cents per day, sur- face; \$1.08, under ground. \$1.10 per day, under ground. 96 cents to \$1.08 per day.	\$1.14 to \$1.26 per day, 9 hours. \$1.28, \$1.32, to \$1.34 per day. \$1.28 to \$1.34 per day \$1.16 to \$1.28 per day; foremen, \$1.08, 7 days. \$1.18, \$1.22, to \$1.28 per day.	40 to 84 cents per 9 hours. 76, 80, to 92 cents per day. 72 to 84 cents per day. 72, 84, to 96 cents per day.	\$1.06 to \$1.20 per 9 hours. \$1.18 to \$1.40 per day; sawyers, \$1.12 to \$1.32, \$1.28 per day; saw- yers, \$1.12 to \$1.32. \$1.32 per day; fore- men, \$1.74, 7 days.
\$1.20, to \$1.28 per per 4 weeks....	\$1.44 per day.....	\$1.04 per day, sur- face; \$1.12, un- der ground. \$32.04 per 4 weeks	\$32.68 per 4 weeks...	\$25.48 per 4 weeks	\$45.48 per 4 weeks; \$30 per 4 weeks, sawyers.
per day.....	\$1.50 per day.....	\$1.12 per day.....	\$1.26 per day.....	90 cents per day...	\$1.28 per day; saw- yers, \$1.12.
per day.....	\$1.44 per day.....	\$1.01, \$1.17, to \$1.28 per day. \$1.32, 7 days	\$1, \$1.08, \$1.28, to \$1.32 per day. \$1.02 per 9 hours ... \$1.38 to \$1.44 per day	66 to 92 cents per day. \$1.08 per 9 hours ... 96 cents to \$1.04 per day.	\$1.25, \$1.32, to \$1.41 per day; sawyers, \$1.10 to \$1.32, \$1.44 per 9 hours. \$1.08 to \$1.20 per day; sawyers, \$1.75.
per week	\$1.56 per day; 30 days per month.	\$1.06 per day; 28 days per month.	\$8 per week	\$7.44 per week	\$8.04 per week; sawyers, \$7.20.
nts per day, se; \$1.32, steam.	\$1.32 per day; la- borers, 96 cents.	96 cents per day; in pit, \$1.12.	\$1.32 per day; 25 and 26 days per month. \$1.36 per day.....	\$1.04 per day.....	\$1.26, \$1.32, to \$1.56 per day.
per day.....	\$1.50 per day		\$1.41 per day.....	84 cents per day...	\$1.26 per day.
per day.....	\$1.44 to \$1.68 per day	\$1.38 per day.....	\$1.44, \$1.60, to \$1.68 per day. \$1.70 per day	\$1.12 per day.....	\$1.34 per day.
per day.....	\$1.60 per day	\$1.46 per day	\$1.70 per day	84 cents to \$1.12 per day. \$1.18 per day.....	\$1.36 to \$1.64; saw- yers, \$1.46
ts per week	\$3.24 per week	\$6.80 per week; in pit, \$7.28, \$1.34 per day.....	\$8.36 per week	\$3.72 per week	\$1.70 per day.
per day.....			\$1.62 per day.....	\$1.12 per day.....	\$8.12 per week.
per day.....				\$1.12 per day.....	\$1.34 per day.
per day.....				\$1.08 per day, 71 days; foreman, \$1.16.	\$1.68 per day. \$1.70, 6 days.
per day.....	\$1.44 per day		\$1.28 per day	96 cents per day...	\$1.4 per day.
per day.....	\$1.78 per 4 weeks		\$30.96 per 4 weeks..	96 cents per day ..	\$1.32 per day.
per week	\$3.76 per week		\$3 per week	\$35 per 4 weeks...	\$30 p r 4 weeks.
per day.....	\$1.30 per day		\$1.68 per day.....	\$1 per day	\$2.02 per week.
per day.....	\$1.14 per day.....		\$1.32 to \$1.48 per day	98 cents per day ..	\$1.50 per day; saw- yers, \$1.50.
per day.....				\$1 per day	\$1.20 per day; saw- yers, \$1.10. \$1.14 per day; saw- yers, 92 cents.

each boiler cleaned.

Hauling \$1.27, and 1 turn per month for repairs.
\$1.33, and 1 turn per month for repairs.
\$1.14 to \$1.20, less 10 per cent. from 1st June last.

46.30 per month
4 turn for shift, and 1 for cleaning and repairing boilers.
\$1.49 1 turn for repairing boilers.
1.45 per day 8 hours.

Merthyr Vale.
D. Davis & Sons.
Blaengwawr.
Abercromby.
Aberdare Coal Company.

Bute.	1.35 to \$1.30 for cleaning boilers.				
M. Jones, Nantmelyn.	1.32 per day, 9 days per week.				
Albion.	1.49 and 1 turn per week for cleaning boilers.				Hauling, \$1.34; shift, \$1.34.
D. Davis & Sons.	55.12 per month.				
Bedrygallt.	1.35 8 hours per shift, 7 days per week.				Hauling \$1.13, and 2 turns per month for repairing, less 10 per cent. from 1st June last.
Glanorgans Coal Company Hlrym.	1.36 11 hours per shift, 6 days per week.				
Penthiwter.	1.22 per day of 8 hours, 7 turns per week.				Over-time for Sundays or night-work.
Coffin & Co, Middlesbrough.	1.35 12 hours, 7 turns per week.				
Powell's Gellygaer Company.	1.32 per day, 3 turns.				\$1.50 per 4 weeks for cleaning engine and winders; 90 cents extra per 4 weeks for cleaning boilers.
Thomson & Griddle.	1.32; under ground, \$1.05.				Without extras for cleaning.
Rhonda Merthyr Co.	1.46 per day; 7 days per week.				Hauling \$1.10 per day, 2 turns.
Monmouthshire.	Hauling-engine-men, \$1.46 per day.				Leading engineer allowed \$6 per month for looking after pumps.
E. D. Williams, Mansfield.	Machine-engine-men, \$1.46 per day.				
Gwladis.	1.46 per day, 7 days per week.				
Rhoswen.	98 cents.				
Swansea Railway.	Coke-engine-man, 98 cents per day.				
per Minors in England.					
Meadow pit.					
Bryngarnos.	\$1.13 per day, 34 days per month.				\$2.40 per month extra for winding, and \$4 cents for 5 cleaning boilers.
Bryn.					
Cwmllyn.	\$1.32 per day.				5 turns per month repairing and raising steam; \$1.56 per month for cleaning boilers.
Morgan & Thompson.	81 cts. and \$1.02 for each boiler cleaned.				14 days per month for repairing and raising steam; \$4 cents per month for cleaning.
Merthyr.	\$1.41 per day; allowance for boilers, 2 days per week, 60 cents.				
Merthyr Iron Company pits.					
Heath, Evans & Co.	\$1.20 1 day, 8 days' pay for 6 worked, 2 days per week, 60 cents.				Winders allowed 9 days per week, pumpers 7.
Yorksire.	\$4 to 90 cents per week, 9 hours per day.				
Flowers Allerton Collieries.	96 cents per day of 10 hours.				Cleaning boilers, 32 cents; cleaning tube, 48 cents extra.
Staffordshire.					
Somersetshire.					
Roadstock Collieries.					3 cwt. of coal allowed per week.

WAGES IN ENGLAND.

WEST YORKSHIRE MINES.

Diagram showing advances and reduction in miners' wages from October, 1871, to October, 1875, in the mines of West Yorkshire Coal Masters' Association.

Per cent.	Glasgow.	West Yorkshire.	Derbyshire.	Manumth. South Wales.	Lincolnshire.	Som. & Gl.	Durham.	South Yorkshire.	Cumberland.	Northumberland.
95										
90										
85										
80										
75										
70										
65										
60										
55										
50										
45										
40										
35										
30										
25										
20										
15										
10										
5										

The datum line represents rate of wages paid in October, 1871. The per centum indicated, at the most recent date, in the columns marked "Reduction," shows the present rates. * South Yorkshire.

WAGES IN ENGLAND.

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YORKSHIRE.

Statement showing advances in wages from 1871 to March, 1873, at three pits of one of the principal collieries in the West Riding of Yorkshire.

Number of pit, and date.	Coal-getting.	By-work.	Boys.	
			Hurriers, average weekly wages.	Pony-drivers, maximum daily wages.
PIT No. 1.				
January, 1871	Per ton.	Per day.		
January, 1872	\$0 37	£1 13		
January, 1873	39	1 21	\$2 00	\$0 40
March, 1873	52	1 67	3 41	48
	61	1 92	3 69	97
			4 52	1 09
PIT No. 2.				
January, 1871				
January, 1872	38	1 13	3 35	57
January, 1873	41	1 25	3 44	41
March, 1873	59	1 67	4 38	65
	67	1 92	6 05	75
PIT No. 3.				
January, 1871				
January, 1872	31	1 13		40
January, 1873	30	1 25		44
March, 1873	48	1 67		85
	57	1 92		97
In May, 1873				

In May, 1872, riddles ceased to be used at all the pits. The benefit accruing to the colliers from this change cannot be set down at less than 1d. per ton. One penny per ton must, therefore, be added to the apparent advance.

EARNINGS OF COLLIERS IN ENGLAND.

In the Sheffield district the colliers earn from £3 5s. to £4 a week, working only for five days. There are colliers in the neighborhood of Huddersfield who are now earning as much as £1 a day. In East Worcestershire the wages range from 8s. to 12s. Taking the average of the best coal-districts, it is obvious that a collier can easily earn from 8s. to 10s. any day he wishes to work. Price of coal in London 40s.—*London Telegraph*, September, 1873.

Under date of October 25, 1874, Walter Williams, esq., writes:

Colliers' wages are nominal; do not represent their earnings, which vary from 5s. 6d. to 8s. per day of eight hours, except in portions of Wales, where they are less by 15 per cent.; but in iron-making districts, now, colliers in thin mines or common coal-works do not get more than 2s. to 30s. per week; steam-coal and house-coal from 35s. to 40s. per week, all working eight hours for a day's work; common laborers earn 3s. to 40s. 6d. per day; skilled, 4s. to 4s. 6d.; brick-layers, stone-masons, 5s. 6d. to 6s. 6d. per day, (nine hours) painters, 7s.; carpenters, 5s. 6d. to 6s.; smiths, 5s. 6d. to 6s.; locomotive-engine drivers, 7s. 6d.; stationary-engineers, 4s. 6d. to 6s. per day.

Wages earned by workmen engaged in the Durham coal-fields, January, 1875.

Overmen, £2 to £2 15s. per week.
Deputy overmen, 5s. 6d. to 6s. per day of eight hours.
Coal-hewers are paid by the score of twenty-one tubs, which vary from 6 cwt. to 12 cwt. each, according to the different seams of coal worked; their average earnings are from 5s. 6d. to 6s. 9d. per day of from five to seven hours.
Lab rers, under ground, 4s. to 5s. 6d. per day of eight hours.
Pit-engine-men, 5s. to 5s. 6d. per day of eight hours.
Laborers, at bank, 3s. 4d. to 4s. per day of ten hours.
Mechanics, 4s. to 5s. per day of nine hours.
In addition to those wages, it is the custom at nearly all collieries to provide houses for their workmen. The houses vary very much in quality at different collieries, but, together with fire-coal, may be taken at £15 to £20 per annum addition to workmen's wages.

ENGLISH MINING IN 1872.

Mr. Robert Hunt, keeper of the mining-records for Great Britain, has made the following returns of English mining in the year 1872:

Minerals.	No. of mines.	Quantities.	Value.
		<i>Tons. Cwt.</i>	
Coal.....	3,661	123,457,316	£46,311,133
Iron ore.....	296	16,564,857	5,774,874
Copper-ore.....	117	91,183	413,738
Thi-ore.....	162	14,266	1,216,135
Lead-ore.....	455	83,968 3	1,146,165
Zinc-ore.....	61	68,512 14	73,951
Iron pyrites (sulphur-ores).....	35	65,916 3	39,420
Arsenic.....	15	5,171 15	17,061
Wolfram.....	3	88 5	993
Cobalt.....	1	1	30
Manganese.....	3	7,773	38,865
Flour spar.....	1	70 12	40
Others, numbers, &c.....	5	3,320 15	8,227
Bismuth-ore.....	1	2	-----
Chloride of barium.....	1	65	130
Barites.....	25	9,092 17	7,678
Clays, blue and fire, (estimated).....	-----	1,200,000	450,000
Other earthy minerals, (estimated).....	-----	-----	650,000
Salt.....	-----	1,300,437 10	634,748
Coprolites, (estimated).....	-----	35,000	50,000
Total value of the minerals produced in the United Kingdom.....	-----	-----	58,913,541

Metals obtained from the ores above enumerated in the United Kingdom in the year 1872.

Description of metal.	Quantities.	Value.
Pig-iron.....	tons.. 6,711,929	£15,740,364
Copper.....	do.. 5,763	583,262
Tin.....	do.. 5,540	1,430,990
Lead.....	do.. 69,155	1,309,115
Silver.....	do.. 628,530	147,250
Zinc.....	tons.. 5,191	118,076
Other metals, (estimated).....	-----	2,500
Total value of metals produced from the ores of the United Kingdom.....	-----	22,070,143

The total value of the metals produced, coal and other minerals raised, in the year 1872: metal, value of, as above, £22,070,143; coal, ditto, £46,311,447; minerals, earthy, &c., £1,811,826; total, £70,193,416. The increase in total value, amounting to £12,871,523, is chiefly due to the additional cost of "getting" each ton of coal. To the 3,001 coal-mines should be added the product of 150 others not included.

RISE OF WAGES IN THE UNITED KINGDOM.

The tables on pages 243 to 278 give the wages or earnings of work-people in Great Britain which were paid in 1871 and which, with the exception of work in iron-mills and in coal-mines, do not in general differ greatly from those which ruled in 1872 and subsequent years. The strikes in the engineering and other trades were chiefly for diminished hours and not for an increase of per-diem wages. The reduction of hours demanded was, in most cases, from ten to nine hours per day, or from fifty-nine to fifty four hours per week, an actual advance in the cost of labor of about 10 per cent. The rise in wages which originated mainly in the coal and iron industries, soon extended to nearly all other branches. In most trades there was an advance in the cost of labor

Britain, has
72:

Value.
£40,311,133
7,774,774
413,738
1,246,135
1,146,165
74,951
39,470
17,561
993
30
38,805
40
8,227
.....
130
7,078
450,000
650,000
651,748
50,000
58,913,541

year 1872.

Value.
£14,740,304
581,252
1,439,990
1,399,115
117,220
118,056
2,500
22,070,143

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more or less marked, in addition to the increase caused by the reduction in the hours of labor.

The various advances and reductions in wages which have taken place since 1871 in the iron mills and furnaces and in the collieries, appear in the pages immediately preceding, while on the following pages the rates obtaining in 1872 when the author visited the manufacturing districts of Great Britain, and at subsequent periods, are presented. While the rates of wages indicated in the following tables vary but little from those of 1871, the respective hours of labor at the different periods must be regarded, whether for fifty-nine hours in the earlier, or from fifty-four to fifty-one hours in the later periods. Those in the later years show, it is true, the extent of the weekly earnings of workmen, unless they labor after hours, which is unusual; but whether compared with similar data at another period or in other countries where the hours of labor were or are greater, the increased cost of labor per hour in recent years is indicated in the tables.

RATES OF WAGES IN 1873—MECHANICAL TRADES.

Rates of wages paid per week in the kingdom of Great Britain for different kinds of labor.

Trades.	Per week, in U.S. gold.	Trades.	Per week, in U.S. gold.
Engineers and machinists.....	8 22	Ship-joiners.....	8 22
Blacksmiths, (general).....	8 22	Iron-molders.....	8 22
Carpenters and joiners.....	8 22	Pattern-makers.....	8 22
Stone-masons.....	8 22	Puddlers.....	8 22
Bricklayers.....	8 22	Smelters.....	8 71
Carrriage and wagon makers.....	7 26	Stone-quarry men.....	5 12
Saddle and harness makers.....	5 20	French polishers.....	8 22
Tin-men and tinsmen.....	7 26	Printers.....	8 22
Painters.....	8 22	Book-binders.....	7 74
Coppersmiths.....	8 22	Cabinet-makers.....	8 22
Angle or iron smiths.....	8 22	Upholsterers.....	8 22

The above statement, furnished by a gentleman in Liverpool, gives a fair average of the rates of wages paid throughout Great Britain for the different kinds of skilled labor indicated. But inasmuch as the same wages, \$8.22 per week, is given as the rate paid to carpenters, cabinet-makers, and painters, as well as to blacksmiths, masons, iron-molders and machinists, who usually receive higher wages, it is not so accurate as the tables on the two following pages, which show the various rates paid to skilled workmen in mechanical and building trades in each of the principal towns of the United Kingdom.

BOILER-MAKERS AND IRON-SHIP BUILDERS.

Table showing the weekly wages paid to boiler-makers and iron-ship builders in some of the principal towns and cities of the United Kingdom during the year 1873.

[Hours of labor per week, 54, except in Aberdeen, Dundee, and Glasgow, where they are 51 hours. Average of 5½ hours per week through the year.]

Localities.	Smiths.	Platers.	Riveters.	Calkers.	Holders-up.*
Aberdeen		\$6 05	\$5 81 to \$6 05	\$5 81	\$1 60
Belfast	\$8 72 to \$9 16	\$8 21 to 8 72	7 74 to 8 21		\$5 81 to 6 05
Birkenhead†	8 72 to 9 16	8 72 to 9 16	7 26 to 7 74	\$7 26 to 7 74	5 81 to 6 17
Birmingham	8 72	7 74		7 04	6 29
Bury	9 19	8 72		7 26	5 56
Chester	9 19	8 72		7 74	5 81
Cork	9 41	8 71		7 26	4 60
Crews	7 99 to 8 95	7 99 to 8 71	7 50 to 7 74		6 05
Derby	8 71	8 71		6 78	5 32
Dublin†	8 71 to 9 16	8 23 to 8 71	7 75		
Dundee	7 02	7 02	6 53 to 6 75	6 23 to 6 77	
Ebbs Vale	7 99	7 99	6 75 to 7 99		5 56 to 5 81
Glasgow ship yard	7 26	7 75	6 80	6 80	4 12
Glasgow boiler-shop	8 47 to 9 19	8 23 to 8 47	7 26 to 7 35	7 02 to 7 35	4 36 to 5 56
Greenwich ship yard	10 10	10 10	8 23	7 26	6 77
Greenwich boiler-shop	10 16	10 16	7 98	7 26	6 29
Huddersfield	8 23	8 23	7 26		5 81
Hull boiler-shop	10 12	9 19	7 74	7 26 to 7 74	6 29
Hull ship yard	10 12	9 19	7 74	7 26 to 7 74	6 29
Leeds boiler-shop	9 19 to 9 68	8 71 to 9 19	6 29 to 7 71		5 32 to 6 29
Liverpool boiler-shop	9 19 to 9 68	8 71 to 9 19	7 26 to 7 71	7 26 to 7 74	6 05 to 6 29
Liverpool ship yard	8 71 to 9 19	8 71	7 26	7 26	5 81
London boiler-shop	8 71 to 9 65	8 71 to 9 16	7 26 to 9 19	6 77 to 7 99	4 64 to 6 29
London ship-yard	9 68 to 10 16	9 19 to 9 68	7 74 to 8 71	7 99	5 81 to 6 29
Manchester	9 68	9 19	8 23		7 26 to 7 75
Newcastle-upon-Tyne boiler-shop	7 75 to 8 71	8 23 to 8 71	7 27 to 7 75	6 77 to 7 75	5 32 to 6 29
Newcastle-upon-Tyne ship-yard	7 99	7 99	7 75	7 04	6 29
Nottingham	9 19	8 71	7 27		5 81
Portsmouth	9 19	9 19	7 99		5 81
Preston boiler-shop	9 19	8 71	7 75	7 75	5 81
Preston ship-yard	9 19	9 19	7 75	7 75	5 32
Rochdale	9 19	8 71	5 81		7 75
Sheffield	7 99 to 9 68	8 71 to 9 19	7 75 to 8 23	6 77 to 7 27	6 05 to 6 29
Wigan		9 19	7 75		6 29
Wolverhampton	8 71	8 23	6 53		5 56
Woolwich	9 41	8 71	7 75		5 81
York		7 99	7 50		5 81
Average in above places.	8 97	8 64	7 48	6 82	5 92

* In some shops holders-up are employed on the piecework system.

† Working-hours from light till dark in winter.

Table
p

Aberd
Aberg
Alders
Ayr
Belsh
Birken
Birm
Bolton
Bradfo
Bristol
Bury
Chester
Covent
Crews
Cork
Derby
Dublin
Dunfri
Dundee
Dunfer
Exeter
Edinbu
Glouce
Greenw

Glasgow

Greenoc

Hatfax
Hudders
Kidderm
Kilmarn

* Althou
the day.

Table sh

Aberdeen
Airdrie
Ayr
Donburi
Dunfri
Dundee
Edinbu
Glasgow
Greenock

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WAGES IN ENGLAND.

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CARPENTERS AND JOINERS.

Table showing the weekly wages of carpenters and joiners, with the number of working-hours per week, in the following principal towns of the United Kingdom during the year 1873.

in some of the
573.
they are 51 hours.

Holdings-up.*
01 60
\$5 81 to 6 05
6 17
6 29
7 74
5 81
4 60
6 05
5 32
4 84
5 56 to 5 81
4 12
4 36 to 5 56
6 77
6 29
5 81
6 59
6 29
5 32 to 6 29
6 05 to 6 29
5 81
4 84 to 6 29
5 81 to 6 29
7 26 to 7 75
5 32 to 6 29
6 29
5 81
5 81
5 32
7 75
6 05 to 6 53
7 02
5 56
5 81
5 81
5 92

Towns.	Wages per week.*		Hours of labor per week.		Towns.	Wages per week.		Hours of labor per week.	
	Summer.	Winter.	Summer.	Winter.		Summer.	Winter.	Summer.	Winter.
Aberdeen	\$6 42	\$6 42	51	51	Kirkcaldy	\$6 93	\$6 93	51	51
Abergevenny	6 49	6 49	51	51	Leeds	7 06	7 06	50	50
Aldershot	7 26	7 30	51	51	Leicester	7 04	7 04	51	51
Ayr	6 93	6 93	51	51	Liverpool	8 32	8 32	55	55
Belfast	7 62	7 62	51	51	London	9 53	9 53	59	59
Birkenhead	8 32	8 32	55	55	Leith	7 71	7 71	51	51
Birmingham	8 17	7 63	51	50	Londonderry	6 29	6 29	60	60
Bolton	7 80	7 80	51	51	Manchester	7 42	7 42	51	51
Bradford	7 21	7 24	49	49	Newcastle-on-Tyne	7 56	7 56	50	50
Bristol	7 62	7 12	51	51	Nottingham	7 62	6 63	54	47
Chorley	7 89	7 89	51	51	Oxford	7 08	7 08	51	51
Coventry	7 26	7 26	55	55	Plymouth	6 17	6 17	50	50
Croy	7 26	7 26	50	50	Portsmouth	6 51	6 51	50	50
Cork	7 30	7 30	50	50	Preston	6 77	6 77	49	49
Derby	7 34	7 02	50	50	Perth	7 20	7 20	51	51
Dublin	8 23	8 23	60	60	Reichels	7 62	6 91	51	49
Dumfries	6 17	5 81	51	48	Rugby	7 11	7 11	54	54
Dundee	7 45	7 45	51	51	Sheffield	7 36	7 36	50	50
Dunfermline	7 20	7 20	51	51	Southampton	6 51	6 51	50	50
Exeter	6 26	6 26	51	51	Stafford	6 84	6 84	50	50
Edinburgh	7 20	7 20	51	45	Stockport	7 06	7 06	50	50
Gloucester	6 26	6 26	56	56	Stoke	6 77	6 77	60	60
Greenwich	9 11	9 11	56	56	Stirling	6 08	6 08	51	51
Glasgow	7 71	7 71	51	45	Wolverhampton	7 02	7 02	51	51
	to 9 90	51	45		Woolwich	9 11	8 23	51	51
Greenock	7 20	7 20	51	51	Worcester	7 08	6 61	51	51
Halifax	6 77	6 77	50	50	Waterford	6 29	6 29	60	60
Huddersfield	6 53	6 53	50	50	Wick	3 43	3 43	57	57
Kilmarnock	6 53	6 53	51	51	York	6 94	6 94	53	53
Kilmarnock	7 20	7 20	51	51	Average	7 21	7 10	59	54

* Although here computed by the week, the rate of wages is usually fixed either by the hour or by the day.

STONE-MASONS.

Table showing the wages of stone-masons per hour and the number of hours worked per week in some of the principal towns of Scotland during the year 1874.

Localities.	Wages per hour.	Hours worked per week.	Localities.	Wages per hour.	Hours worked per week.
Aberdeen	Cents. 14	51	Kilmarnock	Cents. 16	51
Airdrie	17 to 18	51	Leith	15	51
Ayr	15	51	Montrose	12	51
Dunbarton	16	51	North Berwick	16 to 17	51
Dumfries	14	51	Perth	12 to 13	51
Dundee	10 to 17	51	Salut Andrews	15	51
Edinburgh	15	51	Stirling	15	51
Glasgow	16	51			
Greenock	17	51	Average	15.06	

In many of the smaller towns the hours of labor are longer and the wages lower.

PRINTERS' WAGES IN ENGLAND.

In London the established wages of either compositors or machine-men are 36s. (\$8.71) for fifty-four hours' work. There are always a few men, not exactly overseers, who will have, perhaps, five to eight shillings (\$1.21 to \$1.93) more than the established wages, men of quick and steady habits, who are worth the extra money.

Piecework is paid per thousand ems. The prices paid per thousand vary, according to the description of work—close manuscript and leaded manuscript, and also reprint matter leaded and reprint matter close. The prices are from six to seven pence (12 to 14 cents) per thousand. English to minion and nonpareil take one-half penny (1 cent) rise per thousand, and smaller than nonpareil a higher rise, according as the font may be. When books are stereotyped or electrotyped, one-fourth to one-half penny of rise on the above, as spaces being high or low determine.

Piece-hands.—Good or average men can make, easily, from thirty-six to forty shillings, (\$8.71 to \$9.68.) Interior hands run from twenty to thirty shillings, (\$4.84 to \$7.26.) Some of them are poor hands, those that can only make twenty shillings, (\$4.84.) Superior hands can make from forty five to fifty shillings, (\$10.89 to \$12.10.)

In the provinces, in some of the large towns, such as Manchester, thirty-three shillings (\$7.98) is the established wage. Piece prices, consequently, a shade lower; but all other things much in the same way as in London, &c. In most of the English provinces earnings are about thirty shillings (\$7.26) per week.

SCOTLAND.

The established wages in principal towns, twenty-seven shillings and six-pence, (\$6.65,) for fifty-four hours, for machine-men and compositors. Best class of men are generally on a wage of thirty shillings, (\$7.26.) Machine men, all nearly, thirty shillings. Piecework is paid at six-pence (12 cents) per thousand ems; all descriptions of work, except very wide-leaded books, which are one-fourth penny ($\frac{1}{2}$ cent) per thousand less. Stereotyped and small fonts the same as in London.

Piece-hands.—Good average men can easily make from twenty-eight to thirty shillings, (\$6.78 to \$7.26,) and where very diligent and attentive, thirty-five to forty shillings, (\$8.47 to \$9.68,) and sometimes more, but they seldom keep this up.

Boys, in case-room, after three or four years, can earn about ten shillings (\$2.42) per week, if they are active; and their earnings increased to fourteen shillings (\$3.34) a week, during the seventh and last year of their apprenticeship. Many of them, from the fourth year, get the half of their earnings.

In the machine-room, or press-room, they start with seven or eight shillings, (\$1.69 to \$1.95) per week, which gradually rises to, say, sixteen shillings, (\$3.87,) during the last weeks of apprenticeship. Little boys, not apprentices, from four to seven shillings, according to work; some as high as ten shillings—pointers.

Girls in machine-room, earn from four to eleven shillings, (96 cents to \$2.66,) according to ability. Those earning eleven shillings per week are they who point the sheet on the second side of platen machines.

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WAGES IN ENGLAND.

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MECHANICAL AND FARM LABOR IN ENGLAND.

Statement showing the rates of wages paid for mechanical and farm labor in the year 1874

Mechanics.	Durham.	Middlesex.	Nottingham.
Blacksmiths.....	\$1 30 per day ..	\$1 30 to \$1 68 per day...	\$0 45 per hour.
Bricklayers and masons	1 44 per day ..	1 44 to 1 92 per day...	16 per hour.
Cabinet-makers	1 32 per day ..	1 44 to 1 92 per day...	14 per hour.
Carpenters	1 32 per day ..	1 44 to 1 68 per day...	15 per hour.
Coopers	1 10 per day ..	1 68 to 1 92 per day...	17 per hour.
Miners	1 36 per day ..	Generally by the job ..	1 21 per day.
Machinists	1 32 per day ..	1 68 to \$1 92 per day ..	1 45 per day.
Painters	1 42 per day ..	1 44 to 1 68 per day ..	14 per hour.
Shoemakers	90 per day ..	1 41 to 1 68 per day ..	17 per hour.
Stone-cutters	1 44 per day ..	1 41 to 1 92 per day ..	1 09 per day.
Tailors	1 30 per day ..	1 30 to 1 68 per day ..	1 21 per day.
Tanners	1 30 per day ..	1 41 to 1 92 per day ..	1 33 per day.
Tinsmiths	1 20 per day ..	1 44 to 1 92 per day ..	1 21 per day.
Wheelwrights	1 32 per day ..	1 44 to 1 92 per day ..	14 per hour.
FARM-LABOR.			
Experienced hands... { Summer ..	\$4 per day ..	2 40 to 3 84 per week	4 84 to \$5 56 per week.
Ordinary hands..... { Winter ..	64 per day ..	2 40 to 2 88 per week	4 84 to 5 56 per week.
Common laborers at other than farm-work, for six days only ...	64 per day ..	1 92 to 2 88 per week	4 35 per week.
Female servants	40 per day ..	1 92 to 2 40 per week	4 41 per week.
PRICE OF BOARD.			
October, 1874 { For workmen	70 per day ..	32 per day ..	84 per day.
{ For workwomen ..	4 80 per month	40 00 to \$100 00 per year	72 to \$48 40 per year.
October, 1874 { For workmen	3 40 per week	.....	2 90 to 3 39 per week.
{ For workwomen ..	2 40 per week	.....	1 45 to 1 94 per week.

* Working five days only, and for the sixth day, 72 cents.
In Saint Helens, Lancaster, ordinary farm-laborers receive 84 cents per day.

CHIEF MANUFACTURING TOWNS OF GREAT BRITAIN.

In previous pages statements have been presented showing the wages or earnings of work people in various mills and factories of the United Kingdom, classified by industries. The prices of factory-labor therein given were chiefly those prevailing in 1871, and which were kindly furnished to the author by officials of the British government. It is now proposed to present statements, classified by towns, showing the rates of wages, which were obtained personally by the author in the year 1872 and by consuls of the United States and others at subsequent periods.

In presenting the prices of labor in the chief towns of the kingdom it is neither intended to submit historical statements in regard to the rise, the progress, or the present condition of what may be regarded as the leading industry of each town or manufacturing center, nor to consider the causes which rendered each place eminent in its peculiar branch of industry. Interesting as such a historical and statistical sketch might be of the manufactures of Manchester and Birmingham, of Leeds and Sheffield, of Bradford and Nottingham, of Glasgow and Dundee—and it must be confessed that the temptation to pursue such a course is unusually strong—there is neither time for its preparation nor space in these pages for its presentation. A passing allusion to the chief industries of the above and other manufacturing towns of Great Britain is all that is necessary; any more detailed statement would be a reflection upon the intelligence of the larger part of Anglo-American readers. Indeed, the leading productions of some of these manufac-

turing centers are so well known that towns in the United States largely engaged in similar industries are frequently designated as the counterparts of the former. Thus, Lowell is the Manchester, Pittsburgh the Birmingham, and Paterson the Macclesfield of America; while, owing to the recent rapid growth of iron-ship-building in Wilmington, Chester, and Philadelphia, the river Delaware is designated as "the Clyde of America."

LIVERPOOL.

Population in 1871, 493,405.

Liverpool, the principal sea-port of England, situated on the river Mersey, four miles above its mouth, is celebrated for its great commercial importance and its immense trade with every part of the world. The vast amount of English merchandise which finds a market in the United States is chiefly shipped from this port, the value of which, in the year 1871, reached £26,310,743, (\$128,941,230.) In the beginning of the eighteenth century Liverpool possessed only one dock, but now its magnificent and commodious docks cover a space of 400 acres. Ship-building,* both iron and wooden, is extensively carried on at Birkenhead, on the opposite side of the river, where the engineering works of Messrs. Laird and others are situated. The manufactures of the town of Liverpool, however, are but limited, while the products of the consular district, which, during the year ended September 30, 1872, were exported to the United States amounted to nearly \$38,000,000, as indicated by the following table:

EXPORTS TO THE UNITED STATES FROM LIVERPOOL.

Statement showing the value of exports to the United States from the Liverpool consular district during the year ended September 30, 1872.

Articles.	Value in U. S. gold.*	Articles.	Value in U. S. gold.*
Iron	\$7,052,940	Rags, waste paper, &c.	\$850,212
Steel	1,075,650	Fruit	403,715
Hardware	97,515	Beer	262,450
Tin	468,298	Coal	239,809
Tin-plates	13,949,396	Earthenware	107,146
Wire-rope	127,692	India rubber	189,244
Wool	3,840,763	Staves	61,749
Chemicals	3,215,769	Miscellaneous	3,487,602
Leather and skins	1,539,439		
Salt	941,507	Total	37,860,903
Dry goods	944,466		

* Although the rates of wages and cost of subsistence in the United Kingdom which appear on preceding and subsequent pages are computed at the rate of \$4.84, United States gold, per pound sterling, and the shilling at 21 cents, yet, in the above and other tables of exports from manufacturing towns, the pound sterling is computed at the rate now established by law, viz, \$4.8665.

RATES OF WAGES IN LIVERPOOL.

Mechanics and skilled artisans, in October, 1873.—The wages of engineers, boiler-makers, shipwrights, mast and block makers, printers

*SHIPBUILDING ON THE MERSEY IN 1873.—The five principal ship-building firms on the Mersey turned out twenty-nine steamers and seven iron sailing ships during the year 1873, the total tonnage of the steamers amounting to 33,507 tons, and of the sailing-ships 12,164 tons. Messrs. Laird Brothers built eleven steamers, whose tonnage amounted to over 13,000 tons, and six gun-boats, aggregating nearly 2,000 tons. Messrs. Bowdler, Chaffler & Co. built seven steamers, amounting to 7,000 tons. Messrs. Thomas Royden & Sons launched five screw-steamers of the total amount of 5,407 tons, and four iron sailing-ships, aggregating 6,764 tons. R. & J. Evans & Co. built four steamers and one iron sailing-ship, amounting to 7,300 tons. Messrs. Potter & Hodgkinson built two steamers and two sailing-ships of iron, aggregating 5,600 tons.

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POOL.

Liverpool consular

	Value in U. S. gold.*
.....	\$850,212
.....	463,715
.....	262,480
.....	239,889
.....	107,146
.....	189,344
.....	64,749
.....	3,467,632
.....	37,860,903

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and lithographers, and of some of the men in the building trades, as painters, joiners, masons, plumbers, &c., vary from 5s. 6d. to 6s. (\$1.33 to \$1.45) per day of nine working-hours, or from 33s. to 36s. (\$7.98 to \$8.70) per week of fifty-four hours.

The wages of pressmen in oil mills, of the higher class of workmen in chemical works, sugar-refineries, &c., vary from 27s. 6d. to 32s. 6d. (\$6.25 to \$7.86) per week, the hours varying from ten to twelve per day.

The wages of day laborers in Liverpool vary from 21s. to 25s. (\$5.08 to \$6.05) per week. In some of the smaller towns they range from 18s. to 22s. 6d., (\$4.35 to \$5.44.)

Domestic servants.—The wages of housemaids and waitresses vary from £10 to £20 (\$48.40 to \$96.80) per annum, (of course board found;) of cooks from £12 up to £40, (\$58.08 to \$193.60;) of gardeners, £1 to £1 10s. (\$4.84 to \$7.26) per week, living out of the house at their own cost. Footmen and coachmen's wages vary too much to give any fixed rates.

WAGES IN ENGINEERS' SHOPS, IRON-WORKS, ETC.

The following statement, showing the rates of wages paid by the general association of master engineers, ship-builders, and iron and brass foundries, was kindly furnished by Colonel Clay, of Clay, Inman & Co., proprietors of the Birkenhead Forge, under date of October 29, 1873:

Statement showing the weekly rates of wages paid to workmen in different classes of work in the district of Liverpool during the second quarter of the year 1873.

Class of work.	Employers.				
	No. 7.	No. 9.	No. 11.	No. 12.	Average.
Smiths	\$8 32	\$8 32	\$8 46	\$7 82	\$8 23
Strikers	5 42	5 50	5 08	5 18	5 30
Angle-iron smiths	8 94	9 10	8 46	8 53	8 70
Platers	5 32	.....	.....	.....	5 32
Helpers	8 32	8 71	9 10	8 50	8 43
Riveters	4 64	.....	.....	.....	4 64
Boilers-up	7 74	7 51	7 74	7 50	7 62
Turners	7 74	6 29	6 29	6 07	6 60
Coppersmiths	7 98	8 32	8 24	8 12	8 16
Brass-finishers .....	.....	.....	.....	.....	8 11
Fitters and erectors	7 86	7 74	7 62	7 86	7 74
Planers .....	.....	7 62	7 62	7 40	7 72
Shapers	6 77	7 50	7 74	7 74	7 44
Slotters	6 77	6 77	7 50	6 33	7 08
Drillers	6 77	7 26	.....	6 33	6 61
Iron-molders. { Sand	5 94	6 05	5 80	6 05	6 71
..... { Loom .....	.....	8 71	8 71	8 71	8 71
Brass-molders .....	.....	9 68	9 43	9 43	9 51
Core-makers .....	.....	10 16	8 83	8 01	9 00
Pattern-makers .....	.....	7 50	7 01	7 32	7 28
Carpenters and joiners	8 47	8 32	8 22	8 10	8 28
Grinders	7 98	8 32	7 50	7 32	7 74
Engine drivers and tenters	7 50	8 47	7 50	7 08	7 65
Calkers	6 05	5 32	5 08	5 56	5 50
Foundry-dressers	6 11	.....	.....	.....	6 11
Foundry-laborers .....	.....	6 29	6 29	6 29	6 29
Ordinary laborers	4 84	5 32	5 32	4 69	5 04
.....	4 50	4 35	4 50	4 69	4 55
Average wages of skilled workmen in all the shops .....	.....	.....	.....	.....	7 70

WAGES AT THE CANADA WORKS, BIRKENHEAD.

Average rates of wages paid to skilled workmen at the Canada Works, Birkenhead, in the sixteen years from 1854 to 1869, inclusive.

Year.	Fitters.	Turners.	Coppersmiths and braziers.	Grinders.	Smiths.	Boiler-smiths.	Bricklayers.	Saddlers and belt-makers.	Forgemen.	Painters.	Molders.	Joiners and pattern-makers.	Boiler-makers.	Average.
1854	s. d. 29 4	s. d. 31 6	s. d. 27 0	s. d. 31 0	s. d. 34 0	s. d. 34 0	s. d. 26 0	s. d. 36 6	s. d. 23 0	s. d. 32 0	s. d. 31 6	s. d. 30 3	s. d. 31 6	s. d. 29 11
1855	29 3	30 3	27 0	31 5	34 0	34 0	27 0	37 0	23 0	31 6	29 6	31 0	30 3	29 11
1856	29 0	31 3	28 10	32 0	35 0	34 0	26 0	36 0	24 0	33 0	29 0	30 6	30 5	29 11
1857	30 6	33 9	29 0	34 0	34 0	34 0	26 0	33 6	26 0	33 0	28 2	32 6	30 5	29 11
1858	30 10	31 6	28 0	34 0	30 0	32 6	34 0	27 0	25 0	31 6	29 6	31 0	30 3	29 11
1859	27 6	31 0	30 0	22 0	29 6	33 0	31 0	26 0	25 0	31 6	29 6	31 0	30 3	29 11
1860	27 6	31 0	30 0	26 0	30 3	33 8	34 0	27 0	33 0	27 0	31 6	29 6	31 0	30 3
1861	27 6	31 0	29 6	25 6	30 0	33 0	34 0	27 0	36 0	26 0	32 6	30 0	31 6	30 3
1862	27 10	32 0	28 6	27 0	31 0	34 0	34 0	27 0	35 0	25 6	33 0	30 0	31 9	30 11
1863	28 0	31 6	28 1	27 6	31 0	34 0	34 0	27 0	35 0	25 6	33 0	30 0	31 9	30 11
1864	28 0	31 6	31 6	27 6	30 6	32 0	34 0	27 0	34 6	25 6	33 0	30 0	31 9	30 11
1865	28 1	31 5	31 7	32 0	30 3	34 6	31 0	25 6	33 0	25 6	33 0	29 0	31 3	30 6
1866	31 0	31 6	32 6	28 6	31 9	36 0	34 0	24 0	33 0	27 6	32 3	30 6	34 2	31 7
1867	32 6	31 0	32 0	32 0	32 9	37 0	34 0	24 0	33 0	24 6	34 6	31 4	32 0	31 7
1868	31 0	30 0	32 0	32 6	31 6	36 0	34 0	25 0	32 6	24 0	34 2	30 9	32 0	30 5
1869	30 0	29 4	30 9	23 0	30 0	36 0	34 0	26 0	32 6	23 0	31 6	30 0	32 0	29 10
Average in U.S. gold	\$7 02	\$7 33	\$7 34	\$6 45	\$7 44	\$8 26	\$8 22	\$6 07	\$7 27	\$6 11	\$7 86	\$7 11	\$7 17	\$7 24

The above table, extracted from Mr. Brassey's "Work and Wages," exhibits but slight variations in wages during the sixteen years prior to 1870. The average of the thirteen different occupations for the years 1854 to 1857 and from 1860 to 1864 was almost identical, while in 1869 there was a slight decrease.

Nor does the general average in the sixteen years, viz, 29s. 11d. (\$7.24) vary greatly from the rates in 1872, when the author visited the works, or from those of 1873, as shown in the table on the preceding page, in which the wages of all the skilled workmen averaged 31s. 10d., (\$7.70) an advance of but 1s. 11d. (46 cents) per week, or about 6 per cent. The increase in the cost of labor, however, is chiefly owing to the reduction in the hours of labor, which, as before stated, is equivalent to about 10 per cent.

The weekly wages paid in the above works, as stated by Mr. Laird, of Laird & Brothers, October 14, 1872, were as follows: turners, 30s. to 32s.; riveters, 34s. to 36s., but do not work all the time; ordinary machinists, fitters, &c., average 26s.; pattern-makers, 34s. to 36s.; laborers from unskilled to skilled, 18s. to 23s.; ship-carpenters, 6s. per day in shop; 7s. outside.

Mr. Laird stated the advance in the rates of wages paid in 1872 over those of 1867 was 10 per cent. on the higher and 15 per cent. on the lower rates. From 800 to 900 men were at that time employed in the works.

BIRMINGHAM.

Population in 1871, 343,787.

In addition to the various articles of iron manufacture for which Birmingham was, at an early period, celebrated, brass goods began to be produced about the seventeenth century. This branch now forms one of the most important in the town. Every description of article in this

metal is produced in immense quantities. Metallic bedsteads in brass and iron, lamps, chandeliers, gas brackets, cornice-poles, ornamental railings, metallic picture-frames, curtain-bands, as well as more common articles, afford employment to many thousands of men, women, and boys. The buckle trade, formerly so large, has entirely disappeared, and metal buttons are produced in but small quantities. The glass trade, including stained glass for windows, is very successfully prosecuted, and in the vicinity of the town is the gigantic establishment of Messrs. Chance, who supplied the whole of the material required for the glazing of the Crystal Palace for the exhibition of 1851.

A writer (Leland) in the time of Henry VIII, speaking of Birmingham, says, (*ipsissima verba et litera*.)

The beauty of Birmingham, a good market towne in the extreame parts of Warwickshire, is one street going up alonge almost from the left ripe of the brooke, [the Rea,] up a meane hill by the length of a quarter of a mile. I saw but one paroch church in the towne. There be many smithes in the towne that use to make knives and all manner of cutting tooles, and many lormers (saddlers) that make bittes, and a great many maylors; so that a great part of the towne is maintained by smithes, whoe have their iron and sea-cole out of Staffordshire.

Camden, who wrote half a century later, describes it as "swarming with inhabitants and echoing with the noise of anvils."

Electro-plating, which has sprung up entirely within a recent period, is now carried on to an almost incredible extent. The manufactory of Messrs. Elkington, elsewhere mentioned, is the parent establishment in the town. Jewelry, in the fabrication of which female labor largely enters, is made in great quantities. The *papier-maché* trade is extensive. Such articles as sofas, tables, and other kinds of furniture, in addition to the smaller kinds, such as desks, work-boxes, and inkstands, are manufactured and ornamented with figures, flowers, and landscapes, and inlaid with pearl. Fire-arms in great numbers are made in Birmingham. The gun trade, first stimulated by government patronage in the time of William III, retains its early reputation. The factory of the Birmingham Small-Arms Company is largely employed in executing orders from foreign governments. A proof-house, where all gun-barrels manufactured are required to be proved, was established by an act of Parliament in 1813. Metal-rolling, wire-drawing, and pin-making are extensively carried on, while Birmingham stands unrivaled in the manufacture of steel pens.

Mr. Consul Gould furnishes the following interesting information in regard to this important industry:

Steel pens are now made at fourteen factories in Birmingham, and the aggregate production is 15,000,000 per week. There are not less than 2,500 persons employed in the manufacture, producing an aggregate of 750,000,000 annually.

Joseph Gillott, the famous steel-pen maker, died in this town January 6, 1872, at the age of seventy-one. Probably no name has been more widely known for the last forty years than that of this man. Every school-boy in the Old and New World has become familiar with the articles which bear his name. At the time of his death it is estimated that his establishment was producing 150,000,000 pens annually, averaging a pen per day. If we estimate one-half this number as the average for the last thirty years, it will give the enormous aggregate of 2,250,000,000 pens sent out by one man.

It has been denied that he was the first to produce the steel pen, which was originally in the round or barrel form, the two edges of the strips of steel being brought together and forming the slit. These were produced by hand, but Mr. Gillott conceived the idea of manufacturing them by machinery, and his establishment has long been one of the attractive places for persons visiting Birmingham.

Joseph Gillott began life poor, his calling being that of a grinder of cutlery at Sheffield. He came to Birmingham about fifty years ago and followed the business of steel-toy maker for some time, and about thirty-five years since began to make the steel pens which have caused his name to be so well known to the world. These pens

head, in the six-

Joiners and pattern-makers.	Boiler-makers.	Average.
s. d.	s. d.	s. d.
31 6	31 0	30 3
31 0	31 0	30 3
30 6	30 6	30 5
32 6	30 4	30 4
32 6	30 6	30 6
30 6	31 0	30 8
31 6	31 6	30 3
31 0	31 0	30 2
31 6	31 6	30 4
31 3	31 3	30 6
31 9	31 9	30 11
31 2	31 2	31 7
32 0	32 0	30 8
32 0	32 0	30 10

and Wages, 7 years prior to or the years while in 1869

z, 29s. 11d. visited the preceding and 31s. 10d., about 6 per y owing to, is equiva-

r. Laird, of 30s. to 32s.; machinists, orers from y in shop;

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at first were clumsy and stiff and poorly adapted for writing purposes. One of his first devices to remedy the stiffness was the small slit on each side of the point. With the use of dies came the various forms which have since been furnished. The first pens sold for fifty and seventy-five cents each, and for a long time the value was twenty-five cents. The price has gradually decreased, till at the present time they are sold as low as one cent per dozen.

Josiah Mason, also a manufacturer of steel pens, is still living at a greater age than that of Mr. Gillott, and his history is quite similar to that of his compeer, he having started from the most humble circumstances, though he is now regarded as the richest man in this wealthy town. Having no children of his own, he has devoted the whole of his immense wealth for the benefit of the children of the poor. His magnificent orphanage, costing a half million of dollars, is one of the ornaments of our suburbs, and a whole square has been purchased by him in the heart of the city, where elegant and costly buildings are to be erected for a college for poor young men. This immense pen establishment is to be left in the hands of trustees, who are to devote the proceeds to the support of his beloved schools. Mr. Mason's name has not become so intimately associated with steel pens as that of Mr. Gillott, from the fact that he has chiefly manufactured for other parties, whose names have appeared upon the products.

Each establishment manufactures three hundred and fifty tons annually. The celebrated Perry, of London, has had his stamp upon Mr. Mason's pens from the first, and they have been justly esteemed as equal to any in the market.

EXPORTS FROM BIRMINGHAM TO THE UNITED STATES.

Comparative statement of exports from the consular district of Birmingham to the United States for the respective years ending September 30, 1873 and 1872.

[The pound sterling computed at \$4.8665.]

Description of goods.	1873.	1872.
Hardware, steel, and iron	\$1,218,892	\$1,924,982
Sheathing-metal	84,385	117,383
Iron cotton-bale hoops	179,458	111,383
Anvils and vises	19,869	103,641
Tin-plates	119,194	104,788
Chains, hoes, and scythes	432,715	416,456
Saddlery and skins	148,166	181,954
Guns and implements	659,750	673,442
Needles and buttons	450,825	471,221
Watches and materials	36,833	42,924
Chemicals	147,101	133,638
Cotton and silk goods	61,506	167,779
Boot materials	61,378	68,434
Glass, sheet and ware	283,182	273,109
Pens and tips	99,418	83,359
Jewelry and fancy-goods	344,117	484,569
Optical	30,604	37,146
Candle-lights	32,152	39,561
Nickel and cobalt	4,036	22,296
Jet, real and imitation	64,160	16,443
China ware and Parian	122,072	78,303
Miscellaneous	19,694	
Total for Birmingham	4,716,765	5,400,242
Leicester agency	100,132	521,011
Kidderminster agency	196,673	947,902
Wolverhampton agency	519,453	689,958
Redditch agency	640,384	672,710
Total from Birmingham and districts	7,463,413	8,531,823

WAGES IN BIRMINGHAM.

On previous pages, in the classification by industries, the wages paid in Birmingham are given. The rates in some branches of manufacture were personally obtained from the proprietors of the shops, factories, and works indicated, and verified by conversations with the more intelligent workmen.

Engineering-works.—Mr. May, of May & Fountain, engineers, took particular pains to afford full information in regard to the wages paid in iron-founding and machine shops, as they are designated in the United States. Fitters, turners, smiths, &c., best men, earn 36s. per week, a very few as high as 40s.; ordinary machinists, 28s.; inferior machinists, 24s. to 26s. Those receiving but 24s. have not served a regular apprenticeship. Average of the whole shop, about 30s.; laborers, somewhat skilled, 18s. to 24s.; laborers, unskilled, 15s. to 18s. This firm does not employ society men. In shops employing society men only, the average rate is about 32s., some of the best earning as much as 40s. Young men, not so well skilled, earn 25s. per week.

A "society man," a molder of considerable intelligence, working in another establishment, gave the following as the wages in shops employing society men: Molders, 34s. per week of 54 hours, a few obtain but 32s.; fitters, 30s. to 32s. A few superior men get more. Average of all except molders, 30s.; laborers assisting in putting up machinery, 20s.

Harness-factory.—Messrs. Ashford & Winder furnished the following information in regard to the earnings of their work-people: Ordinary workmen earn from 24s. to 26s. per week; best workmen earn from 28s. to 30s. per week; girls, 8s. Men on saddles, piecework, after paying women to help, earn about 40s. Carriers, on piecework, earn from 50s. to 60s. These last save nothing, however, some being out of money before the week is over, owing to intemperance. The sewing is chiefly done by hand. They have one sewing machine and are about to order another. They prefer those of Boston make.

In houses of working-people, girls were seen sewing traces, and at other harness work. A harness-maker, working in another shop, stated that he earns at piecework 26s. Men working by the week average not over 24s., or at most 25s. They find it difficult to support their families on such wages. Many leave off working at trades and become porters, because they can thus earn more money.

Silver-plated ware.—Messrs. Elkington & Co.'s manufactory of silver-plated ware is celebrated throughout the kingdom for the excellence of the workmanship and for the artistic taste displayed in the great variety of articles produced. The manager gave the earnings of the employes as follows: About 500 hands are employed, who work fifty hours net per week, mostly on piecework. Chasers earn from 40s. to 45s.; other workmen, from 35s. to 40s.; inferior, as low as 26s.; average of the whole, about 35s.

Gillott's Steel-Pen Works.—The employes are nearly all girls, who earn about 10s. per week.

Thimble-factories.—Small girls chiefly employed, who earn from 4s. 6d. to 5s. per week.

Other factories.—The average weekly wages of girls at other factory-labor is about 8s., some receiving as high as 10s.

Birmingham Small-Arms Company's Works.—These works are at Small-heath, some four miles from the city. About 1,000 men are usually employed, but when the visit of the author was made only 500 were at work, on a large order for the Russian government. Most of the men work under contractors, who pay from 30s. to 35s. per week for good hands; ordinary and inferior obtain less. Small boys receive 8s. per week; youths, 16s.; laborers, about 16s., but they usually work over-hours, and thus earn 20s.; tool-makers, 36s. to 40s., average about 38s.; grinders, 50s. to 60s., obtaining higher wages in consequence of the dangerous nature of the work.

WAGES OF LABORERS IN BUILDING TRADES.

Mr. George E. Jeffery, secretary of the Birmingham Master-Builders' Association, in a letter to one of the newspapers of that city, dated March 10, 1874, gives the following statement of the rates of wages paid to laborers in Birmingham for the preceding nine years:

For several years before 1864, and to May of that year, the rate of wages paid was 17s. per week of sixty hours.

In May, 1864, 18s. was paid per week of sixty hours.

In June, 1865, payment by the hour was commenced, and the rate per hour was advanced to 4d., the time worked fifty-eight and a half hours, or 19s. 6d. per week.

In May, 1867, time was reduced to fifty-six and a half hours, and wages advanced to 4½d. per hour, or £1 per week.

In May, 1868, the rate of wages paid was 4½d. per hour for fifty-six and a half hours, and this rate of wages and time continued till May, 1872, when, under the arbitration, conducted by Mr. R. Kettle as umpire, wages were advanced to 4¾d. per hour, and the time reduced to fifty-four hours, or to £1 1s. 4d. per week, which is the present rate of wages and time.

These figures show an advance of wages per hour in nine years at the rate of 40 per cent., and 5 per cent. more is now offered, making fifty-four hours, at 5d. per hour, or £1 2s. 6d. per week.

It is proper to state in this connection that Mr. Stephens, secretary of the laborers' association, asserted that the rate of wages was then but 16s. per week.

WOLVERHAMPTON.

Wolverhampton is situated in the great midland coal and iron mining district known as the Black Country, and has manufactories of almost every article produced from iron, steel, and brass. It is a place of considerable antiquity, although little is known of its history until the year 996, when Wulfrune, sister of Ethelred II, endowed a church and college here. The town was then called Hampton, and afterward Wulfrune's Hampton, which has since been corrupted to the present name. Wolverhampton depends mainly upon the manufacture of iron and hardware. The lock-manufacture is one of the oldest in the town, the famous Chubb lock being made here. Tin and japanned ware, hollow ware, gun-locks, safes, cut nails, tools, and implements, are also manufactured; and all these branches together with brass founding give employment to a large number of hands.

The report of the sub-inspector of factories for this district, in 1873, states:

In Wolverhampton and the Black Country, trade has been very good in almost all branches. Many new works have been opened, and old ones have been enlarged. One firm that in 1868 employed 272 hands, now employs 829; and another that at the same date had one factory with 540 hands, 280 of whom were females, has now three factories with 1,143 hands, of whom 504 are females. The tube trade in particular has made great strides within the last few years. The number of such factories has doubled since 1868; and, with one or two exceptions, all the factories then in operation have been enlarged. The demand for labor has consequently increased.

The following notes, in regard to wages in Wolverhampton, are from the author's note-book; those relating to the cost of subsistence and the condition of the working-people will appear in subsequent pages:

July 10, 1872.—Went to Wolverhampton, passing a succession of villages in the Black Country, the town of Dudley off to the left—all engaged in coal-mining or in the production of iron. Saw ruins of the old Warwick Castle, which, with the mines, belong to the Earl of Dud-

ley. The Earl works the mines and makes iron. His income is said to have been £600,000 in 1871, and it is estimated that in the current year (1872) it will reach £1,000,000. Visited large iron-works of Thorneycroft & Co., Wolverhampton. They pay the usual rates for puddling. Laborers in yard wheeling iron, &c., receive 16s. per week. Men who assist in rolling large iron get higher rates, some 4s. 6d., and a few 5s. per day. Women wheeling cinders earn 8s. per week. The firm had declined to employ women for such work, but of late, owing to the scarcity and high wages of men, have been obliged to engage them. The work, though very dirty and unsuitable for women, is not hard.

Coal now costs 13s. to 14s. per ton of 22 cwt. The firm owns mines, but can purchase coal which is mined nearer the works at lower rates than they can mine it.

A puddler employed in Jenks & Sons' iron and steel works says that his net earnings are only 30s. per week, viz: 4 tons at 11s.—14s.; less paid for helper, 4 tons at 3s. 6d.—14s.; net 30s. He says that he can lay up little or nothing.

Visited Chubb's lock factory; from 80 to 90 men employed; no machinery used. The locksmiths are highly skilled workmen. Men are engaged on piecework. Average weekly earnings 35s. per week. On consulting the books of the firm it was found that some of the most skilled men received last week 44s. each.

In other shops and factories: In engineering or machinists' shops the average wages is 30s. per week. A tool-maker earns at piecework 50s., pays assistant 7s. on the £1—18s. 9d.; net earnings 31s. 3d.

A hoe-maker who had gone to the United States, where he obtained higher wages, but owing to high prices of subsistence and the heat, had returned, has worked for one firm twenty-four years, and never lost time except from sickness. Receives 30s. and has to work all the time to live and support family of five children, none of them old enough to earn anything.

Girls in various branches receive from 7s. to 11s. per week.

SHEFFIELD.

Population in 1871, 230,946.

The enumeration of the various leading articles manufactured in Sheffield would fill many pages, and yet the principal productions can be expressed in two words, steel manufactures. This town was renowned for its knives in the time of Chaucer, and is still the chief seat of the English manufacture of cast, shear, and blister steel of all kinds, steel wire, cutlery and tools of almost every variety, railway and carriage springs and buffers, and many other kinds of steel and iron ware, as well as all classes of silver, silver-plated, electro-plated, German silver, britannia and other white metal goods. Britannia metal and the process of silver-plating were invented here.

The Cutlers' Company, known throughout the kingdom by its anniversary, called the "Cutlers' Feast," had its origin in the sixteenth century in certain trade regulations, wholly opposed to modern ideas, "Agreed upon by the whole fellowship of cutlers." It was incorporated by statute in the reign of James I. The list of trades given in the charter of the company enumerated only "knives, scissors, shears, sickles, and other cutlery."

An examination of the stock of one establishment, such as that of the Messrs. Rogers, would indicate a considerable increase in the variety

as well as the volume of articles manufactured from steel. It would be interesting to trace the progress of the leading industries of Sheffield, and to refer to some historical incidents,* but time and space forbid.

EXPORTS TO THE UNITED STATES.

The variety as well as the value of the manufactures of Sheffield, which find a market in the United States, are, to some extent, indicated in the following:

Statement showing the exports from Sheffield to the United States during the years ending December 31, 1872 and 1873.

Articles.	1872.	1873.
Steel.....	\$3,186,653	\$2,975,273
Bessemer-steel rails.....	1,829,019	1,861,658
Fish-plates.....	12,519	47,456
Tires.....	2,573	1,593
Axles.....	12,213	2,876
Crank-pins.....	2,915	2,865
Wheels and axles with Bessemer-steel tires.....	4,137	
Cast-steel tires.....	165,446	161,036
Tire-blooms.....	123,057	122,565
Springs.....	2,155	13,295
Axles.....	54,971	74,053
Frog-points, crank-pins, and pinions.....	3,692	2,528
Switches, railroad-chairs, &c.....	2,286	2,559
Cast-steel bells.....	1,941	3,469
Cast-steel rolls.....	335	1,893
Steel tube.....		3,438
Gun-castings.....		3,653
Iron, iron wire, iron fence, rods, &c.....	72,193	41,990
Telegraph-wire.....	187	1,358
Machinery.....	3,743	4,827
Hardware.....	2,502	2,819
Amids.....	9,245	5,612
Cutlery.....	1,246,949	1,514,385
Files.....	564,024	563,498
Saws.....	24,024	14,364
Other tools.....	111,014	94,599
Garden tools.....	5,943	5,855
Scythes, sickles, and grass-hooks.....	10,291	10,603
Sheep-shears.....	26,136	22,979
Plated goods.....	4,876	1,403
Trays and waiters.....	3,496	3,094
Umbrella-ribs.....	19,584	17,439
Hackle and gill pins, steel mills, flyes and docters or catfies web.....	6,173	4,296
Upholsterers' materials, viz., curled hair, cotton-warp seating, &c.....	56,118	51,994
Guns, gun-material, shooting-tackle, &c.....	38,779	27,348
Measures, measuring tapes and rules.....	17,537	15,997
Optical and mathematical instruments, spectacles, &c.....	7,529	7,268
Surgical instruments, bandages, &c.....	8,403	4,125
Salted skins.....	256,085	355,365
Granite tomb.....	477	
Grindstones.....	10,887	14,023
Miscellaneous.....	21,023	19,570
Total.....	7,962,440	8,035,284

* The poet Montgomery lived, was imprisoned, and died in Sheffield. The advocate of political as well as personal liberty, of free speech, and of a "free press," he was rewarded by a long imprisonment. The publication office of his paper "The Iris," (now a small provision shop,) his editorial room, his chair and his desk, as well as the house in which the latter years of the good old man were passed, and where, in 1851, he died, were visited with deep interest and veneration.—E. Y.

Carpenter
Bricklayer
Stone-mason
Stone-fixer
Laborer.

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	1873.
053	\$2,075,273
019	1,803,659
519	47,456
873	1,593
213	5,876
915	2,668
137	
446	161,036
057	122,565
112	15,459
071	74,050
692	2,508
286	9,559
941	3,462
335	1,893
	3,198
	3,653
193	41,290
187	1,358
743	4,827
502	2,819
245	5,813
949	1,511,385
034	563,498
024	14,364
094	94,599
913	5,875
291	10,003
126	22,970
876	1,403
496	3,094
581	17,439
172	4,206
118	51,994
779	27,348
537	15,997
829	7,268
403	4,125
685	355,363
477	
887	14,023
023	19,570
440	8,035,884

The advocate
press," he was
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WAGES IN ENGLAND.

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RATES OF WAGES IN 1872.

The earnings of workmen in the mechanical trades and in some of the iron and cutlery works of Sheffield, in 1871, are given on previous pages. In addition thereto the following statements are presented :

Table showing the mean wages of mechanics and other laborers per week, in United States gold.

Class of labor.	Wages.	Class of labor.	Wages.
Mechanics:		Engineers' tools—Continued.	
Blacksmiths	\$6 53	Grinders	\$7 62
Carpenters	7 26	Files	6 53
Masons	7 74	Sheep-shears	
Painters	6 53	Forgers	9 68
Plasterers	7 02	Strikers	6 78
Shoemakers	5 32	Grinders	9 80
Boiler-makers	6 53	Hammer-makers:	
Wheel and mill wrights	7 74	Forgers	9 68
Carters	5 08	Strikers	7 26
Clerks in railway-offices	6 05	Razors:	
Slaters, 7d. per hour, 53 hours per week	7 26	Forgers	7 26
Slaters' assistant, 5d. per hour, 53 hours per week	5 32	Grinders	9 44
Table-cutlery:		Butlers	6 78
Table-blade forgers	7 19	Silver-plated ware:	1 63
Table-blade hatters	6 69	Silversmiths	
Table-forks, steel:	5 34	Chasers	7 87
Forgers	6 29	Engravers	7 87
Grinders	7 87	Burnishers } Women	9 68
Files, boys and girls	2 05	} Girls, 12 to 16 years	3 03
Pocket-cutlery:		Butlers } Women	1 82
Pocket-blade forgers	6 69	} Girls, 12 to 16 years	3 39
Grinders	7 26	White-metal ware:	1 82
Hatters	6 05	Spinners	8 82
Saws:		Putting together	7 09
Saw-makers	7 02	Castors and stampers	7 50
Saw-grinders	8 47	Butlers } Men	6 41
Handlers	6 78	} Women	2 90
Rubbers, women	2 18	Women-casters	2 12
Scissors:		Girls, buffers and cleaners	1 45
Forgers	6 05	Women in warehouse	2 54
Grinders	8 83	Burnishers, women	2 90
Files	0 41	Files:	
Putting together	6 41	Forgers	13 31
Burnishers, women	1 04	Strikers	9 68
Edge-tools:		Grinders	12 71
Forgers	10 16	Cutters	7 56
Strikers	7 74	Steel:	
Hardeners	6 78	Melter	12 10
Grinders	10 20	Puller-out	7 02
Engineers' tools:		Cokers	4 46
Forgers	7 87	Pot-maker	9 08
		Converting-furnace men	4 88

Builders' Association wages in November, 1873.

Carpenters	15 cents per hour.
Bricklayers	15 cents per hour.
Stone-masons	16 cents per hour.
Stone-fixers, (trimmings, &c.)	18 cents per hour.
Laborers	10 cents per hour.

The following extracts from the author's note-book present some data in regard to wages in Sheffield. Those relating to cost of provisions and rent will be found on subsequent pages.

July 12, 1872.—Visited the extensive steel-works of Messrs. Thomas Firth & Sons, and was courteously shown through every part by Mr. Firth, jr., who explained all the processes and afforded information in regard to wages, &c.

Head-roller works by the cwt. and earns from £3 to £4 per week. At melting, five men employed at a fire; one receives 40s., two 28s. each, and two 19s. each per week. Hammer-men from 30s. to 40s., la-

borers more or less skilled from 19s. to 21s., average, 20s. Small boys from 6s. to 8s., large boys or youths, who assist in rolling, receive up to 15s. and even 16s.

Swedish iron is largely used, especially for tools. For other work and for some of this, there is an admixture of best English iron, selected brands.

July 13.—In company with Dr. Webster, United States consul, was shown through the celebrated cutlery works of Messrs. Rogers & Sons.

Grinders receive about 60s. per week, but having to find stones and tools, they net about 45s. per week. Owing to precautions taken, this work is not so destructive to health as formerly.

Average earnings of the men engaged in the various kinds of work range from 28s. to 30s., some earn 35s.

In some branches, such as forging pocket-knife blades, two men work together, and at piecework each can earn 7s. 6d. per day, but as the work is hard, they are unable to labor all the week, averaging only four days, and earning but 30s.

In Laycock's hair-cloth factory the girls who weave hair-cloth earn 8s. per week.

Some men who do work for large establishments by contract, pay men from 28s. to 30s. and earn from £5 to £6 per week; but these are really contractors or small manufacturers, and must not be classed with men who work at fixed rates.

Laborers in Sheffield earn from 18s. to 19s.

Carters, drivers of teams carrying steel and hardware to railway-stations, or driving for manufacturers, get from 20s. to 22s.

PROSPECTIVE DECLINE IN WAGES.

It has been seen from statements presented on preceding pages that there has been a considerable reduction in wages in the iron and coal-mining industries from the maximum rates of 1872, but a movement has been made looking to a reduction in iron-foundries, engineering-shops, and other branches, or, in other words, an increase in the hours of labor. A return to the old system of ten hours per day is proposed. The following extract from an article in the London Times of December 21, 1874, more fully explains the proposed change:

A very important step is being taken by the directors of the Atlas Works, John Brown & Co., one of the largest manufacturing concerns in Sheffield. A few weeks since they discharged a large number of their workmen, and reduced the wages of others by 12½ per cent. They are now about to make a change more important than any yet carried out. A notice has been posted in the works announcing that from the 4th of January the wages of the engine-fitters, the hammer-drivers, and the boiler-fitters will be reduced 10 per cent., and those of the laborers in the engineer's, boiler, foundry, and planing departments will be reduced by a similar amount. The time of the laborers in the steel, spring, forge, nail, and tire mills and hammer-shops will be altered to fifty-nine hours instead of fifty-four as at present. The object of the notice clearly is to endeavor to bring about a return to the old system of working ten hours a day. In departments where this cannot be done the wages of the men are to be reduced 10 per cent. Thus, in the engineer's, boiler, foundry, and planing departments the skilled workmen are under the fifty-four-hour system. While this continues it is obviously useless to keep the laborers employed fifty-nine hours, and consequently the wages of the whole of them in these departments are to be reduced 10 per cent., which is considered equivalent to the difference between fifty-four and fifty-nine hours. But in the steel, spring, forge, hammer-shops, and mills it is possible to increase the working hours of the laborers to fifty-nine, because the skilled artisans work night and day turns. In all these departments, therefore, so far as the laborers are concerned, the fifty-nine-hours system is to be introduced. The proposed change is one which will strike a severe blow at the nine-hour movement, but in the present condition of trade it is not likely the men will offer any very serious opposition to it. To the introduc-

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tion of that movement the directors, John Brown & Co., attribute very much of the present depression in the Bessemer steel, railway, and other heavy departments. It is said that the loss of four working hours per week has resulted in an increase in the cost of productions of fully 10 per cent. This fact, coupled with the keenness of continental competition, makes it almost impossible for Sheffield makers of railway and other heavy-class goods to successfully compete with Belgian houses, for wages in Belgium are not so high as they are in England, and the men work ten hours a day. There is no doubt that the example set by John Brown & Co. will be followed by all the other large works at Sheffield, and that ultimately the skilled workman, the engineers among the number, will be asked to return to the fifty-nine-hour system. An attempt in this direction on a small scale has already been made at two works and with a successful result.

NOTTINGHAM.

Population in 1871, 86,621.

The invention of the stocking-frame in the year 1589 gave rise to one of the most interesting chapters in the history of mechanical and manufacturing industry. It was upon this machine that, about a century ago, a coarse imitation of cotton-lace was first produced. The fabric was all woven from one continuous thread. A beautiful adaptation of the machinery enabled a fine silk net (point lace) to be made, employing for many years 1,500 frames in Nottingham and its vicinity. This fabrication has long since died out. Then the machine was so arranged that the material should be used altogether as warp. This very ingenious machine is still usefully and extensively employed. In 1809 a working-frame smith in Nottingham invented and patented the bobbinet-machine. A woman making lace on a pillow may produce three to five meshes or interstices in a minute. The first machine produced 1,000 meshes per minute. A square yard of the produce was sold for \$25. This machine, as originally constructed, though displaying great mechanical skill, was a complicated one. During the time that has since elapsed, incessant and remarkable ingenuity has been shown in simplifying and improving the machine, and plain net, of like quality to that first made, is now sold currently at 12 cents the square yard. A man turns off with ease 40,000 meshes per minute from this "mechanical pillow," as the bobbinet-machine was originally called by its talented inventor. The Jacquard apparatus has been since applied, at great cost, but with perfect success.

EXPORTS TO THE UNITED STATES.

The annual exportation of lace, hosiery, and other Nottingham goods are exhibited by the following statement, showing the exports from Nottingham to the United States during the years ending December 31, 1872 and 1873, the value being computed in United States gold:

Goods.	1872.	1873.	Goods.	1872.	1873.
Lace	\$1,027,885	\$3,389,687	Ribbons		\$16,386
Hosiery	1,080,825	1,033,058	Artificial flowers	\$1,389	
Corsets	47,460	66,205	Straw plait	9,655	796
Linens	86,569	33,084	Wooden goods	2,329	169
Quilts	3,751	1,136	Umbrellas	2,535	
White goods	206,935	61,945	Salted skins	301,977	330,801
Handkerchiefs	21,703	4,767	Plaster and cement	9,985	15,283
Muslins	125,324	42,154	Earthenware	11,316	3,126
Elastics	66,376	57,699	Machinery and iron goods	28,553	20,135
Vestments	68,577	69,202	Miscellaneous	7,111	9,049
Crape	555	27,154			
Silk	1,344	1,901	Total	5,114,124	5,178,130

Nottingham, although not visited in the order indicated, is noticed in this place, because it lies within the consular district of Sheffield.

The following data from the author's note-book relate only to wages. Information in regard to the rent of rooms, prices of provisions, and condition of the work-people will appear further on.

July 20, 1872.—Visited a number of lace-factories. In that of Mr. Thomas Hill the following wages are paid:

Earnings of men, piecework, average, Mr. Hill states, 28s. or over per week. His son thinks the average nearer 30s., and handed me the weekly pay-roll. The first twelve averaged exactly 30s., but those lower down received less. The average is between 28s. and 29s. Some men receive as high as 40s., while others, such as old men, earn as low as 10s. Those who average 28s. are the first class. The second class earn from 20s. to 22s. There is a wide difference between the efficiency of the first and second classes, owing partly to difference in machinery, the latter using old-fashioned hand-loom, the former the most improved machinery.

The average earnings of the young women is 9s. 6d. per week. A few earn from 11s. to 13s. per week, but they usually overlook a few others.

Small girls—known as "half-timers," because they are required by act of Parliament to attend school half the time—receive from 2s. 6d. to 3s. per week for such labor as they can perform.

The wages of work-people, with best class of lace-machinery, on lace-curtains, black-silk laces, &c., average from 35s. to 40s. per week of fifty-four hours for men, as given by Messrs. J. S. Wells & Co., lace-curtain manufacturers, and 40s., as stated by Mr. Hill.

In explanation of the high rates, Mr. Hill stated that the work commanded higher prices because it is injurious to the eye-sight, few men over fifty-five, or at furthest sixty, being able to work at it. Women employed in the same branch earn on an average 10s. 6d. per week. Good fitters engaged in these factories earn 40s. per week. Some men on machines making black-silk lace earn from £3 to £4 per week, but this is exceptional. The high wages obtained is explained by the fact that the work consists of some new pattern or style, which is at the moment fashionable and in great demand, but will probably soon go out of fashion and the demand consequently cease. Did not visit the works of Mr. Mundella, M. P., whom I saw in London.

Hosiery factory of Messrs. A. T. Stewart & Co., of New York.—The earnings in this factory are indicated by the following extract from a letter from Mr. T. G. Carver, agent in Nottingham, to the firm in Manchester, in reply to an inquiry addressed to him concerning the average earnings of the various hands employed in the factory there. The original was shown, and a copy handed me by Mr. Fox, resident partner at Manchester:

In reply to your question as to the earnings of our various hands for the last three months, I have to report as follows: Rotary half-hose hands, £2 4s. 5d. per week; shirt-body hands, girls mostly, £1 9s. per week; rib-top hands, £2 1s.; average earnings on Paget's patent frames, all girls, 16s. 6d.*

MANCHESTER.

Population in 1871, 383,843; Salford, 124,805—508,648.

This ancient town, the site of a fort built by the Celts, was named Mancenion, or "the place of tents." It was taken possession of about the year 72 by the Romans, who continued masters of it until their final departure from the island, some three centuries afterward. It fell into the hands of the Pictish invaders and was occupied successively by the Saxons, the Danes, (about 870,) and long afterward by the Norman Conqueror, by whom it was assigned to William of Poitou, who

* It is not pretended that the above are the regular or usual earnings of operatives in other factories in Nottingham, or elsewhere in England. In reply to my inquiries of Mr. Fox, in Manchester, and of Mr. Stewart, subsequently, in New York, it was stated that the men and women who earn such high wages are most superior in skill and industry.—E. Y.

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became the Lord of the Manor. It is not celebrated, however, for its historical associations, but from the fact that it ranks as the first manufacturing town in the empire, while in population it is only surpassed by London and Liverpool.

Manchester has been a place of trade from a very early period. In the reign of Henry VIII a law was enacted to remove the right of sanctuary from Manchester to Chester, on the ground that it caused the resort hither of idle and dissolute persons, to the injury of trade, both in linens and woollens, for which the place was distinguished, and which gave employment to many artificers and poor folks, whose masters, by their strict and true dealing, caused the resort of many strangers from Ireland and elsewhere with linen, yarn, wool, and other necessary wares for the making of which to be sold there. The disturbances in France and the Netherlands had tended not a little to the growth of manufactures in the town, by causing the settlement of French and Flemish artisans in Lancashire. Early in the last century, it was mentioned as a remarkable fact that in Manchester and Bolton alone goods to the amount of £600,000 were annually manufactured.

Manchester is the center of a great system of canals, and has railway communication with nearly all parts of England. The name of the town has from a very remote period been connected with industry and trade; but its present great importance is specially due to the magnitude of its cotton manufactures, the greatest in the world. It is mentioned as having maintained a trade with the Greeks of Marseilles. In 1552 an act was passed for the better manufacture of Manchester cottons; and in 1650 its manufactures ranked among the first in extent and importance, and its people were described as "the most industrious in the northern part of the kingdom."

Connected with the cotton manufacture are many important and extensive branches of industry, such as bleaching, printing, and dyeing works, manufactures of the various materials employed in those processes, and particularly the great establishments for the construction of steam-engines and machinery. Among these the Atlas Works and those of Sir Joseph Whitworth are the most prominent, while the extensive works in Oldham and Manchester for the production of cotton-machinery are well known in other countries. It is also the chief market in the world for the production of cotton yarn or thread, the supply of which passes through the hands of numerous resident foreign merchants, who export it to their respective countries, giving to Manchester in this respect a character quite unique among inland cities. The manufacture of silk and silk goods and of mixed cotton and silk fabrics is also largely carried on.

As Manchester is the seat of the cotton-trade of Great Britain, it may not be inappropriate to present here some data in regard to the extent of that vast industry:

In 1871 there were in Great Britain 2,481 mills for its manufacture, 38,218,758 spinning-spindles, including 3,523,573 doubling-spindles, 440,676 power-looms, employing in all 449,087 persons. The cost of the buildings and machinery about the trade is said to have amounted to £57,000,000, (\$277,390,500,) with a floating capital of £30,000,000, (\$145,995,000;) and there were 4,500,000 persons, in all its branches, dependent upon its prosperity for their livelihood. The total quantity of yarn exported in 1872 was 211,900,000 pounds weight, of the value of \$81,270,550; and the total quantity of calicos, cambrics, fustians, &c., was 3,535,100,000 yards, worth \$286,636,850. Besides these there were \$21,899,250 worth of lace and small wares, raising the local value to \$389,806,650. Such is the perfection, too, to which cotton-spinning

is carried, that on a self-acting mule a single thread has been produced measuring upward of one thousand miles in length and only weighing one pound.

To illustrate the great decline in the prices of cotton goods, owing to the introduction of improved machinery and the reduced price of raw material, the fact may be stated that a kind of calico which sold toward the close of the last century at 6s. a yard can be produced now at 6d. The average price per yard of goods exported in 1815 was 34½ cents; in 1825, 20½ cents; in 1835, 13 cents; in 1845, 6½ cents; in 1859, 6½ cents; and in 1871, 6½ cents. The average price of yarn exported, per pound, in 1815 was 3s. 7½d. In 1871 it was 13½d.

In this connection it may be interesting to present a statement of the number of spindles and amount of cotton yarn produced in Great Britain as compared with other cotton-consuming countries at the close of the year 1873.

Table showing the number of spindles and cotton consumed per spindle in the under-mentioned countries, with the pounds of cotton consumed per spindle and the total annual consumption, supposing the mills to be running full time.

Countries.	Number of spindles.	Pounds per spindle.	Pounds spun annually.
Great Britain, (1871).....	34,695,185	32	1,223,000,000
United States, (1874).....	*9,415,383	57	538,082,000
France.....	5,200,000	38	197,600,000
Zollverein.....	3,000,000	47	141,000,000
Russia.....	2,000,000	60	120,000,000
Austria.....	1,900,000	47	89,300,000
Spain.....	1,400,000	48	67,200,000
Alsace and Lorraine.....	1,700,000	38	64,600,000
Switzerland.....	2,000,000	25	50,000,000
Belgium.....	800,000	43	34,400,000
Italy.....	500,000	48	24,000,000
Sweden and Norway.....	300,000	60	18,000,000
Holland.....	230,000	43	9,890,000

* Furnished by B. F. Nourse, esq., of Boston.

WAGES IN COTTON-MILLS.

The reduction in the hours of labor and the increase of wages in cotton-mills are shown in the following table:

Statement showing the average weekly earnings of operatives in cotton-mills during the years 1839, 1849, 1859, and 1873.

Occupation.	Sex.	Week of 69 hours.		Week of 60 hours.	
		1839.	1849.	1859.	1873.
Steam-engine tenders.....		\$5 76	\$6 72	\$7 20	\$7 68
Warehousemen.....		4 32	4 80	5 28	6 24
Carding:					
Stretchers.....	Women and girls.....	1 68	1 80	1 92	2 28
Strippers.....	Young men.....	2 64	2 88	3 36	4 36
Overlookers.....		6 00	6 72	6 72	7 68
Spinning:					
Winders on self-acting mules.....		3 84	4 32	4 80	6 00
Piecers.....	Women and young men.	1 94	2 16	2 40	3 84
Overlookers.....		4 80	5 28	6 24	7 20
Reeling:					
Throttle-rulers.....	Women.....	2 16	2 28	2 28	3 00
Warpers.....		5 28	5 28	5 52	6 24
Sizers.....		5 52	5 52	6 00	7 20
Doubling:					
Doublers.....	Women.....	1 68	1 80	2 16	3 00
Overlookers.....		5 76	6 00	6 72	7 68

Other branches show the same ratio of advance.

The following statement was furnished by the proprietors of the cotton-mills of Messrs. Shaw, Jardine & Co., of Manchester, England, operating 250,000 spindles, and producing yarns from No. 60 to 220, sewing-cottons, lace-yarn, crape-yarn, and two-fold warp-yarns:

Average wages (per week of 59 hours) of persons employed in 1872.

Occupation.	Wages.	Occupation.	Wages.
Carding:		Spinning—Continued.	
Overseer.....	\$10 89	Male-spinners.....	\$13 31 to \$15 73
Second hand.....	7 26	Male-backside piecers.....	2 42 to 3 87
Drawing frame tenders.....	2 66	Repair-shop, engine-room, &c.:—	
Speeder tenders.....	3 14	Foreman or overseer.....	14 53
Grinders.....	5 32	Wood and iron workers.....	7 74
Strippers.....	5 32	Engineer.....	9 63
Spinning:		Laborers.....	5 32
Overseer.....	14 52		

Wages per week (59 hours) in cotton-mills in July, 1872.

Occupation.	Sex.	Wages.	Remarks.
Spinners.. { Fine	Men	\$9 60	Very few in Manchester ¹ nearly all self-acting. A cypher is a kind of piecer, &c., on a hand-mule machine; he helps the spinner.
{ Coarse	Men	8 16	
Cyphers.....	do	3 60	
Piecers, on self-actors.....	do	3 60	In a fine mill.
{ Fine	Women.....	2 40	
{ Coarse	Boys.....	2 28	
Piecers..... { Fine	Girls.....	2 16	
{ Coarse	Boys.....	2 64	
Overlooker.....	Girls.....	2 40	
{ Coarse	Man.....	8 40	
{ Fine	Boys.....	1 80	
Seavengers.....	Girls.....	1 44	
{ Fine	Boys.....	1 12	
{ Half time	Girls.....	96	
{ Half time	Boys under 13 yrs.	60	
Weaving:			
{ Men	Men	4 80	Minds two sail-cloth looms or four calico-loom.
{ Women.....	Women.....	4 08	
{ do	do	3 24	
{ do	do	3 12	
Winders.....	Men	8 64	Taking all sorts together.
{ Fine	Men	6 72	
{ Coarse	do	3 00	
Doublets.....	Women.....	2 88	

Average weekly wages (54 hours per week) in engineering-works, in July, 1872.

Trade.	Wages.	Remarks.
Boiler-makers.....	\$9 20	OVERTIME.—For the first four hours past the usual time each hour worked counts as 1½ hours, and for each succeeding hour it is reckoned as 1½ hours. No bonus or overtime is allowed, unless the full week of 54 hours is worked. This note applies to all the trades mentioned on this list.
Riveters.....	8 23	
Molders.....	8 23	
Pattern-makers.....	8 23	
Fitters.....	7 02	
Turners.....	7 02	
Machine-men—minders of slotting, drilling, and planing machines.....	5 32	
Blacksmiths.....	7 02	
Strikers.....	4 64	
Laborers.....	4 36	

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3 36 4 36

6 72 7 68

4 80 6 00

2 40 3 84

6 24 7 20

2 28 3 00

3 52 6 24

2 00 7 20

2 16 3 00

6 72 7 68

Weekly wages (54½ hours per week) in building-trades in July, 1872.

Trade.	Wages.	Remarks.
Plasterers	\$7 98	The plasterers are threatening to strike for fewer hours. Painters are paid by the hour, and in some small shops work 594 hours per week.
Painters	14*	
Plumbers	7 98	Bricklayers, bricklayers' laborers, masons, plasterers, and slaters work only from light to dark from the latter end of October to the beginning of March, and, except in the case of masons, receive 12 cents a day less.
Carpenters and joiners	7 98	
Bricklayers	8 71	
Bricklayers' laborers	5 56	
Masons	5 81	
Slaters	7 98	
	7 26	

* Per hour.

Weekly wages in miscellaneous trades.

Trade.	Wages.	Hours per week.	Trade.	Wages.	Hours per week.
Engine-drivers, &c.:			Binding:		
Drivers	47 to \$10 89	60	Folders and stitchers	\$3 39	55
Stokers	5 08 to 6 78	60	Binders	7 02	55
Cleaners	1 45 to 3 67	54	Finishers	8 71	55
Printing:			Baking:		
Compositors	7 98	55	Foreman	7 02	60
Compositors on newspapers	8 23	53	Second hand	6 78	60
Machine-men	7 98	55	Third hand	5 81	60
Machine-men on newspapers	8 23	53			

The foregoing tables furnish accurate data in regard to the rates of wages paid in various shops and factories in Manchester and vicinity in 1872. The investigations of the author made in this seat of the cotton industry related chiefly to the condition of the work-people, their habits, mode of life, and condition of their homes, and also to the cost of subsistence, the success of the co-operative stores, and their influence upon the members.

The wages paid in several well-known establishments were as follows:

In the works of Sir Joseph Whitworth & Co., where heavy and light machinery and machine-tools and steel-guns are made, the weekly wages of ordinary workmen range from 30s. to 32s., probably averaging, as in other manufacturing towns, 30s. Some of greater skill obtain higher rates, while inferior workmen receive less. Laborers in the works receive from 18s. to 20s.

Sir Joseph Whitworth is favorably known to American engineers, and his report in regard to various industrial establishments of the United States was a fair exhibit of such as he visited. An account of the aid which he offers to young men who have an inclination toward mechanical pursuits will appear on a subsequent page.

The works of Messrs. W. Higgins & Sons, manufacturers of cotton machinery, though not so large as that of Mr. Platt, at Oldham, is well known in the United States.* About 800 hands are employed.

*In this and other machine-shops, and in engineering works in various parts of Europe, one who, though an inexperienced, has visited such first-class works as those of Sellers & Co. and others in Philadelphia, of Corliss in Providence, and, indeed, in all our chief cities, especially the locomotive-engine works in Philadelphia, Paterson, Taunton, &c., is struck by the inferiority of the tools and machinery as compared with those of the United States, which are of the best class. There are exceptions, such as the Atlas Works, in Manchester. In iron-ship yards, however, such as that of Messrs. J. Elder & Co., and others, on the Clyde, the Tyne, the Mersey, and the Thames, although all are not of equal excellence, yet the larger number are thoroughly equipped with the best and most improved tools and machines.

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Machinists earn about 30s. on an average; boys from 6s. 8s.; laborers, 18s. Some men work by the piece, and earn more than 30s. They can earn 40s. per week if they work full time, which many here, as elsewhere, do not. "Blue Mondays," though less known than in some other industries and in other towns, are not unknown here.

Mr. Dodge, formerly of Cohoes, N. Y., who now makes files near Manchester, gives the following as the average rates of wages in machine-shops:

Turners and fitters, from 30s. to 32s.; planers, from 28s. to 30s.; shapers, also drillers, or those running drilling-machines, from 26s. to 28s.; laborers, from 16s. to 20s. Indeed, in machine-shops throughout the manufacturing towns of England, the average rate of wages for skilled hands is 30s., and of laborers 18s. per week.

Rochdale is another of the cotton-manufacturing towns in Lancashire, and the wages of operatives in cotton-mills and in machine-shops are substantially the same as in Manchester. The earnings of young women were stated to be 12s. per week, while some of greater experience and skill receive from 13s. to 14s. Half-timers, whose weekly wages were only 2s. 6d., now receive 4s. 6d., and some as high as 5s.; turners in machine-shops 28s., and some higher.

SEAT OF WOOLEN MANUFACTURES.

As Lancashire is the chief seat of the cotton industry, so almost the whole of the woolen trade is confined to the West Riding of Yorkshire. Leeds is the principal center and emporium of the woolen manufacture, and on its semi-weekly market days its celebrated Cloth Hall* is crowded with manufacturers and merchants, where the various kinds of woolen cloths, long celebrated for their excellence, change hands.

Huddersfield is also largely engaged in manufacturing trouserings, waistcoatings, and fancy goods; while Dewsbury, Heckmondwike, and the surrounding neighborhood make great quantities of carpets, blankets, and coarse cloths. Even more important is the worsted manufacture, which, like that of woolen, has its chief seat in the West Riding, viz. at Bradford. The neighboring towns of Halifax, Keighley, Bingley, Otley, and the surrounding villages are also engaged in it as their staple business.

The number of hands employed in these textile industries in 1871 was as follows: Woolen cloth, 71,683 males, 56,781 females—total, 128,464; worsted manufactures, 34,053 males, 60,713 females—total, 94,766.

LEEDS.

Population in 1871, 259,212.

Its site was probably at one time a Roman station. It was subsequently occupied by the Northmen, and in succession by the Saxons and Normans. The name Loidis (Leeds) is Saxon. As a manufacturing town it dates back only to the sixteenth century. There are many handsome public buildings, an excellent library, founded by Dr. Priestly in 1768, and library and museum of the Literary and Philosophical Society, and a Mechanics' Institute, with 2,000 members and 8,000 volumes.

* Among the rules which govern the trade are the following: 37 inches are allowed to the yard; and, in addition, about one-half yard in pieces under 40 yards, and a yard to pieces over 40 yards in length. Sales are made at three months, and 4d. in the pound deducted for cash payments.

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Wages.	Hours per week.
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8 71	55
7 02	60
6 73	60
5 61	60

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The flax manufacture consumes annually 12,000 tons of flax. Dyeing, coal-mining, iron and machine making, the manufacture of paper, tobacco, pottery, oil and chemicals, form also important branches of industry.

Nearly one-fourth of the whole population, half of whom are females, are employed in the various manufactories. No other town in England is so admirably situated for trade, being placed in the heart of the inland navigation of the country. It is also the center of a net-work of railroads converging to it from all parts of the country, and placing it in connection with every important town of the kingdom.

WAGES IN WOOLEN-MILLS.

The following statement showing the rates of wages paid the employes in the Saint Helen's Mills, Leeds, was furnished by the proprietors, Messrs. John Wilkinson, Son & Co., October 9, 1872:

[Hands employed, 443; hours of labor per week, 58½.]

Occupation.	Men.	Women.	Boys.
Block-cutters.....	\$6 72 per week		
Color-mixers.....	3 96 per week		
Fullers.....	5 64 per week		
Wiley-men.....	4 44 per week		
Weavers, tapestry.....	3 76 per yard.	\$3 28 per yard.	
Washers.....	3 28 per week		
Overlookers.....	3 22 per week and upward.		
Hardener-machine-men.....	4 68 per week		
Firemen.....	5 76 per week		
Card-fillers.....		2 64 per week.	
Sewers.....		2 04 per week.	
Spinners.....		1 44 to \$2 16 per week.	
Tentering-machines.....			\$2 28 to \$2 64 per week.
Perpetual cutting-machines.....			1 80 to \$2 04 per week.

WOOLEN MANUFACTURERS.

Occupation.	Per week.	Occupation.	Per week.
Overlookers..	\$12 10	Weavers.....	\$3 63
Spinners.....	7 74	Burlers.....	2 66
Turners.....	7 74	Cloth-millers.....	2 20
Woolliers.....	5 80	Engine-men.....	2 47
Fillers.....	2 90	Warp-dressers.....	6 29

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At a conference of the Leeds boot and shoe manufacturers and their workmen, held April 26, 1872, the following rates of wages were agreed upon, the scale of prices to be clear of all rivets, sprigs, &c.:

Wages in the boot and shoe trade at Leeds.

Class of work.	Per dozen.		
	Rivet- ing.	Finish- ing.	Paired.
MEN'S LIGHT WORK.			
Best kid, calf, and seal levant.	£2 18	£2 60	£2 18
Kip and gus levant.	1 04	2 42	1 04
Split or fleshers.	1 82	2 30	1 82
Common lace-kip, brown bottom.	1 82	1 04	1 40
Common lace-flesh boot, plain brown bottom.	1 70	1 82	1 33
Men's shooting-boots, wide welt.	3 46	3 87	3 39
Cricketer boots and shoes.	3 28	3 40	2 90
Twos to fives:			
Best kid, calf, and seal levant.	1 58	1 82	1 46
Kip, split, gus, and grained levant.	1 46	1 70	1 33
Common lace kip and flesh boot, plain brown bottom.	1 33	1 46	1 21
Eleven to ones:			
Best kid, calf, and seal levant.	1 46	1 58	1 39
Kip, split, gus, and grained levant.	1 33	1 46	1 21
Common lace kip and flesh boot, plain brown bottom.	1 21	1 21	96
Sevens to tens:			
Best kid, calf, and seal levant.	1 08	1 33	1 14
Kip, split, gus, and grained levant.	96	1 21	1 02
Common lace kip and flesh boot, plain brown bottom.	84	90	78
MEN'S STRONG WORK.			
Stubbed heels and mock clinkers.	3 08	1 70	1 21
Forge-boots.	2 66	1 70	1 21
Sparables and hobs.	2 42	1 70	1 21
Twos to fives, sparables and hobs.	1 82	1 33	1 08
Eleven to ones, sparables and hobs.	1 58	1 08	84
Sevens to tens, sparables and hobs.	1 21	84	66
EXTRAS ON MEN'S WORK.			
Patents.	24	24	.....
Fiddle-waist.	.....	24	.....
Machine-sewn.	24	24	.....
Bevel edge.	.....	24	.....
Red welt.	.....	.....	.....
Best inside-bevel clump.	21	96	.....
Best outside-bevel clump.	72	96	.....
Seconds and thirds inside-bevel clump.	24	72	.....
Seconds and thirds outside-bevel clump.	72	72	.....
First, seconds, and thirds square clump.	24	24	.....
One row of rivets or sprigs extra*.	24	12	.....
Screwed toe and joint in clumps.	48	21	.....
Three rows of rivets or sprigs in middle.	12	.....	.....
Common lace kip and flesh boot, with black waist.	.....	12	.....
Nailed boot, with black waist.	.....	24	.....
Wellingtons.	24	24	.....
Twos to fives:			
Patents.	12	12	.....
Machine-sewn.	18	18	.....
Fiddle-waist.	.....	12	.....
Bevel edge.	.....	18	.....
Red welt.	.....	.....	.....
Best and common inside-bevel clump.	21	48	.....
Outside-bevel clumps.	48	48	.....
First, seconds and thirds square clumps.	12	12	.....
Screwed toe and joint in clumps.	36	18	.....
One row of rivets or sprigs extra*.	12	6	.....
Three rows of rivets or sprigs in middle.	12	.....	.....
Common lace kip and flesh boot, with black waist.	.....	12	.....
Nailed boot, with black waist.	.....	12	.....
Eleven to ones and seven to tens:			
Patent.	6	6	.....
Fiddle-waist.	.....	12	.....
Machine-sewn.	12	12	.....
Best and common bevel clumps.	36	12	.....
One row of rivets or sprigs extra*.	12	6	.....
Three rows of rivets or sprigs in middle.	12	6	.....
Common lace kip and flesh boot, with black waist.	.....	6	.....
Nailed boot, with black waist.	.....	6	.....
MEN'S SLIPPER WORK.			
Common pumps, white bottoms.	84	96	.....
Common pumps, brown bottoms.	84	84	.....
Boys' twos to fives common pumps, white bottoms.	72	84	.....
Boys' twos to fives common pumps, brown bottoms.	72	72

* No extra for finishing one extra row on common brown bottoms.

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Class of work.	Per dozen.		
	Bivet-ing.	Finish-ing.	Paired.
WOMEN'S WORK.			
1. Best kid and seal levant, either plain, fancy, blocked, turned in or not.....	\$1 27	\$1 45	\$1 21
2. Kid and gusis levant, either plain or blocks, not turned in.....	1 15	1 33	1 06
3. Kid, sand-boots, and block-grained.....	96	1 24	96
4. Calf, iron rivets or sprigs.....	96	1 09	84
5. Common calf or sheep, iron rivets or sprigs, flat heels, (not higher than 3 inch).	84	1 09	84
Elvens to ones:	84	96	72
1. Best kid and seal levant, either plain, fancy, blocked, turned in or not.....	84	1 09	90
2. Kid, gusis, levant, sand-boots, and calf.....	72	96	78
3. Common calf and sheep, flat heels, iron rivets and sprigs.....	66	84	66
Sovens to tens:			
1. Best kid and seal levant, either plain, fancy, blocked, turned in or not.....	72	96	78
2. Kid, gusis, levant, sand-boots, and calf.....	66	84	66
3. Common calf and sheep, flat heels, iron rivets and sprigs.....	60	72	51
Fours to sixes:			
1. Best kid and levant.....	60	72	51
2. Calf and common.....	51	62	54
EXTRAS ON WOMEN'S WORK.			
Firsts, seconds, and thirds outside-bevel clump.....	48	72	.....
Firsts, seconds, and thirds inside-bevel clump.....	24	72	.....
Firsts, seconds, and thirds square clump.....	24	24	.....
Firsts and seconds machine-sewn.....	24	24	.....
Thirds machine-sewn.....	24	24	.....
Wittenburg heel.....	12	12	.....
Fiddle-waist.....	48	48	.....
Channels.....	24	24	.....
White foreparts.....	12	12	.....
Black waist and brown foreparts.....	12	12	.....
Brown waist and black foreparts.....	12	12	.....
All patent.....	12	12	.....
One row of rivets or sprigs extra*.....	12	12	.....
One row of sprigs or sprigs extra.....	21	12	.....
Women's high-legged boots, 7 inches.....	24	12	.....
Elvens to ones and sevens to tens:	36	12	.....
Machine-sewn, elvens to ones.....	24	24	.....
Machine-sewn, sevens to tens.....	12	12	.....
Fiddle-waist.....	6	6	.....
White foreparts.....	12	12	.....
Black waist and brown foreparts.....	12	12	.....
Brown waist and black forepart.....	6	6	.....
Channels.....	6	6	.....
One row and seconds bevel clump.....	6	6	.....
One row of rivets or sprigs extra*.....	12	36	.....
One row of rivets or sprigs round the forepart and three up middle.....	12	6	.....
Fours to sixes:	24	6	.....
Machine-sewn.....	24	6	.....
Fiddle-waist.....	6	6	.....
White foreparts.....	12	12	.....
Black waist and brown foreparts.....	12	12	.....
Brown waist and black foreparts.....	6	6	.....
Girls' high-legged boots, all sizes.....	12	12	.....
Copper tips, all sizes.....	6	.....	.....
WOMEN'S SLIPPER WORK.			
Pumps, white and black bottoms.....	60	84	.....
Pumps, brown bottoms.....	60	72	.....
Women's cashmere pumps, with top-piece or spring-heels.....	72	84	72

* No extra for finishing one extra row on common brown bottoms.

HUDDERSFIELD.

Extensively engaged in the woolen manufacture, Huddersfield is celebrated for its production of shawls, flushings, &c. It possesses extensive canal and railway communication and a plentiful supply of water and coal. The number of operatives in the manufacture of woollens in 1871 was 17,297, of whom 11,292 were males and 6,005 females. The variety and extent of the exports to the United States are great.

The variety and extent of the exports to the United States are indicated by the following—

Statement showing the exports from Huddersfield to the United States during the year ending June 30, 1873.

Description.	U. S. gold.	Description.	U. S. gold.
Woolen goods	\$2,032,683	Cotton and wool	\$50,400
Wool and worsted goods	101,533	Cotton and silk	1,295
Worsted goods	83,328	Sewing cottons	143,433
Worsted and silk goods	43,517	Fustians	3,638
Wool and linen	3,551	Flocks	64,162
Worsted and cotton	9,182	Linen	31,451
Wool and silk	38,815	Linen and cotton	4,209
Wool, silk, and worsted	21,351	Calfrhalf	237,567
Wool, cotton, and silk	2,219	Chemicals and colors	46,221
Worsted, cotton, and silk	4,304	Machinery	3,719
Mohair and cotton	8,697	All others	4,810
Mohair	1,796		
Mohair and wool	4,497	Total	3,049,371
Cotton goods	110,004		

WAGES IN WOOLEN-MILLS.

Wages paid in a large manufactory at Huddersfield doing business with the United States.

Occupation.	Sex.	U. S. gold.
Wool-sorters	Men	\$5 80
Dyers	do	4 81
Overlookers	do	\$9 68 to 14 52
Tracers	do	4 36
Feeders	Boys and girls	2 18
Engineers	Men	8 47
Spinners	do	7 26
Warpers	Women and girls	2 18
Beaters	Men	2 18 to 2 90
Sizers	do	4 84 to 19 36
Timers	do	4 84 to 19 36
Weavers	do	5 80 to 9 68
Members	Women	3 63 to 4 87
Knotters	do	4 36 to 6 29
Barbers	Girls	2 18 to 2 90
Scourers	Women and girls	5 12
Fullers or millers	do	2 06
Tenters	do	7 26
Finishers	do	6 29 to 7 26
Pressers	Men	4 84 to 5 80
Warehousemen	do	1 94 to 3 88
Engine-tenters	do	4 84 to 5 80
Firemen	do	4 84 to 7 26
	do	5 80 to 9 68
	do	5 32

WAGES OF MECHANICS AND FARM LABORERS.

Rates of wages paid for mechanical and farm labor in the year 1874.

[Hours of labor vary from 50 to 52½ per week.]

Occupation.	Per week.	Occupation.	Per week.
MECHANICS.		MECHANICS—Continued.	
Blacksmiths	\$4 80 to \$6 00	Tanners	\$5 76
Bricklayers and masons	7 68	Timsmiths	1 30
Cabinet-makers	4 80 to 7 30	Wheelwrights	\$6 20 to 6 72
Carpenters	6 48		
Coopers	6 72 to 7 20	FARM-LABORERS.	
Miners	8 64	Experienced hands	\$1 20
Machinists	4 80	Ordinary hands	136 to 72
Painters	*11 to 14	Common laborers at other than	160 to 96
Shoemakers	7 20 to 8 40	farm-work	172 to 132
Stone-cutters	7 20 to 9 12	Female servants	
Tailors			

* Per hour.

† Per day.

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U. S. gold.
\$5 80
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2 18
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2 18 to 2 90
4 84 to 10 36
4 84 to 10 36
5 80 to 9 68
3 63 to 4 00
4 36 to 6 29
2 18 to 2 90
2 18
7 96
6 29 to 7 96
4 84 to 5 80
1 94 to 3 83
4 84 to 5 80
4 84 to 7 96
5 80 to 9 68
5 32

374.

Per week.
\$5 76
1 50
\$6 20 to 6 72
11 29
136 to 72
160 to 96
172 to 1 32
† Per day.

WAGES IN ENGLAND.

BRADFORD.

Population in 1871, 145,830.

Bradford, in the West Riding of Yorkshire, is, as was previously stated, the seat of the British worsted trade, and exports largely to the United States. In the years 1872 and 1873, the value of principal merchandise exported from the Bradford consular district to the United States was as follows:

Statement showing the exports to the United States from the consular district of Bradford, during the respective years ended September 30, 1873 and 1872.

Articles.	1873.	1872.	Articles.	1873.	1872.
Worsted goods.....	\$12,931,693	\$14,631,176	Yarns.....	\$3,861	\$14,569
Carpets.....	1,620,304	1,911,470	Shawls.....	2,220	2,297
Wool.....	926,362	906,951	Mats and rugs.....	416	569
Machinery.....	167,690	216,793	Velvet.....	1,391	1,075
Iron and steel.....	134,511	165,671	Dumpeks.....	1,573	68,906
Cloths.....	68,558	52,447	Miscellaneous.....	28,462	
Soap-grease.....	11,680	27,253			
Flecks.....	12,511	8,544	Total.....	15,900,266	17,910,402

In addition to the above the value of Bradford goods, invoices of which are certified at Manchester, amounts to about a million dollars, making an aggregate importation into the United States, in 1872, chiefly of worsted goods, from Bradford and vicinity, of about \$19,000,000 in specie, at prime cost. When the freights and other charges, insurance, and duty (of about 60 per cent.) were added, the total currency value of these goods when landed in New York must have approximated \$36,000,000.

In this connection the following extracts from a pamphlet on "Bradford and the Worsted Manufacture," by Mr. George Taylor, will prove interesting:

The whole area of the West Riding worsted manufacture may be included in a triangle, of which the base is a line drawn from Halifax to Otley, and Skipton the apex, containing about 200 square miles. In 1861, the population of this district was 358,698; in 1871, it was 453,047. The term "worsted" is generally said to be taken from a small town in Norfolk, where the manufacture at one time was chiefly conducted. The rapid growth in Bradford and the district which it embraces, of the trade indicated by the word "worsted" has been remarkable, and indeed almost unprecedented. Wool had long been spun by hand in private houses, but it was not till the end of the last century that spinning by steam-power was established in Bradford. The first steam-factory in the town, which was built in the year 1800, had grown, in the year 1871, into 133 worsted factories within the borough of Bradford alone, with 12,807 horse-power, and employing 27,855* work-people; and, in the whole of the worsted trade throughout the kingdom, into 630 worsted factories, worked by steam-engines of 43,977 horse-power, and employing 109,557 work-people.

ANNUAL VALUE OF THE WORSTED TRADE.

A careful investigation of the value of this industry was made in 1864, by Mr. Behrens, then president of the Bradford Chamber of Commerce.

The total value, then, of the wool, goats' hair, cotton, &c., manufactured into worsted and woollen yarns and tissues, in A. D. 1864, was £64,400,000. Of this, the worsted portion was £33,600,000, the woollen £30,800,000.

After quoting this estimate, Mr. Taylor continues:

The progress has been great in both respects; and, without going into unnecessary details, an estimate made by the same gentleman, and which is mainly based upon

* The returns of the census of 1871 give the number of work-people in the worsted trade as 26,593; males, 9,340, and females, 17,253; and in the woollen-cloth manufacture, 6,505 males, and 2,727 females, total 9,235.—E. Y.

the agricultural returns and the board of trade tables for 1872, shows a corresponding extension of the worsted trade during that period. While the available quantity of wool and of similar animal fiber for all purposes was 384,000,000 pounds in 1864, it was last year 500,000,000 pounds, (133,000,000 pounds being of home growth,) of which, probably, 245,000,000 pounds were required for worsted, and 255,000,000 pounds for woollen manufactures, producing in combination with cotton, silk, and other materials, £46,700,000 of worsted yarns and tissues, and £36,100,000 of woollens.

Nothing shows better the great and constant development of the Bradford trade than the amounts exported to all parts of the inhabited globe, which were—

	Yarns.	Worsted tissues.	
In 1842.....	£637,305	£3,556,963	£4,194,268
In 1852.....	1,430,140	4,933,000	6,363,230
In 1862.....	3,662,555	5,881,789	9,544,344
In 1864.....	5,183,229	10,800,521	15,983,750
In 1872.....	6,110,138	20,905,163	27,015,301*

As even a brief mention of the worsted trade would be incomplete without a reference to Sir Titus Salt, to whom more than to any other man is the growth and prosperity of that leading industry due, a somewhat extended notice of the works at Saltaire will appear on subsequent pages.

WAGES IN WORSTED-MILLS, BRADFORD.

Statement of the rates of wages paid to the various operatives employed in manufactories of yarns and textile fabrics in Bradford in 1872.

Occupation.	Sex.	Wages per week.	Remarks.
Wool-combing:			
Wool-sorters*		\$6 77	Long English wool, \$1.41 to \$2.40 per pack.
Wool-washers*		5 08	Patent bowl.
Makers-up	Men	4 00	Hand-fork, (old way.)
Takers-off	Women	2 90	
Comb-minders	Men	2 78	
Preparers	Women	4 11	
Balers	Men	3 63	
Dyers	Men	2 00	
Jobber	Young man 16 to 20 years.	4 11	
Meehanes		3 15	
Warehousemen		7 62	
Overlooker		4 36	
Drawing and spinning:		9 07	For competent person.
Drawers	Women	2 78	
Rovers	Men	2 66	
Spinners	Women	2 90	Minding 3 sides of a frame.
Twisters	Men	2 30	Minding 2 sides of a frame.
Bobbin-layers	Boys and girls	2 90	
Bobbin takers-off	Boys over 14 years	2 30	
Jobber	Men	2 48	
Reelers, (piecework)		9 68	6½ to 7 cents fine counts over \$9.60.
Haul and grossers (piecework)		52	
Packers		4 11	
Wet-men		6 53	
Overlooker		7 56	For competent person.
Weaving:			
Warp-dressers		7 86	
Twisters		7 86	
Weavers, (piecework)		4 36	\$4.32 per week; men, \$5.76.
Takers-in		7 02	
Overlookers		7 56	
Pattern-designers		10 97	

* Foreign wool \$2.40 to \$4.50 per pack of 240 pounds.

* Some portion of this extraordinary increase may be accounted for by the advance in prices which took place in 1871 and 1872.

WAGES IN ENGLAND.

341

Approximate rates of wages and earnings of work-people in the alpaca-mills of Sir Titus Salt, Sons & Co., Saltaire, October, 1872.

Occupation.	Sex.	Average earnings per week.
Preparing:		
Wool-sorters.....	Men.....	\$6 78 to \$7 04
Wool-washers.....	do.....	3 87 to 4 84
Wool-dyers.....	do.....	4 30 to 6 23
Wool-combers.....	do.....	3 87 to 4 84
Carding and spinning:		
Spinners.....	Girls.....	2 18 to 5 04
Warpers and beamers.....	Women.....	4 81 to 7 26
Reelers.....	do.....	3 39 to 4 60
Overlookers.....	do.....	7 26 to 8 47
Weaving:		
Weavers.....	Men.....	4 81 to 5 81
Barbers.....	Women.....	3 39 to 4 36
Overlookers.....	do.....	3 15
Warp-dressers.....	do.....	7 74 to 8 96
Engine-room yard cleaners.....	do.....	7 23 to 8 47
Mechanics, such as machinists, carpenters, &c.....	do.....	4 81 to 6 05
Laborers and watchmen.....	do.....	7 99
Carters.....	do.....	5 81 to 6 78
	do.....	6 03

Mr. Titus Salt, jr., who furnished the above figures, states that the workmen are not quite so well off now as they were before the rise in wages, owing to the greater advance in the prices of provisions and especially of coals.

Mr. Bacchus, the resident agent of Messrs. A. T. Stewart & Co., says:

Women in worsted factories earn 18s. and men about 24s. per week. Laborers and the lowest class of workmen earn 20s.; machinists, 25s. per week. *Mechanics' wages.*—Masons, joiners, plumbers, plasterers, smiths, and painters, 5s. 6d. per day to good workmen for five days in a week and 2s. 6d. on Saturdays; total earnings, 30s., \$7.23.

HALIFAX.

Population in 1871, 65,510.

The manufacture of cloth commenced here in the beginning of the fifteenth century, and Halifax ranks next to Leeds and Bradford as a seat of the woolen and worsted industries. But it is best known as the place where the carpet-mills of the celebrated firm of John Crossley & Sons are situated. A visit to these extensive works, when so courteously shown through every department as the author was, amply repays the journey. It is pleasant to recognize patterns of carpets in use in our houses, to note that the most elegant and tasteful patterns belong to several of the leading carpet dealers in the chief cities of the United States, and to be assured that one of them has the best taste in this direction of any dealer in Europe or America. Sir Francis Crossley is deceased, but the present head of the house, Mr. John Crossley, and his partners, possess also a high reputation for business integrity and enterprise and for the benevolent interest taken in their employes and townsmen. A notice of some of the benefactions of the members of this firm, as well as those of Sir Titus Salt, alike celebrated in a kindred industry, will appear on subsequent pages.

The number of hands employed in the chief industries of Halifax, according to the report on the English census of 1871, was as follows:

	Males.	Females.
In woolen-cloth manufacture.....	3,416	1,837
In worsted and stuff manufacture.....	3,421	4,003
In carpet and rug manufacture.....	1,223	733

The following scale of weekly wages in the carpet-mills of John Crossley & Co., Halifax, was sent to the author by that firm at the date indicated :

WAGES IN CARPET-MILLS, HALIFAX.

	Mean rates in U. S. gold.
Wool-sorters, 20s. to 28s.	\$5 75
Dyers, (very much according to ability and special work.)	
Spinners, boys and girls, from 8s. or 9s. to 13s.	4 35
Spinners, men, from 20s. to 30s.	6 05
Weavers, men, from 20s. to 35s.	8 47
Young women in various employments, from 10s. to 20s.	3 63

While the wages are correctly stated above, the margin is too extended. From conversation with weavers employed in these mills, the information was gained that men earned at piecework from 23s. to 24s. per week, and women from 13s. to 14s. It will be observed that these figures are within the limits above given, and are more definite, and may be regarded as the average earnings of male and female weavers. It was stated that girls on regular wages, not on piecework, receive but 10s.; laborers, 18s.; and machinists to repair looms and machinery, from 26s. to 28s. per week; the latter working ten and a half hours per day.

KIDDERMINSTER, WORCESTERSHIRE.

Although not in Yorkshire, Kidderminster has long been known as the seat of the ingrain-carpet trade, but of late this branch has been transferred to Dewsbury, while Kidderminster now makes the worsted or tapestry carpets. The following statement of the average rates of wages paid in carpet-mills was presented by the proprietors at the date indicated :

Weekly wages of persons employed in 1872 in the worsted spinning and carpet manufactory belonging to John Brinton & Co., in Kidderminster, England.

(Hours of labor per week, 59.)

Description of work.	Wages.	Description of work.	Wages.
Engine-room, yard, &c.:		Worsted yarns and fabrics—Con.	
Engineers	\$9 68	Gill-box and drawing hands ..	\$9 68
Mechanics	\$0 72 to 1 31	Spinners	1 81
Laborers, watchmen, and yard hands	4 36 to 6 05	Reelers	2 05
Foremen	9 68	Reelers	2 66
Worsted yarns and fabrics:		Overscours	9 68
Wool-sorters	7 56*	Assistants	4 84
Wool-washers	4 84	Dyers	\$0 56 to 0 61
Combers	4 84	Weavers	per day..
		Finishers	per piece..
			12 to 14

* 72 cents to \$1.69 per pack, according to quality of wool.

AGRICULTURAL-IMPLEMENT WORKS AT IPSWICH.

In the exposition at Moscow, in 1872, a most creditable display of agricultural tools and implements was made by the firm of Ransomes, Sims & Head, proprietors of the Orwell Works at Ipswich, England. In reply to a request for the rates of wages paid in the works, the following letter and statement were received:

EDWARD YOUNG, Esq., London:

Our books will not enable us, without considerable trouble, to give you the information which you have asked for respecting wages paid in our works to different classes of men, so that, although we have filled up your paper as nearly as we can, yet the fig-

IPSWICH, October 12, 1872.

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ures must not be taken as strictly correct. The wages vary very much, according to the skill of the workmen, and the average weekly earnings depend very much upon the amount of overtime which the men may make. We may say that we have for a number of years taken the average weekly wages earned by all the men and boys, whether mechanics or laborers, in our employ, and find that it averages 20s. 6d. per week. The per week are fifty-four, but this is considerably increased by overtime. The price of coal is also much more than it has been for many years.

We are yours, faithfully,

RANSOMES, SIMS & HEAD.

Mean rates of wages paid in United States gold to workmen employed in the agricultural-irrigation works of Messrs. Ransomes, Sims & Head, Ipswich.

Occupation.	Wages.	Occupation.	Wages.
Wood-workers.....	\$5 93	Painters.....	\$5 44
Iron-workers:		Laborers.....	4 24
Molders.....	6 77	Carriers.....	4 34
Turners or machinists.....	7 50	Apprentices or youths.....	1 33
Blacksmiths.....	6 77	Foremen or overlookers.....	13 31

Hours of labor per week, 54.

On piecework they earn from 1 to 1½ more.

Rents of 3-roomed tenements, occupied by working people, 72 cents per week.

Present price of coal at works per ton: steam coal, \$7.26; smiths' coal, \$3.32.

THE BRICK MAKING TRADE.

The following extract from the report of the inspector of factories for 1874, shows the earnings of work-people at brick-making, and also in the blacking-works:

BRICK-MAKING, NEAR MANCHESTER.

By the union tariff, the sum drawn by the molder from the master is now 9 shillings (\$2.16) per thousand bricks, which is thus distributed: to the molder, 2s. 4d., (56 cents,) and the same amount to the temperer; to the wheeler, 2s. 3d., (54 cents;) to the carrier-off, 1s. 0½d., (25 cents;) and the same to the waller.

The molder has also the right to nominate the carrier-off (who is from 13 to 16 years of age) and the waller. The former is generally his son, the latter his wife or daughter. If the molder does not claim his right to nominate, it passes to the temperer; failing him, to the wheeler; and failing all three, to the employer himself.

The average number of bricks turned out by each molder this season has been 500,000 during the 20 weeks; which is at the rate of 25,000 per week of 45 hours, (rather more than one day per week having been lost by rain.)

Thus the earnings have been, molder, \$14.19; carrier-off, \$6.35, and waller, \$6.35; making a total weekly average for the molder, his wife, and his son of \$26.89.

One case of a molder I knew, who turned out 620,000 bricks this season. His son, aged 14, carried them off, and his daughter aged 17, walled them; a second daughter, of 19, worked at another stool. The net weekly earnings of this man and his three children amounted to \$41.00.

The brick-makers, as a rule, are not improvident; the system of leaving back money with the masters is being generally adopted. Some carriers-off, at the end of the season, had £8 to £10 to take.

MOSS BROOK BLACKING-WORKS.

The wrappers-up are lad's of 16 to 20 years of age; there are 70 of them, each served by two half-timers, or by one full-timer putter-on, at which rate the average weekly earnings are as follows: A wrapper-up, per week, \$4.32; full-time putter-on, per week, \$2.16; half-time putter-on, per week, \$0.96. The total number of persons employed, all boys, is 321.

LONDON.

Population in 1871, 3,254,260.

The rates of wages in the metropolitan district, especially those ruling in 1871, are given on preceding pages under the heading "Metropolis." Unlike most of the towns whose industries have been considered, it is

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not the seat of any very extensive manufactures which find a market in the United States.

To show the variety, but not the extent, of the exports from London, the following report, made by the United States consul-general, Gen. Badeau, to the Department of State, is presented:

Summary of goods exported from London to the United States of America during the years ending September 30, 1871, 1872, 1873, with a list of the principal articles supplied.

PRINCIPAL ARTICLES SENT FROM LONDON TO THE UNITED STATES.

Acids, arrowroot, artists' materials, animals of every description, (alive,) alpaca wool, ammenia, ammunition, axes, brass, bronzes, bleaching-powder, blacking, beer, biscuits, buttons, braces, belts, buckles, brushes, bristles, bricks, books, boots, bulbs, baby-linen, brilliants, balls, barometers, braids, bone, bolts, bedsteads, bars, bark, copper, cutlery, clocks, crystals, cabinet-work, carvings, cork, cork-wood, cochineal, chemicals, cement, chalk, chocolate, cocoa, colors, china, coffee, chicory, corsets, carpets, cords, cottons, crapes, cartridges, caps, cards, cricketing materials, castings, candles, cliff-stone, carriages, drugs, druggists' sundries, dogs, diamonds, decanters, emery, essences, essential oils, engravings, earthenware, furniture feathers, flowers, all kinds of fancy articles, furs, fringes, felt, floor-cloth, fog-signals, flax, fannels, fishing-tackle, granite, guns, gold, gold bronze and leaf, gums, glass, gloves, gutta-percha, gun-wadings, gelatine, gold-beaters' skins, grindstones, hardware, hats, hatters' furs, horse-hair, harnesses, horns, horses, hope, haberdashery, hosiery, human hair, hides, iron, ivory, ink, India-rubber goods, isinglass, jewelry, jet goods, kamptulic, lead, lime, leather, linens, laces of all kinds, linoleum, metals, mustard, mineral waters, manufactures of all kinds, models, moldings, molds, musical instruments, music, millinery, manufactures of leather, matches, milk, machinery, plated goods, perfumery, powder, provisions, pins, photographs and photographic materials and utensils, paintings, pictures, prints, piano-fortes, paper, periodicals, pamphlets, parchment, playing-cards, paper-waste, pigs, plants, prints, parasols, perennation-caps, pickles, preserves, patent barley, quicksilver, ribbons, retorts, rags, ready-made clothing of all descriptions, rugs, rope, raw silk, steel, skins, spelter, stone, silver, sticks, soaps, sodas, starch, spirits, shells, shell goods, scientific instruments, stationery, stereotype-plates, shoes, sheep, seeds, shirts, silks, sheetings, shawls, straw-plaiting, straw hats and bonnets, string, stuff-goods, sun-shades, sausage cases, sauces, spices, salts, statuary, tin-foil, tin, tea, tapestry, tobacco, toys, tools, umbrellas, veneers, varnishes, vellum, vulcanite, wire, watches and movements, wood, wines, wax figures, wools, woollens, and worsteds.

Year ending Sept., 1871.	Value.	Year ending Sept., 1872.*	Value.	Year ending Sept., 1873.†	Value.
	£ s. d.		£ s. d.		£ s. d.
Dec. 31, 1870.	1,756,968 12 6	Dec. 31, 1871..	1,930,377 12 10	Dec. 31, 1872..	2,730,304 16 1
Mar. 31, 1871.	2,331,842 16 0	Mar. 31, 1872..	2,210,674 7 8	Mar. 31, 1873..	2,060,136 7 8
June 30, 1871.	2,248,830 12 3	June 30, 1872..	1,856,416 11 6	June 30, 1873..	1,556,815 9 9
Sept. 30, 1871.	2,320,363 0 0	Sept. 30, 1872..	2,644,485 14 8	Sept. 30, 1873..	1,292,814 0 11
Total,....	8,658,037 0 10	Total	8,671,984 6 8	Total	7,559,072 14 5

* Year 1872, £13,647 5s. 10d. more than the year 1871.

† Year 1873, £1,092,911 12s. 3d. less than the year 1872.

DEPTFORD, COUNTY OF KENT.

Statement showing the average weekly wages (in United States gold) of persons employed in the engineering-works of Messrs. J. Stone & Co., in the town of Deptford, county of Kent, England.

[Hours of labor per week, 54.]

No. of each class.	Occupation.	Wages.	No. of each class.	Occupation.	Wages.
16	Pattern-makers.....	\$9 19	50	Laborers.....	\$4 36 to 25 18
12	Brass-molders.....	\$8 71 to 10 16	50	Boys and apprentices.....	1 21 to 2 40
20	Iron-molders.....	9 19		Engineers.....	8 71*
10	Coppersmiths.....	9 19		Laborers or unskilled workmen	4 26 to 5 18
12	Brassiers.....	7 26 to 8 71		Apprentices or boys.....	1 20 to 2 40
86	Turners.....	7 98 to 9 19		Foremen or overseers.....	9 62 to 19 36
92	Fitters.....	6 77 to 7 98			

* And upward.

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NEWCASTLE-UPON-TYNE.

An extended report on the trade and industry of Newcastle-upon-Tyne was prepared for these pages by Evan R. Jones, esq., United States consul for that district, a condensed statement from which is presented in the following pages. "The various tables given in connection with the different subjects treated in the report," Mr. Jones says, "have been prepared with great care, and can be relied upon with confidence."

NEWCASTLE.—Newcastle-upon-Tyne, as its name indicates, is situated upon the river Tyne, ten miles west of where that river flows into the North Sea. Formerly Newcastle was the chief town of the county of Northumberland, but by virtue of a charter granted by Henry IV, in the year 1400, it became a county in itself, and is represented in Parliament by two members.

At the last census, taken in 1871, the population of this town was 123,443, to which we must add 48,637, the population of Gateshead; for, notwithstanding the last-named place is in the county of Durham, its interests are identical with Newcastle, and in a commercial point of view we must consider them as one.

The two towns are divided by the river Tyne, and united by three large bridges, including the High-level Bridge, one of the engineering triumphs of Robert Stephenson.

The source of the great wealth of Newcastle and district, which includes North and South Shields, is the rich coal-beds found in the immediate neighborhood. Not only does this commodity contribute toward the prosperity of the Tyne directly; but we are also indebted to its cheap price, in all probability, for the establishment upon the banks of this river of some of the most complete and extensive engineering-works to be found in the United Kingdom, if not in the world. I particularly refer to the Elswick engine and ordnance works of Sir William G. Armstrong & Co.; the shipbuilding-establishment of Messrs. C. M. Palmer & Co., at Jarrow; the factories of Messrs. Robert Stephenson & Co., and Messrs. R. & W. Hawthorn, for the manufacture of locomotives and other engines and machines, together with some of the largest chemical-works in this country.

THE TYNE.—I have repeatedly been informed by masters of American ships that in former years the entrance into the Tyne was both difficult and dangerous, and that the channel of the river was in a shallow and otherwise unsatisfactory condition. I need not remind you that such a state of things must have proved a check both upon the shipping interests and the general commercial growth of the district. Thanks to the river Tyne commissioners, causes for complaints, under this head, no longer exist.

I extract a few brief passages from the "report of Captain E. K. Calver, royal navy, on the improvements effected in the river Tyne." He says:

"The depth of the channel over the bar, which was 6 feet 8 inches in 1849, had been increased by dredging to 15 feet in 1865, the time of one of my periodical examinations. Now there is no bar, as a depth of 27 feet exists along the track in from sea, till the proper channel of the river is reached.

"There is now a minimum depth of 24 feet in that portion of the entrance channel where the 'stones,' with 9 feet over them, formerly existed.

"Briefly stated the result is, that the commissioners have, by the process of dredging, cleared away the bar; they have freed the throat of Shields Harbor from the obstructions which nearly blocked it up; they have removed seven extensive shoals from out of the channel of the river between Shields and Newcastle, and increased the ruling navigable depth between the same limits from 2½ feet to 13 and 14 feet, while, by the consequent tidal gain, they have created a power for assisting in the future maintenance of the increased capacity of the river. These results, of national as well as of local importance, establish the Tyne as the most noteworthy example of river improvement within the bounds of the United Kingdom."

No one questions but what these truly wonderful improvements have greatly contributed toward making the Tyne what it is, and has been for several years, the third among the great shipping rivers of the kingdom, in the number and tonnage of vessels entering and clearing.

Ship-building.—Iron-ship-building takes rank next to the coal-trade in magnitude and importance, no less than 20,000 men being employed in the various establishments on the Tyne for the construction of iron vessels.

Among the many extensive works of the kind to be found on this river, the Palmer Ship-building and Iron Company at Jarrow is the largest and most complete. They employ about 8,000 men. Next in importance stands the establishment of Messrs. C. Mitchell & Co., at Low Walker, four miles down the Tyne, where about 3,000 men are employed.

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Value.

£	s.	d.
2,739,304	16	1
2,060,136	7	8
1,556,215	9	11
1,202,214	0	9
7,579,072	14	5

employed in the
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Wages.

£4 36 to 75 1s
1 21 to 2 40
8 71
4 36 to 5 18
1 20 to 2 40
9 65 to 12 39

Vessels of an aggregate of 88,000 tons were launched from the various ship-yards on the Tyne during 1871.

Locomotive and engine works.—Newcastle-upon-Tyne is the cradle of the locomotive engine. At Wylam, eight miles west of this town, George Stephenson, the inventor of the first successful locomotive, was born in 1781, and in 1824, associated with other men of skill and means, he opened the locomotive-works which have since made Newcastle famous for the manufacture of these engines.

Locomotives and marine engines manufactured here are exported to every country in the civilized world, with the single exception of the United States.

Those who have traveled in England will verify my statement, that both in appearance and in the arrangement of suitable protection for engine-driver and fireman, the locomotives of England, generally, are behind those of America. But in countries where Newcastle engines are brought into competition with those manufactured elsewhere, statistics prove them to be possessed of great merit, both for speed and durability.

The work turned out per annum and the number of men employed at the works of Messrs. Robert Stephenson & Co. and those of Messrs. R. & W. Hawthorn are as follows:

Firms.	Locomotives built.	Marine engines built.	No. of men employed.	Labor per day.
Messrs. Robert Stephenson & Co.	52	12	1,400	9 hours.
Messrs. R. & W. Hawthorn & Co.	40	(*)	1,700	9 hours.

* 4,000 horse-power. I was furnished with the number of horse-power, and not the number of engines, by Messrs. Hawthorn.

The Elswick ordnance and engine works.—The Armstrong gun, by name at least, is known to nearly every American; comparatively few, however, are aware that the ordnance works of Sir William George Armstrong & Co., where the destructive weapons are forged, are situated at Elswick, in the West End of Newcastle.

Sir William, the son of a born merchant, who once filled the office of mayor of Newcastle, was born at this town in 1810. He was educated for the law, and finally practiced as a solicitor in his native town. But the law had no charms for him; his mind was of the inventive and scientific turn.

His earlier achievements were improvements upon hydraulic engines and cranes; and in 1846 the Elswick engine-works were founded by Sir William and a few friends, chiefly for the construction of that class of machinery. During the Crimean war he invented the breech-loading gun, with which his name will ever remain associated.

At present the Elswick engine and ordnance works of Sir William G. Armstrong & Co. is one of the richest firms, and most completely arranged works on the Tyne, where artillery is manufactured for nearly all the governments of the earth.

The number of men employed in these works are in the neighborhood of 3,000, and are distributed nearly as follows:

Ordnance works, about.....	1,100
Hydraulic works, about.....	1,200
Foundry works, about.....	400
Blast furnaces, about.....	200
Officers, about.....	60
Total.....	2,900

The genius, indefatigable energy, and persevering industry of Sir William Armstrong have brought his gun to such a state of perfection, both in range, precision, economy of powder, that, by almost unanimous consent, it is acknowledged to be the first of English ordnance.

An ordinary 32-pounder weighs 6,384 pounds, requires ten pounds of powder, and carries a ball 3,000 yards. The Armstrong 32-pounder only weighs 2,912 pounds, requires five pounds of powder, and sends its shot or shell 9,000 yards.

The first pieces turned out by the inventor were lined with steel; wrought iron, in the hand of a master, has since been found to be equally efficient. The Elswick ordnance-works construct guns ranging from a 12-pound field-piece to a 600-pounder, and are possessed of facilities for turning out several cannons per week.

The time occupied in the construction of a 600-pound gun is as follows: Forging, three weeks; for contraction, one week; turning, three weeks; rifling, two weeks; finishing, two weeks; and for extra work, two weeks—total, 13 weeks.

Glass-works.—The Tyne Plate-Glass Company, of South Shields, employs 500 hands, at the following rate of wages: Casters, 30s. (\$7.26) to 35s. (\$8.47) per week; finishers and polishers, 35s. (\$8.47) to 40s. (\$9.68) per week.

The quantity of glass produced per annum is about 600,000 feet; present price, 3s. 3d. (79 cents) per square foot.

The works of Mr. John Sowerby, for the manufacture of glass-ware, are situated at Gateshead, just across the Tyne.

There are several leading houses engaged in the manufacturing business, which are also large exporters to America, not yet mentioned; such as Messrs. W. J. Cookson & Co., in the leads, red and white lead, and Venetian red trade, Messrs. Hoyle Robson & Co., manufacturers of pitch, varnishes, paints, &c., and others.

The alkali trade.—The alkali trade forms by far the most important branch of the commerce carried on between this district and America. Soda crystals, alkali, and bicarbonate of soda are continually going forward to all the larger ports on the Atlantic coast, and occasionally to San Francisco.

Cheap fuel has induced capitalists to establish some of the largest chemical works in the kingdom upon the banks of this river.

Taking three largest manufactories in the district, viz, the Jarrow Chemical Company, the Tyne Chemical Works, and the works of H. L. Pattinson & Co., I find that together they manufactured during the year 1871, 40,607 tons of soda crystals, 34,720 tons alkali, (refined and unrefined,) and 8,153 tons bicarbonate of soda, besides large quantities of caustic soda, chloride of lime, pearl hardening, and oil of vitriol.

The alkali trade is in a thriving condition. Either through sagacity or by good fortune the manufacturers made large contracts for both salt and coal before the late advance in the prices of those articles took place, and by consequence they are now reaping a rich harvest.

In former years the outlay attending the transportation of salt from the Cheshire beds was nominal; the charges of railway companies to Hull and Grimsby were at a very low rate, and at those places the article was taken in as ballast by vessels bound for the Tyne. However, such a state of things no longer exists; railway charges are high, and regular freight is charged by all vessels bringing salt from Hull and Grimsby to this river; and to-day the price of that article is 27s. (\$6.53) per ton, with an upward tendency. Small coal, which is chiefly used in the manufacture of this class of chemicals, is at present commanding 20s. (\$4.84) to 25s. (\$6.05) per ton. I need scarcely add that these figures are considerably in advance of those at which the fortunate contractors were made.

If manufacturers engaged in what is generally known as the alkali trade were obliged to pay current prices for salt and coal, I conjecture that decomposing the chloride of sodium would yield but a very moderate profit.

The three firms above named employ no less than 4,500 men, at an average wage of 4s. 6d. (\$1.09) per day.

The hours of labor necessarily vary according to the nature of employment. The following exhibits a fair estimate of the working hours of men engaged in the alkali trade; Mechanics, fifty-four hours per week; yard laborers, fifty-eight hours per week; processmen, (excepting decomposing-furnacemen,) twelve-hour shifts. "Overtime" is not allowed until after the full week's time has first been worked. "Piecework" is largely entered into in this as well as nearly every other branch of industry, and the more active and ambitious men frequently realize from 40s. (\$9.68) to 45s. (\$10.50) as their week's earnings.

Price of labor.—During the year 1871 a complete revolution took place in the labor market of this country. In the early spring the engineers and machinists of Sunderland, spontaneously and without organization for the purpose, demanded a reduction of the time of labor from 59 to 51 hours per week. The demand was refused by the masters, and the men came out on strike. This might be considered as the keynote of the nine-hours' movement, which resulted in establishing nine hours as a day's work in all branches of industry which admit of its application, throughout the United Kingdom.

Not only have the working-hours been reduced, but in consequence of the increased demand for nearly every natural and manufactured commodity produced in this country, and the very considerable rise in the cost of living, wages have also been gradually advancing, especially since the first of this year. To illustrate this fact I have selected the engineer, as belonging to that class of workmen most closely identified with the great strikes of 1871. An engineer (erector and fitter) while working ten hours a day received only 26s. (\$6.29) as his weekly wage previous to the strike; at present, with nine hours as a day's work, he obtains 30s. (\$7.26) per week.

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The following table gives the average prices paid for labor on the Tyno September, 1872:

Occupation.	Wages.	Hours per week.	Occupation.	Wages.	Hours per week.
Carpenters.....	\$8 47	54	GLASS TRADE.		
Joiners.....	7 50	54	Casters.....	\$7 26 to \$8 47	54
Bricklayers.....	7 26	54	Finishers and polishers.....	8 47 to 9 68	54
Stone-masons.....	7 26	54			
Plasterers.....	7 26	54	COLLIERS.		
Painters.....	6 78	54	The Durham pits.....	36 cts. per ton.	42
Plumbers.....	7 26	54	The Northumberland pits.....	12 cts. per ton.	42
Fitters.....	\$6 78 to 7 26	54	PRINTING AND BOOK-MAKING		
Blacksmiths.....	7 02	54	TRADE.		
Strikers.....	4 64	54	Engravers, first-class.....	\$13 71	....
Riveters.....	7 74 to 8 47	54	Lithographic printers.....	6 71	....
Holders-up.....	5 81 to 6 29	54	Compositors and letter-press		
Platers.....	8 47	54	printers.....	7 26	....
ALKALI TRADE.			Book-binders.....	6 53	54
Mechanics.....	56 to 8 47	54	Book-binders and sewers, wo-		
Labors.....	4 74	54	men first-class.....	\$2 42 to 2 90	....
Brass-men.....	6 65 to 7 50	54			

* 1½-hour shifts.

Night work upon daily papers.

Ruby, per 1,000 ems.....	11 cents.
Nonpareil, per 1,000 ems.....	16 cents.
Minion, per 1,000 ems.....	15 cents.
Boutgeois, per 1,000 ems.....	15 cents.

Weekly papers are less—12 cents per 1,000, minion, instead of 15 cents.

The prices for day-work are 1d. (2 cents) per 1,000 less than for night-work.

NOTE.—Printers in England measure differently from what they do in America. The width is measured in ems and the depth in ems.

Wages in iron-ship-building and engineering works.—The following statement of the wages, ruling at the close of 1874, shows but few changes from the rates of 1872, as given by Mr. Jones. In this, as in a case previously noticed, the difference between the maximum and minimum rates is too great; the mean is not believed to be the true average. For instance, some boiler-makers may earn 38s., but the mean rate, as above stated, 35s., is above the average, which is under 34s. So in regard to laborers; the average is not 22s., the mean rate here given, but 20s. at the utmost.

Average weekly wages (computed in United States gold and working 54 hours per week) paid to persons employed in iron-ship-building and engineering shops in Newcastle-on-Tyne and vicinity in the year 1874.

Occupation.	Wages.	Occupation.	Wages.
Iron-molders.....	\$7 74 to \$10 89	Foremen.....	\$10 89 to \$14 52
Machinists. { Best.....	7 50	Engineers, fitters.....	6 77 to 8 22
{ Ordinary.....	6 05	Pattern-makers and carpenters..	7 26 to 8 71
{ Inferior.....	5 32	Assistants.....	5 32 to 5 59
Boiler-makers.....	4 54	Laborers, carters, &c.....	4 35 to 5 11
{ Hoppers.....	7 74 to 9 19	Apprentices.....	1 45 to 2 00
{ Hoppers.....	6 53	Millwrights.....	7 26 to 8 71
Riveters.....	7 26 to 7 74	Assistants.....	4 35 to 5 11
{ Hoppers-on.....	5 80 to 6 77	Brass-founders.....	5 11 to 5 59
Flangers.....	9 68 to 10 89	Brass-fitters.....	6 77 to 7 26
{ Hoppers.....	8 22	Brass-turners.....	6 77 to 7 26
Blacksmiths.....	6 77 to 7 26	Sailmakers.....	7 26 to 8 71
{ Hoppers.....	4 54 to 5 32		

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WAGES IN SCOTLAND.

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The above list of wages shows what is being paid in the first-class and largest ship-building and engineering establishments in this neighborhood; we ourselves employing some men in all the trades for our making new and repairing old work.

DAVID MOFFAT,
Master Superintendent.

NEWCASTLE-ON-TYNE, November 25, 1874.

Wages in steamers.—The following scale of wages in steamers belonging to the Tyne Steam Shipping Company, limited, was furnished by Richard Welford, esq., secretary and manager:

Station.	Pay while navigating.		Pay during detention at home.	
	Per week of 7 days.	Per day.	Per week of 6 days.	Per day.
Master.....	£ s. d.	s. d.	s. d.	s. d.
Mate.. { Chief.....	4 0 0			
{ Second.....	3 0 0	6 10	30 0	5 0
Carpenter.....	37 0	5 3½	26 0	4 4
Boatswain.....	36 0	5 1½	35 0	5 10
Seamen.....	31 0	4 5	24 0	4 0
Cook.....	30 0	4 3½	24 0	4 0
Steward.....	24 0	3 5	24 0	4 0
Cook and steward.....	21 0	3 0	24 0	4 0
Engineer.. { Chief.....	27 6	3 11	24 0	4 0
{ Second.....	60 0	8 7	42 0	7 0
{ Third.....	42 6	6 1	32 6	5 5
Firemen.....	33 0	4 8½	25 0	4 5
Trimmers.....	30 0	4 3½	24 0	4 0
Watchman.....	28 0	4 0	24 0	4 0
Stewardess.....	10 6	1 6	18 0	3 0

* Generally this amount. † Not found. ‡ If a mechanic, 2ss. § 3s. extra on Sunday. || Per agreement.

NOTE.—Twenty-four hours before sailing-hour, and twenty-four hours after arrival, vessels are to be considered as in "commission." Detention beyond this time places officers and men on reduced pay. Wages in all cases are to be reckoned and paid by the day.

GLASGOW, SCOTLAND.

Population in 1871, 477,732.

Glasgow is the commercial and manufacturing metropolis of Scotland, situated on the river Clyde, which, along its whole course, is beautified by magnificent natural scenery and embellishments of art. Its banks are crowded with the abodes of industry and a thriving population. It was a place of some consideration at the commencement of the twelfth century.

Glasgow now unites within itself a portion of the cotton-spinning and weaving manufactures of Manchester, the printed calicos of Lancashire, the stuffs of Norwich, the shawls and muslins of France, the silk-throwing of Macclesfield, the flax-spinning of Ireland, the carpets of Kidderminster, the iron and engineering works of Wolverhampton and Birmingham, the pottery and glass making of Staffordshire and Newcastle, the ship-building of London, the coal trade of the Tyne and Wear, and all the handicrafts connected with or dependent on the full development of these various and important branches. Glasgow also has its chemical-works, tanneries, rope-walks, dye-works, bleach-fields, paper-manufactories, distilleries, and breweries, beside a vast number of staple and fancy hand-loom fabrics, which may be strictly said to belong to the locality.

no September,

Wages.

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47 to 54 68 54

1s. per ton. 43

4s. per ton. 12

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5 32 to 5 70

4 35 to 4 73

1 45 to 1 83

7 25 to 7 63

4 35 to 4 73

36 to 40

6 7 3

7 26

7 26

While the iron, textile, and chemical products of Glasgow and vicinity are well known, the manufacture of iron machinery, and more recently the building of iron vessels, have given the Clyde a fame which is possessed by no other river.

SHIP-BUILDING ON THE CLYDE.

While in the days of wooden vessels the Clyde was noted for the marine-engines built by Napier and others, which attained the highest excellence of workmanship, the introduction of iron as the chief material used in building sea-going vessels, both sail and steam, has more recently rendered this small stream one of the celebrities of the world. From Glasgow to Greenock, twenty miles, the river is almost lined with ship-yards, working to their full capacity in the building of merchant-ships.

There are in all twenty-eight yards on the Clyde, and these have launched during the year 227 vessels in all, with an aggregate tonnage of 224,000. The following table will specify the classes of vessels and tonnage of each class for 1872:

STEAMERS.		
	Number.	Aggregate tonnage.
Paddle-wheel	10	6,200
Screw	146	198,890
Hoppers and dredges	5	1,900
SAILING.		
Iron	11	12,500
Composite	1	300
Wood	12	1,700
Barges	14	600
YACHTS.		
Steam	8	1,600
Sailing	20	400
Total	227	224,000

The larger of these vessels are destined to the following services: For the East Indian and China trade, 38; West Indian trade, 6; South American, 18; New York, 10; New Orleans, 6; Canadian, 7; African, 8; Mediterranean, French, and Spanish, 30. The others are chiefly coasters.

The following is the aggregate tonnage launched from the Clyde yards during each of the last ten years.

1863.....	124,000	1868.....	169,571
1864.....	178,505	1869.....	192,300
1865.....	153,932	1870.....	180,401
1866.....	124,513	1871.....	196,229
1867.....	108,024	1872.....	224,000

The year 1872 has been the most prosperous one in ship-building yet experienced on the Clyde. Although the number of vessels launched has not been quite up to each of the last few years, the tonnage exceeds 1871 by 28,000 tons and 1870 by 34,200 tons. The increase of last year has been larger than any yearly increase for many years past, and has been entirely in the class of screw-steamers. The year's tonnage of screw steam-vessels is 40,800 tons above 1871; 67,000 tons above 1870; 73,000 tons above 1869; and 77,500 tons above 1868. But while the screw-vessels have so enormously increased, all the other classes seem on the decline. In the building of war-vessels, 1872 has been a blank on the Clyde. In paddle-steamers there has been a considerable decline,

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and the year only shows 6,200 tons as against 10,900 tons in 1871; 10,150 tons in 1870; 8,300 tons in 1869; and 6,300 tons in 1868. In yacht-building there has been a good trade, chiefly in screw steam-vessels.

CLYDE SHIP-BUILDING DURING 1873.

[Condensed from an article in the London Economist of March 11, 1874.]

When the movement for reducing the hours of labor in the engineering and ship-building trades was in progress a couple of years ago, followed or attended, as it was, with an advance of wages, there were many persons who, like "birds of ill omen," prognosticated a sudden collapse in the great ship-building industry of the Clyde, but, strange to say, notwithstanding the past year, 1873, has been the most extraordinary one that has ever been experienced in the whole history of that industry, and has most completely falsified all the evil prognostications, when we compare the tonnage launched during the whole of 1873 with that launched in 1872, the result of the contrast is surprising. In making the annual summary statement regarding the Clyde ship-building trade, it is customary to embrace all the vessels shipped in pieces, barges, and most of the small vessels in the December return; and doing so now we find that the December tonnage for each of the four years, 1871-73, is as follows: 1870, 61 vessels of 23,100 tons; 1871, 76 vessels of 22,300 tons; 1872, 50 vessels of 26,300 tons, and 1873, 46 vessels of 31,500 tons. This last monthly total, therefore, brings up the work done during 1873 to 194 vessels of an aggregate of 261,500 tons, as against 227 vessels of 224,000 tons in 1872, 231 vessels of 196,200 tons in 1871, and 234 vessels of 189,800 tons in the year 1870.

A brief examination of these returns brings out some very interesting facts. First, we notice that extending over a series of four years, while the number of vessels has fallen from 234 to 194, the tonnage of vessels has increased from 189,800 tons to 261,500, the increase upon the four years being 71,700, or considerably more than one-third of the whole tonnage launched in the year 1870. Within the short period of four years, therefore, the average size of vessels built on the Clyde has advanced from about 811 tons to about 1,448 tons, which indicates such a radical revolution in the mechanical arts as but comparatively few persons could have confidently calculated upon at the commencement of that brief period.

The question of "paddle versus screw" has again come to the front in connection with the ship-building statistics now under consideration. *Paddle-steamers*, as to tonnage, were nearly stationary in 1870 and 1871, being between 10,000 and 11,000 tons; they fell off in 1872 to rather over 6,000 tons, but last year they again rose to 19,100 tons, which was a very considerable increase. It was due, however, almost entirely to the demand made by the *China Steam Navigation Company of Shanghai*, which had no fewer than five large paddle-steamers supplied to them of 1,250 up to 3,200, and 200 up to 400 horse-power, or in totals 12,410 tons and 1,450 horse-power.

Of *screw-steamships* there were 125 launched during 1873, of an aggregate of 218,000 tons. These numbers show that the average size of the Clyde-built screw-steamers has risen to 1,744 tons, which is a very extraordinary fact. For its explanation we must refer to the very large number of first-class ocean steamers built during the year for various great mercantile companies. The *Pacific Steam Navigation Company*, for example, were supplied with nine new steamers as the year's addition to their already magnificent fleet. One of them was a vessel of 4,820 tons and 650 horse-power, and the totals were 28,895 tons and 4,500 horse-power. No fewer than six of these great ocean steamers were built by Messrs. John Elder & Co. This is the largest amount of tonnage ever supplied in a single year to any shipping company.

There was a marked increase in the amount of tonnage launched in 1873 under the head of *iron sailing-vessels*. As compared with 1872, there was only one additional vessel, making twelve in all, but there was an increase in the aggregate tonnage from 12,500 tons to 19,000, most of the vessels of the class ranging from 1,550 to 1,980 tons, which are certainly extraordinary sizes for sailing-vessels.

[From the Glasgow Daily Mail.]

The total number of vessels of different classes launched on the Clyde during the year 1874 amounted to 187, with a gross tonnage of 244,467. This, as compared with last year, shows an increase of 17 in the number and a decrease in the tonnage of 2,375. In the class of *sailing-vessels*, as compared with the previous year, there is an increase in number of 29, with an increase in tonnage of 33,710. *Paddle-steamers* have decreased in number by four, and in gross tonnage by 8,651. The number of *screw-steamers* launched during 1874 has been only one less than that of the previous year, while the gross tonnage of these vessels shows a decrease of 29,229. From this it would appear that the average tonnage of the screw-steamers built on the Clyde this year has been much below that of those built during the previous year. As compared with 1864, the number of vessels shows a decrease of 18, while there is an increase in the tonnage of 64,959.

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5	1,900

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1	300
12	1,700
14	600

8	1,600
20	460
227	224,000

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EXPORTS FROM GLASGOW TO THE UNITED STATES.

During the year ending June 30, 1873, the imports into the United States from Scotland, chiefly from Glasgow, were as follows:

Pig iron, (135,695 tons).....	\$2,305,188
Old and scrap iron	344,033
Steel rails	484,723
Steel ingots, bars, &c	117,065
Steel manufactures.....	271,474
Cotton goods	839,887
Other cotton manufactures	2,206,313
Flax, raw	208,082
Flax manufactures	3,740,148
Jute manufactures	313,206
Chemicals	309,031
Sugar, brown	346,351
Other articles	2,894,161
Total, 1872.....	14,341,572
Total, 1873.....	14,344,770
Total, 1874.....	12,106,452

RATES OF WAGES.

Mr. Consul Jenkinson, in transmitting to the author a statement of the rates of wages at the close of the year 1872, makes the following remarks in regard to the cause of the fluctuations in the price of labor:

UNITED STATES CONSULATE,
Glasgow, January 1, 1873.

Hon. EDWARD YOUNG,
Chief of Bureau of Statistics.

SIR: The condition of the laboring classes in Scotland is a subject well worthy the careful study of all who are interested in solving the great problem of labor in the United States. The last three years have been years of unceasing strife between capital and labor, the employers and the employes. "Locking-out," as it is termed, on the one side, and strikes on the other, have been of almost daily occurrence. As the capital of the country is in the hands of comparatively few, these can readily combine to put down the wages of labor, thus forcing the laborers into combinations and "unions" to put them up again. Nearly every trade has its "union," and almost every locality its combination of these unions. All classes alike suffer from these ceaseless contentions between master and man. For instance, for some months past a struggle has been going on between the miners of this district and the proprietors of the coal-mines, resulting in great loss to the proprietors, destitution and suffering to the miners and their families, and an extraordinary rise in the price of coals to the public. Coals which sold here at retail one year ago for 16s. per ton are now selling at 36s., an increase of more than 100 per cent. But the trouble ends not here; iron and many other things, in the manufacture of which coals largely enter, have enormously advanced in price. And what are manufacturers to do? They supply a foreign market, in which they can successfully compete only by selling as low as or lower than others. High prices for labor and material at home will require high prices abroad. If they demand these, others will undersell them and take their trade, while, if they fail to get the advance, they must close their works at home. High wages are, therefore, impossible with them. And this explains in a word the miserable condition of the laboring man in this country, and his utter inability to change his condition. He must work for a mere pittance, to enable his employer to sell his goods abroad at low rates, or there will be no work for him to do, and he will be left to starve.

The strikes of the last few years have considerably advanced the wages paid to skilled labor in Glasgow; still, to an American mechanic the prices now received would seem exceedingly low. In some instances the best workmen get from 30s. to 33s. per week, but the average pay of mechanics, such as blacksmiths, carpenters, masons, tailors, &c., is not more than 27s. per week, equivalent to \$6.53 in United States gold.

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Wages in engineering works in 1872.—The following figures show the average rates of weekly wages paid to workmen in engineering and ship-building trades in Glasgow:

Occupation.	Wages.	Occupation.	Wages.
Pattern-makers.....	86 62	Carpenters.....	86 94
Turners.....	6 40	Smiths' helpers.....	5 97
Planers.....	6 13	Painters.....	5 30
Drillers.....	4 13	Ship riveters and calkers.....	6 42
Finishers.....	6 11	Ship-smiths.....	6 20
Fitters.....	6 27	Holders-on.....	3 90
Smiths.....	6 64	Average of all classes.....	6 11
Hammermen.....	4 51	Unskilled labor.....	3 63
Platers.....	7 70	Common labor outside of works.....	6 05
Riveters.....	6 96		3 38
Calkers.....	6 40		3 67
Joiners.....	5 52		
Sawyers.....			

Works of John Elder & Co.—The author went to Glasgow from Liverpool on purpose to obtain trustworthy information in regard to the cost and condition of labor in the ship-yards and engineering-works on the Clyde. The facts and figures immediately preceding were obtained afterward and forwarded at the date indicated, as well as more extended information as to the condition of the working classes in Glasgow, which will be found under its appropriate head. The following extract from the author's note-book affords some information in regard to a well-known firm which has recently forwarded one of the most valuable statements in this report:

GLASGOW, October 15, 1872.

Reached here this morning after an uncomfortable night-journey from Liverpool, in an unwarmed car. Having been furnished with a letter of introduction to Messrs. J. Elder & Co., one of the most eminent iron-ship-building firms, we crossed one of the bridges over the Clyde, examined their upper works, and rode down about three miles to their yard; were courteously received by one of the partners, who conducted us through every part of the works, explaining every process, from the drawings and models to the finished ship ready for launching. The demand for iron vessels has become so great that this firm and nearly all the other builders are working to their utmost capacity. A steamship which had already received part of her plating was on the stocks, from which another had been launched but thirteen days previously. The ships of the National Line, plying between Liverpool and New York, were built by this firm, and are of great strength and entire seaworthiness, [as we afterwards ascertained by a return-passage in one of them.] The tools and machines in use in Elder's works were fully equal and a few superior to those in Laird's well-known establishment, which I visited on the previous day.

The increase in wages and in iron and other materials has greatly enhanced the cost of building iron ships. One nearly completed was pointed out for which the builders were to receive £130,000, of the same size as another which had previously been built on the same spot for £91,000. True, there were some changes made in the construction of the higher-priced vessel, which enhanced her cost to some extent. The great demand for Clyde-built ships has not been caused by their superiority, for, no doubt, those of Newcastle, Birkenhead, and Belfast are equally as good; but from the fact that they can be built at less cost, owing in part to the cheapness of materials, but chiefly to the abundance of skilled workmen and the low rate of wages paid to them. True, there has been a large advance in labor, averaging about 15 per cent., and it has been no greater, proportionately, than in England, thus leaving the relative rates as before.

As some changes in the rates of wages, as well as in the price of iron ships, have since taken place, the figures then obtained are not presented here. The following statement, however, gives in detail the number of men in each branch or subdivision of labor in the ship-yard and in the engineering and boiler works respectively, and the rate of wages paid to each.

The average rates are computed in United States gold and the gen-

eral average given, which amounts to \$7.07½ in the engineering-works and \$7.13 in the ship-yard; or to \$7.96 and \$8.02, respectively, in lawful money of the United States.

Average weekly wages (per week of 51 hours) paid to persons employed in the engineering, boiler-making, and ship-building works of John Elder & Co., at Glasgow and Govan, in the year 1871.

ENGINEERING AND BOILER WORKS.			SHIP-BUILDING YARD.		
Average number.	Occupation.	Wages.	Average number.	Occupation.	Wages.
	Machinists:		236	Helpers	\$1 10
16	Best	\$7 50	14	Angle-iron smiths	6 05
22	Ordinary	6 50	13	Helpers	4 10
22	Interloc	5 38	79	Ship-smiths	6 65
20	Helpers	4 08	100	Helpers	4 35
63	Pattern-makers and joiners	7 72	110	Riveters	6 65
40	Turners	7 30	152	Holderson	4 10
230	Engine-fitters	6 88	68	Rivet-boys	1 20
33	Blacksmiths	7 26	89	Calkers	6 65
44	Hammermen	4 56	89	Drillers	4 72
4	Millwrights	7 90	266	Joiners	7 98
230	Apprentices	2 54	37	Apprentices	2 30
167	Laborers	4 10	13	Cabinet-makers	8 22
7	Brass-founders	8 74	7	Pattern-makers	7 98
5	Foundry dressers	5 40	8	Blockmakers	7 18
9	Foundry laborers	4 35	37	Machinists	6 17
12	Brass-finishers	6 76	256	Carpenters	7 98
5	Coppersmiths	8 22	49	Apprentices	3 02
2	Crane-men	6 65	25	Boat-builders	8 22
6	Riggers	6 17	41	Iron-finishers	7 18
34	Boiler-makers	7 04	15	Brass-finishers	7 14
54	Riveters and calkers	7 00	10	Mechanics	6 65
16	Holderson	4 84	25	Plumbers	7 74
4	Flangers	7 74	13	Tin-smiths	6 64
19	Blacksmiths	6 53	50	Painters	7 74
24	Hammermen	4 60	43	Red-leaders	6 64
28	Apprentices	3 50	45	Riggers	4 09
38	Rivet-boys	1 86	227	Laborers	4 10
120	Laborers or helpers	3 87	13	Carters	5 80
10	Foremen, (engineer, &c)	14 64	9	Furnace-men	4 96
6	Sundry	12 94	25	Foremen	10 23
119	Fitters	7 18			
582	Average	7 07½	1,407	Average	7 13

DUNDEE, SCOTLAND.

Dundee has been celebrated for its manufactures of linen and hempen fabrics, chiefly of the coarser descriptions. The manufacture of linen appears to have been introduced from Germany in the beginning of the last century. Insignificant in extent at first, it gradually increased until the close of that century, when machinery having been applied to the spinning of flax, a great impulse was given to it. Hand-spinning has been entirely superseded by machine-spinning. The chief articles of manufacture are shirtings, sail-cloth, dowlas, sacking, and bagging.

Dundee is now best known as the seat of the jute manufacture, including all kinds of jute carpeting. Manufactures of jute are almost exclusively carried on here. The consumption in Dundee of this material, which is grown in India, amounts to nearly 40,000 tons annually.

As the raw material is inexpensive, costing in Dundee from 2 to 3 pence per pound, the cloth made from it, reckoned by weight, is the cheapest textile fabric made in Great Britain. Of jute many varieties of fabrics are made, from the coarsest mail-bagging to carpets of great beauty. This range includes pack-sheets for every species of merchandise, sacks for wool, coffee, and guano, &c.

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The annual value of the flax, hemp, and jute manufactures in Dundee is upward of £3,000,000.

Dundee is also famous for its manufacture of confectionery, which is exported to all parts of the world.

Ship-building and machine-making are carried on to some extent.

The author was unable to make a personal examination of the jute industry, although strongly urged by Mr. Consul McDougall in the following extract:

DUNDEE, June 10, 1872.

Permit me to press upon you the necessity (if at all possible) of your visiting this city. The jute manufactures here, to the extent of three-fourths of the whole quantity manufactured, go direct to the United States. The quantities made are something enormous. They are peculiar to Dundee alone, and the machinery in operation is so attractive and powerful that it is of the utmost importance that the bureau which you represent should be fully apprised of the Dundee jute and linen manufactures. Indeed, I am bound to say that in no other city will you receive such useful information, and of such paramount importance to the United States, as you will receive here.

Mr. McDougall forwarded the following statements of the rates of wages which obtained in Dundee at the periods indicated:

FACTORY-LABOR.

Wages paid per week at Dundee, Scotland, the seat of the jute and linen trades, October, 1872.

Occupation.	Per week.		Occupation.	Per week.	
	Hours of labor.	Wages in U. S. gold.		Hours of labor.	Wages in U. S. gold.
Jute spinning, preparing flax:			Joiners.....	51	
Foremen.....	53	\$4 53	Blacksmiths.....	51	\$4 20
Women.....	53	32 13 to 3 42	Masons.....	51	6 77
Boys, 12 to 15 years.....	53	1 69 to 1 93	Laborers.....	51	\$7 99 to 8 47
Jute, spinning flax.....			Plasterers.....	51	4 11 to 4 81
Spinners, women.....	53	2 49 to 2 66	Plumbers.....	51	5 21 to 6 05
Piercers, girls, (12 to 15 yrs.)	53	1 21 to 1 93	Brass-finishers.....	51	7 26
Shifters, girls, (12 to 15 yrs.)	53	1 57 to 1 69	Molders.....	51	6 05
Half-timers, boys and girls, (7 to 12 years).....	53	36 to 66	Bakers.....	51	6 73 to 7 71
Bobbin-winders, women.....	53	2 66 to 2 90	Painters.....	51	6 29 to 6 75
Cop-winders, women.....	53	2 66 to 3 14	Shoemakers.....	51	5 21 to 7 26
Warpers, women.....	53	2 90 to 4 12	Tailors.....	51	6 29 to 7 26
Power-loom tenters, men.....	53	6 53 to 7 39	Domestic servants.....	60	5 21 to 6 73
Power-loom weavers, women.....	53	2 66 to 3 35	Housemaids.....	53 03 to 67 76	
Mechanics.....	51	6 29 to 8 71	Cooks, women.....	50 80	
			Gardeners, men.....	60	5 32 to 5 56

* Per year, with board.

Average rates of wages per week paid to the different workers employed by a jute-weaving establishment at Dundee, February, 1873.

Occupation.	Wages per week.			Occupation.	Wages per week.		
	Lowest.	Highest.	Average.		Lowest.	Highest.	Average.
Jute-pickers.....			\$1 72	Single-loom weavers.....			
Strikers-up.....			3 15	Double-loom weavers.....			\$2 54
Hand at softeners.....	32 13	33 51	3 02	Tenters.....			3 51
Preparers.....	2 13	2 96	2 43	Starchers.....	50 05	57 02	
Spinners.....			2 46	Mill-overseers.....	5 51	6 53	
Coarse spinners.....	2 66	2 90	2 78	Calendermen.....	6 05	7 14	
Piercers.....			1 57	Lappers.....	4 24	5 69	
Shifters, (half-timers).....	62	75	1 72	Measurers, tiers, &c.....	4 36	5 21	
Reelers.....	2 13	2 15	2 13	Mechanics.....			6 53
Cop-winders.....	2 42	3 30	3 02	Joiners.....			6 29
Warp-winders.....	2 42	3 30	3 15				

Statement showing the rates of wages paid for mechanical and farm labor in the consular district of Dundee during the year 1871.

MECHANICAL LABOR.

Occupation.	Wages per week.	Occupation.	Wages per week.
Blacksmiths	\$5 26 to \$6 21	Plasterers	\$3 16 to \$3 64
Bricklayers and masons	2 40 to 9 00	Shoemakers	6 00 to 8 40
Cabinet-makers	6 00 to 7 20	Stone-cutters	8 40 to 9 60
Carpenters	7 20 to 7 68	Tailors	6 00 to 7 20
Coopers	6 48 to 7 20	Tanners	5 28 to 6 00
Miners	10 00 to 12 00	Tin-smiths	5 52 to 6 48
Machinists	6 00 to 7 00	Wheelwrights	6 72 to 7 20
Painters	6 72 to 7 20	Hours of labor per week, 51.	

FARM AND OTHER LABOR.

	Wages per month.
Farm-hands, { Experienced	\$12 40 to \$15 00, with board.
{ Ordinary	11 20 to 12 40, with board.
Common laborers at other than farm-work	23 84 without board.
Female servants	4 20 to \$10 00, with board.

Mr. P. Fleming, of Dundee, emigration agent, when in Washington, furnished the following rates of wages, per week of fifty-one hours, obtained in that town in 1872:

Occupation.	Wages.	Occupation.	Wages.
Mechanics	\$6 05 per week.	Overseer	\$6 05 to \$7 26 per week.
Molders	6 78 to \$7 20 per week.	Joiners	5 21 to 6 02 per week.
Weavers	2 30 to 3 38 per week.	Plasterers	6 17 per week.
Spinners	2 18 to 2 42 per week.	Masons	14 per hour.
General hands, (female)	1 94 to 2 18 per week.	Painters	12 per hour.

LEITH, SCOTLAND.

Population in 1871, 44,280.

This is the sea-port of Edinburgh, from which it is only about a mile and a half distant. The water of Leith, at its confluence with the Frith of Forth, divides the town into two parts, called, respectively, North and South Leith. The principal buildings are the exchange, the custom-house, the town-house, the church of South Leith, and the forts—a military station for a small body of artillery.

The chief manufactures of Leith are ropes, sail-cloth, locomotive-engines and machinery, glass, soap, ale, refined sugar, and oil-seed cakes. Iron and timber ship-building is also carried on to a considerable extent.

RATES OF WAGES IN 1872.

The following statements, showing the rates of wages paid in 1872 for mechanical and agricultural labor in the Leith consular district, which includes the city of Edinburgh, were furnished by Mr. Consul Robeson:

State

I. Maso

II. Join

III. Plan

IV. Blac

V. Plaste

VI. Tins

VII. Boot

Closers

Makers

Makers

Jobbers

VIII. Linc

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X. Painters:

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Grain-mer

Boys

XI. Printers an

Composition

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Letter-press

Letter-press

Lithograph

Bookbinder

Girls

Sewers and

Apprentices

The following

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Scotsman

Compositors

*According to ab

MECHANICAL LABOR.

Statement showing the rates of wages paid to mechanics in Leith, Scotland, in October, 1872.

Classes of operatives.	Working hours per week.	Weekly wages.	Remarks.
I. Masons.....	51	\$6 55	Wages of masons are greatly reduced by what is called "broken time," arising from unfavorable weather, and the average weekly earnings of this class of tradesmen throughout the year may be stated at \$6.05.
II. Joiners.....	51	6 75	Average wages, 13 cents per hour. Working-time: 9 hours for 5 days and 6 hours on Saturdays. Overtime paid at the rate of 10d. (20 cents) per hour. Teams on week's warning. This class of mechanics is not so liable to loss from broken time as masons.
III. Plumbers.....	51	6 75	No broken time.
IV. Blacksmiths.....	51	6 05	Do.
V. Plasterers.....	51	7 20	Wages of plasterers, like those of masons, are greatly reduced during the year by broken time, arising from unfavorable weather, and the average weekly earnings of this class may be stated at \$6.20.
VI. Tinsmiths.....	51	6 20	No broken time.
VII. Bootmakers: Closers.....	57	7 26	These wages obtain all the year round. The hours during which these classes work throughout the year are as follows: Feb. 15 to Nov. 9, 9 hours for 5 days and Saturdays 6 hours; Nov. 9 to Feb. 15, 8 hours for 5 days and Saturdays 5 hours; Nov. 27 to Jan. 11, 7½ hours for 5 days and Saturdays 4 hours; Jan. 11 to Feb. 15, 8 hours for 5 days and Saturdays 5 hours.
Makers of gentlemen's boots.....	59	8 27	
Makers of ladies' boots.....	60	6 05	
Jobbers.....	60	5 32	
VIII. Linen-manufacturing operatives: Skilled workmen.....	51	\$0 84 to 1 31 per day.	According to ability. This class has no broken time.
Mechanics, tenters, &c.....	51	\$0 84 to 1 21 per day.	Do.
Young women and girls.....	51	2 42, 83 39, and 89 87.	Do.
IX. Engineers and millwrights: Best hands.....	51	7 26	Extra time is paid for according to circumstances; usually "time and a quarter" and 1d. (2 cents) per hour as an allowance over and above. These operatives are not liable to broken time.
Second-class hands.....	51	6 77	
Third-class hands.....	51	6 05	
X. Painters: Journeymen house-painters.....	6 67	73 cents extra per week allowed to each man working 1½ miles or upward from the center of the town; also railway-fares to and from work when necessary. Boys get 3s. first year, and wages raised, according to ability, to \$2.42 and \$2.90 per week during apprenticeship of 6 yrs.
Grain-men and ornamental painters.....	.....	15 cts., 36 cts., and 48 cts. per hour.*
Boys.....	.....	\$0 73
XI. Printers and binders in Edinburgh: Compositors.....	54	\$6 89 to 7 26	These are the wages paid to the employees of one of the largest printing and publishing establishments in Scotland. Working time, 24 hours for 5 days and 6½ hours on Saturdays. These operatives have no broken time, and the working-hours specified obtain all the year round.
Letter-press-machine men.....	54	6 78 to 7 26	
Letter-press boys.....	54	1 21 to 1 45	
Letter-press girls.....	54	1 45 to 2 90	
Lithographic-machine men.....	54	6 90 to 7 74	
Bookbinders.....	54	7 26 to 8 47	
Girls.....	54	1 94 to 2 90	
Sewers and folders.....	54	1 45 to 3 15	
Apprentices.....	54	60 to 1 21	
The following are the rates of wages paid in the office of the Daily Scotsman: Regular day-hands.....	53½	7 80	
Compositors: Regular night-hands.....	48	9 68	These day-hands work usually 8 hours extra time during the week, for which they are paid at the rate of 1s. per hour; hence their weekly wages amount to 40s. 6d. No broken time.
Casual day-hands.....	53½	7 26 to 10 40	
Casual night-hands.....	45	8 47 to 13 31	

*According to ability. †The principal Edinburgh paper, if not the most influential paper in Scotland.

Statement showing the rates of wages paid to mechanics in Leith, &c.—Continued.

Classes of operatives.	Working hours per week.	* Weekly wages.	Remarks.
Rates of wages paid in the office of the Daily Scotsman.—Continued.			
Machinists	52½	\$9 68	
Machinists, feeders, (boys, 16 to 24 years.)	52½	\$3 87 to 4 26	
In the establishment of the Edinburgh Courant.			Day-compositors are paid at the rate of 6d and 6d½, and night-compositors 7½d. and 8d., per 1,000 types, according to size. This obtains all the year round.
XII. Carters	51	4 81	Masons' laborers average weekly wages throughout the year may be stated at \$3.84. Day-laborers in country and land-ward districts are paid at the rates of 72 cents and 84 cents per day, but taking into consideration the broken time to which they are exposed, the average weekly earnings of that class do not exceed the sums of \$3.84 or \$4.08. Some classes of laborers have little or no broken time, but it is estimated that the average weekly earnings of a laborer in Scotland may be stated at from \$3.30 to \$4.32 per week.
XIII. Laborers	51	4 82	

AGRICULTURAL LABOR IN SCOTLAND.

Table showing the earnings of agricultural laborers in Scotland.

Class.	*Annual earnings.			Per week, all the year round.
	In money.	In gains.	Total.	
Farm-stewards	\$101 01	3½ loads oatmeal, at 40s., £6 10s.; 12 bushels barley, at 4s., £2 8s.; 1,600 yards ground for planting potatoes, £4; cow kept, £7; house and garden, £3; coals, £2; harvest meat, £1	£26 90	
Farm-hinds	82 98	do	207 63	
Farm shepherds	116 88	do	242 24	
Foresters:				
Overseers				£5 09
Ordinary hands				3 63

* These are the wages, &c., actually paid to the farm-servants on a farm about 25 miles distant from the city of Edinburgh, and may be stated as a fair average of the annual earnings of farm-servants in the southeastern part of Scotland. Besides these wages, farm-servants (hinds, usually keep one or two pigs, and are provided by their masters with the necessary straw for "bedding" free of charge. It is of importance to observe that the farm-servant has no broken time from sickness or inclemency of weather, &c.

There is a class of agricultural laborers known as "bendagers," a class of farm-servants almost peculiar to Scotland. These are females, young women who work at field labor. For the summer half-year their money-wages is from £8 to £10, according to experience and ability; and for the winter half-year £6 to £8; that is, in the former case, \$38.72 to \$48.40, and in the latter, \$29.04 to \$38.72. In addition to this wage they have bed, and board, and washing. On some farms it is imperative on the hind to provide a bendager for field-labor, and he hires one accordingly. The bendager lodges in the hind's house and shares the family living. For her services on the farm the farmer pays the hind at the rate of 39.2 cents a day for nine months of the year, and 24.2 cents per day for three months, with an allowance of \$4.84 for harvest-food,

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Meath, Queen
Louth, Cavan
Kings, Longf
Westmeath
Donegal, Fern
Clare, Galway
Ick
Cork
Carlow, Cork
Leitrim, Mayo
Sligo
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and \$2.42 per week for four weeks during harvest operations, in lieu of the ordinary rate of 30 cents per day. This system of bendage is a fruitful source of complaint among the binds, whose circumstances are, in these days of dear provisions, greatly stinted by being thus, as it were, each compelled to maintain a female worker for the farmer. In many districts the bendage system has been dispensed with altogether, and it is gradually becoming a thing of the past. It is evident that the condition of the bendager, so far as regards remuneration, is much better relatively than that of her master, the bind.

IRELAND.

Ireland has of late years been regarded as an agricultural country, and while it is possessed of cheap labor and other facilities for carrying on manufacturing with success, has not, for various reasons, kept pace with the countries across the Channel, especially since the introduction of machinery. The manufacture of linens, which has its seat at Belfast, and of Irish poplins, which are produced in Dublin, are industries widely known and highly celebrated. To a limited degree cotton, wool, and worsted fabrics are produced; as is also lace in Limerick. Great progress has been made within the last few years in the manufacture of embroidered muslin, which employs about 360,000 persons, principally females. The annual value of the manufactured goods amounts to £1,400,000. Indeed, at the present time the established branches of production and commerce are taking a wide sweep. A better system of agriculture has, within a brief period, been introduced, and with it a larger demand, and consequently a better remuneration for labor. The immense emigration, chiefly to the United States, as appears from a statement on page 241, has not only served to improve the material condition of the emigrants, and reacted on Ireland by the increased wealth and position of those who have sought fortune in other lands, but by reducing the excess of population, has largely advanced the rates of wages of those who remain at home.

WAGES OF IRISH FARM LABORERS.

The following information in regard to the wages of farm laborers in Ireland appears in the journal of the Statistical Society of London, March, 1870, and is computed in United States gold:

Counties.	Per day.		Per week.		Per year.
	With board.	Without board.	With board.	Without board.	With board.
Cork, Limerick, Waterford,	20 24 to 50 61	50 67	50 14 to 14 46	1 10 to 52 43	23- 00 to \$45 67
Antrim, Armagh, Down, Londonderry, Tyrone	25				24 75 to 48 67
Dublin, Wicklow, Kildare	33				
Meath, Queens, Wexford	17 to 24	50 24 to 49	1 07	1 70	
Louth, Cavan, Down	24 to 37	1 37	2 43		
Kings, Longford, Roscommon	37 to 55	1 50	1 32		25 93
Westmeath	30 to 61				45 67 to 73 00
Donegal, Fermanagh	37 to 49				
Clare, Galway, Kerry, Limerick	33 to 47	1 05	2 43		58 37 to 67 10
Cork	37 to 50	1 22	1 46		50 18
Carlow, Cork, Tipperary	25 to 37	1 02	1 32		32 00 to 45 67
Leitrim, Mayo, Roscommon	25 to 37	1 02	1 32		35 03 to 45 67
Sligo					
Winter					
Spring					

* Harvest-wages.

Statement showing the rates of wages paid for mechanical and other labor in Ireland in the year 1873.

Occupation.	Waterford.	Cork.	Londonderry.
MECHANICS.			
Blacksmiths.....	\$8 40 per week.....	\$5 84 per week.....	\$0 81 to \$1 32 per day.
Bricklayers, masons.....	6 72 per week.....	6 33 per week.....	84 to 1 32 per day.
Cabinet-makers.....	7 20 per week.....	.....	96 to 1 04 per day.
Carpenters.....	6 24 per week.....	5 84 per week.....	72 to 1 32 per day.
Coopers.....	5 76 per week.....	1 46 per day.....	72 to 1 08 per day.
Machinists.....	7 50 to \$9 60 per week.....	7 30 per week.....	1 20 to 1 80 per day.
Painters.....	6 00 per week.....	5 84 per week.....	1 08 to 1 56 per day.
Plasterers.....	6 72 per week.....	1 46 per day.....	96 to 1 44 per day.
Shoemakers.....	6 00 per week.....	1 46 per day.....	5 76 to 6 24 per week.
Stone-cutters.....	6 72 to \$7 20 per week.....	1 46 per day.....	96 to 1 44 per day.
Tailors.....	6 00 per week.....	6 09 to \$7 30 per week.....	5 28 to 6 30 per week.
Tanners.....	.....	.....	4 32 to 5 76 per week.
Tinsmiths.....	7 20 per week.....	.....	3 60 to 4 80 per week.
Wheelwrights.....	6 24 to \$6 72 per week.....	8 52 per week.....	4 32 to 5 76 per week.
FARM LABORERS.			
Experienced hands:			
In summer.....	72 per day.....	3 41 per week.....	36 to 40 per day.
In winter.....	60 per day.....	2 43 per week.....	36 to 40 per day.
Ordinary hands:			
In summer.....	60 per day.....	2 02 per week.....	32 to 36 per day.
In winter.....	48 per day.....	1 05 per week.....	32 to 36 per day.
Common laborers, at other than farm work.....	42 per day.....	.....	36 to 72 per day.
Female servants.....	60 00 per annum.....	.....	40 00 to 60 00 per annum.
MISCELLANEOUS.			
Seamen.....	12 40 to \$15 per month.....	.....	.....
Laborers or unskilled workmen, 1874.....	.....	2 02 per week.....	.....
Apprentices or boys, 1874.....	.....	1 46 per week.....	.....
Foremen or overseers, 1874.....	.....	9 73 per week.....	.....

Mr. E. H. Derby, of Boston, who traveled in Ireland in 1872, gives the following memoranda in regard to wages at that time:

Londonderry—servant girls, 13s. per month; servant men, from £10 to £14 per year; masons, 4s. per day. Girls in shirt factories earned an average of 8s.; many at piecework earned from 6s. 4d. to £1 per week each.

Housemaids in Dublin get £10 per year. A washerwoman earns 1s. 6d. per day. Wages of farm laborers, with board, 10s. to 12s. per week. Extra help 2s. to 3s. each per day.

BELFAST.

Population in 1871, 174,413.

Belfast is the chief manufacturing and commercial town and the great depot of the linen trade of the north of Ireland. It is the center of the Irish linen manufacture,* to the cultivation of which it is mainly indebted for its prosperity. There are also flour-mills and saw-mills, founderies, tanneries, breweries, and distilleries, a felt manufactory and vitriol-works, and being a maritime town it has extensive ship and rope yards. It presents an appearance of bustling activity not to be found elsewhere in Ireland.

* Linen was woven in Ireland as early as the eleventh century, but the first mention of Irish linen on record occurs in the thirteenth century, it being stated that in 1272 it was used in Winchester.

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IRON-SHIP-BUILDING AND ENGINEERING WORKS.

Iron-ship-building is extensively carried on by Messrs. Harland & Wolff, the builders of the well-known steamships of the White Star Line. Facilities for this branch of industry, equal to those on the Clyde, are possessed at Belfast; indeed, the rates of wages are said to be somewhat lower. The following rates paid by the firm above mentioned and kindly furnished for this report, being given by the day, and not in such detail as the statements made by the firm of Messrs. J. Elder & Co., of Glasgow, are, therefore, not so valuable for purposes of comparison.

Average wages per day (computed in United States gold) paid by Messrs. Harland & Wolff to hands employed in their iron-ship-building and engineering works in October, 1874.

Occupation.	Wages.	Occupation.	Wages.
Platers, riveters, and calkers	\$1 13	Riggers.....	\$1 09
Holders-on.....	68	Smiths.....	1 06
Shipwrights.....	1 29	Hammermen	58
Joiners.....	1 10	Fitters and pattern-makers.....	1 15
Painters.....	1 17	Laborers.....	62
Sawyers.....	98		

DUBLIN.

Population in 1871, 267,717.

Dublin City, the capital of Ireland, claims a high antiquity. In the early part of the ninth century it was taken by the Danes, and in 1169 by the English under Strongbow. The manufactures are limited to Irish poplins, stockings, cotton, and a few other fabrics. Iron casting, cabinet making, and manufactures of the minor articles of jewelry and apparel are thriving, but afford employment to but a small part of the population. The well-known Dublin porter is an important item in the trade of the city, the exports in 1871 reaching 281,301 hogsheads.

Mr. Wilson King, United States consul at Dublin, under date of November 24, 1873, writes as follows:

In all, or nearly all, branches of labor wages are greatly higher than they formerly were, and I do not think that the cost of living has advanced proportionately. Bread is slightly dearer, but meat, sugar, and tea, and even oatmeal, can be had for nearly the same as before the advance in wages.

AGRICULTURAL WAGES IN ENGLAND AND WALES.

Rates of agricultural wages and amount of weekly earnings for men, women, and children, in each county of England and Wales, in the quarters ended Michaelmas and Christmas, 1869, and Lady Day and Midsummer, 1870.

[Compiled from parliamentary papers, No. 371, of session 1870, and No. 181, of session 1871.]

Districts and counties.	Quarters ended—	Men.		Women.	Children under 16.
		Weekly wages without lodg- ing and food.	Weekly earn- ings by task- work.	Weekly wages without lodg- ing and food.	Weekly wages without lodg- ing and food.
SOUTHEASTERN.					
Surrey.....	Michaelmas, 1869*.	83 38	53 63 to 41 84	41 21 to 41 45	80 96 to 41 03
	Christmas, 1869....	3 14	3 63	1 21 to 1 45	62 to 1 08
	Lady Day, 1870....	83 14 to 3 38	4 35 to 4 05	1 33 to 1 45	1 08 to 1 21
	Michaelmas, 1869*.	3 38 to 3 63	4 35 to 4 05	1 45 to 2 17	72 to 1 19
Kent.....	Christmas, 1869....	3 14 to 3 63	3 63 to 4 35	1 45	72 to 1 34
	Lady Day, 1870....	3 14 to 3 63	3 38 to 4 11	1 45 to 1 61	72 to 1 21
	Midsummer, 1870....	3 38	4 11	1 45	96 to 1 21
	Michaelmas, 1869*.	2 66 to 3 20	3 63 to 4 81	1 45	48 to 1 49
Sussex.....	Christmas, 1869....	2 66 to 2 90	3 14 to 3 63	1 21	72 to 1 03
	Lady Day, 1870....	2 66 to 3 14	3 02 to 4 35	1 21 to 1 45	72 to 1 45
	Midsummer, 1870....	2 66 to 2 90	3 14 to 3 63	1 21 to 1 45	72 to 96
	Michaelmas, 1869*.	2 66	4 35 to 4 81	1 21	96 to 1 21
Southampton.....	Christmas, 1869....	2 66	2 90 to 3 20	72 to 96	1 21
	Lady Day, 1870....	2 42 to 2 66	2 90 to 3 63	72 to 1 21	81 to 1 33
	Midsummer, 1870....	2 42 to 2 90	2 90 to 3 63	96 to 1 21	72 to 1 21
	Michaelmas, 1869*.	2 66 to 3 14	3 63 to 4 81	1 21 to 1 45	1 21 to 1 69
Berkshire.....	Christmas, 1869....	1 93 to 2 42	2 42 to 3 14	96 to 1 08	81 to 1 49
	Lady Day, 1870....	2 42	2 66 to 3 14	96 to 1 08	81 to 1 08
	Midsummer, 1870....	2 17 to 2 42	2 90 to 3 63	96 to 1 21	81 to 1 21
	Michaelmas, 1869*.	2 17 to 2 42	2 90 to 3 63	96 to 1 21	81 to 1 21
SOUTH MIDLAND.					
Herts.....	Michaelmas, 1869*.	2 12 to 4 34	5 47	1 68	96 to 2 49
	Christmas, 1869....	2 51 to 3 14	4 26	1 08	96
	Lady Day, 1870....	2 60 to 3 11	3 26	96	96 to 1 04
	Midsummer, 1870....	2 78 to 3 14	3 63	96	96
Northamptonshire.....	Michaelmas, 1869*.	2 90 to 3 14	3 63 to 6 65	96 to 1 45	84 to 1 45
	Christmas, 1869....	2 42 to 3 26	3 38 to 4 11	72 to 1 45	48 to 1 08
	Lady Day, 1870....	2 66 to 2 90	3 38 to 3 63	96 to 1 45	84 to 1 68
	Midsummer, 1870....	2 66 to 2 90	3 14 to 5 08	96 to 1 45	60 to 81
Huntingdon.....	Michaelmas, 1869*.	3 87	4 35	1 45	1 45
	Christmas, 1869....	2 66	3 34	1 21	72 to 96
	Lady Day, 1870....	2 66	2 90	1 21	72 to 1 21
	Midsummer, 1870....	2 42	2 90	1 21	96
Bedfordshire.....	Michaelmas, 1869*.	2 66 to 3 63	3 63 to 5 33	1 21 to 1 45	60 to 1 45
	Christmas, 1869....	2 42 to 3 38	2 66 to 2 90	96 to 1 45	60 to 1 21
	Lady Day, 1870....	2 42 to 3 38	2 66 to 2 90	96 to 1 45	60 to 1 21
	Midsummer, 1870....	2 42 to 3 38	2 66 to 2 90	96 to 1 45	60 to 1 45
Cambridge.....	Michaelmas, 1869*.	2 42 to 2 90	3 63 to 3 87	72 to 1 21	48 to 81
	Christmas, 1869....	2 42 to 2 90	3 63 to 3 87	72 to 1 21	48 to 81
EASTERN.					
Essex.....	Michaelmas, 1869*.	2 42 to 3 63	2 90 to 7 20	81 to 1 21	48 to 1 45
	Christmas, 1869....	2 42 to 3 02	2 42 to 3 7	81 to 72	48 to 1 45
	Lady Day, 1870....	2 42 to 2 90	2 42 to 3 7	81 to 1 45	48 to 1 45
	Midsummer, 1870....	2 42 to 2 90	2 42 to 3 38	81 to 1 21	48 to 1 45
Suffolk.....	Michaelmas, 1869*.	2 17 to 2 90	3 38 to 7 20	96 to 1 08	48 to 1 68
	Christmas, 1869....	2 42 to 2 90	2 90	96 to 1 08	48 to 96
	Lady Day, 1870....	2 42 to 2 90	2 90 to 3 38	96	48 to 1 45
	Midsummer, 1870....	2 42 to 2 90	2 90	96	48 to 1 45
Norfolk.....	Michaelmas, 1869*.	2 42 to 3 11	3 11 to 4 35	72 to 1 21	24 to 1 21
	Christmas, 1869....	2 17 to 3 11	2 90 to 3 63	72 to 1 21	48 to 1 21
	Lady Day, 1870....	2 42 to 3 11	2 90	72 to 1 08	48 to 1 21
	Midsummer, 1870....	2 42 to 3 14	2 90 to 3 87	72 to 1 21	48 to 1 21
SOUTHWESTERN.					
Wiltshire.....	Michaelmas, 1869*.	2 42 to 2 90	3 87 to 1 38	96 to 1 45	48 to 1 45
	Christmas, 1869....	2 39 to 2 66	2 90 to 3 11	81 to 1 21	48 to 1 45
	Lady Day, 1870....	2 39 to 2 66	2 90 to 3 63	81 to 1 45	48 to 1 45
	Midsummer, 1870....	2 42 to 2 90	3 14 to 3 87	81 to 1 21	48 to 1 45
Dorset.....	Michaelmas, 1869*.	2 17 to 2 42	3 63 to 4 35	96	48 to 1 45
	Christmas, 1869....	2 05 to 2 17	2 90 to 3 11	72 to 96	48 to 96
	Lady Day, 1870....	2 05 to 2 90	2 17 to 3 26	81 to 96	48 to 1 45
	Midsummer, 1870....	2 17 to 3 63	2 42 to 1 35	72 to 1 45	72 to 1 49

* With beer at hay-time and harvest.

† Usual rate at harvest-time.

‡ With food

* With beer at

AGRICULTURAL WAGES IN ENGLAND AND WALES.

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Rates of agricultural wages and amount of weekly earnings, &c.—Continued.

and children, in
Christmas, 1869,

session 1871.]

Children under
16.

Weekly wages
without lodg-
ing and food.

£0 96 to £1 03

62 to 1 08

1 08 to 1 21

72 to 1 39

72 to 1 53

72 to 1 21

96 to 1 21

48 to 1 49

72 to 1 03

72 to 1 45

72 to 1 06

96 to 1 21

84 to 1 33

72 to 1 21

1 21 to 1 09

84 to 1 09

84 to 1 06

84 to 1 21

96 to 2 09

96 to 1 08

96 to 1 45

48 to 1 08

84 to 1 08

60 to 1 45

72 to 1 45

72 to 1 21

60 to 1 45

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Districts and counties.	Quarters ended—	Men.		Women.	Children under 16.
		Weekly wages without lodg- ing and food.	Weekly earn- ings by task- work.	Weekly wages without lodg- ing and food.	Weekly wages without lodg- ing and food.
Devonshire	Michaelmas, 1869	£1 03 to £2 90	£2 17 to £3 63	£0 6 to £1 08	£0 6 to £1 21
	Christmas, 1869	2 14 to 3 06	2 54 to 3 63	96 to 1 08	72 to 1 21
	Lady Day, 1870	2 05 to 2 96	2 42 to 3 63	96 to 1 08	48 to 1 21
	Midsummer, 1870	2 17 to 3 09	2 42 to 3 38	96 to 1 08	72 to 1 21
	Michaelmas, 1869	2 66	3 63	1 08	1 08
Cornwall	Christmas, 1869	2 66	3 63	1 08	72
	Lady Day, 1870	2 66	3 63	1 08	72
	Midsummer, 1870	2 66	3 63	1 08	72
	Michaelmas, 1869	2 42 to 2 90	3 38 to 4 84	96 to 1 45	96 to 1 93
	Christmas, 1869	2 42 to 2 51	2 42 to 3 11	1 21 to 1 45	84 to 1 45
Somerset	Lady Day, 1870	2 42 to 2 66	2 42 to 2 50	1 21	84 to 1 45
	Midsummer, 1870	2 42			
WEST MIDLAND.	Michaelmas, 1869	2 42 to 3 14	3 38 to 3 68	1 21 to 1 57	96 to 1 21
	Christmas, 1869	2 42 to 2 90	2 90 to 3 63	96 to 1 21	72 to 1 21
	Lady Day, 1870	2 17 to 2 90	2 90 to 3 63	96 to 1 21	84 to 1 21
	Midsummer, 1870	2 17 to 2 90	2 90 to 4 84	96 to 1 21	84 to 1 21
	Michaelmas, 1869	2 42 to 2 54	3 14 to 4 84	96 to 1 08	48 to 1 45
Herefordshire	Christmas, 1869	2 17 to 2 42	2 66	96 to 1 21	60 to 1 21
	Lady Day, 1870	2 17 to 2 66	2 90	96 to 1 08	72 to 1 45
	Midsummer, 1870	2 17 to 2 90	2 66 to 3 63	96 to 1 21	72 to 1 45
	Michaelmas, 1869	2 42 to 2 90	3 63 to 3 87	1 08	1 21
	Christmas, 1869	2 42 to 3 14		84 to 1 08	
Shropshire	Lady Day, 1870	2 42 to 3 14		84 to 1 08	
	Midsummer, 1870	2 66 to 3 14			
	Michaelmas, 1869	3 14	5 08	1 45 to 1 93	
	Christmas, 1869	3 14	3 87	1 21	84
	Lady Day, 1870	3 14		1 21	84
Stafford	Midsummer, 1870	3 14		1 21	84
	Michaelmas, 1869	2 66 to 3 87	2 90 to 6 05	72 to 1 45	48 to 1 45
	Christmas, 1869	2 42 to 3 14	2 90 to 3 87	72 to 1 21	48 to 1 06
	Lady Day, 1870	2 42 to 2 90	3 42 to 3 87	96 to 1 21	48 to 1 45
	Midsummer, 1870	2 42 to 2 90	3 42 to 3 87	96 to 1 21	48 to 1 45
Warwickshire	Michaelmas, 1869	2 66 to 3 87	3 15 to 4 84	24 to 72	72 to 96
	Christmas, 1869	2 54 to 3 14		84 to 1 21	72 to 1 45
	Lady Day, 1870	2 66 to 3 14	3 63	64 to 96	72 to 1 45
	Midsummer, 1870	2 66 to 3 63		64 to 1 43	84 to 96
NORTH MIDLAND.	Michaelmas, 1869	3 14 to 3 63			
	Christmas, 1869	2 90 to 3 14		96 to 1 45	96 to 72
	Lady Day, 1870	2 90 to 3 14		84 to 96	72 to 84
	Midsummer, 1870	2 90 to 3 38	3 63 to 3 75		84 to 1 45
	Michaelmas, 1869	3 11	3 63 to 4 84	93 to 1 21	72 to 96
Rutland	Christmas, 1869	3 02	4 84	1 45	84 to 1 45
	Lady Day, 1870	2 90			72
	Midsummer, 1870	2 90			72 to 1 45
	Michaelmas, 1869	3 14			72 to 1 45
	Christmas, 1869	3 38	5 58		72 to 1 45
Lincoln	Lady Day, 1870	3 38			96
	Midsummer, 1870	3 38			96
	Michaelmas, 1869	3 38			96
	Christmas, 1869	3 38			96
	Lady Day, 1870	3 38			96
Nottinghamshire	Midsummer, 1870	3 38			96
	Michaelmas, 1869	3 38			96
	Christmas, 1869	3 38			96
	Lady Day, 1870	3 38			96
	Midsummer, 1870	3 38			96
Derbyshire	Michaelmas, 1869	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Christmas, 1869	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Lady Day, 1870	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Midsummer, 1870	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Michaelmas, 1869	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
NORTHWESTERN.	Christmas, 1869	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Lady Day, 1870	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Midsummer, 1870	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Michaelmas, 1869	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Christmas, 1869	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
Cheshire	Lady Day, 1870	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Midsummer, 1870	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Michaelmas, 1869	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Christmas, 1869	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Lady Day, 1870	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
Lancashire	Midsummer, 1870	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Michaelmas, 1869	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Christmas, 1869	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Lady Day, 1870	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08
	Midsummer, 1870	2 90 to 3 38	3 50 to 4 36	1 21 to 1 61	84 to 1 08

* With food

* With beer at hay-time and harvest.

* Usually with beer at harvest-time.

† With food.

Rates of agricultural wages and amount of weekly earnings, &c.—Continued.

Districts and counties.	Quarters ended—	Men.		Women.	Children under 16.
		Weekly wages without lodging and food.	Weekly earnings by task-work.	Weekly wages without lodging and food.	Weekly wages without lodging and food.
YORKSHIRE.					
West Riding....	Michaelmas, 1869 [†]	\$3 38 to \$5 80	.....	\$1 45 to \$3 38	\$1 21 to \$3 38
	Christmas, 1869....	3 26 to 3 99	\$3 63 to \$4 35	1 45 to 1 69	96 to 1 93
	Lady Day, 1870....	3 26 to 4 11	.....	1 45 to 1 69	72 to 1 45
	Midsummer, 1870....	3 63 to 4 35	.....	1 21 to 1 45	96 to 1 45
North Riding....	Michaelmas, 1869....	3 63 to 4 78	.....	1 45 to 2 17	72 to 1 45
	Christmas, 1869....	1 90 to 3 87	.....	1 21 to 1 45	78
	Lady Day, 1870....	2 99 to 3 63	.....	60 to 1 45	60 to 96
	Midsummer, 1870....	3 63 to 4 35	3 75	1 21 to 1 45	84 to 96
NORTHERN.					
Durham.....	Michaelmas, 1869 [§]	3 63 to 4 35	4 35	1 21 to 1 81	84 to 96
	Christmas, 1869....	3 63 to 3 87	.....	96 to 1 45	.....
	Lady Day, 1870....	3 63 to 4 11	.....	1 08 to 1 45	.....
	Midsummer, 1870....	3 63 to 4 11	.....	1 08 to 1 45	84 to 1 21
Northumberland.	Michaelmas, 1869....	3 63 to 5 00	.....	96 to 4 35	96 to 2 17
	Christmas, 1869....	3 38 to 3 87	.....	1 21 to 1 81	60 to 1 45
	Lady Day, 1870....	3 63 to 4 35	.....	1 21 to 1 81	72 to 1 45
	Midsummer, 1870....	3 63 to 3 87	.....	1 45 to 1 69	72 to 1 45
Cumberland.....	Michaelmas, 1869....	3 63	.....	1 81 to 2 17	1 03 to 1 45
	Christmas, 1869....	2 42 to 3 63	.....	1 45 to 1 69	72
	Lady Day, 1870....	3 63	.....	1 45 to 1 81	72 to 1 08
	Midsummer, 1870....	3 63 to 4 35	.....	1 45 to 1 81	72 to 1 45
Westmorland...	Michaelmas, 1869 [§]	3 50 to 4 35	3 63 to 5 08	48 to 1 57	30 to 1 29
	Christmas, 1869....	3 63 to 3 87	.....	.....	.....
	Lady Day, 1870....	3 38 to 4 11	.....	1 45	1 21
	Midsummer, 1870....	3 39 to 4 35	.....	2 17	54 to 1 21
WELSH.					
Monmouth.....	Michaelmas, 1869....	2 42 to 3 63	3 63 to 5 32	1 45	36
	Christmas, 1869....	2 42 to 3 63	3 63 to 4 35	1 21	48
	Lady Day, 1870....	2 66 to 4 00	3 63 to 4 35	1 45	.....
	Midsummer, 1870....	2 66 to 3 63	3 63 to 5 32	1 21 to 1 45	.....
WALES.					
Unions.					
Merthyr Tydfil..	Michaelmas, 1869 [†]	3 02 to 4 35	3 87	1 21 to 1 45	.....
	Christmas, 1869....	2 90 to 4 11	.....	96 to 1 21	72
	Lady Day, 1870....	3 63	.....	96 to 1 21	.....
	Midsummer, 1870....	3 63	.....	96 to 1 45	42 to 72
Bridgend and Cowbridge.	Michaelmas, 1869....	3 14 to 3 63	4 35 to 5 08	1 45	72 to 1 69
	Christmas, 1869....	3 14 to 3 63	.....	1 45	72 to 1 69
	Lady Day, 1870....	3 14 to 3 63	4 35 to 5 08	1 45	72 to 1 69
	Midsummer, 1870....	3 14 to 3 63	4 35 to 5 08	1 45	72 to 1 69
Gower.....	Michaelmas, 1869....	2 90 [†]	3 63	1 45	1 69
	Christmas, 1869....	2 90	3 63	1 45	1 45
	Lady Day, 1870....	2 90	.....	1 45	.....
	Midsummer, 1870....	2 90	.....	1 45	.....
Llanelli.....	Michaelmas, 1869 [†]	3 14 to 3 63	.....	1 21 to 1 45	72 to 96
	Christmas, 1869....	3 14 to 3 63	.....	1 21 to 1 45	72 to 96
	Lady Day, 1870....	3 26	.....	1 45	1 21
	Midsummer, 1870....	3 26	.....	1 45	1 21
Llanddulas-lawr....	Michaelmas, 1869....	2 42 to 2 90	4 84 to 5 80	1 21 to 1 45	72 to 96
	Christmas, 1869....	2 42 to 2 90	2 90 to 3 35	1 21 to 1 45	.....
	Lady Day, 1870....	2 42 to 3 25	.....	96 to 1 21	72 to 96
	Midsummer, 1870....	2 90 to 3 38	.....	96 to 1 21	72 to 96
Carmarthen.....	Michaelmas, 1869....	2 90	3 63	1 21	72
	Christmas, 1869....	2 17	2 90	.....	.....
	Lady Day, 1870....	2 17	2 90	92	92
	Midsummer, 1870....	2 17	2 90	92	92
Haverfordwist....	Michaelmas, 1869....	2 42 to 2 90	.....	1 45	96
	Christmas, 1869....	1 21 to 1 45	.....	96	.....
	Lady Day, 1870....	1 21 to 1 45	.....	96	.....
	Midsummer, 1870....	1 21 to 1 45	.....	96	.....
Cardigan.....	Michaelmas, 1869 [§]	2 17	2 42 to 2 90	72 to 1 45	72 to 1 45
	Christmas, 1869....	1 93 to 2 17	1 93 to 2 42	96	96
	Lady Day, 1870....	1 93 to 2 17	1 93 to 2 42	96	96
	Midsummer, 1870 [§]	2 17 to 2 66	.....	96 to 1 45	96

* With beer at hay-time and harvest.

† Usually with beer at harvest-time.

‡ With food.

§ With food and cider at harvest-time, and a cottage, &c.

|| Usually with food and beer at harvest-time.

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Northampton
Norfolk.....
Wiltshire.....
Dorset.....
Devonshire.....
Cornwall.....
Gloucestershire
Herefordshire
Shropshire.....
Stafford.....
Worcestershire
Warwickshire
Leicestershire
Lincoln.....
Nottinghamsh
North Riding
Durham.....
Monmouth.....
Gower, (Wales)
Crickhowell

Kent.....
Sussex.....
Southampton
Berkshire.....
Herts.....
Northamptonsh
Bedfordshire.....
Norfolk.....
Dorset.....
Devonshire.....
Cornwall.....
Gloucestershire
Shropshire.....
Worcestershire
Leicestershire
Lincoln.....
Nottinghamshire
Lancashire

AGRICULTURAL WAGES IN ENGLAND AND WALES.

365

Rates of agricultural wages and amount of weekly earnings, &c.—Continued.

Continued.

Children under 16.	Districts and counties.	Quarters ended—	Men.		Women.	Children under 16.
			Weekly wages without lodging and food.	Weekly earnings by task-work.	Weekly wages without lodging and food.	Weekly wages without lodging and food.
\$1 21 to \$3 38	Crickhowell	Michaelmas, 1869 [*]	\$2 90	\$3 63	\$1 45	\$1 45
		Christmas, 1869.....	2 90	3 63	1 21	96
		Lady Day, 1870.....	2 90	3 63	1 21	96
		Midsummer, 1870.....	2 90 to 3 14	3 63	1 21	96
		Michaelmas, 1869.....	2 42 [*]	2 42	1 21	96
72 to 1 45	Knighton	Christmas, 1869.....	2 17 [*]	2 42	1 21	96
		Lady Day, 1870.....	2 42 [*]	2 42	1 21	96
		Midsummer, 1870.....	2 42 [*]	2 42	1 21	96
		Michaelmas, 1869.....	2 42 [*]	2 42	1 21	96
		Christmas, 1869.....	1 93	1 45	1 45	1 45
96 to 1 45	Conway.....	Lady Day, 1870.....	3 38	3 63	1 45	1 45
		Michaelmas, 1869.....	1 93	3 63	1 45	1 45
		Christmas, 1869.....	2 17 [*]	3 63	1 45	1 45
		Lady Day, 1870.....	2 17 [*]	3 63	1 45	1 45
		Midsummer, 1870.....	2 17 [*]	3 63	1 45	1 45

* With food and cider at harvest-time, and a cottage, &c.

† With food.

Weekly earnings of women and children at task-work.

WOMEN.

Counties.	Quarter ended—			
	Michaelmas.	Christmas.	Lady Day.	Midsummer.
Kent.....	\$2 90	\$2 17	\$1 45 to \$2 17	\$1 93 to \$2 17
Sussex.....	\$1 93 to 2 42	96	96	96 to 1 45
Southampton.....	1 45 to 1 69	1 45	1 45	96 to 1 45
Derbyshire.....	72 to 1 21	1 45	1 45	96 to 1 45
Northampton.....	1 93 to 2 42	1 45	1 45	96 to 1 45
Wiltshire.....	96 to 1 45	1 45	1 45	96 to 1 45
Dorset.....	2 05 to 2 17	1 45	1 45	96 to 1 45
Devonshire.....	1 45 to 2 17	1 45	1 45	96 to 1 45
Cornwall.....	1 45	96 to 1 25	1 21	96 to 1 45
Gloucestershire.....	2 05 to 2 17	1 45	1 45	96 to 1 45
Herefordshire.....	1 45 to 2 17	1 45	1 45	96 to 1 45
Shropshire.....	1 45	96 to 1 25	1 21	96 to 1 45
Stafford.....	1 45	96 to 1 25	1 21	96 to 1 45
Warwickshire.....	72 to 2 90	1 21 to 1 93	96 to 1 93	1 21 to 1 91
Leicestershire.....	1 39	96	96 to 1 93	1 21 to 1 91
Lincoln.....	2 17	96	96 to 1 93	1 21 to 1 91
Nottinghamshire.....	2 17	96	96 to 1 93	1 21 to 1 91
North Riding, (Yorkshire).....	2 17	96	96 to 1 93	1 21 to 1 91
Durham.....	1 45	96	96 to 1 93	1 21 to 1 91
Monmouth.....	1 45	96	96 to 1 93	1 21 to 1 91
Gower, (Wales).....	1 45	96	96 to 1 93	1 21 to 1 91
Crickhowell.....	1 45	96	96 to 1 93	1 21 to 1 91

CHILDREN UNDER 16 YEARS.

Counties.	Quarter ended—			
	Michaelmas.	Christmas.	Lady Day.	Midsummer.
Kent.....	\$1 45 to \$2 90	\$1 45 to \$2 90	\$1 45 to \$2 90	\$1 45 to \$2 90
Sussex.....	1 93	1 93	1 93	1 93
Southampton.....	1 69	1 69	1 69	1 69
Derbyshire.....	1 81	1 81	1 81	1 81
Herts.....	1 81	1 81	1 81	1 81
Northamptonshire.....	1 81	1 81	1 81	1 81
Bedfordshire.....	1 81	1 81	1 81	1 81
Nottinghamshire.....	1 81	1 81	1 81	1 81
North Riding, (Yorkshire).....	1 81	1 81	1 81	1 81
Durham.....	1 81	1 81	1 81	1 81
Monmouth.....	1 81	1 81	1 81	1 81
Gower, (Wales).....	1 81	1 81	1 81	1 81
Crickhowell.....	1 81	1 81	1 81	1 81

A return, similar to the foregoing, was made to the House of Commons in July, 1873, giving the average rate of weekly earnings of agricultural laborers in England and Wales during the quarters ended Michaelmas and Christmas, 1872, so far as the same could be readily obtained.

The following information, condensed from this return, exhibits a gratifying improvement in the earnings and the condition of farm-laborers over those of 1860-70:

At Epsom the weekly wages to men were 14s. a week; and women, 6s.; children under sixteen years of age, 5s.; and the same stated as weekly earnings by task-work. In the eastern district the men earned 16s. by the week and 20s. by task-work. In Kent (at Faversham) the men earned 20s. as weekly wages and 26s. at task-work. Only those who sow and reap are engaged by task. Beer, ale, and cider are given in some places; in others no refreshment. In one place in Wales the weekly wages to men was from 15s. to 22s., and with "task money" stated at 18s. 6d.; and at the same place breakfast was given, as well as other meals, with about four pints of beer a day. It is mentioned that the supply is afforded during the hay and corn harvests, and it is added, "They are not stinted in food." At Northampton the weekly wages was 14s. Of course, the amount is different in the various counties. In Dorsetshire the wages to the men were from 9s. to 12s. per week. Shepherds, 20s. in the lambing season.

On the (Queen's) Osborne farms laborers formerly received but 14s. per week, from which was deducted 2s. for the rent of the cottage with which each is provided. A garden is attached to each cottage. A quantity of thin beer is given to each man.

FARM-WAGES IN 1874.

There has been an advance in the price of farm-labor and a reduction of the hours of labor since 1870.

In an article on the condition of the working-classes of England, which appears on subsequent pages, Mr. Stanley James says:

The average rates of farm-wages throughout England have since risen, and the hours of labor have been reduced. In the northern counties, 18s. a week is now paid for farm-labor; in the midland districts, 16s.; and in the southern districts, from 12s. to 14s. There are still parts of England, however, in which men are paid less than the latter sum.

From the London Times and other undoubted authorities the following information in regard to the prices of farm-labor in Great Britain is obtained:

In Aberdeenshire, a plowman receives from £28 (\$135.52) to £30 (\$145.20) per annum, with food and lodging.

In Mid Lothian, agricultural wages have doubled since 1840.

In Northumberland, 21s. (\$5.05) a week and 3s. (72 cents) extra in harvest, house and garden free, and 50 stone of potatoes within the year.

In North Lancashire, 20s. (\$4.84) and 21s. (\$5.05) weekly to plowmen.

Yorkshire, 20s. (\$4.84) to 23s., (\$5.56.)

Lincolnshire, 18s. (\$4.35) per week, winter and summer.

Norfolk, 2s. 6d. (60 cents) per day, ordinary laborers.

Agricultural laborers' wages have risen from 50 to 100 per cent. all over the country within the last quarter of a century.—*Times*, April 17, 1874.

New Market, (April, 1874).—Weekly wages paid by an employer under the Duke of Rutland, as follows: Laborer, 17s. 2d. to 18s. 9d., (\$4.15 to \$4.53); horsekeeper, 18s. 6d. to 20s. 5d., (\$4.47 to \$4.94); yardman, 21s. 4d., (\$5.16,) including harvest-work and piecework.

Thetford.—Wages paid upon the Knettishall farm to a man sixty-eight years old, who is the lowest paid among the able-bodied laborers employed. Forty-seven weeks at 14s., (\$3.38) \$158.86; piecework over day wages, £2 15s., 8d., (\$13.47;) five weeks harvest wages, £3 19s., \$43.31; making a total of \$215.64.—*Times* June 8, 1874.

Mr. Walter Williams, under date of October 25, 1874, writes: "Farm laborers earn from 2s. 6d. to 3s. 6d. per day, according to capacity, with perquisites."

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FARM WAGES IN 1875.

The following extracts, from the *Chamber of Agriculture Journal*, show the wages of farm laborers in different counties of England at the most recent dates, and indicate a marked advance on the rates of 1870:

Berkshire, (Maldenhead), January 22.—Lowest price for day-men, 13s. or 14s. per week. Working hours per day, 9½.

Hampstead Norreys, January 20.—Wages, 12s. and upwards; 7 o'clock to 5.30, next month to 6 o'clock.

Essex, January 14.—Wages, from 13s. to 16s. per week by day. Hours, from 7 to 5.

Suffolk, January 19.—Wages, 13s. and 14s. a week; 8½ hours a day.

Somersetshire, (Marlloch), January 21.—Wages 11s., and three gallons of beer per week.

Buckinghamshire, February 17.—Wages, 11s. per week for ordinary laborers and stockmen, 16s. for 9½ hours' work.

Cardiganshire, February 19.—Laborers abundant, on account of the strike in the iron and coal works. Wages, where food is not given, average 19s. to 11s.

Herefordshire, February 19.—General wages, 12s. per week, with cider; wagoners and stockmen, from 2s. to 4s. per week more, with cider and harvest money extra.

North Essex and South Suffolk, February 18.—Wages, day-work, 2s. per day from 6 a. m. to 6 p. m., two hours for meals. Contract work up to 2s. 6d. per day.

Bucks, North, February 26.—Wages, 13s. to 16s. a week.

Essex, February 25.—Wages, 14s. weekly, from 6.30 to 5 o'clock.

Herefordshire, (near Madley), February 25.—Wages vary from 12s. to 15s. per week; except in the winter, they work from 6 a. m. to 6 p. m.

Kent, February 25.—Wages, 16s. a week and upward.

Leicestershire, (near Grantham), February 24.—Ordinary wages, 2s. 6d. a day; no scarcity of men. Hours, from 6.30 a. m. to 5.30 p. m.; in fact, the men leave home at 6 a. m., and reach home again at 6 p. m.

Monmouthshire, (Llanarth), February 25.—Wages, 12s. to 15s. per week, with perquisites. Hours, 10½.

Yorkshire, North Riding Dales, (Leatholme, Farm), February 23.—Wages of farm servants, laborers, and mechanics are high, much out of proportion as compared with the price of wheat.

Warwickshire.—Wages, 15s. per week. Hours, about from 7 till 5.

Cheshire, (Tatton), March 3.—Wages mostly vary, according to locality, from 13s. to 17s. per week, and laborers are scarce. Hours of labor from 7 in the morning until 6 in the evening, with 30 minutes for breakfast, and 1 hour for dinner.

Berkshire, March 11.—Wages, 12s. and 13s.; carters, &c., 1s. a week more. Hours of labor, from 7 a. m. till 5 p. m., 1 hour for dinner; in many places from 6 a. m. till 6 p. m., with half an hour for breakfast, and 1 hour for dinner.

Dorsetshire, March 11.—Wages, nominally, about 12s. a week, with perquisites; 15s. without. Good men earn from 2s. to 5s. a week extra.

Gloucestershire, March 11.—Wages from 11s. to 14s. per week. Hours of labor, from 7 a. m. to 5 p. m.

Norfolk, (West), March 10.—Wages are nominally 13s. per week, but good men have more.

Yorkshire, (West Riding), March 20.—Wages from 13s. to 24s. per week. Ten hours per day.

Buckinghamshire, (South), March 15.—Wages, 14s. per week; many men earn more by piecework. Hours, from 6 to 5.

Devon, March 18.—Wages, 12s. per week, with cider.

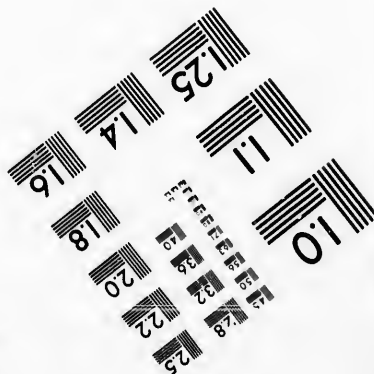
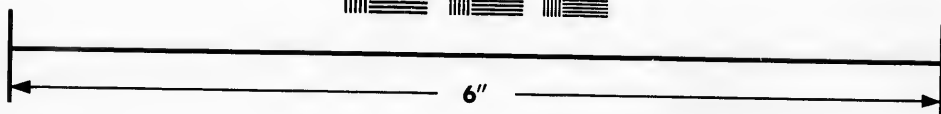
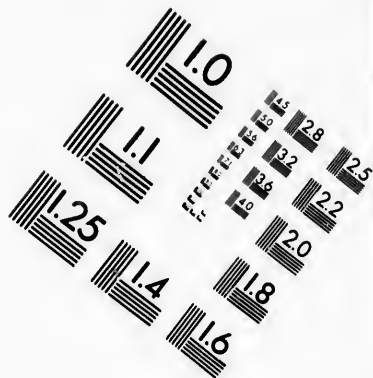
Wiltshire, (Tisbury), March 18.—General wages, 12s. per week; but in many parishes it is 11s. for 10 hours' work; women, 10d. per day.

SALARIES OF CLERKS IN BANKS, INSURANCE COMPANIES, ETC.

The following information, condensed from the *London Economist* of May 1, 1875, in regard to the salaries of clerks in banking and other institutions, although forming no part of the object of this report, will prove of interest to some readers:

As regards the *initial* pay, the usual age of entry in banks and insurance companies is from seventeen or eighteen to twenty, and the salary from £70 to £50. The usual pay of a junior clerk between eighteen and twenty may be roughly put at about £50. The Bank of England, with an establishment of eight hundred clerks, returns the age of entry for ordinary clerks as eighteen to twenty-five, and the initial pay "about £70 per annum." The London and Westminster Bank, with 443 clerks, returns the age of entry at from eighteen to twenty-one, and the initial pay £50 per annum, except





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in the case of the juniors, who enter between sixteen and seventeen at £50 per annum. In Glyn's, with 200 clerks, the initial pay is £75 per annum, and the age of entry between seventeen and eighteen. Seventy-five pounds for a lad of eighteen is by no means a low salary. Upon that point I can speak with considerable confidence. Taking the general run of clerical employment in the city, there are not many places where a lad of eighteen would get £75 a year.

As regards maximum pay, about £350 to £400 a year in banks, and, at the most, £300 a year in other establishments, are the maximum amounts to which ordinary clerks, if they are possessed of merit—there being hardly any promotion except by merit—may look forward to. Thus, in the Bank of England, the secretary stated that every clerk would rise to a "maximum" of £300 about forty-one to forty-four years of age.

In the London and Westminster Bank, and in Glyn's, the maximum in both cases is stated to be £400 for an average clerk.

RELATIVE AMOUNT OF WORK PERFORMED.

In estimating the actual cost of labor in the United Kingdom, from the figures presented on the preceding pages, regard has only been had to the number of hours of labor which the work-people have exchanged for the sums named. The computation is made upon the supposition that each man, at a given occupation, will perform a definite amount of work per hour, whether he labor eight, nine, or ten hours per day; in other words, that men who have been working ten hours per day will perform one tenth less if the time is reduced to nine hours, and one-fifth less if reduced to eight hours per day; which supposition may or may not be correct.

If it be required to ascertain the advance in the cost occasioned by a reduction of the hours of labor, this pro rata mode of computation will furnish the result approximately correct. But when, in determining the results of this investigation, it becomes necessary to compare the cost of labor in Great Britain with that in the United States, other data will be required in addition to those which have already been under consideration. The question is, What amount of labor is exchanged for a given quantity of coin, or of food, clothing, and shelter? This leads to the further inquiry, Does a workman in the United Kingdom accomplish as much work, in the same space of time, as one in a similar employment in the United States? This branch of the investigation engaged the attention of the author before and during his visit to the manufacturing towns of Great Britain, and he endeavored to gather such facts as would enable him to determine this question. Through observation and inquiry the conclusion was reached that, in most industrial pursuits, a workman in England does not perform so much work in, say, nine hours as another of equal knowledge and skill in the same branch in the United States. The reasons assigned for this were various, some of which are here presented.

Mr. Sellick, then United States consul at Bradford, is of opinion that work-people will not perform as much work in a week as similar workmen in the United States. The English work-people, he stated, lack intelligence, waste time, and by their intemperate habits injure their health, and consequently lessen their ability to labor.

The same reply, substantially, was made by the consul at Sheffield, and by others elsewhere, each possessing such an acquaintance with the subject as enabled him to express an intelligent opinion.

A Mr. Dodge, formerly of Cohoes, N. Y., a manufacturer of files near Manchester, having employed workmen at the same labor in both countries, and therefore fully qualified to form an intelligent opinion, stated, in reply to a question, that English workmen perform less work in a given time than Americans in similar employment. He gave as a reason, that it was owing to the want of "adaptability" of the former

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to different kinds of work; that it was difficult to get them out of "old ruts," or to train them to work more rapidly than they had been accustomed to.

It is evident that the intemperate habits of the men, and the loss of time consequent thereon, prevent them from performing a full week's work. Time, while at work, especially during the latter part of the week, the men work as rapidly as those in the United States; but in the earlier part of the week this is not the case with men who drink to excess. Even if men of such habits do not observe the festal day of their patron, Saint Monday, they are unable to perform a fair day's work so soon after the dissipation of Saturday night and Sunday. This is especially true of the men in Sheffield, as will appear in subsequent pages under the caption, "Condition of the laboring classes."

The fact will not, perhaps, be disputed, that in most branches of manufacture, especially at machine or engineering work, and in the fabrication of hardware, cutlery, and other manufactures of iron and steel, the workmen perform less work per week, on an average, than an equal number in the United States.

The next inquiry is, What percentage of reduction should be made in the computation? From observation and inquiry the author is led to the conclusion that it amounts to ten per cent.; in other words, that, on an average, nine hundred men in the United States, employed at the branches indicated, as well as at many others, will accomplish as much efficient work per week as one thousand in England. If, therefore, the hours of labor in England were as formerly, fifty-nine per week, and in the United States fifty-four, the amount of work accomplished by a given number of men in the respective countries would be about the same.

In cotton and in other textile factories, and in some other branches of industry, the difference between the amount of labor performed in the two countries is not so great. A fair average of the whole industrial population of the two countries would, it is believed, indicate, in favor of the work-people of the United States, a difference of but eight, possibly of but six, per cent. in the amount of work performed.

In this connection it may be stated that, after the rise of wages in England in the year 1872, it was ascertained that the men in many branches of industry performed less work than when the rates were lower. An illustration of this fact is given by a correspondent of the Leeds Mercury, who presents an interesting comparison of the work done by colliers in 1864 and 1873:

In 1864 the average product of our coal-mines gave for each person employed 3274 tons, which for 313 working-days, is equal to $21\frac{1}{2}$ cwt. for each person per day.

In 1868 the average product gives for each person 317 tons, which, for 313 working days, is equal to 20 cwt. for each person per day; and in 1873 the average product gives for each person only 271 tons, which, for 313 days, is equal to $17\frac{1}{2}$ cwt. for each person per day. It will thus be seen that in the first period of five years (1864 to 1868) there was a diminished output per person of about 7 per cent.— $21\frac{1}{2}$ to 20 cwt. In the second period of five years (1868 to 1873) the output had declined by 124 per cent.—20 to $17\frac{1}{2}$ cwt. per day for each person. So in the ten years each person employed about a coal-mine has reduced his labor by nearly 19 per cent.— $21\frac{1}{2}$ to $17\frac{1}{2}$ cwt. per day. It is a remarkable fact that, while there has been so great a reduction in the amount of work performed per man in 1873, the rates of wages have advanced from 30 per cent. upward.

A further illustration of this fact was given to the author by a mine owner or agent residing in Manchester. The average earnings of all the miners in a certain mine in 1871, was 4s. 7d. per day; while in 1872, when the rates were from 100 to 150 per cent. higher, the weekly earnings of the same men were really 2d. per week less. They averaged less than 1 working-days per week, while many worked but from 3 to $3\frac{1}{2}$ days.

II.—PRICES OF PROVISIONS, GROCERIES, HOUSE-RENT, ETC.

Having in the foregoing pages given the earnings of work-people employed in the manufacturing and mining districts of the United Kingdom in 1871, before the advance in the cost and the reduction in the hours of labor, also the rate of wages paid in 1872 and in subsequent years, and the earnings of farm-laborers in 1870 and in recent years, the readers of these pages who may desire to institute a comparison between the prices of labor in Great Britain and those in Continental Europe or the United States of America, will find the necessary data so far as regards the United Kingdom. The figures, originally given in British money, have, in most cases, been computed in the coin, but not in the paper-currency equivalent, of the United States. If the purchasing-power of the British shilling were really, as well as nominally, identical in value with 24 cents (coin) in the United States, and with the mark of Germany, which are very nearly the equivalents,* then no future presentation of facts were necessary to enable the economist to make the comparison above indicated.

If, in the near future, a uniformity of weight and fineness of the gold-coin bearing different names and the impress of sovereignty of various countries be adopted, the traveler would find that his coin would pass current in the world's market, but he would be doomed to disappointment if he supposed that its ability to minister to his wants were the same everywhere.

PURCHASING-POWER OF WAGES.

If a workman in Birmingham receive for fifty-four hours' labor 30s., or about \$8.33 in United States currency, and another of the same occupation in Philadelphia earn \$12.50, it would be inaccurate to say that the earnings of the latter were 50 per cent. more than those of the former. The question is not what is the United States equivalent of the thirty British shillings, but what is the purchasing-power of the wages of the one workman in England and of the other in the United States. In other words, how much of food, clothing, and shelter will the earnings of the one purchase as compared with the other? For the solution of this question other elements are necessary, and these must be considered under the next general head, viz:

* The following table shows the relative weight and value of the gold coins of Europe, which most nearly approximate those of the United States:

Denomination.	Country.	U. S. gold.	Weight in pure gold.	
			Grains troy.	Metric grammes.
Half-eagle	United States	\$5	116.1	7.523
Sovereign	Great Britain	4.8665	113	7.322
Twenty-five-franc piece	France	4.843	112.690	7.298
Twenty-mark piece	Germany	4.764	110.626	7.168

Price

Flour: ...
Wheat ...
Rye ...
Corn ...
Barley ...
Fresh ...
Preserved ...
Beans ...
Veal ...
Pork ...
Mutton ...
Lamb ...
Legs ...
Chops ...
Duck ...
Fresh ...
Canned ...
Hams ...
Shoulders ...
Sausages ...
Lard ...
Codfish ...
Mackerel ...
Butter ...
Cheese ...
Potatoes ...
Onions ...
Beets ...
Brussels ...
Milk ...
Eggs ...

Tea, Oolong ...
Coffee ...
Rice, green ...
Rice, white ...
Sugar ...
Good brown ...
Yellow ...
Coffee B ...
Molasses ...
New Orleans ...
Porto Rico ...
Syrup ...
Syrup, common ...
Syrup, rich ...
Coal ...
Oil, coal ...

Dress

Shirtings: ...
Brown, 4-4 ...
Bleached, ...
Sheetings: ...
Brown, 9-8 ...
Bleached, ...
Cotton flannel ...
Tickings, good ...
Prints ...
Mousseline de ...
Sarties, medium ...
Dress, men's ...

Four-roomed to ...
Six-roomed ten ...

For men ...
For women ...

PRICES OF PROVISIONS, ETC., IN ENGLAND.

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Prices of provisions, groceries, and other leading articles of consumption, also of house-rent and board, in the manufacturing towns of Great Britain.

Articles.	PROVISIONS.	ENGLAND.			
		1872.		1871.	1870.
		Birmingham.	Bradford.	Bradford.	Huddersfield.
Flour:					
Wheat, superfine	per bbl	\$4 50	\$3 00 to \$4 50		\$7 00
Wheat, extra family	do.	9 00	9 00	\$7 35	\$7 00
Rye	do.			7 84	8 61
Commeal	do.				7 26
Barley	do.				7 58
Beef:					
Fresh, roasting-pieces	per lb	21	22 to 24	20 21 to 24	20
Fresh, soup-pieces	do.	12	16 to 18	19 to 21	12
Fresh, rump-steaks	do.	26	28	24	36
Corned	do.	18		22	16
Veal:					
Fore-quarters	do.	16	17 to 21	16 to 18	16
Hind-quarters	do.	13		17 to 21	15
Cutlets	do.	26		24	24
Mutton:					
Fore-quarters	do.	16	18	18 to 20	16
Leg	do.	21	21	21	20
Chops	do.	24	24	24	24
Pork:					
Fresh	do.	16	13 to 19	18 to 20	16
Corned or salted	do.	15		16 to 20	16
Bacon	do.	20 14 to 20	16 to 20	16 to 20	16
Hams, smoked	do.	24	20 to 24	24	24
Shoulders	do.	10 to 12	14 to 20	16 to 20	12
Sausages	do.	18	14 to 20	16 to 20	16
Lard	do.	14 to 18	14 to 20	16 to 20	16
Butter	do.	24 to 28	24 to 32	24 to 32	24
Cheese	do.	18	14 to 20	16 to 20	16
Potatoes	do.	02	05 to 10	05 to 08	04 to 10
Beans	do.	06	08	08	08
Milk	per qt	16 to 21	18	24 to 26	18 to 24
Eggs	per doz				
Tea, Oolong, or other good black	per lb	60 to 72	60	36 to 50	64 to 84
Coffee:					
Rio, green	do.	21	32 to 40	16 to 20	20
Rio, roasted	do.	32	32 to 40	32 to 40	30
Sugar:					
Good brown	do.	08	08 to 10	07 to 08	08
Yellow C	do.	07	08 to 10		08 to 10
Coffee B	do.	08	09 to 10		09 to 10
Molasses:					
New Orleans	do.	06	06 to 07	05	(gallon) 22
Porto Rico	do.	04	06 to 07	06	(gallon) 22
Simp	do.	06	09	08	(gallon) 22
Salt, common	do.	10	12 to 16	12	66 to 69
Salt, fine	do.	4 36	3 36 to 4 60	4 38	2 90 to 3 61
Oil, coal	per ton	Not used.			
DOMESTIC DRY GOODS, ETC.					
Shirtings:					
Brown, 4-4, standard quality	per yd	17	08 to 18	12 to 16	10 to 14
Bleached, 4-4, standard quality	do.	13	08 to 18	16 to 20	12 to 16
Sheetings:					
Brown, 9-8, standard quality	do.	14	22 to 28	42	12 to 16
Bleached, 9-8, standard quality	do.	17	26 to 34	42	14 to 18
Cotton flannel, good quality	do.	30	20 to 48	30 to 36	16 to 20
Tickings, good quality	do.	14	21 to 29	10 to 16	28 to 32
Prints	do.	21	24 to 38	36 to 42	12 to 18
Mouseline de laine	do.	22 10	2 90 to 3 87	2 88 to 3 87	2 90 to 3 87
Satinets, medium quality	do.				
Boots, men's heavy	per pair				
HOUSE-RENT.					
Four-roomed tenements	per month	4 84 to 6 65	5 76 to 7 20	3 23 to 4 00	
Six-roomed tenements	do.	6 65 to 7 66	9 60 to 11 40	4 00 to 5 48	
BOARD.					
For men	per week	2 90 to 3 38	2 82 to 3 60	1 94 to 2 42	
For women	do.	1 45 to 1 94	1 68 to 2 16	1 03 to 1 34	

* Half a cent to four-fifths of a cent.

† Has almost universal, 60 cents per 1,000 feet.

‡ Brogans, elastic sides.

E-RENT, ETC.

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Prices of provisions, groceries, and other leading articles of consumption, &c.—Continued.

Articles.		ENGLAND.			
		Leeds.	1872.	1874.	1872.
			Manchester.	Newcastle-on-Tyne.	Nottingham.
PROVISIONS.					
Flour:					
Wheat, superfine	per bbl.	£7 57	£7 74	£6 17	£7 50
Wheat, extra family	do.		9 00	6 77	8 71
Rye	do.		25 08 to 6 14	4 96	4 00
Cornmeal	do.		3 99 to 4 11	5 08	
Beef:					
Fresh, roasting-pieces	per lb.	20	22	23	22
Fresh, soup-pieces	do.		10	14	10
Fresh, rump-steaks	do.	30	21	24	24
Corned	do.		16 to 18	16	£0 19 to 22
Veal:					
Fore-quarters	do.		17	18	18
Ham-quarters	do.		20	20	22
Cutlets	do.		22	21	25
Mutton:					
Fore-quarters	do.		18	16	18
Leg	do.	18	21	20	21 to 22
Chops	do.	24	24	22	24
Pork:					
Fresh	do.		16	16	14
Corned or salted	do.		16	16	18
Bacon	do.		12 to 18	18	16 to 20
Hams, smoked	do.	22	23 to 28	24	24
Shoulders	do.		12	12	1
Sausages	do.		16 to 18	18	22
Lard	do.	17	02 to 18	20	16
Codfish, dry	do.			08	12
Butter	do.	32	20 to 28	£0 24 to 32	24 to 34
Cheese	do.	18	16 to 20	18	12 to 20
Potatoes	do.	02			(bushel) 05
Rice	do.		04 to 08	04	06
Beans	per qt.			08	(Haricot) 12
Milk	do.		06 to 08	08	
Eggs	per doz.	21	20 to 22	22	30 to 36
GROCERIES, ETC.					
Tea, Oolong and other good black	per lb.	£0 60 to 88	64 to 97	48 to 72	48 to 96
Coffee:					
Rio, green	do.	32		24	26
Rio, roasted	do.		32	28	40
Sugar:					
Good brown	do.	07	08	07	06
Yellow C	do.		07	08	07
Coffee B	do.	00		09	
Molasses:					
New Orleans	do.			(gallon) 36	
Porto Rico	do.			(gallon) 48	
Sirup	do.		04		05
Soap, common	do.	08	06 to 08	08	06 to 18
Starch	do.		10	12	
Coal	per ton	5 14	3 14 to 4 44	4 84	3 38 to 5 56
Oil, coal	per gall.	(*)	48	48	(t)
DOMESTIC DRY GOODS, ETC.					
Shirtings:					
Brown, 4-4, standard quality	per yd.		10 to 17	09	07 to 12
Bleached, 4-4, standard quality	do.		10 to 21	16	08 to 13
Sheetings:					
Brown, 8-8, standard quality	do.		19 to 42	18	19 to 42
Bleached, 8-8, standard quality	do.		50 to 66	24	20 to 50
Cotton flannel, good quality	do.		32 to 48	16	19 to 36
Tickings, good quality	do.		19 to 33	20	24 to 48
Prints, good quality	do.		09 to 17	14	09 to 15
Monsieur de laines	do.		22	24	24
Satinets, medium quality	do.		1 00	54	
Boots, men's heavy	per pair.		2 90 to 3 63	3 34	2 42 to 3 63
HOUSE-RENT.					
Four-roomed tenements	per month.	3 88	4 00 to 4 81	5 00	3 36 to 4 81
Six-roomed tenements	do.		6 28 to 6 76	7 10	4 81 to 7 24
BOARD.					
For men	per week.		(*)		2 90 to 3 39
For women	do.				1 45 to 1 93

* Gas, per 1,000 feet, 84 cents.

† Varies much.

; Working-class do not board.

Price

Flour: Wheat, superfine

Wheat, extra family

Rye

Cornmeal

Beef: Fresh, roasting-pieces

Fresh, soup-pieces

Fresh, rump-steaks

Corned

Veal: Fore-quarters

Ham-quarters

Cutlet

Mutton: Fore-quarters

Leg

Chops

Pork: Fresh

Corned or salted

Bacon

Hams, smoked

Shoulders

Sausages

Lard

Codfish, dry

Butter

Cheese

Potatoes

Rice

Beans

Milk

Eggs

Tea, Oolong

Coffee: Rio, green

Rio, roasted

Sugar: Good brown

Yellow C

Coffee B

Molasses: New Orleans

Porto Rico

Sirup

Soap, common

Starch

Coal

Oil, coal

DOMESTIC DRY GOODS, ETC.

Shirtings: Brown, 4-4, standard quality

Bleached, 4-4, standard quality

Sheetings: Brown, 8-8, standard quality

Bleached, 8-8, standard quality

Cotton flannel, good quality

Tickings, good quality

Prints, good quality

Monsieur de laimes

Satinets, medium quality

Boots, men's heavy

HOUSE-RENT.

Four-roomed tenements

Six-roomed tenements

BOARD.

For men

For women

For mechanics, For women emp

See—Continued.

PRICES OF PROVISIONS, ETC., IN ENGLAND.

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Prices of provisions, groceries, and other leading articles of consumption, &c.—Continued.

4.	1872.	Nottingham.	Articles.	ENGLAND—Continued.				
				1872.	1871.			
					Sheffield.	London.	Liverpool.	St. Helens. Sunderland.
			PROVISIONS.					
\$6 17	\$7 50		Flour:					
6 77	8 1		Wheat, superfine per bbl	\$7 71 to \$8 29				
4 96	4 00		Wheat, extra family do.	8 00 to 8 57			\$7 02	\$6 40
5 08			Rye do.	5 71 to 6 29			7 26	7 12
			Barley do.	4 57				5 10
22	22		Doef:					5 04
17	10		Fresh, roasting-pieces per lb	20				
24	28		Fresh, soup-pieces do.	17	\$0 23	20	\$0 22	2 1
16	\$0 19 to		Fresh, rump-steaks do.	23	18	16		16
			Corned do.	20	28	22	22	24
18	18		Veal:					12
20	22		Fore-quarters do.	20	22	17	22	
21	23		Half-quarters do.	18	22	17	22	
16	18		Cutlets do.	24	30	21	22	20
20	22	21 to	Mutton:					22
22	24		Fore-quarters do.	16	19	17	22	
			Leg do.	20 to 21	22	18	22	16
16	18		Chop do.	20 to 22	28	20	22	24
16	18		Pork:					21
18	20	16 to	Fresh					
21	24		Corned or salted do.	18	20	18	18	18
18	20		Bacon do.	16 to 20	19	16		18
21	24		Hams, smoked do.	20 to 21	21	18	20	19
18	22		Shoulders do.	16	19	21	21	26
20	22		Sausages do.	16	21	16		21
08	12		Lard do.	05 to 06	23	20	16	24
32	34	21 to	Codfish, dry do.	06	08	06		20
15	20	12 to	Mackerel, pickled do.	21 to 28	30	31		07
21	25	(bushel)	Butter do.	13 to 21	23	20	31	31
08	12		Cheese do.	20 to 24	24	20	20	22
08	12	(Haricot)	Potatoes do.	03 to 05	09	01	06	01
22	30 to 36		Rice do.	08	11			12
			Beans do.	06	11			09
72	48 to 56		Milk per qt	18	39	08	08	10
			Eggs per doz			29		28
			GROCERIES, ETC.					
24	36		Tea Oolong or other good black per lb	69	60	72		
28	40		Coffee:				76	72 to 91
			Rio, green do.	28 to 21		24		
07	06		Rio, roasted do.	40	30	34	32	21
08	07		Sugar:					36
09			Good brown do.	07	06			
			Yellow B do.	08	07		08	06
36			Coffee B do.	08	10		06	07
18			Molasses:					
08	06 to 08		New Orleans do.	05			04	07
12	12		Porto Rico do.	07	08			
4 14	3 38 to 5 26		Sirap, common do.	01	08	(gallon)	72	(gallon) 46
48	(f)		Starch do.	04 to 08	05	07		(gallon) 51
			Coal do.	08 to 12	20	12	08	08
			Oil, coal per ton	3 14 to 3 87	29	12	12	12
			Oil, coal per gall	56	29	5 21	3 69	3 84
			DOMESTIC DRY GOODS, ETC.					42
09	07 to 12		Shirts:					
16	08 to 13		Brown, 4-4, standard quality per yd	08 to 12	08			
18	19 to 42		Bleached, 4-4, standard quality do.	10 to 16	15	08	14	09 to 12
24	20 to 50		Shirts:					12 to 24
16	19 to 36		Brown, 9-8, standard quality do	12 to 20	32	25		24 to 46
20	24 to 48		Bleached, 9-8, standard quality do	32 to 60	36	31		48 to 84
14	09 to 15		Cotton-bannel, medium quality do.	16 to 20	30	27	48	18 to 24
21	21		Tickings, good quality do.	12 to 60	21	21	18	24 to 64
34			Prints do.	12 to 24	20	15		10 to 14
3 34	2 42 to 3 67		Mousseline de laines do.	16 to 32	32	17		28
			Stimms, medium quality do.	17	20	48		1 00
5 00	3 36 to 4 41		Boots, men's heavy per pair	2 42 to 3 75	3 36	3 21		2 88
7 10	4 61 to 7 21		HOUSE-RENT.					
			Four-roomed tenements per mo	3 36 to 4 32		4 21	3 76	4 80
			Six-roomed tenements do.	6 05		6 22		6 98
			BOARD.					
	2 00 to 3 39		For mechanics, &c per week	2 80 to 3 63				3 36
	1 45 to 1 93		For women employed in factories do.	1 45 to 1 93		3 40		2 50

* Per stone.

† Double width.

es do not board.

Prices of provisions, groceries, and other leading articles of consumption, &c.—Continued.

Articles.	WALES.		SCOTLAND.			
	1872.		Glasgow.		1872.	
	Cardiff.	Newport.	1873.	1874.	Dundee.	Leith.
PROVISIONS.						
Flour:						
Wheat, superfine, per bbl	\$7 47	\$8 47	\$6 48	\$6 53		\$9 09
Wheat, extra family, do.	7 95	8 71	7 20	7 26		
Beef:						
Fresh, roasting-pieces, pr lb	20	20	21	21	\$9 20 to \$9 22	19 to 20
Fresh, soup-pieces, do	16	16	16 to 18	17	18	19 to 20
Fresh, rump-steaks, do	21	22	21	24	20	21
Corned, do	30		18	18	20	20
Veal:						
Fore-quarters, do	18	18	14 to 16	15	16	19
Hind-quarters, do	19	19	20 to 22	21	16	22
Cutlets, do	24	20	32	32		28
Mutton:						
Fore-quarters, do	18	18	14 to 16	15	20	16
Leg, do	19	20	18 to 20	19	19	22
Chops, do	20	22	20 to 21	22	20	21
Pork:						
Fresh, do	18	17	16 to 20	18	16	14 to 19
Corned or salted, do			14 to 18	16	14	
Bacon, do	\$9 17 to 22	19	20	20	20 to 22	21
Hams, smoked, do	17		24 to 26	25	24 to 28	26 to 28
Shoulders, do	17		17	17		14
Sausages, do	17	16	16	16		
Lard, do	20	16	16 to 20	18	16	20
Codfish, dry, do			06	06	06	06
Butter, do	27	20 23 to 26	26	26	28 to 32	28
Cheese, do		14 to 19	18	18	16	20
Potatoes, do	02		007		(bush.) 1 33	(bush.) 1 34
Rice, do	03 to 06	04 to 06	01	01	03 to 07	05
Milk, per qt	07 to 08	01	08	08	12 to 16	16
Eggs, per doz	20	20	34	34	24 to 32	28
GROCERIES, ETC.						
Tea, Oolong or other good black, per lb	9 11 to 97	43 to 92	60 to 72	65	48 to 81	48 to 85
Coffee:						
Rio, green, do			30 to 32	31		
Rio, roasted, do		40	26 to 40	38	32 to 40	41
Sugar:						
Good brown, do	08	07	05	05	07 to 08	09
Yellow C, do		08	07 to 08	06	10	
Coffee B, do				074	08	
Molasses:						
New Orleans, do			04	04	06	
Porto Rico, do				05	06	07
Sirup, do			05	063		06
Sap, common, per lb	06 to 07	06	06 to 07	11	06 to 09	08 to 09
Starch, do	10 to 12	10	10 to 12		10 to 11	12 to 13
Cool, per ton	5 60		4 00	3 87	5 00 to 6 00	6 34
Oil, coal, per gall						49
DOMESTIC DRY GOODS, ETC.						
Shirts:						
Brown, 4-4, standard, per yd	09 to 13	09 to 13	07 to 12	093		10
Bleached, 4-4, standard, do	07 to 17	07 to 17	09 to 18	133	16	14
Sheetings:						
Brown, 9-8, standard, do	24 to 30	26 to 30	21	21	12	20
Bleached, 9-8, standard, do	32 to 42	26 to 36	31	17	32	42
Cotton flannel, medium, do	24	21		18		22
Tickings, good quality, do	30	30	36	12	24 to 28	10 to 17
Prints, do	15 to 19	13	12		11	14
Mousseline de laine, do	18 to 21	18			20	
Satinets, medium quality, do	81	81			133 to 153	
Boots, men's heavy, per pair	3 39 to 4 35	3 39			3 87 to 4 84	3 44
HOUSE-RENT.						
Four-roomed tenement, pr mo	4 84	2 90			6 05	3 03
Six-roomed tenements, do	6 78 to 7 26	4 35			7 26	5 15
BOARD.						
For mechanics, &c., per week	2 90 to 3 39	2 90	3 60	3 63	2 90 to 3 63	2 42 to 2 90
For women in factories, do	1 93		2 65	2 66	1 93 to 2 18	1 57

* Linen.

Prices

Flour:
Wheat
Rye
Corn-meal
Beef:
Fresh
Fresh
Corned
Veal:
Fore-q
Hind-q
Cutlets
Mutton:
Fore-q
Leg
Chops
Pork:
Fresh
Corned
Bacon
Hams
Shoulder
Sausage
Lard
Codfish, dry
Mackerel
Butter
Cheese
Potatoes
Rice
Beans
Milk
Eggs
Tea, Oolong
Coffee:
Rio, green
Rio, roasted
Sugar:
Good brown
Yellow C
Coffee B
Molasses:
New Orleans
Porto Rico
Sirup
Sap, common
Starch
Coal
Oil, coal
Shirts:
Brown, 4-4
Bleached, 4-4
Sheetings:
Brown, 9-8
Bleached, 9-8
Cotton-flannel
Tickings, good
Prints
Mousseline de
Satinets, medium
Boots, men's heavy

Four-roomed to
Six-roomed ten
For mechanics,
For women emp

See.—Continued.

ND.

PRICES OF PROVISIONS, ETC., IN IRELAND.

375

Prices of provisions, groceries, and other leading articles of consumption, &c.—Continued.

1874.		Articles.				IRELAND.				Average in the United Kingdom.
Number.	Leith.					Belfast.	Londonderry.	Portlawn.		
						1874.	1873.	1873.	1874.	
	£9 6s		PROVISIONS.							
			Flour:							
			Wheat, superfine.....per bbl		\$5 81 to \$6 78					
			Wheat, extra family.....do.				\$7 20	\$6 33	87 43	
			Rye.....do.				\$8 71	9 00	87 07	
			Barley.....do.						85 54	
			Beet:						85 47	
			Fresh, roasting-pieces.....per lb	11 to 15		20	18	16	21	
			Fresh, soup-pieces.....do.	11 to 16		14	11	14	16	
			Fresh, ramp-steaks.....do.	14 to 16		21	19	18	25	
			Corned.....do.		15	16		11	20	
			Veal:							
			Fore-quarters.....do.	22					14	
			Hind-quarters.....do.	22					10	
			Quicks.....do.	22					25	
			Mutton:							
			Fore-quarters.....do.	12 to 18		20	17	15	17	
			Leg.....do.	12 to 18		20	18	15	19	
			Chops.....do.	12 to 18		21	18	17	22	
			Pork:							
			Fresh.....do.	12 to 13						
			Corned or salted.....do.	14 to 16					21	
			Bacon.....do.	16	20 18 to 22	12	14	10	16	
			Hams, smoked.....do.	12 to 18	21	26	21	19	24	
			Shoulders.....do.	12 to 18		21	18	17	21	
			Sausages.....do.	12 to 18		21	16	15	17	
			Lard.....do.	12 to 18		21	12	12	17	
			Codfish, dry.....do.		04 05	05	07	07	07	
			Mackerel, pickled.....do.		21	21	21	21	08	
			Butter.....do.		21	21	21	21	29	
			Cheese.....do.	(bushel) 36	(bushel) 40	00 02	00 07	00 07	19	
			Rice.....do.	04	04 to 08	05	04	04	06	
			Beans.....do.						09	
			Milk.....per qt	16 to 21	05	01	01	01	08	
			Eggs.....per doz		21	18	21	21	25	
			GROCERIES, ETC.							
			Tea, Oolong or other good black.....per lb	41 to 64	81	72	82		69	
			Coffee:							
			Raw, green.....do.	21					28	
			Raw, roasted.....do.	31	32	41	37		35	
			Sugar:							
			Good brown.....do.	05 to 06	07	07	06	07	07	
			Yellow C.....do.						07	
			Coffee B.....do.						08	
			Molasses.....do.						08	
			New Orleans.....per gall							
			Porto Rico.....do.						24	
			Sirup.....do.						10	
			Soap, common.....per lb	07	08	07	1 46	76	04	
			Starch.....do.	09	09	16	08		04	
			Oil, coal.....per ton	4 35 to 6 05	5 80 to 7 20	6 26	5 81	4 78	11	
			DOMESTIC DRY GOODS, ETC.							
			Shirtings:							
			Brown, 4-4, standard quality.....per yd		08 to 14	11	08		11	
			Bleached, 4-4, standard quality.....do.		10 to 20	12	10		14	
			Sheetings:							
			Brown, 9-8, standard quality.....do.		36 to 60	11	12		25	
			Bleached, 9-8, standard q. ality.....do.			13	16	34	24	
			Cotton-linnet, medium quality.....do.		22 to 24	24	20		27	
			Tickings, good quality.....do.			24	16		28	
			Prints.....do.				11		15	
			Mousseline de laine.....do.		21 to 36				23	
			Satinets, medium quality.....do.		32 to 44				83	
			Hosiery, men's heavy.....per pair		2 60 to 6 05	2 18	2 07		3 23	
			HOUSING.							
			Four-roomed tenements.....per mo	2 00 to 2 50		1 91	2 43		4 11	
			Six-roomed tenements.....do.	3 00 to 4 00		2 42	3 41		5 37	
			BOARD.							
			For mechanics, &c.....per week		2 16 to 3 60		2 52		3 11	
			For women employed in factories.....do.		1 68 to 1 92		1 46		1 93	

PRICES OF PROVISIONS, GROCERIES, ETC.

[From the author's notes.]

BIRMINGHAM.—Rent of kitchen and two rooms above, in rear of house, 4s. a week; in front, 5s. Bread, 8d. for 4-pound loaf. Meat, 1s. per pound. Cheese, good American, 7d. per pound. Rent of three rooms, about 3s. 6d. per week for back, and 4s. 6d. for front; average, about 4s. House-rent in suburbs, lower than in the city—4s. to 4s. 6d. for house of four rooms; 6s. for six rooms.

SHEFFIELD.—Rent of rooms, ordinary price, 1s. per week for four rooms, or about 1s. per room. Good rooms rent for more. A respectable small house may be had for 6s. a week. Meat in Sheffield is good. Workingmen buy the best, and they can afford it. Excellent beef and mutton, 10d. per pound; good at 8½d. American bacon, 7d. to 9d. Butter, from 1s. to 1s. 2d.

MANCHESTER.—Leg of veal, 9d.; best fillet, 6d. Leg of mutton, 9d. Good beef, for stewing, 7½d.; for roasting, 9d. to 9½d. Tea, very good, 2s. 4d. to 2s. 8d.; best, 3s. Good white sugar, 4d.; best, 4½d.; brown, 3d. to 3½d. Flour, 2s. to 2s. 1d. per stone. Bacon, 7d. to 9d. Cheese, 6d. to 8d. Dry goods, low. Rent of rooms, 4s. for four rooms. In another part of the city rents are 2s. 9d., 4s. 6d., and 4s. for four rooms. Good cheese, 8d., chiefly American, which is very good, and occasionally better than English, at the same price. Good tea, 2s. 8d.; best, 3s.

HALIFAX.—Four rooms in upper part of house, from £8 to £9 per year. Better houses, built by Crossleys, two rooms on a floor, larger frontage, at 10 guineas a year, and poorer at lower rates.

BRADFORD.—Rent of houses, five or six rooms, for clerks, £18 to £20 per year.

NOTTINGHAM.—Rent of three to four rooms, average 4s. per week. Some nice houses in a good street rent for the same. Within the walls of the old town four to five rooms, including taxes, 4s. to 4s. 6d. Price of provisions much the same as in other western towns. About 10d. to 1s. for the best beef; 8d. to 10d. for very good; quite good at 9d. Veal 10d. by the leg; 13d. for cutlets, and much less for the poorer pieces.

HIDDERSFIELD. Price of board, for workmen, 10s.; for workwomen, 7s. per week.

COOK. (From Mr. Derby's notes.) Prices in a provision store: Beef and mutton, 10d. to 1s. per pound; pork and bacon, 9d.; corned beef, 9d.; smoked hams, 10d. to 1s.; cab-bages, 1d. each.

LONDON WHOLESALE PRICES IN 1872.

From the monthly statement of the wholesale prices of the following articles in the London markets during each month of the year 1872, the following average, expressed in United States coin, has been computed, and the average pro-rata price stated per pound:

	Per cwt.	Per lb.
Pork: Hams, smoked	\$26 50	23.7
Lard	17 03	15.2
Butter	29 24	26.1
Cheese	15 98	14.3
Rice	3 29	2.9
Coffee, Jamaica middling	25 84	23
Sugar, good brown	8 77	7.9
Molasses, West Indies	3 08	2.7

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33-in
36-in
40-in
White sh
Fine
Ston
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Lanc
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Fancy fl
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72-in

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PRICES OF DRY GOODS IN ENGLAND.

377

The following statement, forwarded by Mr. Consul Moran, gives the retail prices of cotton and other goods in Sunderland:

Statement showing the average retail prices of the following articles of dry goods in Sunderland, supplied by Messrs. Sheraton, drapers, in November, 1874.

Articles.	Price.	Articles.	Price.
Gray shirtings:		Gray sheetings—Continued.	
30-inch.....	6 to 9	20-inch.....	32 to 34
33-inch.....	7 to 11	Double warp, 20-inch.....	40 to 54
36-inch.....	8 to 11	White sheetings:	
40-inch.....	10 to 16	72-inch.....	44 to 60
White shirtings:		80-inch.....	51 to 66
Fine make, 36-inch.....	10 to 20	Double warp, 80-inch.....	60 to 84
Stout make, 36-inch.....	13 to 20	Ticks:	
White flannels:		Cotton, 27 to 32 inch.....	18 to 24
Lancashire.....	24 to 42	Union, 32-inch.....	20 to 30
Saxony, finer.....	28 to 48	White or brown, 32-inch.....	30 to 36
Fancy flannels:		Prints:	
Unions.....	14 to 30	30 to 32 inch.....	9 to 16
All wool.....	36 to 66	Satin cloths, French flannels, and various other dress-materials.....	20 to 48
Gray sheetings:			
72-inch.....	24 to 40		

WHOLESALE PRICES OF GRAIN.

Table showing the average price of wheat per imperial quarter* in England and Wales for the last week of each month during ten years, from 1863 to 1872, inclusive, the pound sterling being computed at \$1.84.

Month.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.
January.....	\$11 59	\$9 84	\$9 31	\$11 01	\$15 04	\$17 50	\$12 41	\$10 32	\$12 70	\$13 51
February.....	11 27	9 80	9 23	10 99	11 49	17 74	11 99	9 82	13 06	13 49
March.....	10 97	9 65	9 27	10 86	11 74	17 62	11 23	10 26	13 35	13 10
April.....	11 05	9 47	9 54	10 99	15 22	17 88	10 99	10 30	11 11	13 14
May.....	11 23	9 54	10 10	11 45	15 79	17 48	10 93	10 97	11 49	13 97
June.....	11 23	9 68	9 98	12 31	8 42	16 31	11 69	12 29	11 49	14 31
July.....	11 11	10 64	10 36	12 58	8 64	15 17	12 52	12 78	14 63	14 29
August.....	11 07	10 26	10 97	12 30	16 11	13 77	13 10	12 40	13 87	14 29
September.....	10 58	9 90	9 88	12 44	15 50	12 55	12 24	10 97	13 85	14 29
October.....	9 63	9 37	10 24	12 70	17 04	12 40	11 47	11 73	13 69	14 29
November.....	9 74	9 35	11 33	13 91	16 55	12 34	11 01	12 20	13 51	14 29
December.....	9 78	9 45	11 35	14 52	16 29	12 21	10 50	12 61	10 97	14 29
Average for each year.....	10 77	9 72	10 13	12 17	14 48	15 32	11 65	11 33	13 53	13 81
Average for each year per bushel,†	1 34	1 21	1 27	1 52	1 81	1 91	1 46	1 42	1 69	1 73

* The imperial quarter (= 8 imperial bushels of British standard) contains 17,745½ cubic inches, and is equivalent to 1¼ standard bushels of the United States.
† The imperial bushel is about 3 per cent. larger than the standard bushel of the United States—the former containing 2,218.19 cubic inches and the latter 2,150.42.

The average price of grain per quarter (imperial measure) in England and Wales for the three months ended Christmas, 1872, was as follows: Wheat, \$13.85; barley, \$10.20; oats, \$3.52.

WHOLESALE PRICES OF GRAIN.

Statement showing the average price of grain per Imperial quarter in England and Wales during thirty-five years, from 1840 to 1874, inclusive.

Period.	Wheat.	Barley.	Rye.	Period.	Wheat.	Barley.	Rye.
1840-44, (five years)	\$13 88	\$7 66	\$8 92	1867	\$15 48	\$9 64	.....
1845-49, (five years)	12 90	8 29	8 10	1868	15 36	10 32	.....
1850-54, (five years)	7 50	6 06	7 60	1869	11 56	9 46	.....
1855-59, (five years)	13 84	8 80	9 30	1870	11 26	8 30	.....
1860	12 58	8 78	8 50	1871	13 60	8 68	.....
1861	13 28	8 66	8 58	1872	13 48	8 00	.....
1862	13 30	8 42	8 72	1873	14 08	9 50	.....
1863	19 54	8 14	7 58	1874	13 38	10 58	.....
1864	9 64	7 18	7 30	Average for 35 yrs.	13 20	9 14	.....
1865	10 04	7 11	.....			
1866	11 98	8 08	.....			

The general average of the price of wheat, barley, and oats, in England and Wales for the years 1868, 1869, and 1870, were: Wheat, per quarter, \$12.70; barley, \$9.36; oats, \$6.15.

PRICES OF MEAT AND OTHER PROVISIONS.

Prices of beef and mutton in Great Britain in the following months of 1872.

Markets.	January.	April.	July.	October.	Average.
London:					
Beef per 8 pounds..	\$1 21 to \$1 41	\$1 25 to \$1 33	\$1 37 to \$1 53	\$1 29 to \$1 41	\$1 28
Mutton do	1 45 to 1 69	1 21 to 1 33	1 34 to 1 69	1 45 to 1 61	1 47
Newcastle:					
Beef per 11 pounds..	2 23 to 2 42	2 17 to 2 29	2 17 to 2 60	2 35 to 2 42	2 29
Mutton per pound..	18 to 21	21 to 21	16 to 21	17 to 19	19
Edinburgh:					
Beef per 11 pounds..	2 29 to 2 54	2 17 to 2 29	2 17 to 2 66	2 29 to 2 48	2 44
Mutton per pound..	18 to 21	20 to 22	17 to 20	16 to 19	19

Table showing the average price of wheat, meat, and potatoes in each quarter of the five years ending December 31, 1874.

Quarter ending—	Wheat in England and Wales.	Meat at the Metropolitan Meat Market.		Potatoes at Water-Market, London.
		Beef.	Mutton.	
March 31, 1870	Per q'ter. \$10 14	Per lb. \$20 11.5	Per lb. \$20 12.5	Per ton. \$21 48
June 30, 1870	10 72	11.25	12.75	20 00
September 30, 1870	13 08	12	14.25	28 80
December 31, 1870	13 02	12.75	17.25	16 80
March 31, 1871	12 86	12.75	14	20 88
June 30, 1871	14 31	13	14	15 92
September 30, 1871	13 86	14.5	15	16 92
December 31, 1871	13 50	14	13.5	21 56
March 31, 1872	13 28	12.25	11.25	24 00
June 30, 1872	13 60	12.75	11.75	32 88
September 30, 1872	14 11	13.25	15.50	25 56
December 31, 1872	13 71	13.50	14.50	30 40
March 31, 1873	13 40	13.50	15.25	31 68
June 30, 1873	13 54	14.75	16.25	30 88
September 30, 1873	14 72	14.5	15.75	25 88
December 31, 1873	14 66	13.5	14.25	25 88
March 31, 1874	14 92	14.5	13.75	25 35
June 30, 1874	14 66	13	13.25	36 00
September 30, 1874	13 30	13.25	13	21 00
December 31, 1874	10 61	13	12.50	20 16
Average	14 15	13.62	14.61	27 91

Who

January
February
March
April
May
June
July

Average
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Beasts:
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Second
Third
Fourth
Sheep:
Interior
Second
Third
Fourth

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London
Aldershot
Canal Island
Northern
Eastern
Southern
Woolwich
Chatham
Southwestern
Western
South Wales
North Wales

Average

379

Wholesale prices of wheat, beef, and mutton, in London and Manchester, for each month in the year 1874.

Barley.	Rye.
89 64
10 32
9 46
8 30
8 68
8 96
9 50
10 78
9 14

Wheat.				Barley.			
Date,		Wheat.	Barley.	Date,		Wheat.	Barley.
		Gazette price per imperial quarter.	Inferior millings, per c bushels.			Gazette price, per imperial quarter.	Inferior millings, per c bushels.
January 1	£14 80	£4 08	£1 24	August 1	£14 32	£4 10	£1 10
February 1	15 50	1 02	1 06	September 1	14 04	1 04	1 02
March 1	15 56	1 00	1 02	October 1	14 06	1 18	1 10
April 1	17 36	1 00	1 02	November 1	10 50	1 06	1 00
May 1	11 00	1 04	1 02	December 1	10 72	1 06	1 08
June 1	14 80	1 06	1 12				
July 1	11 56	1 04	1 00				
Average of year...				Average of year...			
		13 51	1 04			13 51	1 07

PRICE OF BUTCHERS' MEAT.

PRICE OF BUTCHERS' MEAT.

Average yearly price of butchers' meat, (per stone of eight pounds, sinking off.) distinguishing the various kinds as sold in the Metropolitan Cattle Market, in each of the years 1868, 1869, and 1870.

Kind of meat.	Average for the years—			Kind of meat.	Average for the years—		
	1868.	1869.	1870.		1868.	1869.	1870.
Beasts:				Sheep—Continued.			
Interior	\$0 75	\$0 83	\$0 86	Fourth class, South-			
Second class	85	93	1 05	downs	\$1 20	\$1 28	\$1 34
Third class, large prime	1 05	1 15	1 19	Lamb's	1 45	1 45	1 61
Fourth class, Scots ...	1 20	1 30	1 28	Calves:			
Sheep:				Coarse	1 00	1 12	1 61
Interior	83	92	84	Small prime	1 17	1 34	1 30
Second class	93	1 14	1 04	Pigs:			
Third class, long course				Large hogs	84	1 01	1 16
wood	1 10	1 27	1 24	Small meat porkers ...	95	1 24	1 35

CONTRACT PRICE OF PROVISIONS FURNISHED THE ARMY AND NAVY.

The following tables show the contract price at which bread, meat, and the other principal articles of provisions were furnished to the troops in Great Britain and Ireland, and also for the use of the Royal Navy during the years 1868, 1869, and 1870, and indicate to some extent the prices of food in the Kingdom:

Contract price of bread, meat, and rations supplied to the troops in each district of Great Britain for the first and second half-year of 1870.

Districts.	Broad, price per 4-pound loaf.		Meat, price per pound.		Cost of ration of 1 pound of bread and ½ pound of meat.	
	First half-year.	Second half-year.	First half-year.	Second half-year.	First half-year.	Second half-year.
London	<i>Cents.</i> 9	<i>Cents.</i> 12.32	<i>Cents.</i> 11.96	<i>Cents.</i> 12.09	<i>Cents.</i> 11.68	<i>Cents.</i> 12.04
Aldershot	10.7	10.38	12.4	12.6	12.4	11.86
Channel Islands	10.76	10.12	12.76	13.61	12.22	12.64
Northern	10.6	9.41	13.02	12.4	12.40	11.8
Southeastern	11.21	11.50	11.16	11.94	11.36	11.50
South-east	10.4	9.26	13.06	12.2	12.49	12.66
Clatham	11.58	10.64	15.18	12.42	13.16	11.41
Southwestern	11.62	10.6	13.68	14.10	11.52	11.86
Western	11.46	10.86	12.78	12.32	11.52	11.96
North Wales	10.96	10.7	12.08	12.12	11.8	11.96
North Britain	10.92	10.61	12.50	12.51	12.06	12.61
Average						

Average prices paid for army purveyors' stores in England in the years 1868, 1869, and 1870.

Articles.	1868.	1869.	1870.	Average of 3 years.
Tea.....per pound..	\$9 47	\$9 46½	\$9 50.8	\$9 48.1
Sugar, crushed wet lumps.....per cwt..	9 6½	9 46	10 21	9 78
Barley, best Scotch.....do.....	4 20	4 22	4 38	4 27
Rice, cleaned Patna.....do.....	4 12	3 92	4 31	4 12
Linseed meal.....do.....	4 48	4 78	5 47	4 91
Soap, hard, yellow.....do.....	7 26	6 92	7 40	7 33
Porter, imperial pints, per dozen, 8 to gallon.....	804	794	73	77
Ale, imperial pints, 8 to gallon.....	94½	85½	78	86
Fowls.....do.....	57	53½	53½	54
Milk.....per gallon..	22½	22 35	23	23
Potatoes.....per cwt..	1 56	1 48	1 54	1 53
Vegetables, mixed.....per pound..	02	02	02	02
Eggs.....per dozen..	22	22	23	22

Contract prices of bread (per 4-pound loaf) supplied to the troops in each county of Ireland in each half of the years of 1868, 1869, and 1870.

County or station.	1868, half-year to—		1869, half-year to—		1870, half-year to—	
	May 31.	November 30.	May 31.	November 30.	May 31.	November 30.
Antrim.....	Cents. 14	Cents. 13.8	Cents. 11.9	Cents. 9.88	Cents. 10.2	Cents. 9.41
Armagh.....	16	15	12.5	10	10	9.5
Buttevant.....	14.5	13.38	11.36	10.2	10.78	9.71
Carlow.....	15.5	14.8	13.5	11.8	11.2	10.5
Cavan.....	19.98	15.5	14.48	13	12.48	10.75
Clare.....	18.5	17.7	13.54	12.5	13	10
Cork, except Fermoy and Buttevant.....	14.98	12.98	10.96	9.5	10	8.2
Fermoy.....	14.5	14.2	11.4	10.4	10.9	9
Down.....	16.98	15.46	11	9.98	9.46	9.91
Fermanagh.....	17.8	15.5	13.5	11.8	11.2	10.5
Galway.....	15.96	17	13.5	12	11.5	10.8
Kerry.....	16.4	16	13	11	11.6	10
Kildare, except Curragh and Newbridge.....	18	17.7	15	13	11	15
Kilkenny.....	14	3.5	12	10	11	8.28
Kings County.....	17	16.8	13	12	13	10.46
Limerick.....	14.76	13.96	11.4	10.2	10.66	9.48
Londonderry.....	15.56	14.8	12	11.8	12.5	11.8
Louth.....	17	15.4	13.4	11.5	11.5	11.7
Mayo.....	15.4	14.71	11.9	10.2	10.4	9.5
Monaghan.....	18	15.5	12	10.4	9	9
Sligo.....	19	15	14	11	12	11
Tipperary.....	17.5	17.5	13	10	10.5	11.5
Waterford.....	17.5	15.4	13.4	11.4	11.9	9.8
Westmeath.....	15.8	15.5	12	10.4	11.4	9.5
Wexford.....	17	15.4	12.8	10.9	11.42	9.8
Wexford.....	19.5	19	17	11.4	12	10.1
Average.....	16.58	15.44	12.81	11.01	11.18	10.22
Kildare, Curragh of.... flour per sack of 280 pounds.	\$12 31	\$12 06	\$9 42	\$8 20	\$8 50	\$7 80
Dublin..... flour per sack of 280 pounds	12 08	11 94	9 32	7 98	8 28	7 38

Cont

Antrim
Armagh
Buttevant
Carlow
Cavan
Clare
Cork, ex
Down
Dublin
Fermanagh
Fermoy
Galway
Kerry
Kildare
Kilkenny
Kings Co
Limerick
Londond
Louth
Mayo
Monaghan
Sligo
Tipperary
Waterford
Westmeath
Wexford

Aver

Average p
at home
and 187

Bread
Biscuit
Sugar
Tea
Raisins
Fresh beef
Vegetables
Salt pork
Rice
Preserved beef
Preserved potatoes
Flour
Wheat for con
Oats for con
Cocoa
Pepper, raw
Fresh beef, fat
Salt beef
Salt, white, for
Lime or lemon
Vinegar
Split peas
Milk

3, 1869, and 1870.

	Average of 3 years.
30.8	\$0 48.1
31.1	9 75
31.4	4 27
31.7	4 12
32.0	4 91
32.3	7 33
32.6	7 7
32.9	8 6
33.2	5 3
33.5	2 3
33.8	1 53
34.1	2 2
34.4	2 2
34.7	2 2

county of Ireland

	1870, half-year to—	May 31.	Novem-ber 30.
8.	Cents.	Cents.	
10.2	9.44		
10	9.5		
10.78	9.71		
12.48	10.75		
13	10		
10.9	9		
9.46	9.91		
11.2	10.5		
11.5	10.8		
11.6	10		
11	15		
13	8.78		
13	10.46		
10.66	9.48		
12.5	11.8		
10.4	9.8		
9	9		
12	11		
10.5	11.5		
11.9	9.8		
11.4	9.5		
11.42	9.9		
12	10.1		
11.18	10.22		
8.50	8.90		
8.48	7.38		

PRICES OF PROVISIONS IN THE UNITED KINGDOM. 381

Contract-prices of fresh meat supplied to the troops in each county of Ireland in each of the half-years of 1868, 1869, and 1870.

Counties.	1868, half-year to—		1869, half-year to—		1870, half-year to—		Average.
	May 31.	Novem-ber 30.	May 31.	Novem-ber 30.	May 31.	Novem-ber 30.	
Antrim	Cents. 9.5	Cents. 9	Cents. 10.36	Cents. 9.2	Cents. 11.56	Cents. 10.5	10.02
Armagh	10	9	9	8.5	11	11	9.5
Barfregan	11.86	10.74	9.92	9.5	8.88	8.44	9.89
Carlow	11.5	12	11.5	11.94			11.73
Cavan	13	16	15	14	13	12	14
Clare	9.92	10.5	9.5	1	10.5	8	9.57
Cork, except Fermoy and Ballewin	12.5	10.92	10.4	10	8.96	9.8	10.47
Dublin	9	9	11	10	10.46	9.5	9.83
Fermanagh	11.48	11.76	11.38	11.4	11.55	11.42	11.5
Fermoy	9.5	9.5	10	10	10	9.5	9.75
Galway	11	9.91	9.5	9.46	11.38	9.34	10.10
Kerry	10	8	9	8.5	9.5	10	9.17
Kildare, except Curragh and Newbridge	13.5	9.5	10	8.5	9.5	9	10
Kilkenny	16	12	11.8	11.94			12.85
Kings County	12.9	13.36	11.8	11.6	11.55	11.74	11.91
Limerick	7.48	9.38	9.5	8.92	10.5	9.44	9.4
Lisdowney	8.96	8.4	8.41	10.2	11	9.5	9.42
Londonderry	8.98	7.7	7.2	7.76	8.96	7.7	8.22
Louth	10.1	11	11	11	11	11	10.9
Mayo	11	9.5	11.5	9.5	10.5	9.5	10.25
Meath	9.92	8.88	13.98	9.4	9.76	9.34	10.21
Monaghan	8.5	7.98	9.5	7.24	10	11.94	9.18
Sligo	13	11	11	10.5	9.5	9	11.92
Tipperary	13.5	11	12	12.4	13.5	13.5	12.65
Wick	10.84	10	11	11	10	8.5	10.22
Westmeath	8.8	8.5	9	8	8	8.5	8.55
Wexford	10	9.5	8.98	9	9.5	8	9.16
Average	12	11.5	11	10	10	9.5	10.66
	10.91	10.26	10.56	9.95	10.38	9.34	10.27

Average prices at which the principal articles of provisions were purchased or manufactured at home for the use of the royal navy in the respective years ended March 31, 1868, 1869, and 1870.

Articles.	1868.	1869.	1870.	Average.
Bread	per 100 pounds.			
Biscuit	£1 00	£3 80	£3 06	£3 62
Sugar	4 52	4 14	3 28	3 98
Tea	5 60	5 84	5 66	5 60
Raisins	38 28	46 01	34 38	37 77
Fresh beef	7 22	5 40	6 70	6 44
Vegetables	11 52	10 82	11 18	11 17
Salt pork	1 14	1 20	1 34	1 19
Eice	13 48	14 40	14 91	14 27
Preserved boiled beef	4 96	4 96	3 36	4 43
Preserved potatoes	21 00	21 60	12 98	18 53
Flour	8 42	8 96	7 66	8 35
Wheat for conversion	4 72	4 52	3 20	4 15
Oats for conversion	3 62	3 18	2 31	3 05
Out-meat	2 58	2 64	2 31	2 49
Cocoa	4 52	4 51	4 14	4 40
Pepper, raw	13 16	12 22	12 06	12 48
Fresh beef, for curing and preserving	7 16	7 61	8 26	7 69
Salt beef	12 58	13 76	12 76	13 03
Salt, white, for curing beef and suet	14 84	16 78	15 60	15 56
Lime or lemon juice	46	46	50	47
Vinegar	62 61	49 21	46 48	52 59
Salt pease	12 58	12 76	12 56	12 63
Milk	26 54	24 62	20 84	24 00
	20 12	16 52		18 32
	per 100 quarts.			

INCREASE IN THE COST OF LIVING.

In the following paper Mr. Jones, United States consul at Newcastle-on-Tyne, presents his views in regard to the advance in the cost of provisions in 1872:

The cost of living has advanced between 30 and 40 per cent. this year. The price of coal is nearly double what it could be purchased for on the 1st of January last; flour has risen from 50 cents to 60 cents per 100 pounds; butchers' meat is 2 to 4 cents higher; and now that the potato-crop has failed, not alone in Ireland, but generally throughout the United Kingdom, we are certain to experience a serious advance in what we might term the great staple of the laboring classes.

The employers of labor in England reason about as follows:

"Let us obtain the necessities of life for our workmen as cheaply as possible, so as to enable them to render us their services at a low wage; this, together with our cheap money, and natural advantages in mineral resources, in the close proximity of coal and iron, as well as by our favorable geographical position for the international market, will enable us to undersell all others and confine competition to our own land."

I believe it to be a well-established tenet in political economy, that in proportion to the increase of population the price of animal food will advance in this country. It is true that this principle may occasionally be overruled by shipments of live stock from the continent, yet I apprehend that this can bring about no serious exception to the rule, for upon the first appearance of the rinderpest, the cattle-plague, or kindred diseases, upon the plains of Yorkshire or among the hills of Carnarvon, the importation of cattle will be stopped by order of the privy council; therefore, it is fair to anticipate that a traffic attended by so many difficulties, risks, and uncertainties will never attain the magnitude necessary to nullify the principle laid down. The farmers of this country must be induced to abandon wheat-growing and turn their mind and attention to stock-raising, else matters will soon become serious.

Employers of labor are not unmindful of the situation. Herculean efforts have been and are still being made to induce the working-classes to adopt the Australian meat as a general article of diet. Capitalists have formed limited-liability companies for the development of this trade.

It is permitted to go abroad that Australian beef and mutton are to be found upon the tables of the aristocracy of the country.

At a public meeting held in the adjoining borough of Gateshead, a few months ago, for the agitation of the meat question, the mayor of Newcastle asserted by authority that one of the wealthiest men in this district used this class of food twice a week, and preferred it to the meat procured from his regular butcher.

This policy will certainly contribute to wipe away the natural prejudices of the masses against meat killed, cooked, and canned by unknown hands 15,000 miles away.

COST OF CLOTHING.

In the foregoing tables the cost of provisions and of house-rent per week has been given, also the price of various articles of dry goods and of boots, thus furnishing some data for a computation of the cost of living in the United Kingdom as compared with the United States. While the prices of the principal articles of subsistence are on the whole as high in the former as in the latter country, the rental of rooms and the price of clothing are only about one-half as much as in the United States. From a careful computation made in London, it is believed that clothing can be purchased there at 50 per cent. of the gold and 56 per cent. of the currency prices in New York. From a tailor in High Holborn, who makes more clothing for citizens of the United States than any other in London, the following prices were obtained:

Good business suits, made to order, of good and fashionable material, cost from 58s. to 60s.; the lowest price of similar quality in New York, ready made, being \$28 to \$30. Suits of fine blue cloth, 82s. 6d., (\$19.96,) which it is believed could not be obtained anywhere in the United States for \$10. Fine black cloth dress-vests, 10s.; dress-trousers of best black doeskin, 36s.; frock-coats of the best black cloth that could be purchased in London, silk lined, 80s., (\$19.36;) overcoats from 50s. to 60s., the latter of good beaver-cloth, with silk-velvet collar.

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Clothing:
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Staff-ser
Sergeant
Sergeant
Musician
Privates
Privates
Drummer
Tunic..

PRICES OF CLOTHING IN ENGLAND.

383

Ready-made clothing is sold at lower rates. Good-looking trousers were seen at various clothing-stores with the prices of 11s. 6d and 12s. 6d. affixed. Laboring men are not only able to purchase their clothing at about one-half the rates paid in the United States, but are in the habit of wearing at their work fustian or corduroy suits, which are not only cheaper in price but of great durability; so that an English workman's clothing costs but about one-third the price paid by his brother workman in the United States. It is difficult to present the prices of the cheaper articles of clothing in such a manner as to enable an intelligent opinion to be formed of their cost as compared with similar articles in this country; but the prices paid for cloth and clothing for the army and for the hospitals, as shown in the following statement, indicate the lowest rate at which woollens can be obtained in England.

PRICES OF ARMY CLOTH AND CLOTHING.

The prices paid for cloth and for some of the articles of clothing purchased for the British army, also for one of the hospitals, as given in the following tables, afford some indication of the cost of clothing in England suitable for the working-classes:

Prices paid for army cloth and clothing for the British army in the years 1868, 1869, and 1870.

Articles.	Per yard.			Articles.	Per yard.		
	1868.	1869.	1870.		1868.	1869.	1870.
Cloth for Infantry:				Rifle—Continued.			
Sergeants' scarlet.....	\$3 02½	\$2 16	\$1 87	Tunic and overall, No. 3.....	\$2 21	\$2 15	\$1 89
Privates' red.....	1 95	1 87	1 52	Tunic and overall, No. 3.....	2 21	2 18½	1 54
Staff-sergeants' gray.....	2 02	2 02	1 60	Tartan for kilt.....	73	20	55
Privates' gray.....	1 45	1 45	1 22	Tartan for trousers.....	73	20	55
Cloth for Rifle:				Cavalry cloak cloth:			
Sergeants' tunic.....	2 20	2 22	1 91	Sergeants' blue tunic.....	2 50½	2 50	2 61
Sergeants' trousers.....	2 46	2 46	2 46	Sergeants' blue overall.....	2 22½	2 20½	1 85
Privates' tunic.....	2 18½	2 08	1 68	Cavalry cloak cloth.....	2 21	2 19	1 83
Privates' trousers.....	1 89	1 89	2 50	Privates' blue tunic.....	2 52	2 49	2 19
Tunic and overall, No. 1.....	3 36	3 36	2 88	Infantry regulation boots, per pair.....	2 57	2 39	2 40½
Tunic and overall, No. 2.....	2 50	2 41	2 01				

Prices paid for army clothing in each of the years 1868, 1869, and 1870.

Articles.	1868.			1869.			1870.		
	Infantry.	Highland.	Rifle.	Infantry.	Highland.	Rifle.	Infantry.	Highland.	Rifle.
Clothing:									
Staff-sergeants' tunic...	\$12 24	\$15 15	\$11 24	\$11 61	\$14 54½	\$2 68	\$11 32½	\$13 67½	\$12 4½
Staff-sergeants' trousers.....	4 53½	5 46	5 29	4 58	5 94½	4 50½	4 46½	5 89	4 68
Sergeants' tunic.....	5 56	5 57½	5 56	5 87	7 30	5 72½	6 03½	7 19	5 74
Sergeants' trousers.....	2 77½	3 09	3 09	3 27½	4 43½	3 52	3 22½	4 73	3 56
Privates' tunic.....	5 02½	5 15	5 41	5 30	6 06½	6 02	5 22½	5 70	5 22½
Privates' trousers.....	4 72	5 01½	4 88½	4 53½	5 29	5 03	4 46	4 98	4 87
Drummers' or buglers' tunic.....	2 65½	3 02	2 46	2 61½	3 41½	2 57½	2 46½	3 55½	2 44
	5 98	6 20	5 48	5 22	6 80½	6 01	5 81	6 42½	5

PRICES OF CLOTHING.

Prices paid for various articles of clothing, &c., at Bethlehem Hospital, in the year 1870.

Articles.	1870.
Cloth coats, (various colors).....each.....	\$6 01
Cloth waistcoats, (various colors).....do.....	1 08
Cloth trousers, (various colors).....do.....	3 41
Cloth, servants' blue { Coats.....do.....	11 12
Waistcoats.....do.....	3 40
Trousers.....do.....	6 16
Canvas out of use except for coal-carrying { Jackets.....do.....	1 92
Waistcoats.....do.....	2 4
Trousers.....do.....	3 4
Servants' frocks.....do.....	96
Drinks and waistcoats.....do.....	1 36
Flannel { Petticoats.....do.....	13 41
Tick feather-beds.....do.....	2 04
Tick feather-pillows.....do.....	2 01
7-4 Whitney blankets.....do.....	2 58
8-4 Whitney blankets.....do.....	3 29
11-4 Whitney blankets.....do.....	24 20
Men's stockings.....do.....	4 41
Women's stockings.....do.....	3 06
Blue rounds.....do.....	1 02
Linon handkerchiefs.....do.....	1 34
Blue rounds.....do.....	103
Dowls, (30 inches).....do.....	21
Check, (30 inches).....do.....	1 41
Sheets.....do.....	15
Cotton prints.....do.....	24
List shoes.....do.....	2 58
Men's boots.....do.....	1 50
Women's home-made { Boots.....do.....	96
Shoes.....do.....	

CO-OPERATIVE ASSOCIATIONS.

Industrial co-operation having already been briefly alluded to, it may not be improper in this place to refer to those co-operative societies for the purchase and sale of the necessaries of life, which in England are in much favor. Associations somewhat similar are not unknown in this country, especially in New England, where, some twenty years ago, they were numerous, and apparently successful; but for some defect, either of organization or administration, they gradually declined in number and popularity. In England, however, they have, on the whole, met with decided success, there being at the present time 1,400 of such societies, with a total membership of nearly 500,000. Last year they sold domestic supplies to the amount of £15,000,000. The Rochdale plan of co-operation is considered to be the best. The Co-operative News, the organ of this movement in England, says:

By examining the leading features of this plan, it will be seen to be as simple as it is efficacious. Many of the societies, now the most flourishing, commenced their business operations with less than \$200. Everything is purchased and sold for cash. Those who have tried the credit system have all failed. The goods are sold at the ordinary price demanded by the regular dealers, no more, no less; but great care is taken to exclude all adulterated articles. To prevent fraud, chemists are employed by some of the associations, and should any of the committees of management suspect an article to be impure, a sample is immediately forwarded for analysis, and the goods are not sold until a report has been received. Thus, goods sold in co-operative stores have a just reputation for purity. It is cheaper to pay a fair price for a pure article than a lower price for an adulterated one.

It is believed that co-operative industry will soon control the whole productive and distributive business of the country. There are tens of thousands of people in England, who, up to the time they joined the co-operative societies, had never saved a penny, who have now considerable sums accumulated by this means. The accumulation is effected by a sort of double-compound interest. The average interest is said to be as high as 28 per cent. on the whole share and loan capital.

The following is taken from the price-list of the Bold street "Household stores" in Liverpool:

Statement of the prices of some of the articles of household use, from the price-list of the Bold street co-operative stores, Liverpool, 1873.

1870.		
each	\$6 04	
do	1 68	
do	3 44	
do	11 42	
do	3 40	
do	6 16	
do	1 92	
do	54	
do	88	
do	3 44	
do	95	
do	1 56	
do	13 41	
do	2 04	
per pair	2 04	
do	2 58	
do	3 29	
per dozen	24 29	
on pairs	4 41	
do	3 35	
per dozen	1 02	
do	1 34	
per yard	42 1/2	
do	21	
each	1 41	
per yard	15	
per pair	21	
do	2 58	
do	1 50	
do	96	

Australian meat, without bone:	
Beef, in packages, per pound	\$0 14 to \$0 15
Beef, corned, in packages, per pound	15 1/2 to 17
Beef, spiced, in packages, per pound	15 1/2 to 17
Mutton, per pound	13 to 14
Kangaroo venison, in packages, per pound	20
Texas beef, roasts, per pound	13 to 15
Potted game, per tin	20
Salmon, per tin	20
Lobster, per tin	20
Anchovy paste, per tin	20
Ham and chicken patés, in tins, per dozen	28
Veal and ham patés, in tins, per dozen	4 68
Liebig's extracts of meats, per pound	3 72
Essence of beef, in jars	26
Tea, fine Souchong, per pound	12
The society's mixture of finest teas, per pound	54
Coffee:	60
Ceylon, per pound	31
Finest full-flavored Mocha, per pound	36
Essence of, per dozen	2 28
Chocolate, per pound	32
Cocoa, per pound	20
Sugar:	
Demerara, raw	06 to 07
Crushed	07
Crystals	06 to 07
Fruits:	
Currants, Zanto	06
Raisins, Valentias	09
Raisins, Sultanias	13
Raisins, Muscatels	14
Dates, Taffat	09
Prunes, French	07
Almonds, Valentia	24
Preserved oranges	1 44
Lime-juice, per dozen quarts	2 52
American tinned fruits—	
Peaches, one-pound tins	21
Pine-apples, one-pound tins	22
Tomatoes, two-pound tins	23
Turkey figs, per pound	10
Olives, French, one-half pints, per dozen	2 04
Olives, Spanish, one-half pints, per dozen	2 16
Capers, pints	3 12
Arrowroot, one-pound tins	16
Corn-starch, per pound	11
Sago and tapioca, per pound	05
Sago and tapioca, pearl, per pound	08
Sago and tapioca, Rio, per pound	15
Macaroni and vermicelli, per pound	13
Rice:	
Patna, two-pound packages	05
Carolina, two-pound packages	07
Soap:	
Mottled	07 1/2
Pale wax	08
Fine white	14
Candles:	
Stearine	20
Paraffine	21
Spermaceti, best	46
Soda, 14 pounds	21
Starch, per pound	10

Spices:	
Jamaica ginger, per pound.....	\$0 24
Cloves, per pound.....	21
Mace, per ounce.....	06
Nutmegs, per ounce.....	06
Pepper, black, per ounce.....	16
Pepper, white, per ounce.....	32
Pepper, Cayenne, per ounce.....	40
Pimento, per ounce.....	12
Vinegar, distilled, per quart.....	16

THE MANCHESTER AND SALFORD CO-OPERATIVE SOCIETY.

Having visited the shops and offices of the above society in Manchester, and made inquiries of the officers in regard to its operations and success, the author believes that a few items of information in regard to the objects and management of an association which has not only been productive of material but of moral benefit to its members, will prove interesting. The secretary said that the savings of the members encouraged them in habits of thrift, and that they were not so much given to spend money in drink as is usual with other working-men.

This society was established to purchase food, firing, clothing, and other necessities at wholesale prices, or to manufacture the same and retail them; also to purchase, erect, mortgage, sell, and convey, or to hold land and buildings, and to carry on the labor, trade, or handicraft of builders.

The rules of the society declare that the capital of the same shall be raised in shares of one pound each, one of which shall be transferable, and the remainder withdrawable. Each member shall hold at least one share, and not more than two hundred. Any member may pay the whole or any part thereof in advance, but not less than twopence per month, or two shillings and sixpence per quarter per share, and, on default, shall be fined threepence per quarter, unless the default is shown to have arisen from sickness, distress, or want of employment, or any other reason satisfactory to the committee of management; in which case a written statement of the cause of the default shall be sent to the secretary at the time at which such payments ought to be made, otherwise the fine shall be enforced.

It is further provided that each member shall receive quarterly out of the surplus receipts of the society, after providing for the expenses thereof, in each quarter, interest not exceeding 5 per cent. per annum upon every paid-up share standing to his account in the books of the society; but the committee shall at any time have power, with the sanction of an ordinary general meeting, to alter the rate of interest upon shares.

Also, that the net proceeds of all business carried on by the society, after paying for the expenses of management, interest on loans, the proper reduction in value of fixed stock, and the interest upon the subscribed capital, shall from time to time be applied by direction of the ordinary quarterly meetings, either to increase the capital or business of the society, to the formation of a reserve fund, or to any provident purpose authorized by the laws in force in respect to friendly societies, and the remainder (less £2 10s. of every £100 clear profit to be set apart for instruction and recreation) shall be divided among the members of the society in proportion to the amount of their purchases at the stores during the quarter.

The dividend for the last quarter was 1s. 6d. on the £1 to members and 10d. to non-members. There is a library with reading-room for members, and a public room for meetings of the society, and for the weekly meetings of the 14 directors, who receive 1s. per week for such service.

The sales are at the prices charged for the same qualities at other shops. The following were noted:

Good American cheese, 8 cents per pound, (very much used, and said to be frequently better than English at the same price.) Very good tea, 2s. 8d.; the best at 3s.

HALIFAX.—The forty-eighth semi-annual report of the Co-operative Society at Halifax, which has just been received, gives its operations

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up to December 31, 1874, from which the following information is obtained:

The society, which has twenty-three branches, does a business of nearly £280,000 per annum, making a net profit of nearly £20,000 per annum, allowing a dividend to its members aggregating nearly £500 per week. It has an extensive library, and issues to its readers about 500 books per week. The reading-room is supplied with 12 daily papers, 22 weeklies, and 12 quarterly and monthly magazines. The total expenses amount to 1s. 1d. per £ of sales.

Of a similar society at Edgeworth, near Bolton, the sixtieth quarterly balance-sheet for March 31, 1875, shows a business in grocery and drapery of £198 per week. Stocks are turned over in twenty-six days. They have a small savings-bank and reserve fund, which amounts to 2d. per £ of share capital.

DIET OF WORKMEN—FAMILY EXPENDITURES.

The following statements of weekly expenditures of the families of some laboring men in Great Britain indicate, to some extent, the kind of food most in use. It will be observed that meat of all kinds, which forms so large a proportion of the cost of food in the United States, constitutes, on an average, less than one-fifth, (19.6 per cent.,) while in Manchester and Huddersfield it is but little over 10 and 14 per cent., respectively.

In conversations with workmen in various manufacturing towns, the author made inquiries in regard to their food and mode of living, and the following, selected from his note-book, are specimens of replies from a number of workmen:

MANCHESTER.—Most workmen have bread and bacon, or butter, with tea or coffee for breakfast. Fresh meat of some kind or bacon and bread or vegetables for dinner. Supper is light, consisting chiefly of bread. Many, though desiring meat,* cannot afford much of it when it costs 10d. or 1s. per pound for steaks.

HALIFAX.—For breakfast, tea, bread and butter, or bacon, (bacon supplies the place of butter.) For dinner, a chop, with bread or potatoes; sometimes a pudding. For supper, bread with tea.

BIRMINGHAM.—For breakfast, bread with bacon, and tea. For dinner, usually bacon with bread or vegetables, fresh meats being high. Vegetables are but little used by workmen, being high in price. Cheese is much used, especially American.

EXPENDITURES OF WORKMEN'S FAMILIES.

A circular, requesting statements of the weekly expenditures by the families of laboring men for provisions, house rent, clothing, and other necessities of life, was to but a limited extent responded to in Great Britain. While all wage-laborers know the amount of their weekly receipts, and are, unfortunately, aware of the fact that usually the whole is expended, yet they keep no account of how much goes for bread, or meat, or the other articles named in the following statements. The few which have been obtained are here presented:

*In relation to this subject an English writer says: "We know, indeed, that animal food is productive of strength; just as the London beef-fed bricklayer lays 1,000 bricks as much work."

Table showing the average weekly expenditures of laborers' families in the manufacturing towns of Birmingham, Bradford, Huddersfield, Manchester, and Sheffield, England, with their weekly earnings, in 1872.

Articles of expenditure.	Birmingham.	Bradford.	Huddersfield.	Manchester.	Sheffield.
	2 adults and 5 children.	2 adults and 3 children.	2 adults and 3 children.	2 adults and 5 children.	2 adults and 2 children.
Flour and bread.....	\$1 62	\$1 02	\$0 92	\$1 31	\$0 81
Meats, fresh and salt.....	1 30	1 20	81	60	1 93
Lard.....	11	18	60	10	6
Butter.....	25	48	60	16	36
Cheese.....	28	20	10	10	10
Sugar and molasses.....	28	50	56	52	30
Milk.....	27	30	14	36	24
Coffee.....	7	12	12	12	8
Tea.....	18	18	20	18	21
Fish, fresh and salt.....				18	12
Soap, starch, salt, pepper, vinegar, &c.....	16	21	36	16	21
Eggs.....	12	12	6	12	4
Potatoes and other vegetables.....	41	21	36	21	36
Fruits, green and dried.....	6		16	8	6
Fuel.....	30	28	32	60	32
Oil or other light.....	11	8	9	12	8
Other articles.....	10	28	12	20	21
Spirits, beer, and tobacco, if any.....		48		36	60
House-rent.....	1 30	1 08	86	1 08	81
For educational, religious, and benevolent objects.....	54	21	36	36	36
Total weekly expenses.....	7 37	7 22	7 15	6 88	7 41
Total for 52 weeks.....	380 61	375 44	371 80	357 76	385 32
Clothing per year.....	45 00	120 00	25 00	85 00	48 40
Taxes per year.....	3 15		10 00		7 25
Total yearly expenses.....	428 79	495 44	406 80	382 76	440 98
Weekly earnings of laborers.....	8 37	*11 20	7 20	7 96	
Yearly earnings, estimating 52 weeks.....	435 24	530 40	374 40	413 92	

* Earnings of family.

WEEKLY EXPENDITURES.

Table showing the average weekly expenditures of laborers' families in the manufacturing towns of Leith and Dundee, Scotland, and Cardiff and Cronebrar, Wales, with their weekly earnings, in 1872.

Articles of expenditure.	Leith.	Dundee.	Cardiff.	Cronebrar.	General average in Great Britain.
	2 adults and 2 children.	2 adults and 3 children.	2 adults and 3 children.	2 adults and 6 children.	
Flour and bread.....	\$0 96	\$2 20	\$1 21	\$1 21	\$1 25
Meats, fresh, corned, salted, &c.....	1 21	1 50	1 08	1 15	1 20
Lard.....		16	10	10	11
Butter.....	36	72	42	50	40
Cheese.....		28	32	36	28
Sugar and molasses.....		50	36	40	40
Milk.....	36	16	11	14	20
Coffee.....	18	8	16	52	10
Tea.....	24	30	52	40	20
Fish, fresh and salt.....		21		16	10
Soap, starch, salt, pepper, vinegar, &c.....	14	16	32	15	20
Eggs.....	12	36	21	12	15
Potatoes and other vegetables.....	48	61	36	48	40
Fruits, green and dried.....		12		8	10
Fuel.....	36	30	48	36	30
Oil or other light.....	12	8	12	12	10
Other articles.....	24	21		6	15
Spirits, beer, and tobacco, if any.....	21	24	48	60	40

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EXPENDITURES OF WORKMEN'S FAMILIES.

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Table showing the average weekly expenditures of laborers' families, &c.—Continued.

Articles of expenditure.	Leith. Dundee. Cardiff. Cronbar.					General average in Great Britain.
	2 adults and 2 children.	2 adults and 3 children.	2 adults and 5 children.	2 adults and 6 children.	2 adults and 6 children.	
House-rent	\$0 72	\$0 80	\$1 45	\$1 21		\$1 03½
For educational, religious, and benevolent objects	12	24	24	24		
Total weekly expenses	6 09	9 38	8 41	8 02		30
Total for 52 weeks						7 02
Clothing per year	316 68	487 76	438 88	418 24		396 21
Taxes per year	38 72	72 60		21 20		31 12½
Total yearly expenses	355 76	567 60	438 88	472 44		6 20
Weekly earnings of laborers	7 26	*14 00	8 64	8 47		413 56
Yearly earnings, estimating 52 weeks	377 52	728 00	449 28	440 44		478 92

* Earnings of family.

III.—CONDITION OF THE WORKING-CLASSES OF GREAT BRITAIN.

Having presented in the foregoing pages the earnings of farm-laborers and of work-people employed in the mines, mills, factories, and other industrial establishments of the United Kingdom; having stated the cost of house-rent, and of provisions, and other articles of prime necessity, it is now proposed to consider the condition of the working-classes of that country.

The classes whose condition is to form the subject of investigation are chiefly those engaged in factory, mechanical, and other skilled industries, and only to a limited extent the farm-laborers of England. Before entering upon a more extended discussion of the subject in its material and moral aspects, the condition of the latter class will be considered, and as the author was unable, when in England, to make such a personal investigation as would command full confidence, he submits data contributed by others who possessed favorable opportunities for acquiring accurate knowledge. It is proper to state, however, that the opinions expressed in the following paper, and in others inserted elsewhere, are those of their respective writers, which opinions are not necessarily concurred in by the author of this report.

From an article already referred to, "On the condition of the working-classes of England," by Mr. J. S. Stanley James, the following portion only is inserted in this place:

THE AGRICULTURAL LABORERS OF ENGLAND.

The social position of Gurth, who, with the badge of servitude, a brass collar round his neck, tended the swine of Cedric the Saxon, was certainly strongly defined by law and custom. Still, Gurth had certain rights, and Cedric acknowledged obligations to his serf. In this age of "contract," it is certain that the emancipated farm-laborer of England has, during the last half century, in a material point of view, been less prosperous than his Saxon forefathers. In writing this, let it be clearly understood that the general condition of the people is spoken of. In many places the lot of the farm-laborer has been palliated by charitable schemes of clergy, or landowners, or squire; but the cause of this charity is, that the laborers have yet been considered as sort of serfs, whom, however, their betters were not bound to protect, but treated them kindly or

harshly, as the case might be. England boasts of its wealth and prosperity. The riches of England have increased yearly, but during the present century the condition of the farm-laborers has yearly become more miserable. During the eighteenth century, judging from a material point of view, an agricultural laborer was not unprosperous. In that time the farmers of England made large profits, and great quantities of wheat were exported. Then came the great wars; afterward the passing of the corn-laws. Year by year, too, the accumulation of real estate increased. The small proprietors, men who owned and farmed their own land, became less and less. The number of land-owners became fewer, but the number of laborers for hire greatly multiplied. Three great causes may be assigned for the present miserable condition of the English farm-laborer: the English land-system; the system of poor-law relief; and the great local increase of population.

Until the land-laws and the tenure on which land is rented in England are altered, the condition of the farm-laborer can never be materially benefited. If they are not much better than serfs, their employers, the tenant-farmers, are but vassals of the owners of the soil. The majority of the farms in England are only let on yearly terms, renewable from year to year. The same family may have lived on one farm for generations, paying, out of the reward of their labor, and the labor they have wrung from their hands, exorbitant rents to the owners of the land. During these years they have not been allowed to carry a gun, to throw a fish-line, or to snare a rabbit on their farms without the permission of their landlords. They have voted at elections for the nominee of their landlord; they have supplied recruits for the "yeomanry" troop raised on the estate. A day comes, perchance, when a descendant of such ancestors, more intelligent or self-willed, refuses to be led by the nose by the steward or bailiff. He has an opinion of his own, and at the county election votes against "my lord's" or "the squire's" candidate. Next rent-day comes, and he whose ancestors have, perhaps, erected every building on the farm, have converted barren wastes into fertile fields, and have paid their landlords a heavy rent for that privilege—why, this ridiculous fellow, who dared to have a will of his own, is turned out of the home of his fathers, to seek another as he may.

And here I wish it to be clearly understood that I keep aloof from the political aspect of the question. Whig or Tory, liberal or conservative, the great land-owners have always had the temptation and the power to so govern their tenants, and, in cases where the landlord himself would be impartial, his subordinates, the agent, steward, or family lawyer, take care to use on their own behalf the power delegated to them. Kept in such a state of vassalage, it is no wonder that, in their turn, the farmers of England have screwed down and tyrannized over their laborers.

In the old time the value of the land itself was nothing; what it would produce was everything. Now the land itself is valued most, and its produce least. The rents paid by the farmers of England are stated to be only from one to three per cent. on the estimated value of the land, and many of them, after keeping their laborers on starvation wages, find it hard work to pay that rent. It is notorious that nowadays farming in England is far less remunerative than any branch of trade or commerce. A young man fairly educated and a thorough farmer may invest a certain capital on his farm; he may devote time and careful attention to his work; he may pay the lowest rate of wages. In ten years' time he will find himself a far poorer man than his brother, who may have invested the same capital and attention in some business or trade. In too many cases an English farmer finds at the end of ten or twenty years that he has sunk all his capital, and has received no return for it except the maintenance of himself and family. Remember, too, that in such case the laborers have been ground down, as I shall hereafter show. What is the true and logical conclusion to draw? Humboldt says that agriculture is the only true source of wealth. A nation which cannot feed itself has, after all, however rich in other respects, a weak point. In England we are told that farmers, who only pay the landlord from two to three per cent. on the value of the land, pay their laborers wages which only keep them on the very margin of existence, and yet farming is an unprofitable occupation. The real truth is, that nearly every farm in England is greatly overrented; that the estimated value of land is fictitious, which fictitious value is kept up by several causes: first, the limited area of Great Britain; second, the great demand for land caused by the absorption of small holdings into large estates. There seems to be an unwritten compact among the land-owners of England to maintain their landed estates and add thereto by every means in their power. Year by year the land-owners of England get fewer. Even as Ahab coveted Naboth's vineyard, so does a large proprietor eye a small holding which may be adjacent to his estate, and the accumulation of land into the hands of a few goes on yearly. It is true that, when any very large property comes into the market, it is occasionally purchased by some rich merchant, contractor, or railroad man; but these, wise after their generation, withdraw their money from investments paying 7 to 10 per cent., to buy land which they can let at only 1 or 2 per cent., for the purpose of being admitted to the class of landed proprietors, who, directly or indirectly, both politically and socially, in senate, court, and camp, rule England.

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So, in fact, low wages are, to a certain extent, the result of high rents. In propor-
tion to what the soil produces, the land-owner takes far too large a share, and the laborer
far too small a share. The farmer, the middleman, has great cause of complaint, but
he is at least well supplied with the necessities and comforts of life.

The poor-laws of England are a model of incompetency. According to the system
of parochial and non-parochial districts, and the complication of local authorities, the
poor are only entitled to relief within the immediate district in which they are born.
As the wage of a farm-laborer has always been kept down to the point of bare sub-
sistence for himself and his family, the laying by of any fund for his support when out
of work, or in old age, being impossible, he is then compelled to apply for relief. In
consequence of these laws, laborers remain all their lives in a district where the labor-
market is overstocked and wages low; hereditary paupers, they, imprudently
in fact, a puzzle to all, and no one can properly interpret them. Mr. Edward Jenkins,
the author, who is also a lawyer of no mean repute, says, respecting one of the codes,
that it is "unvalued by the most malignant ingenuity of former or contemporary
nations; a code wherein, by gradual accretion, has been framed a system of relief to
poverty and distress so impolitic, so unprincipled, that none but the driest, mustiest,
most petrified parish official could be expected to lift up his voice to defend it; so com-
plicated, that no man under heaven knows its length, or breadth, or light, or depth;
it stands to this hour a monument of English stolidity—a marvel of lazy originality
and statecraft."

The third great cause of the miserable condition of the English farm-laborers arises
in a great measure out of the second. The operation of the poor-laws has prevented
the migration of this class of labor to other parts of England, where it would be better
paid. Labor in England is unequally distributed. The farm-laborer class is renowned
for its superfluity; these, the very poor, are blessed (.) with more than their share
of a check, such as war, pestilence, famine, or emigration, an evil impossible to be miti-
gated—an irrevocable law of nature. In England, the effects of this evil among the
farm-laborer class is plainly visible; yearly the population is increasing, each unit re-
ducing by his competition the reward of his own labor and that of his fellows.

An English village is far more pleasing to the eye than a manufacturing town. An
English cottage—the outside, at least—makes a better picture than a tenement-house.
A great deal has been written about "Merry England," but the truth is that England
is not merry, and her laborers have indeed little cause to be so. The cottages in which
they live, which are such a pleasant adjunct to the landscape, are, in too many
instances, hovels, in which the employers would not stable their horses; hovels, with-
out ventilation, drainage, or the surroundings necessary for ordinary decency; hovels,
which have bred a race of men who, from want of domestic comfort, spend every
spare hour in the pot-house, and who have nothing to look forward to but to be buried
in a pauper's grave; hovels, which have bred a race of women whose maidenly modesty
vanishes unborn in consequence of the scenes they were obliged to witness through
the want of proper sleeping-accommodation. No matter what wages the men may
obtain, their cottage-accommodation will keep them depraved and miserable. This
want of decent cottages throughout England arises in a great measure from the law
of primogeniture and entail. The land-owner is only a tenant for life; he may, per-
chance, like to add to his estate and power by purchase, but in too many cases he will
not spend one penny to build decent cottages or to improve those already on his estate,
but will screw down his tenants, endeavoring by every means to save money for his
younger children. Of course, in many parts of England, there are decent cottages,
built by charitable landlords; but this is the exception, not the rule, and even then
of a benevolent landlord, but he will allow no more cottages to be built, and those at
present erected are hardly sufficient for half the laborers employed on his estate; they,
in consequence, having to walk miles to and from their work. But then the pastoral
and select character of the model village is maintained.

In 1871 the average wages of English farm-laborers were twelve shillings per week.
In the southern parts of England the wages were only eight or nine shillings; in the
north, about fifteen; but the average may be taken as above. On such pay it was
impossible for a married man to provide proper food for himself and family; meat was
a rarity, to be tasted once or twice a year; a little bacon might, perhaps, be indulged in
once a week; for the rest of the time dry bread was the chief fare. Such food, and the
miserable habitations I have described, have naturally impaired the efficiency, and
another century of such conditions would cause a woful physical degeneracy of the
laborer. But, in spite of all drawbacks, the English farm-laborer is the most efficient,
in his line, in the world, and he is comparatively by far the worst paid. The English
railroad "navvy," a class sprung into existence during the last twenty-five years,
reputed principally from the hardest of the farm-laborers, is a being who eats and
drinks much and exacts high wages, but, according to the testimony of the late Mr.

Thomas Arch, esq., member of Parliament, who during his numerous railway contracts had employed laborers of all nationalities, he is the cheapest laborer in the world. The *poor men* in the British army are also recruited from the farm-laborers. Bent by toil and exposure and suffering from the want of proper nourishment, the farm-laborer plods through the fields of England, but he only wants proper conditions to become one of the finest physical types and best workers in the world. With such homes as they have, it is not to be wondered that laborers spend whatever little money they can in the village beer-house. Their lives are unlovely; there is no silver lining to the cloud hanging over them. What wonder that they seek their only pleasure in the sensual exaltation of strong drink! Yet the drunkenness among farm-laborers is very slight; the poor fellows cannot, if they would, afford that luxury. Viewed in every relation of his life, the portion of the farm-laborer has been one of toil, poverty, and hard living in a degree to which the other working-classes of England have long been strangers.

But the agricultural laborer has at last taken the matter into his own hands. On a dark, rainy night in February, 1872, Joseph Arch first stood up under the chestnut-tree at Wellesbourne, and laid the foundation of that great movement which has since spread over all England. That is not three years ago, yet Joseph Arch at the present moment has undoubtedly more personal power than any other man in England. His record is known wherever the English language is spoken. His work has already brought forth good fruit; the average rates of farm-wages throughout England have since risen, and the hours of labor have been reduced. In the northern counties of England 18s. a week is now paid for farm-labor; in the midland districts, 16s.; and in the southern, 14s. and 12s. There are still parts of England, however, in which men are paid less than the latter sum. But Mr. Arch has experienced the greatest opposition and abuse in consequence of his labors on behalf of the class from which he has risen.*

John Walter, esq., a member of the British Parliament, and editor of the London Times, in an address which he delivered at a meeting in Berkshire, dwelt upon the condition of the agricultural laborer, and declared that, in spite of all reports to the contrary, it was better than it had been heretofore. He showed by statistics that while the price of food is only a very little higher than it was at the close of the last century, wages are two or three times as much as then. Nevertheless, the wages now paid are very small, and the average laborer earns only thirteen or fifteen shillings a week, while the combined earnings of a man and his wife and family do not amount to more than twenty shillings a week.

And a judicious writer of our own country, commenting on the past and present condition of agricultural laborers in England, remarks that the results of the labors of Mr. Arch and his coadjutors are already manifest in a decided rise of the scale of remuneration of English farm-

* Mr. Arch has directed his attention toward emigration, and recently visited Canada to ascertain the extent of the demand for labor there, and see what encouragement would be given him by the Canadian authorities. These have held out great pecuniary inducements, and now advance nearly all the passage-money of farm-laborers from England. New Zealand and Australia are also bidding for this valuable class, and laborers are now taken to those colonies free. The New Zealand government lately voted two million pounds sterling for the purpose of encouraging emigration from England. It seems to me a pity that the United States Government or the State authorities do not make some attempt to obtain this valuable contingent of labor. The exodus has begun, and in ten years' time England will be drained of her most valuable laborers. Mr. Arch proposes returning to America and going through the States this year, and, as far as he is concerned, I am sure that he will be willing and will advise that every English laborer should go to America. But when the New Zealand, Queensland, and Canadian governments step in and offer to pay the passage of farm-laborers and their families to the respective colonies named, it is little wonder that the advocates of emigration to the States find themselves fighting an unequal battle. However, only the American may point out the glories of his country, the present advantages and brilliant future waiting for the laborer, still, when the agent of New Zealand or Canada points to the free passage, the latter inducement is sure to prevail. It is hoped that when Mr. Arch visits America some arrangements may be made, either by State authority or the co-operation of private individuals, by which the passage-money from England may be advanced to laborers of this class.

At a meeting of the Agricultural Society, held at the residence of Mr. Arch, on the 1st of March, 1872, the following resolutions were adopted:—
Resolved, That the Agricultural Society of England do hereby express their sympathy with the efforts of Mr. Arch and his coadjutors, and do hereby recommend that every English laborer should go to America.

labor, and in the prospect of a permanent elevation in the condition of the laborer:

Five years ago the existence of a National Union of Farm-Laborers would have been thought a perfectly incredible thing. Yet, as the result of less than two years' agitation, that union possesses 33 districts, 900 branches, and 100,000 members.

A minority of the agricultural laborers of England had, for years, to find food and clothing for themselves and their families on the average wages of nine shillings a week. To a man so situated, meat was an unheard-of luxury, and an occasional swinish debauch formed the solitary gleam of what he called the pleasures of existence. Education for his children was out of the question, because, even had schools been provided, he had neither the money to buy clothes in which his children could attend school, nor was he able to spare the pittance which they began to earn at an early age by working in the fields.

A few weeks ago 220 laborers in the eastern counties of England, whose wages had last year been advanced from twelve to thirteen shillings a week, demanded a fresh advance to fourteen shillings. The farmers, who, during the last few years, have commonly called resistance to "union dictation,"

The National Union is able to pay \$8,000 a week toward the support of the men who are locked out and who fail to get employment in other quarters. It will probably be able to do so as long as the farmers can afford to hold out. Statistics show, moreover, that during the last ten years the number of agricultural laborers has decreased in England. This is partly due to their absorption into the working-classes of manufacturing towns, and in a less degree to emigration. Both influences are likely to be felt in increased force during the present decade, and thus, on the mere question of balance between supply and demand, the ultimate triumph must rest with the laborers. The present movement will probably produce a more scientific system of culture in England, and a more judicious employment of labor than heretofore. In this way, also, it will indirectly raise the industrial status of the laborer.

The New York Journal of Commerce states that—

The British agriculturists, unlike the mechanical and mining trades, which make the most agitation, have real grievances to complain of, and they, certainly as much as the workmen of that description, need the representation in Parliament for which the latter are scheming and contriving, not, indeed, without claims that could not in a democratic country be denied.

Mr. William Morris, editor of the Swindon Advertiser, in addressing a meeting of agricultural laborers in the west of England, after his return from America, uses this language:

England wanted workers, not paupers. The wage paid the agricultural laborer made him a pauper. In Swindon they had one pauper to every forty-three of the population. In Bishopstone, ten miles off, but in the same Poor-Law Union, they had one pauper to every ten of the population. Bishopstone was a purely agricultural village, and the wage paid there made one-tenth of the inhabitants paupers, living upon the rates which the men of New Swindon paid. At Swindon, the better wage paid reduced pauperism down to one in forty-three of the population. But the Swindon ratepayer had not only to keep his own poor, but he had to help to keep the poor of Bishopstone also, and it was therefore his bounden duty to see that the pauperism the private relations between master and man they had no business whatever, but which additional assistance was necessary to enable him to live, he made his system of paying wage a public question, and one which all who contributed to the rates were justified in discussing. Mr. Morris having made reference to Canada and America, said he did not intend at present calling any meeting specially to refer to these countries, but he would be at any time ready and willing to accept the invitation of men wishing to hear what he had to say about the great West, to address meetings called by them.

At a meeting of the Shrivenham branch of the National Union of Agricultural Laborers, Mr. Morris addressed the meeting:

His recent trip across the Atlantic had proved to him most clearly that if they had any repetition of starvation cases, it would be the laborers' own fault. The great West contained vast tracts of the most bountiful land, lying in sheer waste through want of hands to till it. This land, the richest in the world, might be had by farm-laborers of England on terms they might easily comply with, the chief one being that they would bring it into cultivation and make it productive. While the laborer in possession of

this land was raising himself into the position of a landed proprietor, the State would care for his children, and give them a thorough, good education free of cost, and thus fit them for any position in life. He, Mr. Morris, was more than ever satisfied that his course in connection with this movement had been the right one, and, let the consequences be what they might to him as an individual, he should go with the men to the end. In England the movement had benefited the men without injuring the master, for what the employer spent in extra wage he would save in rates, and he would have the advantage of men working for him in the place of paupers. The men knew full well what the union had done for them. As a body they had accomplished more in a year than as individuals they could have done in a life-time, and, in addition to more and better wage, they had already won for themselves a spirit of independence and manly feeling; they were beginning to estimate themselves at more than a pauper's value, and it would not be long before their new position would be recognized throughout England as being infinitely better than that in which they had previously lingered.

Mr. Morris, after his return from a visit to the United States, wrote to the author as follows:

SWINDON, October 24, 1874.

You ask for some details as to how our poor live. I will give you a case that came under my notice the other day.

An apparently strong, robust man applied to the poor-law guardians for relief, consequent upon some temporary illness in his family. His own age was thirty-three years and his wife's age thirty years.

He had five children, aged respectively eight, six, four, three years, and three months, in all seven souls. The man, when making his claim, was receiving 12s. a week wages. Out of this sum he had to pay 1s. 6d. a week for rent of his cottage, leaving 10s. 6d. to find food and clothing for seven persons, two of them being adults in the very prime of life. As you will see, allowing three meals a day at a cost of one penny a meal, the full wages, without the deduction for rent, would have been insufficient by 3d. a week; yet a penny would not buy more than 8 ounces of bread at the present cost, or more than about the third of an ounce of mutton or meat. I was holding a meeting in the village in which this man lives a few evenings afterward, and I referred publicly to his case. I asked if he had truly represented his case, and the answer was yes. I was also assured that, until the present movement among the laborers, more than 11s. a week had never been paid to such men, the general rate being 10s. Men in such a state as this cannot tell how they live. It is a mystery to them as well as to every one else. It is a well-ascertained fact that, in districts where these wretched wages are paid, the cost of tillage of the land per acre is much higher than in districts where better wages are paid; yet we English people are so wedded to old notions that men kick most vigorously against all change. In the same district where these prices obtain there is not an agricultural laborer to be found who, for an ordinary week's work, receives more than 12s. a week wages. Until very recently, 9s. and 10s. was the rate paid. Can it be wondered at, then, that in the year 1868 our pauperism cost us £10,439,000? Our agricultural poor have never been paid a living wage, and we have had to supplement wages out of poor's-rates. This is proved most clearly by the fact that the recent rise in wages from 9s. and 10s. to 11s. and 12s. per week has decreased our pauperism, between the years 1870 and 1873, no less than 184 per cent. We may well suppose that the minimum cost of feeding human beings has been arrived at in our union work-houses. In my paper for October 13 you will see a report of a case where a man is charged with leaving his wife and family chargeable to the Eastern Union. The master of the house, in supporting the case, swears that the cost of five persons in the work-house is £1 5s. per week, or more than double what an ordinary laborer would have to maintain his family with from his wages, when out of the house and in full work. In another number of my paper, that for October 27, you will find the case reported of a man twenty-one years of age, who was a hired servant at 1s. a week. This man was to have £5 over at Michaelmas. You ought to understand what this means. It is a common practice in some districts, when hiring a servant by the year, to give so much per week, with so much over at the end of the term. But the payment of this bonus by the master cannot be enforced by the man, and for this reason—it is always *promised* conditionally that the master is perfectly satisfied with the man's work throughout the whole of the year, as well as covering all possible claim for over-time in the harvest and other busy seasons. This bonus, in fact, ties a man down to be used by his master in any and every way he may think fit; if a master calls upon such a man to work from 4 or 5 in the morning until 8 or 9 at night, he must comply under pain of forfeiting this over-money. Practically, therefore, his over-money, instead of increasing the man's wage, does no more than meet the extra wear and tear of the man at the busy seasons and at harvest-time. There is oftentimes a great fuss made about the amount laborers earn at piece-work. It should never be forgotten that the piece-work price is based on the day-work standard. The man working piece-work could not live on the day-man's wages. To earn the larger sum,

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he must spend a larger sum for more and better food: therefore I always contend that the ordinary weekly wages should be considered exclusively, when reference is made to the amount paid the laborer. In another paragraph in the same paper you will see how a poor, wretched laborer, out of his poor wages, had managed to save up a large sum of money. I suppose that, in all states and conditions of men, such characters will be met with. I much fear there is little or no difference in the class of food this man used, that he might save money, and that used in the ordinary laborer's family, that they may fill their bellies as best they can and live. If you would like to have them, I will look up a number of statements made by the men themselves at meetings over which I have presided, where they have told of their struggles to live. I shall never forget one woman asking permission to speak, and publicly thanking God that her old man, by being put on as milker, and therefore working on the Sunday, was enabled to earn a shilling a week extra, which enabled her to give her children a that amount of extra bread to eat.

As to emigration: I believe thousands of our best laborers would gladly leave the country; but how is it possible for them to do so? Now and again they have managed to save a few pounds; but where there is one who has done so there are ninety-nine who are over head and ears in debt to the village shopkeeper.

For twenty-five years must I have read the history of these people in our police-courts and small-debt courts, as well as at the board of guardians' meetings, and nothing would delight me more than to see some well-devised plan for shipping them off to countries where labor is estimated at a better value and wins a more generous reward.

Mr. Morris, on account of a statement published in his paper in relation to a particular case of destitution in his neighborhood, was subjected to a suit at law, for alleged libel affecting the character of an employer, a Mr. Barnes, who felt himself aggrieved by certain allegations therein concerning the low rate of wages paid by him to the different members of a laborer's family; the inference from which was that Mr. Barnes had acted oppressively toward the poor. This case had been brought under the notice of Mr. Morris, as a member of the board of guardians of the poor, and he could not justifiably close his eyes to the actual suffering which the case presented. For this publication, however, the jury awarded to the complainant the sum of £50.

"AGRICULTURAL LABORERS' NATIONAL UNION."

[From the London Examiner.]

The agents of the National have only been at work in a certain county since last Christmas, and the number in union already exceeds two thousand, while several parishes can be found where every adult and able-bodied laborer acts in combination with his fellows. The policy of wholesale discharge has been tried and found wanting. One Berkshire farmer discharged eight of his men at a week's notice for joining the union, and before the following week had expired they were one and all placed in situations where they earned 18s. a week instead of the 11 that had previously formed the total of their wages. The policy of wholesale eviction has shown itself to be equally futile and suicidal. It has been tried at one place, and over forty cottages still remain empty, vainly seeking for fresh tenants. The wages had already been raised a shilling per week; when was it going to stop? Clearly something must be done, and that of the agitators. Stop the meetings, and the movement would sustain a severe check. Of course, meetings in the village school-rooms and in the halls of the market-towns had never been permitted, and if only the waste-lands and open spaces could be saved from the demagogue's unhallowed tread, the kindly feeling between the farmers and the laborers might still be preserved.

Such, it would seem, has been the course of their reflections, and the village of Littleworth was first selected for the opening of this new campaign against liberty of speech. Seven laborers were summoned before the Farringdon bench of magistrates (one of the justices being Viscount Folkestone, of "baron of beef" notoriety,) and mulcted in a penalty and costs for obstructing a footpath, on the evidence of two potholes to have been most extraordinary. The "footpath," independently of the roadway, was 26 feet in width, which is surely an unusual allowance for a village lane; but, notwithstanding this, and the evidence distinctly denying the existence of any obstruction, the justices thought fit to decline granting a case for the higher courts. Moreover, the identical spot on which the laborers' meeting was held is the very ground

that has been constantly and habitually used for the past forty years, without let or hindrance, for the holding of Methodist and temperance meetings. This, in itself, proves that the question of obstructing the highway was a mere frivolous subterfuge.

This decision naturally caused great indignation in the neighborhood, and a meeting was summoned on the 26th instant, to be held in the market-place at Farringdon. The market-place was thronged with between three and four thousand laborers from the neighboring villages to listen to the speeches of Mr. Arch and others. The meeting was conducted in the most orderly way, and the laborers, at its conclusion, quietly dispersed to their homes, notwithstanding the great provocation that was offered by the throwing of rotten eggs and stones from the windows of an adjacent house. The police attempted no interference with the throwing of missiles, but doubtless, in accordance with their instructions, they were not idle on the occasion. Shortly after the commencement of the proceedings, they demanded the removal of the wagon that served as a platform, but eventually contented themselves with taking the names of the speakers, with a view to the issue of summonses. In the interests of the Union, and for the preservation of invaluable public rights, it is earnestly to be hoped that the Farringdon bench will proceed with their prosecutions. The fining of Joseph Arch, and the strong probability that he would exercise his option of preferring prison to a fine, for the crime of speaking in a country market-place to our poor country serfs, in a district where their wages only just remove them from starvation, would be worth more to the Union than the cheque of a millionaire. Other meetings have been held in this market-place, and standing-room found for wild-beast shows and exhibitions of cattle. But even suppose that the Farringdon bench should be successful in punishing these speakers, how long will laws last which sanction such outrageous decisions? The country should be very grateful to the National Agricultural Laborers' Union for putting these questions to the test.

CONDITION OF FACTORY, MECHANICAL, AND OTHER SKILLED WORKMEN.

Having considered the condition of the agricultural laborer, attention is now directed to an inquiry into the condition of British workmen employed in mines, mills, factories, and at mechanical trades. The habits of the workmen in regard to industry, and if he is unable to perform a full week's work the cause of such inability, and whether it can be removed; the condition of his home, whether comfortable, and, if not, whether the discomfort arises from his improvidence or other fault, or whether it is the fault of his employer, or results from the system or state of society—all these form subjects worthy of careful and impartial investigation.

It is assumed in the outset that the evils above indicated do exist; that the average British workman is not in general industrious, but labors only four or five days per week; that his family lives in discomfort; that the education and training of his children are almost wholly neglected, and that this discomfort and neglect are not necessarily occasioned by insufficient earnings.

If the above statement affords a fair indication of the condition of many of the skilled workmen in Great Britain, especially in the manufacturing and mining districts, the question arises to what cause or causes are these results to be ascribed? A reply to this question involves a discussion of

THE DRINKING CUSTOMS OF GREAT BRITAIN.

The chief cause of the evils which afflict the British workmen and their families, it is believed, is the excessive use of spirits and beer. Although this report comprises an inquiry in relation to the wages and condition of the laboring-classes in the United Kingdom, yet, in regard to the drinking habits of society, the investigation may be profitably extended beyond this limit. These habits of the British people are unfortunately not confined to the working and lower nor even to the mid-

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The fact is not forgotten that this investigation is made by a citizen of a country which, next to Great Britain, is perhaps most noted for its large consumption of intoxicating beverages—a country which expends over \$600,000,000 annually in spirituous, vinous, and malt liquors. A citizen of the United States should, therefore, be conscientiously careful in his statements, when he remembers that in this respect the walls of his national house are composed of brittle material without strength to resist the return missiles which an attack on the glass house of England might provoke.

Although facts which constantly presented themselves to the author during his stay in Great Britain afford evidence to his mind of the extent of the drinking habits of its people, and would, if presented, be sufficiently convincing to candid minds, yet preference is given and greater weight should be attached to the testimony of residents of that country who have had favorable opportunities to ascertain the actual facts, and against whom no imputation of adverse prejudice can be alleged.

The first authority cited is the London Times, which in 1872 published the following statement:

DRINKING CUSTOMS OF ENGLAND.—The figures published by the Statistical Society showing the amount of intoxicating fluids annually consumed in this country are certainly large. We drank, it appears, last year, in spirits, malt liquors, wine, cider, &c., of £120,000,000. It is calculated that at least half of this money is spent by the working-classes; and as they desire principally strength or quantity in their drink, we shall probably not be wrong in assigning to them very much more than half our entire yearly consumption. There is no more alcohol in a bottle of wine than in half a pint of ardent spirits, and the cost of the one may be a guinea, and of the other ninepence or a shilling. It is clear that if the working-classes have spent their £60,000,000 in a cheaper form of intoxicating drink, they have got much more for their money, and may probably be debited with fifty million gallons out of the entire seventy-two millions of the year. It will be seen, if the figures are compared with those of 1871, that the total amount of the past year is not only very large in itself, but shows a considerable increase on the year before it. We spent in 1871 only £108,000,000 on the same obnoxious gallons of alcohol. The rise is certainly considerable. It has been due, probably, to the increased wages of labor, which have allowed the workman to indulge himself in more luxuries.

The following, in relation to the same subject, appears in the Times of November 6, 1874:

DRUNKENNESS IN ENGLAND.—The number of persons charged before magistrates in England and Wales in 1873 with being drunk, or drunk and disorderly, namely, 182,941, is very nearly double the number so charged in 1863, in which year it was but 94,745. The increase has been chiefly in the last six of the intervening ten years. In 1867 the number was but 100,357; in 1868 it was but 111,365; in 1869, 122,310; in 1870, 131,870; in 1871, 142,243; in 1872, 151,081. In 1873, the first year under the new intoxicating liquors act, instead of the continuance of an increase of 10,000 or 11,000 in a year, the number leaped up to 182,941, an increase of 32,000 over the preceding year. There are no means of distributing the increase among its causes, whether high wages, stricter police supervision, or other causes; but the number is remarkable. It is worth notice also that the increase is more among men than among women. In 1867 the number exceeded against comprised 74,869 men and 25,437 women—three men to one woman; the women being a little above a fourth of the whole number; but in 1873 the numbers were 141,232 men and 41,709 women, the women in 1867 being 100 more than a fourth of the whole number, but in 1873 4,000 less than a fourth of the whole number.

The following extract from Fraser's Magazine, February, 1872, illustrates the evils resulting from the drinking habits of the laborer:

DRINK TRAFFIC IN GREAT BRITAIN.—The drink-seller in manifold cases knows certainly that the customer is transferring to him money which is not morally his own to

spend. Every married workingman employs his wife as his cook and housemaid. In these characters she has a right to wages from him, which must be paid before he has any right to mere indulgence of the palate. When he has children, they too have a prior right; and the mother, during her times of weakness, ought not to be worked. A laborer who neglects wife and children to gratify his appetite for liquor is morally guilty as though spending the money of another.

In proof of the statement heretofore made, that the habit of drinking to excess extends to the middle and upper classes, the testimony of Dr. Austie is presented. The following appeared in the Practitioner for 1872:

We must notice the fact that many girls of the wealthy middle and of the upper classes, especially the former, are of late years taking to consume all kinds of wine, and particularly champagne, to an extent which used never to be permitted. At many modern ball suppers champagne flows like water; and the attentive observer will soon perceive that it is not the men, by any means, who do the larger part of the consumption. These same young ladies who have so freely partaken of champagne over-night will next day at lunch take plenty of bottled beer, or a couple of glasses of sherry. Dinner comes round, and again either champagne or hock or port or sherry is drunk, not less than a couple of glasses being taken. And then the evening very often brings a party of some kind with the inevitable champagne or sherry. *We are speaking of things which we have seen* when we say that many girls who live among rich (especially *nonceau riche*) and gay society are in the habit, during six months out of the twelve, of taking (in the shape of wine, &c.) a daily average of two, two and a half, or three ounces of absolute alcohol, a quantity which, if expressed in cheap beer, would be equal to six or seven pints.

The general moral is that light wine gives the taste for strong wine, beer for gin. This is fully experienced in France, in the United States, in Germany, and in England. Our Saturday Reviewer remarkably comments: "Education and intelligence are rather against a woman than otherwise, for they make her believe that she at least is safe while gradually and unawares inhibiting the fatal propensity."

In further illustration of the general use of liquors, in England, it may be stated, as the result of personal observation, that ladies of the middle classes, when visiting any exhibition, are accustomed to partake of wine with their necessary refreshments.

In the visits of the author to large industrial establishments in England and Scotland wine was frequently offered—a custom which was in vogue in the United States some forty years ago, the retention of which in Great Britain is probably due to the intense conservatism of that country. In one instance, where the works were extensive and several hours occupied in their examination, wine was at several times offered, and surprise was expressed that such *fatiguing exertion* could be undergone without some stimulus.

In various parts of Europe Americans were met at dinner who declined taking wine, but such a refusal on the part of Englishmen* or other Europeans was in no instance observed.

In subsequent pages extended articles "On the condition of the working-classes of Great Britain," prepared especially for this report by United States consuls and others, are given in full. Brief extracts from some of these papers, referring to the drinking habits of the people, are presented here.

The United States consul at Manchester says:

The working-classes consume an enormous quantity of intoxicating liquors, principally beer, though very many partake largely of spirits and of the cheaper wines. Intemperance seems to be on the increase, especially among the women, not only of the working-classes, but also of the middle and upper middle classes.

General Fairchild, United States consul at Liverpool, under date of November, 1873, writes:

The increase of drunkenness, and all dissipation which follow idle hours, is alarming.

* The author may be pardoned for making a personal reference. An English lady, because one of her guests drank no wine at dinner, also declined to taste the beverage; a marked exception to the general custom above indicated, and a rare exhibition of true politeness.

The Westminster Review of January, 1874, says:

Liverpool has the unenviable notoriety of being the most drunken town in the United Kingdom.

Dr. Trench, the able and well-informed medical officer of the health department of Liverpool, remarks:

The working-classes of Liverpool are extremely intemperate, even when compared with similar sections of the community in other large towns of Great Britain.

His able official report for a previous year contains the following on the same subject:

The amount which is spent in drink is astonishing. One or two instances of the worst kind, occurring in the same street, may be cited.

A man earns 27s. regularly, and spends as regularly 21s. in drink; his four children are in rags. In another instance the wages are 30s. a week regularly; the father and mother are both drunken, and three children are half starved, and in rags. In another house is a copper-ore worker, earning 27s. a week, all of which is spent in drink by himself and his wife. The children are in rags and filth, and look idiotic. In the same street there are sober men, earning only 20s. and 23s. a week, who are living in comfort.

The landlord of a small public-house, who had lived for years in the district, and knew intimately the habits of the people, said, "For one man who did not drink, there were fifty who would take their share; they starve their wives and children, and must beg if they want a bit."

Mr. Jenkinson, the consul of the United States at Glasgow, in reference to the increase of intemperance, wrote as follows:

That drunkenness prevails to an alarming extent among the working-class cannot be denied; that it has increased as their wages have been increased is also true. Many have, no doubt, been benefited by such increase of wages; but most, it seems, outspend their extra earnings in extra quantities of whisky.

Dr. Webster, United States consul at Sheffield, thus writes, January 22, 1874:

From inquiry and my own observation, I believe that for the larger part of the loss of time and the reckless waste of money is the result of the drinking habits which prevail so generally. It is painful to see how the weekly wages are squandered by the thousands who throng the drinking places on Saturday, Sunday, (at certain hours,) Monday, and Tuesday, and, indeed, on all the days of the week.

There are in Sheffield 1,100 public houses, licensed places for the sale of beer and spirits. At each of these, at a low estimate, an average amount of £10 is spent weekly, making an aggregate of £11,000 of weekly expenditure for a population of 240,000.

Mr. Consul Jones, of New Castle-upon-Tyne, in his report on the moral and social condition of the working classes, says:

Many of them are very improvident and fond of drink; a feast of food and stimulants in the early part of the week, at the expense of an insufficient supply at the end, is very frequently the case among the sons of toil on the Tyne. Excessive drinking has undoubtedly increased in this district since the short hours and advanced wages have prevailed.

It was said boastfully by English statesmen that *the nation had drunk itself out of the Alabama claims by the increased income from the tax on intoxicating drinks during the past year.*

The following extract from a letter addressed to the author by the right honorable the Earl of Shaftesbury, a nobleman universally regarded as a Christian philanthropist of the highest type, further illustrates this part of the subject:

Sir: * * * * * There are speeches, pamphlets, and treatises in immense abundance on the evils of intemperance. Even our newspapers are beginning to denounce the sin and call for a remedy. I should weary you by repeating—and, indeed, you must well know them—the numerous and various facts which may be read every day and everywhere. There is very little of all that is said that I should not endorse.

That the filthy, close, depressing, pestilential state of the dwellings in several large

LONDON, February 12, 1875.

towns, and certainly in the metropolis, is a strong provocation to drink, and specially to drink ardent spirits, is to my mind simply beyond question.

The loss to a country, morally, socially, and financially, by such habits among the people, defies all calculation.

With many thanks for your letter, I am, sir, your obedient servant,
SHAFTESBURY.

EDWARD YOUNG, Esq.,

Chief of United States Bureau of Statistics, Washington, D. C.

THE NATIONAL BEVERAGE.

In an editorial, discussing the agitation for the repeal of the tax on malt, a tax which its opponents denounce as one that "robs the poor man of his beer," the London Daily Telegraph of March 6, 1874, makes the following remarks:

We know all that can be said about the "national beverage." There are those who believe that it is the "wine of the country;" that, if we made it cheap and its use universal, the consumption of ardent spirits would decrease, and comparative temperance be really promoted; and that—to quote Sir Robert Peel slightly altered—"the laboring-man would recruit his exhausted strength with abundant and untaxed beer, no longer leavened by a sense of injustice." It is quite possible that some of these brilliant results might be achieved. This belief in the beneficent blessings of the drink is, however, not new. It at one time dictated a legislative measure, that was received with hearty and almost universal applause. The beer-act of 1830 was passed in order to encourage everywhere the erection of beer-houses, as distinct from gin-palaces. It was designed, as its friends said, to "supply a wholesome beverage," or what Lord Brougham, oddly enough, called a "moral species of beverage," distinguished from rum, brandy, whisky, and gin, which, by implication, he accused of immorality. Men of all parties supported the measure, as conducive to the health, the morality, and the sobriety of the laboring-classes, through bringing to their doors a cheap and wholesome me drink. But the results bitterly disappointed the expectations of its friends. Sidney Smith wrote: "The new beer bill has begun its operations. Everybody is drunk. Those who are not singing are sprawling. The sovereign people are in a beastly state." We have now given up the policy of multiplying beer-houses, in order to bring back the age of gold. The farmers tell us we did not go far enough, and that the true "Paradise Regained" is to be found in a home-brewing people.

BREWERIES IN BURTON-ON-TRENT.

Manchester is not more celebrated for its manufacture of cotton, Leeds for its woollens, Birmingham for its hardware, and Sheffield for its steel and cutlery, than is Burton for its ale. Although, in proportion to the vast product, but few men are employed in its manufacture, and therefore a knowledge of the rates of wages is comparatively unimportant, yet in consequence of the vast influence which emanates from this interesting town, the author took occasion to visit it, and was shown through the extensive brewery of Messrs. Allsopp & Sons. This is the largest single brewery, and makes 2,000 barrels of ale per day. Bass produces a larger quantity, but has three breweries in operation. The vast extent of the beer-interest in Great Britain may be gathered from the following account of only one establishment in one of the towns devoted to this manufacture:

The town of Burton-on-Trent is almost wholly given up to the manufacture of beer. In fact, the breweries are the town, and the interstices between the breweries simply contain some dwelling-houses. The immense breweries of Bass, Allsopp, Inds, Coople, Worthington, Salt, Nunneley, Evershed, and Robinson are all there, besides others of lesser note. Bass alone has three breweries there, covering altogether a little over 100 acres of ground. Bass used last year 237,000 quarters of malt for brewing purposes. If it be reckoned that an acre grows four quarters of barley, 60,750 acres were occupied in growing the malt which Bass used. Of hops his consumption was 24,000 cwt., which engrossed about 2,000 acres of hop-growing country. In malt-tax and license-duty he paid last year £200,000. The total brew of Bass during the year

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amounted to 720,000 barrels, each barrel containing 36 gallons; so that Bass could have served more than half the estimated number of the human race with a glass of beer per head from his brewing of one year. Throughout his Burton premises Bass owns over five miles of private railway, runs five private locomotives, and uses twenty-six steam-engines, with a collective horse-power of 436. He employs in Burton over 2,000 persons, and pays more than £2,000 in weekly wages. He used last year 33,300 tons of coal. He has in use 30,000 butts, 144,000 hogsheads, 113,000 barrels, and 243,000 kilderkins; a stock of casks, in all, in store and scattered over the country, exceeding half a million.

Mr. Bass is now, and was at the time of the visit, a member of Parliament, as are also Mr. Allsopp and some other brewers; but in the House of Commons his name is rarely mentioned. On great financial or educational questions, or on measures for the improvement of the condition of the poor, or for the correction of abuses, he rarely, if ever, speaks; in the efforts now making to improve the condition of dwellings of the working-classes, his voice has not been heard supporting the measures so ably urged by Mr. Cross and others. But if, in the House of Commons, his voice is not heard and his influence not felt in behalf of measures for the amelioration of the condition of the lower classes, the influence of Mr. Bass outside of Parliament is potential. Westminster may be the seat of political and financial influence, but the vast power which molds the character, affects the material and moral condition, and sways the destinies of the great masses of the English people, has its chief seat at Burton-on-Trent. Nor is this influence confined to the British Islands. Throughout Europe and America, and in countries which the traveler rarely visits, the name of Bass is well known. In places where the immortal works of Shakespeare are unread, the products of Bass are familiar; ears which have never heard the classic name of Stratford-upon-Avon, are not unused to Burton-on-Trent.

It was hoped by an inexperienced American, when leaving London—whose placarded houses and walls proclaimed the virtues of the ale or porter of different and rival brewers—that by crossing the Channel he would escape from the ubiquitous Barton brewer, but the first English words that met his eyes as he sat at breakfast at Dieppe were “Bass’ ale.” At the far East this ale was seen not only in the modern but in the renowned ancient capital of Russia,* and at the great fair at Nijni Novgorod on the far off Volga, as well as in the usual routes of travel in Central Europe; at the West, in the floating palaces which traverse the Atlantic, and in New York, Washington, and throughout the United States, even to the shores of the Pacific, Bass’ ale can be procured.

And it may be doubted whether there is any spot upon the globe, where civilized people dwell which is unsupplied with the malt liquors of Bass,† Allsopp, or other English brewer.

Although the evils resulting from the continued use of strong beer are painfully apparent in Great Britain, yet it does not easily intoxicate. Taken at meals or with bread, forming as it does a chief article of consumption, it is apparently harmless; but its excessive and long-continued use, especially at night and when taken by itself, produces most injurious effects. The beer of Germany, especially of Bavaria, which forms a staple article of consumption, must be much lighter, for in that

* In 1789 a consignment of twenty half hogsheads of ale, containing 729 gallons, was made by a Burton brewer to Saint Petersburg, and in exchange requested the shipment of pipe and hogshead staves.

† Mr. Bass, like Mr. Guinness, in Dublin, and the late Mr. Vassar of this country, has distributed large sums in benevolence. A church was pointed out to the writer in Burton, costing some £25,000, and another situated elsewhere, which were built at his sole expense. Possibly there is some connection, other than alliteration, between beer and benevolence.

country intoxication is infrequent. Indeed, the consul of the United States at Chemnitz remarked, "Judging from the quantity a native can consume, I apprehend that one will stagger quicker from the weight than the strength of the potion." In England, small or light beer has been in general use for many centuries, and was a common beverage long before the introduction of tea.*

Indeed it is a little remarkable that while the use of beer does not diminish, that of "the cup which cheers but not inebriates" has greatly increased, until the average consumption, in that country has reached four pounds per capita.†

To those who need or think they need some stimulus, the use of malt liquors is far less injurious than spirits. The intemperance which so generally prevails in Liverpool, Glasgow, London, and Antwerp, where West India rum and other spirits are largely consumed, attests this fact.

HOMES OF THE WORKING PEOPLE.

It has been incontestably shown that the chief cause of the evils that afflict working men and their families arises from the excessive use of spirituous and malt liquors. In making a full analysis of this subject it becomes necessary to extend the investigation beyond the secondary and search for the primary cause, of which the cause just stated is merely an effect. If the workman indulges in the excessive use of spirits and beer, which results in decided injury to his family, is he alone responsible? The question is pertinent and demands a candid reply. From a careful consideration of the subject it is evident that the intemperate habits of a great mass of British workmen are due to the drinking customs of the classes above them in the social scale, which the facts already presented, and others which are patent in regard to the almost universal use of intoxicants in the upper ranks of society, sufficiently prove. Until those to whom the working classes look for example feel their responsibility in the premises, so long will the majority expend a portion of their earnings in drink, and suffer their families to remain in poverty, ignorance, and discomfort. The responsibility for this misery should, it is affirmed, be shared by others.

In addition to the drinking customs of society which should justly be charged with a part of the wrong inflicted on the workmen's families, there is another cause for which others are chiefly responsible, viz, the wretched tenements occupied by the working classes. From the initial step in this investigation the author's attention was arrested by observing the miserable apartments in which most of the factory operatives dwell. In Birmingham and Wolverhampton, and in most parts of the "black country," in parts of nearly all the chief manufacturing cities of England and Scotland, the tenements to which the tired laborers return at night, and where they should have comfort and repose, are in many cases unfit for human habitation. In some instances these belong to the corporations owning the mills, mines, or works, and were erected in low grounds destitute of drainage and of proper sanitary regulations. In other places they occupied rooms in poor buildings in the outskirts of town or in the most crowded thoroughfares, redolent of filth and dirt. Confined to two or three rooms, or as in Glasgow to one, or at most

* Tea was introduced into England before 1657. Beer was used in Germany and Britain in the time of Tacitus.

† In the United States the consumption of tea, which was formerly but one pound per capita, has gradually increased until now it is nearly 1½ pounds; still it is but little over one-third of the average consumption in Great Britain.

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to two rooms for a family, comfort, cleanliness, and even decency are impossible.

What wonder, then, when the husband and father, fatigued with his day's toil, returns home, to partake of his frugal evening meal, finding his wife irritable in consequence of hard work, the care of wayward children, and the deprivation of ordinary comforts, that he visits the ale-house where he and his fellow-toilers, similarly circumstanced, drown their cares in the beer-mug and squander their hard earnings which should have been devoted to the comfort of their families!

In the papers already referred to, on the condition of the working classes, which appear on subsequent pages, ample testimony is afforded of the character of the tenements occupied by the poor. The following facts in regard to that subject are first presented.

Mr. Consul Jenkinson, in his report on the condition of the laboring classes of Glasgow, thus writes in regard to the wretched tenements which most of them occupy:

HOUSES OF THE LABORING CLASSES OF GLASGOW.

The condition of the laboring men of this city cannot be fully understood without a glance at their homes. In this respect, perhaps, more than in any other, is the greatest contrast presented between the British and American mechanic. Home comforts, in the American sense, are but little known to the laboring man in Glasgow, living for the most part in great tenement buildings, where ten or a dozen, sometimes twenty or thirty, families occupy a single tenement; each family possessed of but one, or at most two, ill-ventilated, dreary, dirty rooms. The official statistics upon this subject are startling. The city chamberlain, in his report for 1869, says, "It is quite aside from the subject to complain of single apartments being each occupied by a family, for such has always been the case, and apparently will continue to be the case, much as it is to be regretted. The chief evil arises when a dwelling-house becomes subdivided into single apartments, each entering through its neighbor, in place of each opening only upon a well-ventilated staircase or corridor. Some readers may not be prepared to learn that at the census of 1861 more than 28,000 houses in Glasgow were found to consist of but a single apartment, and above 32,000 to consist of two; so that of the whole 82,000 families comprising the city, upwards of 60,000 were housed in dwellings of one and two apartments each."

For 1870 the estimated numbers were: Families each occupying a single room, 29,881; those occupying only two rooms, 43,403—showing that more than 73,000 of the 97,000 families comprising the city of Glasgow in 1870 were living in one or two rooms each. The mere statement of these facts is sufficient to show that few home comforts fall to the lot of the laboring classes of this city, and if I should add a description of the dirt and desolation prevailing in most all of these homes, making them mere nests of disease and suffering, I would even then have only partially detailed their discomforts. And imagine 8,000 of these families congregated on the space of four blocks, as is the case in this city, and can anything more be done to darken the picture? Such miserable dwellings cannot of course command very high rents, and it is not surprising, therefore, to find, from an official report, that during the year just closed (1872) there were in this city more than 74,000 dwelling houses renting at less than 550 each. And, as I find on inquiry that dwellings of two rooms rent for from \$10 to \$50 each, it is presumable that all of these 74,000 dwellings, each occupied by a family, were of one or two rooms each.

In a report prepared for these pages by Mr. Consul Webster, "on the condition of the working people of Sheffield," he says:

The mother in many cases being away from home at work, consequently neglects the family. The husband, knowing that there is no comfort for him at home, resorts to the nearest dram-shop for refreshment; the wife, in many cases, doing the same. Hence the sad neglect of the children.

In the matter of their dwellings and furniture, their dress, their sleeping accommodations, and almost everything that goes to make the home, the comfort of the family is seriously abridged. And yet vast numbers who earn good wages, say thirty, forty, and fifty shillings a week, seem to be satisfied with the scantiest supply of the most common absolute necessities of life. In very many cases large families do live in one and two rooms. This would not be true of a majority, but it is too common.

Mr. Consul Branscomb, in his "report on the condition and habits of the working classes of the Manchester consular district," which appears in full on a subsequent page, thus alludes to the homes of some of the working people:

The houses of those persons who squander so much in drink * * * are squalid, wretched, and desolate. In many cases families who can unitedly earn, when they all care to work full time, three, four, five, and even six pounds per week, live in filthy and dilapidated old tenements in the back slums, and sometimes huddle together in one or two rooms, without a bit of decent furniture.

Mr. Consul Gould, in his report upon the condition of the working-people, which appears on a subsequent page, says:

In a large proportion of their homes family comfort is totally unknown. The tenements of the laboring-class are but poor apologies for homes, in multitudes of cases their whole furniture not being worth more than a few shillings. Pawnbrokers do a thriving business, and the only part of the week when comforts are introduced is on Saturday evening and Sunday, after the wages of the week come in. Monday usually begins with the poverty and pawning of the previous week, and thus the perpetual round continues. The tenements are generally small and dirty.

The following extract from the Cambrian News shows the uncomfortable lodgings of working-people in Wales:

The newly-appointed inspector of nuisances for the rural district of Aberystwith has made two reports, which reveal an almost inconceivable state of degradation among the people. A large number of the houses are altogether unfit for habitation, and those hovels are terribly over-crowded, adults of both sexes being herded promiscuously together. In one case, sixteen men sleep in eight beds in two small rooms; and in another instance four men occupy the beds during the night and four during the day, the day-occupants frequently having to wait until the night-men get up. In one place a family lives in a hut, which is also used as a slaughter-house, skin-room, and butcher's shop; and in another, a woman, her grown-up daughter, a cow, a fether, and nine fowls occupied one room, which has no fire-place, no window, and no light or ventilation beyond that provided by the door.

Dr. Griffiths, the medical officer of health for the borough of Sheffield, in his annual report issued in 1874, thus refers to the sanitary condition of the dwellings of the poor:

Many of the dwellings of the poor are unfit for them. One room frequently serves the threefold purpose of bed-room, dwelling-room, and work-room, and the cubic space for air is totally inadequate for the health of the tenants. When to this is added that the windows are generally what are termed Yorkshire lights, or casements, many of which cannot be opened; and that when panes are broken the deficiency is supplied by wood or paper, excluding the light; and that whole families, without regard to sex or age, the single and married, are promiscuously mingled—there need be no surprise at the existence of disease nor at the spread of infection.

The following extracts are from a report on the sanitary condition of Liverpool, made in 1871, by Dr. Parkes and Dr. Sanderson:

Within the courts each house usually consists of a room on the ground-floor, a room above this, and a third room in the attic. Most of them have cellars. It very frequently happens that there is a family in each room except the cellar. In many cases the staircase forms part of the rooms, and is without any window, so that in fact there is an inevitable mixture of the air contained in all the rooms. Few constructions could be better adapted for the spread of contagious diseases.

Many of them at once attributed their condition to drink; others owned it on being pressed on the matter. Several women gave an exact statement of what their husbands earned and what they brought home. Two examples are selected of workmen in whose cases there was no irregularity of employment. A tin-plate worker in constant work earns 22s. a week. He has a wife, evidently a careful, respectable woman, and four children. In reply to questions, she said he drank a little, then owned "he drank very heavy." Sometimes he brought home 12s., sometimes 16s., sometimes 12s.; last week he drank it all. If he would bring 22s. a week, she should be "happy as the day is long." This family of six persons were living in one back room, for which they paid 1s. 6d. a week; it was 10½ feet long, 9 feet broad, and 8½ feet high; the furniture was a bed, table, and two rickety chairs. Two of the four children were sick. In the front room of the same house, the rent of which was 2s. a week, a man and wife, a daughter aged 17, and a son aged 15, lived; the man earned 21s. a week, and passed his

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time in drinking hard, repenting and saving, and then drinking again; the wife "drank all she could get." The son and daughter earned next to nothing.

The unhappy people seem to know none of the comforts and few of the decencies of life, and widespread habits of drunkenness, and consequent want of food, and their wretched homes in destroying their health.

It is no doubt partly from the smallness and precariousness of the earnings of unskilled industry, that so many families live in the single rooms of sub-let houses, and thus perpetuate their miserable condition in the training and bringing up of their children. *It may be a question whether this condition of their homes promotes the vice of drunkenness, or whether drunkenness itself be the primary and originating cause of that thriftless imprudence which leads to poverty and want.* But there is another phase of the habits engendered by the single-room tenements of our sub-let houses, which is not without interest in all future measures for the education and improvement of the people.

In sixty-two instances adult sons and daughters slept in the same room with their parents, and in three instances in the same bed. In one hundred and fifty-two instances adult daughters slept in the same room, and in fifty-six instances in the same bed, with their parents. In two hundred and fourteen instances adult sons slept in the same room, and in one hundred and fifty-eight instances in the same bed, with their mothers. In thirty-seven instances adult daughters slept in the same bed, with their mothers. In thirty-seven instances adult daughters slept in the same room, and in twenty-seven instances in the same bed, with their fathers. In fifty-nine instances the mother with her adult sons and daughters slept in the same room, and in twenty-one instances in the same bed, together. In twelve instances the father, with his adult sons and daughters, slept in the same room, and in six instances in the same bed, together. In seven instances a mother, adult son, and a female lodger slept in the same room, and in two instances in the same bed, together. In sixty-four instances a man, his wife, and a female lodger slept in the same room, and in three instances in the same bed. In twelve instances adult brothers and sisters slept in the same room. In thirty-nine instances the overcrowding which we find in sub-let houses is generally connected with or caused by these bad arrangements of a family. Thus, for example, in one room of the cubical dimensions of 900 feet, a mother and her two sons, aged eighteen and twenty, were in one bed, and a man, his wife, and his daughter, aged eighteen and other bed. In another room of the cubical dimensions of 800 feet, there were found sleeping, a father, two sons of eighteen and twenty, a daughter of twenty-two, and a female lodger of thirty years of age. In another room of the cubical dimensions of 800 feet, there were found sleeping in one bed on the floor, two brothers of twenty-four and twenty-six, and four sisters of twenty-eight, twenty, eighteen, and sixteen years of age, respectively.

The following table, from official sources, shows the crowded condition of some parts of Edinburgh, and the consequent increase of mortality.

Over-crowded tenements and their vital statistics.

Name.	Area in square yards.			Population in 1864.			Mortality in 1863.		
				Above 5 years.			Under 5 years.		
	Rooms.	Families.		Above 5 years.	Under 5 years.	Total.	Above 5 years.	Under 5 years.	Total.
Gowanloch's Land	292	60	30	109	27	134	2	2	4
6 Cowgatehead	365	60	32	155	21	179	4	2	6
Middle Market-stair	400	59	56	197	51	248	3	5	8
Old Market-stair	300	31	22	66	14	110	4	3	7
56 Blackfriars' Wynd	250	49	22	103	27	130	1	1	2
23 Carrubber's Close	353	45	35	107	28	135	3	2	5
Scott's Land, Cowgate	250	51	42	122	42	170	6	3	9
Hopie's Land, Canongate	230	36	29	80	23	103	2	1	3
Purves' Land, Canongate	352	32	21	92	27	119	....	4	4
Burns' Land, Canongate	176	25	14	54	14	62	....	1	1
Birtley Buildings, Canongate	254	35	33	101	24	125	1	6	7
Crombie's Land, Westport	167	27	20	51	16	70	1	2	3
3 East Richmond street	285	56	43	148	29	177	1	2	3
23 St. James street	438	70	50	168	52	220	3	5	6

It is gratifying to know that the improvement in dwellings for the working-classes has engaged the attention of philanthropists in Eng-

land, and that the subject has received the careful consideration of Parliament, as will be shown on a subsequent page.

The London Times, in an article showing the small number of the comfortable, regards those families which pay a rental of less than £20 a year as not among the "comfortable." The writer says:

Seven in eight of our population live in "houses of less than £20 a year—that is, are not, in the ordinary sense of that word, comfortable at all, but are, with more or less of content, always struggling to make ends meet, always compelled to think of money, always affected in the most direct and serious way by a tax, a rise in prices, or a stoppage in the course of trade. It is only to one in eight of our population that a sovereign is not a very serious sum, only to four in a thousand that a five pound note is not an important, most important amount of money." The number of the really comfortable in Britain cannot by possibility exceed 70,000, while it may be very little more than half that amount.

As the working-class pays a rental of less than £20 a year, it will be observed that this vast array of work-people are living outside the pale of "comfortable."

DEGRADED CONDITION OF THE WORKING-CLASSES.

[From the London Daily Telegraph, July 13, 1871.]

But there are people who are worse off than the mill-hands, whose abiding-places are the slums of Manchester. I should not have thought it possible, but so it is. There are toilers and sweaters for daily bread whose condition in life is worse even than that of the miner who delves in the bowels of the earth or the smelter of iron who works naked to the waist, and with a leather mask before his face to keep his eyes from being melted in his head, as is the red ore in the melting pot; it is his business to feed and keep at a molten simmer. I thought and said so a fortnight since; but at that time I had not visited the potteries, nor passed half a day in Longton, which is the center of the murky region where half the crockery that is used in the world is produced; and I am afraid to say how many times drier, smokier, and, to the unaccustomed, more stifling than any other pottery parish round about.

The following extract from the report of the Inspector of British factories indicates the degraded condition of the work-people in the fens and at brick-making:

I have just received a report from Mr. Lakeman of some work he has done in the fens of Cambridgeshire: "I have gone through the center of the fen district, and of all the journeys undertaken by me it was the most tedious and uninteresting, excepting that I have taken note of a type of people seemingly peculiar to the fens, vacant in expression of countenance, ignorant of everything but work. They do not know the names of the localities around them, and never see any one better than themselves, save their employers. I wonder how these poor creatures are to be reached, what is their hope, where their happiness or comfort in life."

From another part of the country I have had much the same picture: "A most barbarous, semi-civilized, ignorant set. Men and boys look like red Indians; the sand used in brick-making being burnt red, and with which their bodies are covered, working bareheaded, barefooted, with exposed breasts, and with wild looks, drinking all day Sunday; Monday and Tuesday dog-fighting and man-fighting. They resume work on Wednesdays, when the poor little unfortunates are made to toil away, stamping and carrying, and pressing a good fortnight's work into three or four days. One man, who last week earned in four days 2s., took his wife home a loaf of bread and 6d."

Not only among the fens and in the brick-fields of England is this degradation manifest, but in those towns which exhibit the highest type of civilization. In some of the manufacturing towns of England there is a downcast look which indicates hopelessness, if not despair, on the part of the working-classes. They seem to have sunk into a condition of despondency from which nothing can rouse them. No ray of hope glimmers in their pathway, beckoning them to higher position. They seem to regard their social condition as fixed. They have no hope, and apparently little desire, to rise superior to their present state. What

their fathers were they are, and their sons will be. Many of them seem destitute alike of hope for increased happiness here or hereafter.

These traits were noticed by the author more at Wolverhampton, and elsewhere in the Black Country, and at Bradford and other portions of Yorkshire, and in some localities of Lancashire. The working-classes of England are not possessed of the elasticity of the Irish, and seem more despondent than the people of any class in other countries, except the recently emancipated serfs of Russia.

The following extract from a letter written by Professor Shepard, of Chicago, to the New York Examiner, although perhaps too highly colored for an accurate description of the working-classes in the whole of England, is yet a true as well as graphic presentation of the condition of a portion of them.

THE WORKING-CLASSES OF BRADFORD.

Bradford is a thoroughly English manufacturing town. You do not know what faces I saw, if you never saw the faces of the English working-classes.

O, the wretched faces of weary children, the faces lit up with a forced mirth! The faces that have been feeling the grinding and grinding for generations—the inherited mother and babe. I don't believe there is such a looking lot of people on the face of this earth as the working-classes of England. Just over the Tweed there is relief, had enough there, but not to be compared with what you see in the great manufacturing towns of England.

I recall Switzerland. But there, with all the appearance of dull uniformity, you see no grinding of the faces of a lower class by the heels of an upper class. The "common people" of that uncommon country have nobody above them and nobody below them. Besides, some education is compulsory, and some military training. They are picturesque in dress, and free-looking in the face, however addicted to unlovely labor and uninspiring industry—a dead-level people in the most mountainous of countries. Above them, only the mountains, below them only the valleys. Perhaps they crouch to the mountain out of them, as the ravages of adamantine caste have crushed some of the aspiration of the British workman. In the north of Europe, whatever you see of haggardness and weariness, you see certain something like contentment, and elasticity, and thrifty independence of behavior. Then, as for the south of Europe, the lowest are the hapdest—laborer, beggar, and pauper are jolliest of them all. The destitute are never sighing, not the ragged beggar. So in Ireland. With all his barking and biting at the heels of the "oppressive" old lion, Pat never shows any of the grind in his face. The Irish peasantry are as pleasant a sight as any sight of the sort in the world. In the land of the Celt or the Southron you will always find the veriest squalor touched with the nature's brush of the picturesque.

But there is nothing to relieve the eye or cheer the imagination in this vast sea of down-turned faces in England. The lower classes there are utterly destitute of anything calculated to break the monotony of their toilsome look. They have no manners, or customs, or costumes; no games or frolics with which to animate the spectacle they present to the eye of the foreigner. They work and work and work; they drink and drink; they smoke and smoke and smoke.

They do as their fathers did; their children do as they do. Father and mother and child go forth to their labor until the evening, and go forth to the beer-shop when the evening comes. That shop, with its blaze of gas, its sparkling brass hoops on the gin-casks, its gilded ornaments on the beer-fountains, its row of tidy tumblers, its clatter of cop-sound of boozey discontent—that grog-shop contrasts fatally with that workingman's home. That is his only home, indeed—his home and theater, recreation and education, social life, mental life, and animal life, all in one. Is it any wonder that the one candle-lit, dingy room up the court is unable to hold its own against it?

So it is a dead-lift—this effort in behalf of the lower millions of England. They are not attractive; they are horribly unattractive. They repel the imagination. You avert your face; you never smile, because they never smile. The wickednesses of the low Italian fascinate before you have had time to be on your guard; the quickness of the low Briton are repulsive. There is no spontaneity or enthusiasm, or gish, and logg. There is an ever and forever ooze, in the way of the British workman, that sets you almost distracted. It is pulling teeth to pull him through.

REPORTS ON THE CONDITION OF THE WORKING-CLASSES OF GREAT BRITAIN.

Having directed attention to the drinking habits of the laboring-classes and the condition of the rooms they occupy, it is now proposed to present, *in extenso*, the several reports made by consuls of the United States, and others, on the subject under consideration.

SHEFFIELD.

Letter from C. B. Webster, esq., United States consul.

UNITED STATES CONSULATE,
Sheffield, August 4, 1872.

In the great steel-manufactories of Sheffield, employing, each, several thousands of men, scarcely any work is done on Monday, and very little on Tuesday. I am informed that this is true of a large portion of the laboring population of this town. On those days the streets and drinking-places literally swarm with workmen. Work stops on Saturday at 1 o'clock. The loss of time on Monday is due principally to the drinking habits of the operatives, but in part to the necessity of taking time for repairs of machinery.

It has been stated to me as a fact, that, although the rates of wages are advancing, the men are earning less money, because they work fewer hours.

In estimating the average weekly expenditures of a family of two adults and three children, the fact is to be taken into account that, in a large proportion of families, the wife and some of the children, the latter often as young as twelve years of age, earn considerable amounts of money. This makes it very difficult to estimate the actual earnings and expenditure of the families of the working-people. They expend all they earn, and they earn more than would appear in the report of the amount paid to the man who is supposed to support the family. And here we see the superior condition of the American workman of the same grade, he, by his own earnings, being able to support his family far more comfortably than the English laborer, with the immense added advantages of freedom to the wife to care for the interests of the home, and to the children the privilege of constant attendance at school.

The fact of the mother, in many cases, being away from home at work, and consequently neglecting the family, enters as an important element in estimating the moral condition of this class of people. For the husband, knowing there is no comfort for him at home, resorts to the nearest dram-shop for refreshment, the wife in many cases doing the same. And these shops abound in every neighborhood; hence the sad neglect of the children. Whether the practice of drugging mentioned by the Hon. Mr. Mundella, M. P. for this district, exists to any extent in Sheffield, I am not able to say. That it does prevail to a sad degree in some parts of England you will see from the address of Mr. Mundella to his constituents, which is inclosed. But this neglect of the children in their tender years, and the close confinement of the very young of both sexes, will account for the fact that so many dwarfed, crooked-legged, and otherwise deformed persons are seen in our streets.

The fact that young men and young women are employed side by side in the same kind of labor will explain, in part, the low state of morals that prevails. The work is very largely dirty work; and when one sees the untidy condition of the vast numbers of females that swarm from these great "works," the conviction will force itself upon the mind that virtue must be in great peril while in constant association with such want of cleanliness. This condition of the operatives is somewhat excusable, since there are no free public baths in Sheffield, a town that needs them as much as any in the kingdom. Indeed, there are no baths of any kind at all sufficient to meet the wants of the people. If any of the gentlemen who have made large fortunes by the aid of the working-people should desire to do some good thing, aacknowledgment of their prosperity, they could hardly do better than to establish free baths of ample accommodation in every ward of this great town.

In regard to the health, comfort, morals, and education of the people, the facts in regard to Sheffield will not probably differ essentially from what is true of other large manufacturing towns of England.

In the year 1870 there came before the courts 209 cases of bastardy. It is probable that as many more occurred that were not made public, although I have no means of obtaining definite information.

During the week ending July 27, 1872, there were 654 inmates in the Sheffield Workhouse. There were, also, 5,435 persons receiving "out-relief," making an aggregate of 6,119 persons more or less dependent upon public charity for support at the best season of the year.

CONDION OF THE WORKING-CLASSES OF GREAT BRITAIN. 409

Letter from Mr. Consul Webster dated—

Sheffield, January 22, 1874.

DEAR SIR: In reply to your inquiries in regard to the condition of the workmen of Sheffield, especially as to their habits, I have the honor to submit the following, which will be found, I think, to contain definite replies to all your questions. I have endeavored to state the facts as they are, without exaggeration. In order to do so, I have made many inquiries, not merely of employers and employed, but of intelligent, candid, and disinterested persons in all walks of life, especially of those who have the best means of knowing the class in respect to whom you inquire.

You ask first, are they (the workmen) industrious? If a stranger should visit this great town, with its hundreds of tall chimneys, and should go through the extensive works that annually supply the world with such immense quantities of their products, he would be very likely to come to the conclusion that this is a very busy and industrious people. There is no denying the immense results wrought out by the Sheffield workmen. They are a hard-working people—*while they do work*. But it is true that a very large proportion of them are idle a great many days in the year, when they might and ought to be at work, and when their employers are needing their labor. Every Monday is so generally a holiday, that it has come to be called Saint Monday. The streets are full on that day of men at leisure, and this fact cannot fail to strike a stranger, especially an American, who was not acquainted with the customs of the town. This Monday idleness is, in some cases, enforced by the fact that Monday is the day that is taken for repairs to the machinery in the great steel-works, during which the masses of the men employed in such establishments must necessarily be out of work. But this will account for but a small portion of the idleness on that day. It is, to a great extent, voluntary, and has become a settled habit and custom. And this holiday is, in thousands of instances, protracted through the next day, so that large numbers of the workmen, stopping work on Saturday noon, do not commence again until the following Wednesday. Such men can hardly be called industrious.

From inquiry and my own observation, I believe that far the larger part of this loss of time, both for employer and employed, and the reckless waste of money consequent upon it, is the result of the drinking habits that prevail so generally. It is painful to see how the weekly wages are squandered by the thousands who through the drinking places on Saturdays, Sunday at certain hours, Monday, and Tuesday, and, indeed, on all the days of the week. I would not say that Sheffield will compare unfavorably with other large manufacturing towns of England; I presume it would not, although the nature of the labor required here is such as perhaps to lead to greater temptations to drink, and to a fancied greater necessity for it, than in districts where the work is of a much lighter kind. I say fancied necessity, because there does exist here a body of men employed in the most exhausting kind of labor in our great steel-manufactories, who are total abstainers, and who, to say the least, have proved themselves the equals of any in efficiency and endurance.

Another great cause of waste of time and money ought to be mentioned. It is the prevalence of gambling, in the form of rabbit-coursing, handieapping, pigeon-shooting, and the like. This evil has become so great, that a public meeting was called not long since to consider means for suppressing it.

I am quite sure that the amount of money spent in the above-mentioned ways has increased with the advance in wages, and that the larger amounts earned by the workmen have not been used, except in comparatively few cases, to increase the comforts of their families. They have always lived well, so far as their food is concerned. They spend their money freely for meats of the best quality, and the general appearance of the workmen is that of a well-nourished and vigorous people. There are, of course, many exceptions to this belonging to a class far below, such as can be found in every great town.

Respectfully yours,

C. B. WEBSTER,
United States Consul.

Hon. EDWARD YOUNG,
Chief of Bureau of Statistics, Washington.

BIRMINGHAM.

Letter from Mr. Consul Gould on the condition of the working-classes.

BIRMINGHAM, November 12, 1873.

SIR: In response to your inquiries, I beg to say that there is no improvement apparent in the condition of the working-people in consequence of the advance of wages. It was said boastingly by statesmen a few months since that the nation had drunk itself out of the Alabama claims by the increased income from the tax on intoxicating drinks during the past year.

The general testimony is that no more comforts go to the family now than formerly. Increased pay means, with the mass of miners and foremen, an increase of no other luxury than that of drink. In a large proportion of such homes *family comfort is totally unknown*. The increased wages also lead to idleness, as they do not care to work more than enough to secure a certain amount, and thus have more time to spend in the public house. Of course there are honorable exceptions, but the papers and general testimony of those familiar with the workingmen of the district go to prove a sad increase of idleness and drunkenness.

The tenements of this class are but poor apologies for homes, in multitudes of cases their whole furniture not being worth more than a few shillings, and remaining the same as when wages were low. Pawnbrokers do a thriving business, and the only part of the week when comforts are introduced is on Saturday evening and Sunday, after the wages of the week come in. Monday usually begins with the poverty and pawning of the previous week, and thus the perpetual round continues.

The tenements are generally small and dirty, though they might be made much more comfortable and convenient if the women were trained to habits of neatness and understood housekeeping.

The families are almost universally large, requiring the manual labor of the mother, and also of the children at an early age. The house is thus left to the smaller children, and but little attention is devoted to it. All this might be easily remedied, if the men devoted what they earn for the support of the family, and the women were trained to housekeeping. In a large number of cases the women drink as badly as the men, and have no ambition to better their condition.

Yours, truly,

J. B. GOULD,
United States Consul.

To Hon. EDWARD YOUNG,
Chief of United States Bureau of Statistics.

MANCHESTER.

Report of Mr. Consul Branscomb on the condition and habits of the working-classes of the Manchester consular district.

SIR: The working-classes of this consular district are naturally an energetic and industrious people; but they cannot, I regret to add, be said to be very temperate. They consume an enormous quantity of intoxicating liquors, principally beer, though very many partake largely of spirits and of the cheaper wines. Intemperance seems to be on the increase, especially among the women, not only of the working-classes, but also of the middle and upper middle classes.* This is the testimony not only of temperance advocates and missionaries, but also of medical men, Christian ministers, police officers, and magistrates. Much working time is lost, and many employers are often sadly harassed, by their work-people going off to fiddle. The president of the Manchester Chamber of Commerce, Hugh Mason, esq., J. P., himself a very large employer of labor, in his address to the chamber, delivered this morning, on the state of the labor-market in connection with the cotton trade, made the following remarks:

"They had had to pay a higher price for labor than at any period in the history of the cotton trade. There had been in all departments of the cotton trade a general scarcity of labor; and in addition to that, and perhaps as a consequence of that, there had not been that industry and that fair return of labor for wages on the part of a great many of those engaged as cotton operatives which ought to have been the case. They had taken advantage of their dominant condition, and had disregarded those necessary rules of discipline and subordination, without which no great concern, indeed no small concern, could be carried on with any degree of pleasure, or even of profit. Time, which affected all things, would undoubtedly change the present state of things."

From the foregoing testimony, which could be corroborated to almost any extent, it is obvious that much time is wasted by the work-people. Much of their earnings is recklessly squandered by and through their drinking habits, and, as a natural and inevitable sequence, the home-comforts of the families of these people are very seriously abridged by the large amount spent by the men, and, in sadly too many instances, by women, and even by youths of both sexes, in drink. And, as a further sequence, the

* LANCASHIRE DRINK-FACTS.—Lancashire spent £13,299,750 directly upon intoxicating liquors in 1882. What did Lancashire get in return? The following statistics will show: £1,113,244 to pay in poor and police rates; 192,494 paupers; 30,000 vagrants, filling as vagabonds about the streets; 4,706 lunatics; 4,749 inquests on deaths; 90,257 persons brought before the magistrates and convicted of crime; 5,943 depredators, offenders, and suspected persons not convicted; 2,749 houses of bad character, brothels, and receivers of stolen goods, &c.; 17,733 public houses and beer-shops; 50,332 drinkards, filling multitudes of homes with misery; 7,000,000 or more bushels of grain destroyed in manufacturing the drink, or equal to 105,000,000 4 pound loaves; 5,000 or 6,000 persons employed in the manufacture of the drink.

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houses of these persons who squander so much on drink, tobacco, and all their brood of other social vices and bad habits, are squalid, wretched, and desolate. In many cases families that can unitedly earn, when they all care to work full time, three, four, five, and even six pounds per week, live in filthy and dilapidated tenements in the back slums, and sometimes huddle together in one or two rooms, without a bit of decent furniture.

Toward the end of the week and before the pay-day, they are in debt to the honest shop-keeper, the bulk of what they had earned the previous week having been spent at the beer-shop and the gin-shop. Many poor, hard-working, and sober women often complain sadly that the increased wages and the curtailed hours of labor, instead of being a boon have been a curse to the family. The men have had more to spend on "fiddle," while the women have got less for food, clothing, and the house-rent. The evil seems to be growing and spreading in many districts, notwithstanding the earnest efforts of temperance and social reformers, the operations of the newly-formed school-boards, the increased activity and zeal of many of the clergy and dissenting ministers, and the recent amendment of the licensing laws, whereby places where intoxicating liquors are sold have had their hours of sale curtailed. The drinking habits of the people have become so very bad that any slight restriction does not seem to produce an appreciable result, except that the downward tendency is not now so rapid as it was, and as it most probably would have been had there not been some little legislative check applied. This report, however, would be incomplete, and would not do justice to the people of this district, if it were not also stated that, side by side with these pernicious and wide-spread drinking habits, and the consequent social vice, misery, and disorder, there is, at the same time, an increasing band of active, zealous, and enthusiastic temperance and social reformers. Total-abstinence societies, Bands of Hope, Good Templar Lodges, and workmen's clubs, on temperance principles, are being established and carried on as never before. There are also many co-operative societies, in which the working classes, the more sober and industrious portions, are investing their savings, and by means of which they are not only providing more home comforts, but are making provision for times of sickness, and when death shall come, securing some substantial aid for the bereaved ones.

This district is the headquarters of most of these social movements for the promotion of sobriety, thrift, and social progress. The United Kingdom Alliance, which aims at the total legislative suppression of the liquor-traffic, has its central offices in Manchester.

There are no figures showing the education of the whole city, but of 8,863 persons committed to the Manchester city-jail in 1870, the following is a return of the degree of their instruction:

Neither write nor read.....	3,459
Read and write imperfectly.....	5,313
Read and write well.....	86
Superior instruction.....	10

8,863

I remain, very respectfully, your obedient servant,

C. H. BRANSCOMB,
United States Consul.

Hon. EDWARD YOUNG,
Chief of Bureau of Statistics, Treasury Department, Washington, D. C.

In Manchester the free libraries have proved highly successful. The number of times that persons have availed themselves of the libraries during the year 1871-72 was 2,264,688, against 2,112,900 the previous year. The accessions amount to 14,387 volumes.

LIVERPOOL.

Letter from Dr. Truett on the condition and habits of the laboring classes.

MEDICAL OFFICER OF HEALTH DEPARTMENT,
MUNICIPAL OFFICE, DALE STREET,
Liverpool, November 20, 1873.

SIR: Your questions are so general that I fear my answers will appear to rest, a good deal more than I like, upon my individual opinion; but such must always be the case where the questions are not sufficiently definite to admit of statistical replies. With this explanation I will proceed to consider your questions *seriatim*.*

* These questions were prepared by the author of this report and forwarded to the consuls of the United States at Liverpool and elsewhere in Europe.

I. Are the laboring classes industrious?

I consider that the laboring classes of Liverpool are as a rule wishful for employment, and that laziness or a desire for unoccupied idleness is not one of their vices. All labor which is not in the form of piece-work and not paid for according to results, will be perfunctorily and negligently performed, and hence opinions as to the industry of the people will always vary according to the stand-point of the master and the servant, the employer and the employed. It is necessary also to remember that the condition of the laboring classes of Liverpool is somewhat peculiar. There is little or no continuous occupation for skilled laborers, either in workshops or factories, as is the case in such towns as Birmingham, Manchester, and Sheffield, and hence, in Liverpool, we have very few classes of workmen receiving high wages with whom it is an object of trades-unionship to prevent the labor-market being overstocked or the supply being in excess of the demand. We have not in Liverpool any extent of that arranged and planned idleness on special days, (termed in Sheffield saints' days,) when the highly-paid artisans and workmen, in order to keep up the demand, systematically refuse to work, however urgent may be the requirements of trade. There is, however, in Liverpool a great deal of enforced and unavoidable, though comparatively little of voluntary idleness. The chief demand in the labor-market of Liverpool is for unskilled or mere manual work; and as, even in the most prosperous years, when trade is brisk and the shipping fully occupied, the supply of workmen is always larger than the demand, it follows as a consequence that large sections of the laboring classes of Liverpool are obliged to rely upon, and to be content with, casual and uncertain occupation.

Therefore, so far from using a combined and voluntary idleness to keep up the price of labor and to regulate its supply and demand in their favor, they are, as a rule, obliged to be content with uncertain and irregular work, given at the option of their employers. The nominal wages of the unskilled day-laborer in Liverpool, such as the dock or cotton porters, is 4s. a day or 24s. per week; but as a result of the competition occasioned by the excess of supply over demand, the average wages of such workmen, even in years of prosperity, do not exceed 18s., or four days and a half work per week. This average will greatly vary, according to the state of trade. This is markedly seen when a continuance of easterly winds prevents the arrival of sailing-vessels, by which hundreds of the laboring classes are at once either totally thrown out of employment or are only able to obtain one or two days' occupation in the week. Indeed, so varying are the changes of the labor-market, and with it the wage and income of the laborer, that the list of the numbers receiving out-door relief and the list of sick and dead of typhus caused by want and overcrowding, can be used as barometers of the state of the trade of the port. One of the great drawbacks of Liverpool, socially, morally, and sanitarily, is this excess of unskilled labor, which originally owed its origin chiefly to the Irish famine-fever of 1847, when thousands of the poor people fled to Liverpool and were supported by the rates.

Another peculiar feature of the labor-market of Liverpool is that there is no established industrial occupation for young women or for boys and girls, as exists not only in the manufacturing districts of Lancashire and Yorkshire, but everywhere where the textile fabrics are manufactured, and where weaving, spinning, and knitting are carried on as manufactures. The consequence of this is that while in Birmingham a person is struck with the absence from the streets of young people during the working-hours of the day, he is equally astonished at the great numbers of the young and active who prowl and lurk about the courts and alleys of Liverpool at all hours. This idleness among the young, in large sections, of the people is very evident in Liverpool. It is at first compulsory idleness, occasioned by the absence of occupation or work; it soon demoralizes the child and then degenerates into a habit of vicious idleness. It is among such poor children that industrial schools are wanted; for unless children are taught some kind of industry or trade, we cannot hope to see them make any effort to rise above the wretchedness of their parents.

II. Are the laboring classes intemperate?

III. If so, do they lose much time from labor in consequence?

IV. Are the comforts of their families seriously abridged by the amount spent for drink?

I consider that it has been incontestably proved that the working classes of Liverpool are extremely intemperate, even when compared with similar sections of the community in other large towns of Great Britain. I know no stronger or sadder proof of this than the returns made by the police force, which show that during last year, 1872, 18,510 persons were brought before the justices on the charge of drunkenness, and that of this number no less than 7,726 were females.

This number, though so large, will only include persons who were obstreperously drunk. It will follow as a corollary from this fact that much time is lost either directly by incapacity for work on account of drink, or indirectly by sickness consequent on the effects of drink, and also that the comforts of the families of the laborer are seriously abridged by the amount spent in drink.

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The causes which lead to the great intemperance of the laboring classes in Liverpool are—

1. The number of sailors constantly arriving at the port, who, when on shore, freely spend their money in a reckless and dissipated manner.
2. The uncertain occupation and wages of laborers, among whom want and distress excite the desire and feeling for the stimulus of drinks.
3. The squalor of the homes of the unskilled laborers in contrast with the warmth and glare of the public houses, and the existence of 1,551 public houses and 252 beer-houses as temptations to the wretched people.

We all acknowledge the vice of drunkenness to be the great moral evil of Liverpool; but, however we may deplore its existence, no statesman or philanthropist has been able to suggest a practical remedy.

The extent of poor-law relief is a very fair test of the physical condition of the people, and as want, to the extent of requiring poor-law relief, is largely due to intemperance, so the number of paupers will be to a certain extent an index of the extent of that vice. The population of the parish of Liverpool at the last census was 235,411, and we find that during the last seven years, being years of ordinary prosperity, the average number of persons at one time within the parish receiving poor-law relief was 15,910; or, in other words, the number of persons receiving parochial relief included every sixteenth person within the parish.

It is not thereby meant that all paupers are drunkards, but it is implied that drunkenness may be considered to a large extent a motor or cause of such extended pauperism.

V. *What is the condition of the rooms they occupy?*

VI. *Do many families live in one or two rooms only?*

The extent of room-occupations by the families of the laboring class may be judged of by the following facts:

The total assessments for the year 1873 in the borough of Liverpool are 101,042; of these, 11,572 are for warehouses, shops, sheds, &c., leaving the number of inhabited houses 89,470. We find that 64,903 of these houses are assessed at a rental below £13 per annum, and 9,528 are assessed at between £14 and £20 pounds per annum, leaving 15,039 houses at an assessment above £20 per annum. It is further known that the houses below £13 consist merely of three apartments, of an average size of between 800 to 900 cubic feet for each apartment. All such houses with singularly few exceptions are sublet in single-room occupation. The usual practice is for the landlord's tenant to sublet the middle room to another family; but occasionally, in the Irish quarters of the town, both bedrooms are sublet, and three separate families live and sleep in the same house.

Besides the 64,903 houses at a rental below £13, there are 9,528 houses at a rental between £14 and £20 per annum. These houses contain, on an average, five, or six apartments, namely, a front and back kitchen and four bed-rooms. The average cubical dimensions of the front bed-rooms are from 1,000 to 1,100 feet, and of the back bed-rooms from 800 to 900 feet. Such houses are also, as a rule, sublet by the landlord's tenant in single, double, and treble room-occupation. It will be thus seen that 80 per cent. of all the habitable houses of Liverpool are, as a rule, sublet in room-occupation for longer or shorter periods; in fact, sublet is their normal condition. The extent of subletting of houses, and consequently of room-occupation, is such a grievous evil in Liverpool, both as respects filth and overcrowding, that Mr. Graves, our late member, introduced into the public-health act of 1866 a clause enabling local authorities to make regulations—

1st. For fixing the number of persons who may occupy a house, or part of a house, which is let in lodgings or occupied by members of more than one family.

2d. For the registration of houses thus let or occupied in lodgings.

3d. For the inspection of such houses and the keeping the same in a cleanly and wholesome state.

4th. For enforcing therein the provision of privy accommodation and other appliances and means of cleanliness, &c.

5th. For the cleansing and lime-washing at stated times of such premises.

The power thus given by the law was specially meant for Liverpool, and for the remedy of an evil which is greater here, among our unskilled and ill-paid workmen, than it is among the skilled mechanics and factory-operatives of Manchester, Sheffield, and Birmingham.

The health committee have enforced the law both as to registration, cubical space in rooms, and periodical inspection, by day and night, among 10,162 of the worst of sublet houses in Liverpool. It need only be stated that, by our by-laws as to sublet houses, and by the general provisions of the nuisances-removal act, carried into force by thirty inspectors, we are enabled to insure to a tolerable extent the general cleanliness of the rooms of the working-classes as far as regards ceiling, walls, and floor; but no words descriptive of wretchedness would be too strong to picture the squalor of

houses altogether destitute of furniture, as seen in large districts of the town occupied by the Irish, and occasionally seen even in the districts inhabited by English and Scotch.

VII.—*Have the recent advances in wages resulted to the advantage of the families of the workmen, or have they tended to produce greater irregularities?*

I do not know what may be the case in manufacturing districts, where the custom of strikes for increased wages prevails, where workmen are banded together by unions to maintain high wages and to prevent the supply of labor being equal to the demand, and where the custom of holidays or saint-days has become part of a system of organized arrangement. In such manufacturing towns the charge against the workmen of demoralization consequent on high wages may be true; but of one thing I am perfectly convinced—that the rant about high wages demoralizing the people in Liverpool, and thereby increasing the extent of drunkenness and crime, is utterly false.

I can state, from personal observation, that the condition of the people in these last few years has vastly improved.

I remain, dear sir, yours, very truly,

W. S. TRENCH.

To GENERAL FAIRCHILD,
United States Consul.

Extract from a letter to the author from the Hon. Lucius Fairchild, United States consul at Liverpool.

The almost universal testimony here is to the effect that the recent rise in wages has not contributed, as a general thing, to the greater comfort of the families of the laboring-men. I am told, by every one with whom I have conversed on the subject, that the increase of drunkenness and all dissipation which follow idle hours is alarming. I believe that it is the opinion of the best informed that the families of the laboring-men are even worse provided for, as a rule, than when wages were less.

Under date of November 22, 1873, General Fairchild writes as follows:

In my last I gave it as the general opinion here that the laboring-classes had not been substantially benefited by the recent rise in wages, which I meant to more especially apply to those engaged in the coal-mines and factories. You will note that Dr. Trench gives other testimony respecting the influence of such rise on the laboring-classes of this town.

ST. HELEN'S, NEAR LIVERPOOL.

Letter from John Hammill, esq., consular agent of the United States.

UNITED STATES CONSULATE,
St. Helen's, November 12, 1873.

DEAR SIR: In reply to your inquiries in regard to the habits and condition of the working-classes in this district, I may say that they are very various, as, I suppose, must be the case where there is a population of 50,000 composed almost solely of them; but I will describe their condition as well as I am able. I will deal with the colliers first, as they are a numerous body, and are at the present time attracting the most attention, on account of the enormous price of coal, for which they are in a great measure to blame, as they will not work more than, say, three weeks per month; in consequence of which they get considerably less coal, making it scarce, and therefore dear. They are enabled to afford this waste of time through the extravagant wages they are now getting, (I believe fully 100 per cent. more than they got two years ago,) but which I am afraid are doing them no good, as when they are not working they are following such objectionable pursuits as drinking, gambling, &c., which, of course, do not improve their condition, nor the condition of their families, as they must spend, or rather waste, a good deal of their money in this way. Their mode of living now is very different from what it was some year or two ago, as then butcher's meat was considered a great luxury, and seldom indulged in, but now, although it is considerably dearer, they not only buy it regularly, but will have nothing but the best joints. I think this remark applies equally to all working-men, but to the colliers in particular. Their morals have improved since the discontinuance of sending women down the pit, but they are not remarkably good yet. They are, as a body, very reckless with their money, squandering it about, a great many of them not even paying their cottage-rents, which only average 3s. per week. They marry early, the men from eighteen to twenty-two, and the women from seventeen to twenty. Of course, there are steady, industrious men among them, and what few of these there are must be living very comfortably and saving money.

The men employed in the various glass-works are, as far as I am able to judge, a great contrast to the colliers; at any rate, you do not see them hanging about the streets, drinking and idling all day long, as you do the colliers, but this may be accounted for by their having to work during the day and not having the same opportunity. Be that as it may, they always appear respectable, and work regularly.

Women are largely employed in the plate-glass works, and earn from 15s. to 20s. per week. The men's wages depend upon the kind of work they do. Some of the glass-blowers can earn from £1 to £5 per week. On the whole, I think the glass-makers are the most respectable large body of men we have. I now come to the laborers in the chemical yards or works, and I think I should be justified in saying that they were even a worse lot than the colliers, but I conclude it arises in this way, viz: that the work required is, for the most part, dirty and disagreeable, and many men object to it; consequently it falls to the least respectable in the community, who in this district are largely composed of Irish, who, in addition to their other vices, are very dirty in their habits and habitations. They live in the lowest part of the town, and, for the most part, half starve their wives and families. I have seen their children running about with bare feet, clothed in rags, and using the most profane language—children whose ages ranged from eight to fourteen years. There is no doubt that a large percentage of the prisoners at our police courts are supplied from these people. Any epidemic which breaks out in the town is sure either to originate there or to fly there at once. Other workmen, such as joiners and bricklayers, are very ordinary, and I have no remarks to make upon them.

I may add that all the workmen live in cottages, the rental of which ranges from 2s. to 5s. per week, and that each family have a cottage to themselves, except in a few cases, where they take single men in as lodgers. Every able-bodied man, if he will work, can make a good living, and the scarcity of poor people or beggars is very noticeable. I have said nothing about wages, as it would be almost impossible to give you any exact idea, they are paid so differently by different people. Some men work per hour, some per day, and some do piece-work. For instance, take a chemical works. Say they make (as most of them do) salt-cake, black-ash, caustic soda, bleaching-powder, chlor-manufactures gets differently paid, and the manufacture of glass the same.

Yours, obediently,

JOHN HAMMILL.

United States Consular Agent, St. Helen's.

Hon. EDWARD YOUNG,

Chief of United States Bureau of Statistics, Washington, U. S. A.

GLASGOW.

HABITS OF THE LABORING-CLASSES.

[From a report of Mr. Consul Jenkinson.]

If the efforts of laboring-men in this country to increase the wages paid them were for the purpose of procuring more comfortable houses, better food, better clothing, better education, an increase in all the comforts of life, one could heartily wish them success in their efforts. But there are grave reasons to fear an opposite result. That an increase of wages would only bring greater misery and greater vice by the opportunity it would give for greater self-indulgence, especially in drink, is feared by many of the best friends of the working-men of the country. That drunkenness prevails to an alarming extent among this class of the people cannot be denied. That it has increased as their wages have been increased is also true. Many have, no doubt, been benefitted by such increase of wages, but most, it seems, only spend their extra earnings in extra quantities of whisky. The British board of trade and excise report, just issued, gives some important statistics bearing upon this point, extending, however, to the whole of the United Kingdom. This shows that in this country the consumption of sugar, tea, and coffee has upon the whole decreased during the year, while in nine months reported of 1872 the increase of spirits consumed has been over 12 per cent. over the corresponding period of 1871. Commenting on this statement, a leading Scotch paper says: "For several years past the rate of increase in intoxicants has been growing, while that on the other commodities has been diminishing; and at this moment, while the consumption of intoxicants is increasing more rapidly than ever, that of the other and better commodities has come to a stand." It seems, therefore, that the laboring-classes of this country have little wish to better their condition; that the comfortable homes, good and plentiful food and clothing, are all so far above their reach, they will not attempt to secure them, but any wages they receive above the mere pittance to which they have been accustomed is spent in rendering their condition still more wretched and possibly still more vicious.

MONEY SPENT AT THE PAWN-SHOOTS.

A fact of terrible significance was stated recently by a magistrate of Glasgow, Scotland: "I have tried," he said, "to come at some sort of estimate of the money spent yearly by the working-classes in pawning, and the result has been that from £150,000 to £200,000 a year is spent in interest!" In reply to a question, Is not that more than is spent in all the religious observances and education of the city? the reply was, "I think it is a great deal more."—*English paper.*

NEWCASTLE-UPON-TYNE.

Report of Mr. Consul Jones on the moral and social condition of the working-classes.

Newcastle-upon-Tyne is unfortunately a very unhealthy town. This condition of things is produced by a variety of causes: First, it is situated upon the east coast and where the island is most narrow; hence we are more susceptible to all atmospheric changes than where there is a greater distance from shore to shore; from our easterly position we suffer severely from the bleak, biting east winds, especially in the spring of the year; and pulmonary diseases, bronchial and throat affections, are very prevalent. Second, the many chemical works in the neighborhood fill the air at times with gases injurious to health. And, lastly, by the direct steam-communication with European ports, and the great number of ships arriving from all parts of the world, we are liable to import epidemics such as the small-pox, which wrought great mischief here in 1871, and it is with great difficulty that the small-pox and other contagious diseases can be eradicated from the narrow, dirty streets to be found along the docks both at Newcastle and Shields. The rate of mortality in the large towns of England, which is published every two weeks, generally places Newcastle in anything but an enviable position, and, as in all crowded cities, the heaviest levies fall upon the poorer classes.

Notwithstanding all this, I question if larger, stronger men can be found in England than those to be seen at the various workshops on the Tyne. It is a fact that the champions of nearly all the athletic exercises of England hail from this district.

The mode of living among the working-classes is not what could be desired; their breakfasts consist of bread and butter with coffee; dinners of cold meat or meat-pies and bread and water; tea, of bread and butter with tea; and supper, of bread and butter, or bread and cheese, with coffee.

Many of them are very improvident and fond of drink; a feast of food and stimulants in the early part of the week, at the expense of an insufficient supply at the end, is very frequently the case among the sons of toil on the Tyne.

Excessive drinking has undoubtedly increased in this district since the short hours and advanced wages have prevailed; and in this opinion I am corroborated by the evidence of several intelligent, discerning workmen, who would have gladly given a different account of their own class had truth not stood in their way.

The new licensing act, I doubt not, will have a most beneficial effect upon people addicted to the excessive use of strong drink. This law provides that all public-houses shall be closed "on Sunday, Christmas Day, and Good Friday, during the whole day before the hour of half past 12 in the afternoon, and between the hours of half past 2 and 6 in the afternoon, and after the hour of 10 at night, and on all other days before the hour of six in the morning and after the hour of 11 at night."

"Any person who sells or exposes for sale, or opens or keeps open any premises for the sale of intoxicating liquors during the time that such premises are directed to be closed by or in pursuance of this section, or during such time as aforesaid allows any intoxicating liquors to be consumed on such premises, shall for the first offense be liable to a penalty not exceeding £10, and for any subsequent offense not exceeding £20."

The benefit that will accrue to the British workman from these prohibitory clauses cannot be overestimated; many of the quarters formerly lost by the engineer through tarrying at the public-house on his way to the shop in the morning will now be saved. After 11 he must turn his face homeward; the penalty of violating the law is too heavy to be trifled with by the keepers of drinking-saloons. More sleep will thus be afforded toward recuperating the strength of both mind and body. The time for indulging is shortened; may we not hope that the resolution of those prone to the immoderate use of the intoxicating beverage be strengthened, their ambition rekindled, and their new hopes, their higher aims, bring sunshine to many a hearth now all but lost in the gloom of despair.

The laboring-classes in this district, especially pitmen, are great fanciers of dogs; while others of more refined taste breed birds of various kinds in large numbers; grow flowers of rare beauty, and under great difficulties, on such a scale as to put the owners of magnificent conservatories to shame. A collier named Thomas Buckham first went

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down a coal-pit at the age of fourteen; he worked six years as a boy, and has been a hewer for forty years, during which time he has not averaged 20s. (\$1.81) of a weekly wage; yet this man has competed for prizes at flower-shows for thirty-six years, and has never contested without winning a prize. Last year, fifty prizes, out of fifty-four, were awarded to him at a flower-show held near Newcastle, and this year he carried away forty-nine out of the fifty-four.

A large proportion of the laboring-classes of this district are passionately fond of sports, particularly boat-racing. When a contest takes place, between celebrities, on the Tyne, especially if after working-hours, or on Saturday afternoon, numerous steamers, crowded with anxious spectators, follow the race; while the banks of the river are crowded by thousands of people who have assembled to witness the aquatic strife. Numerous matches for foot-racing, quoit-pitching, howling, dog-running, shooting, and even singing, come off nearly every week, where the competitors are from the ranks of labor.

The masses on the Tyne have a dialect peculiar to this district alone; its most characteristic feature consists of an inability to pronounce the "r" aright. The sound which they give to this consonant is a kind of combination of the "r" and the "eh" of the Welsh or German. A Scotch girl, engaged as a servant in Newcastle, on being asked how she got along with the language, said that she was enabled to pronounce like the natives by "swallowing the 'r's' and giving them a bit clow i' the middlo."

This peculiarity is but rarely met among the more educated portion of the inhabitants. A moderate proportion of the workmen and their families attend places of worship on Sunday, a great majority of whom are Wesleyans.

The people of Tyneside are gruff, outspoken, and impress the stranger as being uncivil; a long residence in their midst proves them to be equitable, generous, and warm-hearted.

EVAN R. JONES,
United States Consul.

MINERS WITH SCIENTIFIC TASTES.

The following notices of some miners in the Northumberland and Durham coal-fields, which have been furnished to the author, will be read with interest:

John Simms, West Cranleyton, son of an ingenious miner who died several years ago; his son John works in West Cranleyton colliery, and has worked there from boyhood; he is about forty years of age; works as a hewer of coal. He has made great progress in the study of the fossil and reptile remains of the north coal-districts, and has a very large and good collection. He also works with the microscope and prepares microscopical objects; his preparations of fish-remains are very good. He is interested in butterflies and moths, and his knowledge of local natural history is very creditable.

Joseph Taylor, a workingman, residing at West Cranleyton, is a relative of Mr. Simms by marriage, and his tastes and capacities very similar to those possessed by his brother-in-law. He has a good collection of lower coal-measure fossils; he also mounts objects for the microscope, and he and Mr. Simms both supplied Mr. West the slides for his work on coal-measure paleontology. Mr. Taylor is about forty years of age, and for several years has devoted his leisure hours to paleontology.

John Salt, Newsham colliery, about thirty-three years of age, has made a large collection of coal-measure fishes and labyrinthodont, and has found the largest and best specimens of labyrinthodont that have been found in any part of the world. His collection, gathered by his own hands, was unique. He also made microscopical sections, and he, and the other miners, Simms and Taylor, first possessed very excellent microscopes. They all had good libraries. Mr. Salt has removed to Staffordshire.

David Knight, who was killed by an accident in Dudley colliery, Northumberland, about five years ago, was a very ingenious working miner; he collected fossils, butterflies, &c., and constructed a microscope; ground his own lenses, and fitted up the instrument himself. He also invented a machine for grinding lenses for telescopes and microscopes. He contributed several articles on mathematics to local journals, and was an ingenious and industrious man.

THE CONDITION OF THE WORKING-CLASSES OF ENGLAND.

By J. S. STANLEY JAMES.

* * * * *

In the Old World it is not so very long since, indeed it is still true of many parts, "all were born to a fixed social position, and were mostly kept in it by law or interdicted from any means by which they could emerge from it." Sir Henry Maine says

"The movement of the progressive societies has hitherto been a movement from status to contract; that is, from a condition of life in which relations between individuals are determined by membership of families or tribes, or conquering or conquered races, toward a condition of things in which they are dependent upon contracts entered into by individuals." But although society has thus progressed in England, the condition of employer and employed cannot in all cases be fairly called a contract, for the latter is often entirely at the mercy of the former; and in this I must draw the distinction between skilled and unskilled labor, between the farm-laborers of the country and the artisans and mechanics of the town. The condition of the first is dependent upon the laws relating to population and food, and is also considerably affected by the present laws of England; the latter are mostly influenced by the laws of commercial and monetary economy of supply and demand. It will be best, perhaps, to divide the workers of England under several heads.*

I.—THE ENGLISH OPERATIVE.

Not unskilled laborers, yet hardly to be called mechanics, the operatives are a class who have sprung into existence during the present century. The agricultural laborer can perform all the ordinary operations about a farm by using the skill which, without any effort on his part, has gradually accumulated upon him from his boyhood. It has cost him nothing, and all his village companions have about as much of it as he has himself. It is so with laborers in towns; they partake of the stock of common knowledge as they do of light, air, or anything else which is acquired without labor or the equivalent of labor. The population of a mining district grows as it were into the knowledge of mining; in sea-ports into dock-porterage; and in textile-fabric districts into a knowledge of ordinary mill-work; these are the operatives. It is but one hundred and five years since Watt's first patent for the steam-engine was granted, and the application of steam to manufactures is of far more recent date, yet already it has spread all over the world. Many trades are now so subdivided by the use of machinery that the utmost degree of simplicity in manipulation is reached. In large manufactories men are but the feeders of the machine. To a certain extent the operative may, in comparison with the farm-laborer, be called a skilled workman, but by the subdivisions of trade and the use of machinery many mechanics are but masters of one branch of a trade, and being dependent upon the steam-engine are reduced to the status of the operative.

The most numerous body in England, next to the farm-laborers, the operatives are the most miserable. Crowded together in huge workshops, their labor is more unhealthy than that of an agriculturist. Their homes in the large cities are often a disgrace to civilization. If they obtain higher wages than the laborer, the increased cost of living in cities often counterbalances that apparent advantage, and they can save little from their wages. In any case of slackness of trade they suffer miserably. The moral condition of factory-operatives as they are in England—unfits them for the duties of domestic life when they marry. In America a girl works in a factory and her employment is considered more respectable than that of a domestic servant. In England it is the reverse; a "factory-girl" is a name of contempt, and domestic servants consider themselves far superior to such.

But operatives suffer from no evil which may not arise in the United States or in any large center in the world. Whatever discontent they may truly feel arises not from political but purely economic grounds. It is a question of supply and demand, and in every branch of labor in England the supply exceeds the demand. Every trade is relatively overstocked; like the trees of a too thickly planted forest, the workers suck the life from each other. The farm-laborers suffer, as I have shown, from a condition of things the result in a great measure of the laws in respect to the land; the other workers of England only from the evils inseparable from the laws regulating capital and labor. Pages might be written showing the miserable social condition of the operatives of England, but *cui bono*? During the last ten years, however, that condition has become greatly improved, and mainly by the exertions of the workers themselves. In many of the large towns, in Lancashire and Yorkshire, the men are joining together and building and working co-operative factories. The "Star" mill at Oldham, which with the machinery cost over half a million dollars, is owned and worked by the operatives.

II.—THE MINERS AND IRON-WORKERS OF ENGLAND.

It has been often said, and with much truth, that England's greatness has been built up by the wealth of her mineral resources; that without her coal and iron she would never have gained her proud position among nations. The natural advantages of Great Britain as a maritime country are great; her harbors and great rivers placed her in olden time far ahead of any other nation in that respect. But in later days, and especially since the introduction of steam-power into every branch of industry, the pre-eminence of

* The remarks of Mr. Stanley James on agricultural laborers appear on preceding pages.

coal and iron has been the cause of England's commercial prosperity. The coal-fields of England are the centers of the most dense populations. The greatest manufactures are fostered in the immediate neighborhood of her mineral wealth.

In the year 1872 nearly 400,000 males were employed in about 3,000 coal-mines, supporting it is calculated, one-eighteenth of the total population of Great Britain by coal-mining, and raising 123,386,758 tons of coal—more than half the coal mined in the world. The miner passes his time far away from the light of day and the pure air of heaven. He endures many perils; is in danger from fallings of earth; from waters, which at any moment may flood the mine and drown the workers; from choke-damp and fire-damp. The latter is a foe insidious and deadly, striking without a moment's warning. In some of the old workings in the Black country (the coal-district of Staffordshire) and South Wales, even the most careful precautions known to science and most copious ventilation are useless against this dread foe.

The carelessness of the men themselves conduces a great deal to such accidents. Although naked lights are never carried, the lamp in use being the safety one invented by Sir Humphrey Davy, although their lamps are handed to them locked before they go down the mine, yet, after an explosion, an open lamp lying by the body of some miner often tells the tale of folly. The light given by the lamp, screened as they are by wire-gauze, is very dim, and the men, reckless of their lives and those of their comrades, often pick the locks and work with the naked candles. In 1869, 1,116 lives and 96,777 tons of coal raised. It must be a strong inducement, indeed, to tempt men to a coal mine not only dangerous, but wearisome and disgusting. They work among eled degrees; in such the hours of labor are necessarily short. In the deepest coal-mine in England, at Rosebridge, in Lancashire, where the shaft has been sunk over 2,400 feet, the temperature of the earth is ninety-four degrees Fahrenheit.

English miners have always obtained good wages, and they are now earning upwards of £3 a week.

Side by side with the coal-mines of England there will always be found large iron-works. Coal and iron are often found in the same district, but when they are not it is more profitable to transport the iron-ore to the vicinity of the coal-fields than to take the coal to the iron-fields. In the making of iron there is not so much mechanical skill required as strength and power of endurance; machinery does the rest. Iron-workers, like miners, labor hard, ever exposed to great dangers, but win a good reward in the shape of wages. In their social habits I will treat the two as one class. They are rough, ignorant, much given to the British vice of indulgence in strong drink, and often brutal when in their cups. One cause of intemperance is the heavy burden of care and toil. To earn subsistence for themselves and their families they undergo a degree of labor exhausting to the body and injurious to health; in consequence, relief is sought in stimulants, and these men who have the blood of their Anglo-Saxon forefathers in them, renowned in history and song as heavy revellers, have not as yet learned to draw the line at moderation. Another cause of intemperance is the want of self-respect which the present state of society in England induces among the poor and laborious. Society has offered no inducements to the laboring classes to higher or more refined tastes; it has, in fact, said to these men, "You are beneath us; in our eyes but little better than brutes." So, still more degraded and robbed of a powerful protection against low tastes, namely, self-respect, what wonder that these men become brutes in their pleasures. The state of their homes, too, is not enticing, although they are much better lodged than agricultural laborers; still, considering the wages they earn, the houses they inhabit are most wretched ones, deficient in accommodations for comfort and decency. These men, therefore, find in the public house attractions superior to those offered by their homes; ignorant as they are, their pleasures are all sensual ones, and the larger part of their income is spent in meat and drinks.

Sufficient of strong drink is the miners' or iron workers' desideratum; when that passion is satisfied the love of sport comes uppermost, and in this, physical action and competition are most desired. The miner takes great delight in his own prowess. Too often it may be that he turns his strength upon his helpmate; but in many mining-districts the females, from working on the "pit-bank" at an early age, are a match for their lords. It may be imagined that the miners become a brutal, depraved set of men. Not altogether so. Hard-drinking, hard-fighting lot as they are, debarred from higher aims or tastes, they have yet in them the blood of heroes, and many noble deeds are done by them. Whenever there is an explosion of "fire-damp" there is seldom need to call for volunteers to descend the mine. The men are always ready and willing to go to the rescue of their fellows, although they well know that in fifty cases out of a hundred, the first succeeding party will share the same fate. I have myself seen many cases in which the men have sacrificed their own lives to help others.

The miners of Cornwall and of North Wales work under a different system and form a distinct class. They are employed on piecework, or, as they express it, "bargains." Although they do not now obtain the high wages given to the coal-miners, still, on the

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whole, they are perhaps more prosperous. Situated, too, as the copper-mines and slate-quarries are, in the open country, they obtain purer air and cheaper living; still with these, as with the majority of English workers, drunkenness is a great curse. I do not mean to stigmatize the whole working population as drunkards, but statistics show that far too large a proportion of their income is spent on strong drink. While on this subject I may quote the following from Professor Leone Levi's report on "Taxation and the Working-Classes of England:"

"Of the taxes affecting wealth and industry, the working-classes pay but a small amount. *Of the taxes on luxuries, however, the working-classes pay a much larger proportion.* Two-thirds of the duties on spirits, malt, and tobacco, as well as of the license-duties for the sale of the same, amount in all to £21,000,000, out of a total, including the revenue for wine, of £33,700,000; and when we come to the taxes upon necessities, two-thirds of the revenue on tea, the half of that on sugar, and a fair proportion of the taxes on fruit and other custom and excise duties, give a total of £4,250,000 out of a total of £7,950,000. Altogether, about £29,200,000 seem to be the proportion of the imperial taxation falling upon the working-classes, and £38,500,000 the proportion of the middle and higher classes. And it is important to notice, that while the latter pay 42 per cent. of their taxes out of duties on articles of consumption, the working-classes pay as much as 96 per cent. of theirs in this form. In addition to the imperial taxation, however, there are the local taxes, which amount in all to about £25,000,000, a fifth of which may fall on the working-classes, but which, deducting the amount excused, may leave only £4,250,000 as really paid by them. In the aggregate we may take it, that out of £30,000,000 of taxes, imperial and local, £30,000,000 are paid by the working-classes, and £60,000,000 by the middle and higher classes; and for every £1 of taxes the proportion paid by each is about as follows:

Falling on the working-classes.			Falling on the middle and higher classes.		
Spirits	£0	7 5	Local taxes, land, houses	£0	7 10
Malt	0	3 0	Stamps	0	3 3
Tobacco	0	3 0	Income-tax	0	3 0
Local taxes, houses, &c	0	2 9	Spirits	0	1 10
Tea	0	1 5	Malt	0	0 9
Sugar	0	1 0	Tobacco	0	0 9
Licenses	0	0 9	Sugar and tea	0	1 0
Other taxes	0	0 8	Wine	0	0 7
			Others	0	1 0
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"To appreciate properly, however, the real burden of taxation, we must take into account the number and income of the working classes. The relation to their number is easy to calculate, since £30,000,000 of taxation among 21,000,000 of persons gives an average of 28s. 6d. per head, while £60,000,000 among 11,000,000 of the middle and higher classes gives an average of 109s. per head.

The proportion of taxation to expenditure differs enormously with different families and individuals, the provident and the improvident, the temperate and the intemperate, the town laborer and the agricultural laborer paying very different portions of taxes. But it is important to bear in mind that very few of our workmen save much out of their weekly earnings. Assuming an expenditure of £400,000,000, the proportion expended on each article by the working-classes may be approximately stated as follows:

	Per cent.	Amount.
Bread	15	£60,000,000
Flour	5	20,000,000
Meat	7½	30,000,000
Butter and cheese	5	20,000,000
Sugar, tea, and coffee	6	24,000,000
Other articles of food	6½	26,000,000
Drink	12	48,000,000
Tobacco	3	12,000,000
Rent and taxes	9	36,000,000
Coal and gas	6	24,000,000
Clothing	13	52,000,000
Other expenses; education, church or chapel, amusements, doctors' bills, clubs, furniture, &c.	12	48,000,000
Total	100	400,000,000

Twelve per cent. spent on drink is a large proportion; but from my knowledge of the working-classes of England, I am sure that Professor Levi, if anything, rather underestimates that item of their expenditure.

III.—MECHANICS AND SKILLED TRADESMEN.

All over the world the mechanic is economically in a different position from the laborer, the miner, or the "factory-hand." He has been provided with a trade. Either a premium has been paid for teaching him, or he has, as an apprentice, foregone part of his earnings during the period of pupilage. He has bought something which he is bound to sell again; his acquired skill being his stock in trade. In England the mechanic, who works both by his hands and his brain, doing that which machinery does not yet do, is intellectually and morally the superior of the other members of the working class. As already indicated, the introduction of machinery to the level of output through the subdivisions of manufacture, reduced many mechanics to the level of operatives. They do not require that skill of hand and eye which an apprenticeship gives. But there are still many trades in which this special skill is required, and in which the steam-engine will always be entirely subordinate to that human skill.

The English mechanic is the superior of the other workers; but in education and social standing, how inferior to the American! His intelligence is mostly confined to his trade; apprenticed at an early age, his only education has been that of the workshop. Outside his trade he is too often ignorant of everything. A small proportion of mechanics may yearly become masters; now and then they become wealthy and enter the ranks of the aristocracy or gentry. Then this ignorance of which I speak shows itself so plainly, and makes the *nouveaux riches* of England notorious throughout the world. In this again, as always, let it be understood that I speak generally. I have seen a Manchester mechanic read Newton's "Principia" in the original. I know a London mechanic well read in Latin and Greek, and who is learning Hebrew in order that he may study the Scriptures in that tongue. But the general ignorance of the workers of England arises from there not having been, until the last two years, any system of national education. The English mechanics I believe to be unsurpassed in the world, but owing to that want of education and the early age at which they are apprenticed, they are, outside their trades, far inferior to the American.

English mechanics do not receive such high wages as miners or iron-workers. Still their work being more regular and there being less risk to life, they are certainly materially better off than any other class of English workers. It would swell this paper too great a length to go through all the branches of English trades and compare the wages given with those in America. As a rule, however, I find that wages of mechanics in the Eastern States and large cities generally are 100 per cent. higher than in England, and the cost of living does not increase proportionately.*

This is but a slight sketch of the working-classes of England, but it is drawn from the life, and there is no fact or inference contained therein which is not within my own knowledge. What is the real cause of the poverty and hardships the workers of England endure, and what can be done to alleviate their lot? Socialists attribute this poverty to the constitution of society; political reformers to the form of government; theologians, perchance, as a punishment of original sin. But the real cause is not on the surface. The farm-laborer suffers certainly from a condition of things entailed upon him by the land-laws of England. He shares with the other workers in the want of a good national system of education, and in the hard barriers of class-distinction which, keeping the working man in a subservient position as one of the "lower order," prevents him from having that personal self-respect which is such a help and safeguard through life. But above all these are the laws of nature and political economy. The population of England has increased faster than its production of food; her laborers faster than her capital. England now shows larger profits, higher wages, more soaring business, and greater luxury among the employers of labor; and yet in spite of higher wages the working-classes can only reach a certain low level of comfort. The competition existing in an overstocked labor-market keeps wages at a certain limit, and if living has risen in proportion. But supply and demand rules everything, and the trades unions cannot overcome economic laws. My theory may be objected to by England. Where is the outlet? But a few miles of water and the United States, the true "Greater Britain," is reached. America opens her arms to all the world, but should especially welcome those of her kindred, the race of the men who landed on Plymouth Rock and founded the plantations of Virginia, Maryland, and Pennsylvania.

LONDON, January 31, 1874.

J. S. STANLEY JAMES.

* For example, a mechanic in London will receive 30s. a week, (I take a high average.) If a single man he will have to pay at least 15s., one-half his income, for his board. In America the same mechanic will receive \$15 a week, and will pay for his board \$5, one-third of his income, and live twice as well as his English counterpart. Throughout all the handicraft trades I find this difference between wages and living in England and America.

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LORD ROSEBERY ON IMPROVING THE CONDITION OF THE WORKING-CLASSES.

At a meeting of the Social Science Congress, held at Glasgow, in October, 1874, the president, Lord Rosebery, made an extended address in which he directed his remarks almost exclusively to an exposition of what he considered the best means of improving the condition of the working-classes. Foremost among these means he places education. Education and enlightenment, he says, are required to keep pace with the material prosperity of the country. But the education of experience is also valuable—as much so as superior culture. It is requisite that the working-classes should understand the injurious effects of strikes and collisions with their employers, and that employers should recognize the claims of their workmen to their kindness and forbearance. He favors compulsory education, also, as a means of lessening habits of drunkenness. The statistics of national thirst are not very attractive topics so long as revenue considerations are suffered to obscure every other, and it is unfortunately true that among a large section of the population increased prosperity seems to mean increased drink, or, as he sarcastically puts it, “the outward signs of our civilization are an extraordinary accumulation of wealth and an extraordinary consumption of alcohol.” But an increase of culture by no means implies an increase of sobriety.

He reviews the physical questions which so materially concern the welfare of the working-classes—their dwellings, their hours of labor in factories, especially as regards women and children, and the good aspects of union and co-operation. He says:

It is true that unions among work-people, with a view to the artificial raising of their wages, may hamper production, and harshly control freedom of action. On the other hand, they have often been of real service by promoting intelligent communication between work-people in different parts of the country, and in ascertaining the due recompense of labor. Few impartial persons will be disposed to deny that, though it has caused bitter feelings on both sides, as all such revolutions must, the great social movement which has recently united the English peasantry is likely to diffuse enlightenment, to encourage independence, and to place wages on a more clear and rational footing. The natural adjustment of the right proportion between the profits of capital and the wages of labor is a tolerably sure, it may be, but certainly a very slow process, and union among workmen has had a beneficial effect in hastening it. Strikes, which cause so much distress, and which so greatly hinder production, we must lament. But so long as capital and labor continue distinct and opposing interests, is it likely that strikes will be rare? Co-operation, indeed, is the obvious remedy for all these troubles; but co-operation can hardly, so far, be considered a success in this country. It appears to require a more general intelligence and a greater accumulation of capital among the working-classes than exists at present.

There is so much to be done; our civilization is so little removed from barbarism. At this moment there is a daily column in the newspapers devoted to recording brutal outrages, where human beings have behaved like wild beasts. Every policeman in London is assaulted on an average about once in two years. Within the memory of living men the workers at the salt-pans of Joppa, only a mile or two from Edinburgh, were serfs—*adscripti gleba*—and sold along with the lands on which they dwelt. Neither they nor their children could move from the spot, or could alter their calling. The late lord provost of Edinburgh, who bears the honored name of Chambers, records his having talked to such men. What a hell, too, was described to Lord Ashley's commission of 1842. In the mines were women and children employed as beasts, dragging trucks on all fours, pursuing in fetid tunnels the degraded tasks which no mere animal could be found to undertake. We know that equal horrors existed in the brick-fields two or three years ago, when there were 30,000 children employed, looking like moving masses of the clay they bore, whose ages varied from three and a half years to seventeen, and when an average case was thus described: “I had a child weighed very recently, and though he was somewhat over eight years old, he weighed but 52½ pounds, and was employed carrying 43 pounds of clay on his head an average distance of fifteen miles daily, and worked seventy-three hours a week. This is only an average

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case of what many poor children are doing in England at the present time, and we need not wonder at their stunted and haggard appearance, when we take into account the tender age at which they are sent to their Egyptian tasks." Then again: "All goodness and purity seems to become stamped out of these people, and were I to relate," says a witness, who worked himself in the brick-fields, "what could be related, the whole country would become sickened and horrified."

IRELAND.

Letter from Mr. Consul King on the condition of the working-people of the Dublin consular district.

CONSULATE OF THE UNITED STATES,
Dublin, November 24, 1873.

DEAR SIR:

First, as to the condition of the working-people in this district. In all or nearly all branches of labor wages are greatly higher than they formerly were, and I do not think that the cost of living has advanced proportionately. Bread is slightly dearer, but meat, sugar, and tea, and even oatmeal, can be had for nearly the same as before, but advance in wages. I have never seen people of the laboring class, or perhaps I should say of the manual-laboring class, so badly clothed as here. Even in cases where necessity does not compel such carelessness, ragged or tattered patched garments are not uncommon, yet clothes are really quite cheap here, even when compared with prices current ten years ago on the European continent.

House-rent is low, and I think has not advanced greatly for some time, but I think the working-people pay more for rents than they formerly did. Dublin is full of fine old houses, formerly the abodes of the courtly or wealthy, but now abandoned by fashion. Until recently, and even still to a certain degree, the better portion of these houses were chiefly occupied by clerks or people of that respectable class with low fixed incomes. Within the past few years, great numbers of small houses have been built on all the outskirts of the city, and have been occupied chiefly by persons of this class, and the apartments formerly used by them have been taken possession of by the manual-laboring class in addition to what they had before, thus greatly improving the condition of their lodgings. At least this is my opinion, founded partly on isolated instances which have come under my own observation, but chiefly on the fact that large numbers of new small houses have been built in the city while the population has not increased. I do not think that landlords generally keep their houses in as good condition as they ought, and I have been told that the reason for this is the defective nature of very many of the titles and consequent danger to holders or improvers of city property. The Irish land-act has never been extended to the cities, which I consider it would greatly benefit, as it seems to have done the country districts.

Secondly, in regard to drunkenness: On this I was unable to give an opinion of any value, and, consequently, appealed to that eminent Irish statistician, Dr. Neilson Hancock, who kindly gave me the benefit of his observations. In his opinion, Irish laborers, when compared with English or Scotch, may be called industrious. In my own opinion an English laborer will get drunk at night and go to work as usual next day, while the Irishman will not work the day after a debauch. According to Doctor Hancock's statistics drunkenness throughout Ireland is less prevalent than it was ten years ago; and he thinks there is not more of it here than in England, though in Ireland the number of arrests is greater, which fact is accounted for, the doctor thinks, by the facts that there are more policemen here, and that they are under government control, while the English police are local, and, consequently, are more wary when making arrests of tax-payers.

I have also received your letter of the 31st ultimo, and, in compliance with your request, have been to see Mr. Pim. I have also again tried to secure some statistics from Mr. Guinness, and have, in both cases, met with courteous promises, but, as yet, nothing has resulted.

WILSON KING,
United States Consul.

DR. EDWARD YOUNG,
Chief of the Bureau of Statistics.

ADVANCE OF TEMPERANCE PRINCIPLES.

On this subject Mr. Consul Webster, under date of March 26, 1873, writes as follows:

The cause of temperance, I am quite sure, advancing. The results of the earlier closing of public houses are seen to be good. "The Good Templars" organization is growing

very rapidly, and is drawing in many who have been hard drinkers. And, moreover, we are coming to that stage when the better sort of drinkers feel called upon to excuse themselves by saying that their physician advises it, &c.

Sobriety is to be commended and its absence deplored among all classes, especially among railroad employes, to whom the lives of the travelling public are intrusted. But it may be doubted whether much benefit will result from the following instance of—

ENFORCED TEMPERANCE OF RAILROAD EMPLOYÉS.

It is stated that Superintendent Angell, of the European and North American Railway, has sent to all the employes of the road a form of pledge for them to sign, whereby they agree to abstain from using intoxicating liquors as a beverage, and the use of profane or ungentlemanly language. Accompanying the blank pledge is a circular informing the employes that this step is taken in consequence of frequent complaints at the office, and requesting those declining to sign to give notice of their intentions, that their places may be filled by others.

A SANITARY STRIKE.

A strike with a novel object is reported as having occurred at the Trenton collieries, Durham, the miners having struck for water and decency. They allege that their sufferings, owing to a want of water both for drinking and for domestic purposes, have been very considerable, and that their complaints receive no attention. Acts of Parliament and orders of the local government board are stated to be, as far as they are concerned, mere dead letters; and the men, who with their families number about 3,000 persons, refuse to do any more work until they are provided with a proper water-supply, and with decent dwelling accommodation. The neglect which has characterized some of the Durham colliery districts is but too well known, and although in some isolated localities excellent dwelling accommodations and every necessary sanitary requirement are provided for the colliers, there are many places in which such a thing as a closet is unknown, and where none but the filthiest water can be procured unless it is sought at a considerable distance. This strike at least has our sympathy, and we trust that it will teach some of the wealthy colliery-owners a lesson in sanitary administration.—*The Sanitary Record*.

THRIFT AMONG THE WORKING CLASSES IN THE TEXTILE DISTRICTS.

[From the report of the Inspector of Factories, 1874.]

Want of thrift has hitherto been considered one of the great faults of the operative class, and therefore one hails with pleasure any institution which tends to foster among them a more provident and careful character.

The establishment of penny-banks as connected with schools and churches in the poorer parts of some of our manufacturing districts, is doing much to promote saving habits among our working classes, and I am glad to find, after making careful inquiry, that such institutions have largely increased of late years, and are much patronized by those for whose good they are established.

I annex a deposit-book of one of these institutions situated in a crowded factory district of Manchester; and also a notice which has been circulated in the factories and workshops of the neighborhood. The book gives the rules pertaining to the management of the institution. I am informed that during the past year the number of depositors in this bank was over 400.

I should like to see such institutions established in connection with all our large factories and workshops, especially where married women are employed. And I think the following remarks on one I have lately come across will show the good they may produce:

Some time since, on going through one of our largest cotton-mills in Salford, I observed by a notice hung on the walls that a penny savings-bank in connection with the works had been established, where sums of from one penny to £10 are received from the work-people, and interest at the rate of 5 per cent. given on sums over 10s., the firm having consented to guarantee the amounts invested. The notice went on to say, "those of our hands that have not begun to save are reminded that although trade is rather good at present it may not always remain so, and they are earnestly requested to avail themselves of the opportunity to provide for less prosperous times."

On making inquiry, I found that this call had been fairly responded to by the hands employed. This mill gives employment to upward of 800 hands, of whom above 500 are females.

The sums deposited weekly vary from 6d. to 5s. This institution, besides promoting saving habits among the work-people generally, is a great boon to the married women, and is taken much advantage of by them. It acts to them as a kind of lying-in club, where, many months before the birth of her infant, the mother can make a little provision for the event by laying aside a small sum weekly unknown to her husband, and without his being able to meddle with it. This enables her not only to meet the time with more comfort around her, but also does away with the necessity of her returning to her work in the factory so soon after her confinement; thus saving her own health and giving a better chance to the infant of surviving future hardships.

The deposits in this factory-bank were in 1873, £70 4s. 10d.; withdrawals, £58 4s. 1d.; number of depositors, 63; accounts open 31st December, 23.

HOUSES FOR THE POOR.

[From the New York Times, February 23, 1875.]

An interesting debate occurred in the English House of Commons on February 8 upon a subject which is of deep interest to all civilized countries—the improvement of the dwellings of the working classes. Mr. Cross, in behalf of the government, presented a bill which would go far toward remedying the evils resulting from overcrowding in English large towns and cities. In his able speech advocating the bill, he indirectly showed how much has already been accomplished in this great reform. The "Peabody fund" controls a capital of \$3,000,000, entirely devoted to building similar objects; other associations have also accomplished much, so that thirty thousand of the poor of London are now housed in well-ventilated, healthy, and scientifically arranged buildings. The remarkable sanitary influence of these "model houses" is shown by the fact that the death-rate in the lowest districts of Manchester, Liverpool, and London will run up to sixty or seventy per thousand, and in one instance has attained the fearful maximum of seven hundred per thousand, while the death-rate in the "model lodging-houses" is never over fifteen per thousand. The effect of these buildings in preserving the lives of young children is equally remarkable. Thus, in Liverpool, the annual rate of mortality of children under one year amounts to thirty in one hundred living, while in the model houses it seldom amounts to eighteen. In one district of Manchester, out of a hundred deaths of persons of all ages, the deaths of children under five years reached the extraordinary rate of 49.7, or nearly one half. Yet in these improved buildings they seldom reach the ratio of twenty.

Various cities of England have already had special acts passed to enable them to improve the poor-quarters. Thus, in Liverpool, under these acts, the corporation has demolished 503 houses, and improved 392 "courts," at an expense of \$435,000. Edinburgh has also spent a large sum, and cleaned out some 1,400 houses. Many nests of crime were broken up, and the police reported a falling off of the number of serious offenses from 670 to 570 in one year. At Glasgow about \$9,000,000 was expended, but has been improved. The experience of all these cities has been that the breaking up of all these fever-nests and dens of crime produced no hardship to the poor people who were turned out. They always found quarters elsewhere, and many were induced to transfer themselves to the country. It often happened, too, that where improved buildings were erected more people were accommodated over a given space of ground, but under much better sanitary conditions, so that the same district could accommodate as many poor as before the improvements, and yet save forty or fifty lives among every thousand of the inhabitants.

The new law which is proposed in the English Parliament allows the corporations of the large cities to break up poor-quarters, open streets, demolish houses which have become infected with fever, and make various improvements which have sanitary objects. The secretary of state himself will have the power of urging the "order" necessary through the house of commons, so as to save the town councils much expense. The cost of the improvements will, of course, be laid upon the tax-payers. It is not proposed, however, that the town councils should at once build "model lodging-houses," but that they should endeavor to entice the floating capital of the country to investments in these improvements. In case, however, the land is left to run to waste, the local authority has the power to build, in special cases, with the consent of the secretary of state.

HOUSES FOR THE WORKING-CLASSES.

[From a report on the sanitary condition of the city of Edinburgh.]

The condition of the poor and their miserable dwellings also engaged the attention of the charitable in Edinburgh, and the movement which originated in London, for erecting suitable houses for the working-classes, extended to this city. In 1851, the first block of houses was built, and named Ashley Buildings, after the nobleman who

had taken such a prominent part in the operations of the metropolitan association. No better site could have been obtained for the structure in question. It was placed in the town district, in which overcrowding prevails to a great extent, and on all sides it was surrounded by decaying houses, tenanted by the poor. It not only afforded to the industrious workman a greatly-improved habitation, but from its situation formed an example to surrounding proprietors and tenants of the manner in which such houses should be built and kept in a permanent state of cleanliness. To secure a site old property had to be removed, and thus, while benefiting the working-classes, the association directly ameliorated the condition of the old town by the erection of houses in its midst built according to the most approved sanitary plans.

A WORKMAN'S TOWN.

[From the London Times of August 5, 1872.]

Lord Shaftesbury recently laid the first stone upon an estate at Wandsworth, called the Shaftesbury Park Estate, which has been acquired by the Artisans, Laborers and General Dwellings' Company, (limited,) and is to be laid out as a workman's city, in 1,200 dwellings. The company was formed in 1867, in consequence of the destruction of houses by railroads and other improvements, for the purpose of enabling workmen to erect dwellings combining fitness and economy with the latest sanitary improvements, and to become themselves the owners of these dwellings in the course of a stated number of years by the payment of a small additional rent. On every estate purchased by the company a suitable space will be reserved as a recreation-ground, a co-operative store will be built for the especial benefit of the tenants, and *public houses will be absolutely forbidden.*

The Shaftesbury Park Estate contains about forty acres, and is situated between the Wandsworth road and the Southwestern Railway, and about half way between the Wandsworth road and the Clapham Junction Stations; and a new station on the London, Chatham and Dover Railway forms part of the architect's design for the future buildings, so as to afford to the inhabitants of the projected "city" all necessary facilities for going to and returning from their labor. The houses are to be thoroughly drained, constructed on sound principles, and with good materials, and well supplied with water. Ample school accommodations will be provided, and a hall for lectures or public meetings will be built. The houses are to be of three kinds, for the accommodation not only of artisans, but also of the "clerk-class;" and each house is to form a distinct and separate tenancy, fitted with every sanitary and domestic convenience.

At the appointed time a large concourse of people had assembled to witness the ceremony of laying the first or "memorial" stone. Lord Shaftesbury arrived punctually at the time appointed, and Mr. Walton, the chairman of the company, opened the proceedings by some introductory remarks, in the course of which he paid a warm tribute to Lord Shaftesbury's consistent endeavors to elevate the working-classes in the scale of civilization and humanity. His lordship then took the trowel and mallet, and laid the stone with the skill and self-possession of a finished workman. Having pronounced it truly laid, his lordship then addressed the assembly. He said:

"MY GOOD FRIENDS: Having laid the first stone of this noble experiment, an experiment which seems to me deserving of the most unqualified success, I cannot separate from you without a few words of thankfulness and congratulation that we have met to-day for such a worthy purpose. We have founded this day a workmen's city, and we have founded it upon the very best principles. We have founded it upon the great principle of self-help, and upon the great principle of independence. By independence, I mean without any other assistance than that which every man has a right to receive from his fellow-man, sympathy and kind aid, and that is what every man, either great or small, stands in need of from another. You have founded the workmen's city upon your own efforts, and by your own contributions, and for the great and wise purpose of advancing your social position and bodily health, as well as your intellect and general prosperity. And most heartily do I say for myself, and I also say it in the names of hundreds and thousands of your fellow-men, that the blessing of Almighty God will rest upon the good work which you have inaugurated to-day. I like the principles you have laid down for your guidance. *You have shown your wisdom in a moral point of view by excluding public houses and the tap-room; and you have done with them as the people did of old by the lepers, you have put them outside the camp.* You have, too, founded the buildings with a due regard to the necessary arrangements. There are schools for the children, and will also be a library and reading-room for yourselves, and a club-room, where you will have the advantage of indulging in beneficial amusements. I hope, however, you will not forget the women, who are by far the best part of you, let me tell you. In those intellectual amusements take care that your good wives and daughters are not excluded, for you will find there is no social progress without the aid of the female sex. If the woman floats, she floats like a cork, and drags the man after her. I am glad, then, to say that you have inaugurated this workmen's city upon a sound and wise basis, and also that every man shall have his house to himself, so as

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to fulfil the national saying that an Englishman's house should be his castle, and to maintain the great principle that the working-man should be the master of his house, and the happy head of a moral and industrious family. I would urge you most sincerely, as long as you have breath, to hold fast to the great social family relations of life. That will be the first step in the prosperity of your city, and it is the grand security of empires. I am delighted, too, to find that you have established a recreation-ground in the center of your city for the healthy enjoyment of your children; but I would strongly urge you not to devote this space to flower-beds and gravel-walks, but to leave it free for cricket, for foot-ball, and for all those manly and exhilarating games by which the healthy development of the body may be promoted and secured. The schools which will be established I hope will be turned to good account, and thus save your children from the temptation of the pot-house and 'penny-gaff.' More mischief is done in London by children frequenting such places than many people are aware of. You cannot do better than look to your children, and see them properly educated, because in early life lasting impressions are made. A child eight years of age will retain early impressions, which will never, while life lasts, be wholly effaced. A good, tender, pious mother will make impressions on her child which may for a time leave it in manhood, but which will sooner or later return." His lordship then alluded to the impressions created by the culture of flowers and window-gardening, and then passed on to picture the wretched and ill-ventilated homes of some of those who were compelled to dwell in the midst of the metropolis. He said: "Imagine a young man, about twenty years of age, in the prime of life, coming up from the country to seek work in London. He may obtain, perhaps, as much as 35s. per week. As a matter of necessity he takes, as it were, the first place he can get. The place is ill-drained and badly ventilated. He lives, perhaps, over a pestilential stream, and in a few months he is numbered with the dead, and his wife and family come upon the parish for assistance. There is nothing so economical as humanity. Whatever it may cost at the outset, good air, good water, and no overcrowding in close, noisome rooms, will be found the most economical and best means of developing the physical and moral energies which God has given to you. The domiciliary condition of the people involves health, comfort, and happiness. It involves also contentment, and people who are contented always give a government less trouble than those who are not. When men are contented they become excessively reasonable, and employer and employed find that their interests are identical. They must hold together, and by united action give force to progress. I should like, then, to see, from the Queen upon the throne to the lowest in the land, one feeling of united sympathy of action, and one and all give 'a long pull, a strong pull, and a pull altogether.' I can only say that I have been delighted beyond measure at what I have seen to-day. For more than thirty years I have been engaged in advocating improvement in the domiciliary condition of the people, but it is not by charitable means that the work can be effected. It must be done by the exertion of your own hearts and hands. You must say, 'We are Christians, and will live like men.' I trust that this will be the commencement of a great work, destined for the advancement of the social position of the people." In conclusion, his lordship said he felt an honor had been conferred upon him by being invited to attend that highly-interesting gathering. He said that a library was to be established in connection with the school; and, as a memorial of the day, he hoped the committee would allow him to be the donor of the first book. The book he should give would be 'The Homes without Hands,' a wonderfully interesting account of the way in which creatures not provided with hands were enabled, by the instincts which God had given them, to provide themselves with safe and healthy habitations. He selected it not only for the sake of the information to be derived from it, but also for the sake of the reflections that it was calculated to suggest. He hoped when the city on which they were then engaged was completed, when every man was sitting under his own vine and his own fig-tree, enjoying the blessings which God had given him, that their thoughts would be called to another place, in which he trusted he should some day meet them—to a home without hands, eternal in the heavens."

BENEFICENT MANUFACTURERS.

In the preceding part of this chapter attention was called to the condition of the tenements occupied by a large portion of the laboring-classes, and the opinion was expressed that the drinking habits so common among them were aggravated by the want of comfortable homes. It was alleged, at least by implication, that upon mill and factory owners rested a considerable share of the responsibility for the intemperance and degradation of the working-classes in manufacturing towns. In the early part of this investigation the author discovered the chief

cause of this deplorable condition, and suggested a remedy to some of the proprietors of large industrial establishments. On reaching the West Riding of Yorkshire, especially the town of Bradford, the gratifying fact was ascertained that the benevolence of some of the wealthy and large-hearted mill-owners had already been directed into that channel. The most noteworthy instance was that of Sir Titus Salt, whose alpaca-works at Saltaire, as a first-class industrial establishment, deserves especial mention, but whose beneficent and successful enterprise for the welfare of his work-people entitles him to a place in the very front rank of philanthropists. In well-directed efforts for the promotion of the best interests of laborers "many have done wisely," but in practical benevolence "he has excelled them all." It is eminently proper, therefore, that, in a chapter on the condition of the working-classes of Great Britain, special mention should be made of—

SALTAIRE AND ITS FOUNDER.

It has already been intimated that no account of the worsted-trade of Bradford would be complete without a notice of Sir Titus Salt, who, if not the first to engage in the production of worsted goods, was the first to manufacture the wool from the alpaca sheep. This beginning, in 1836, proved so successful, that in 1852 the importation of this wool had reached 2,186,480 pounds, and the price consequently advanced from 10*d.* per pound in 1836 to 2*s.* 6*d.* in 1852. There were in Bradford and its suburbs, in the year 1850, 194 mills.

Mr. Salt might have retired from business and enjoyed his well-earned wealth, but he chose to go on, not only to help his large family, but also to *improve the condition of the factory operatives*. How successfully this determination was carried out, the following statement, condensed from an extended account by a local writer, will prove:

Bradford, with its still-increasing manufactures, was becoming overcrowded, dirty, and smoky; its streams and canal were every year becoming more and more sinks of filth and pollution, and hot-beds of foul diseases, and Mr. Salt wisely determined to do no party to its further increase. Seeing a better spot on the banks of the river Aire, and purchasing a tract of land there, he at once began to erect such a palace of industry as England had never seen, with dwellings for the work-people contiguous. In 1853 these works were opened by a banquet of unusual magnificence, attended not only by the lord-lieutenant, members of Parliament, magistrates, mayors, and other civic dignitaries, but by the work-people of Mr. Salt, who, to the number of 2,500, marched in procession from his mills to the railway-station at Bradford, and were conveyed by a special train to the works.

The mills, warehouses and sheds, dye-houses, and gas-works at Saltaire occupy an area of 9½ acres. The principal building, six stories high, distinguished in many respects for architectural elegance above all other works of the kind, is built of light-colored stone in the Italian style of architecture, and is computed to cover over 9 acres, including the warehouses, stables, and dining-hall, while the floors in the several buildings cover an extent of 11½ acres, or 55,000 yards. The walls of the building are of extraordinary thickness, and, in truth, more resemble the castles of ancient times than a building for the exclusive purposes of peaceful industry. The south front of the mill—545 feet in length and 72 feet above the level of the falls—has a very commanding and beautiful appearance. The floors are based upon arches of hollow brick, supported by long rows of highly ornamented cast-iron columns and massive cast-iron beams. The roof is of iron, and the windows are large and formed of immense squares of plate-glass, a fact which alone proves that everything has been done to render the building attractive and comfortable for those employed.

The warehouses, which run northward from the center of the great front line and terminate at the canal, are 330 feet in length. The ground slopes downward to the canal, so that that end of the warehouses rises 90 feet from the level of the water, or 18 feet higher than the principal front.

These magnificent sheds are roofed with sloping skylights, through which the light is more directly and uniformly diffused than by side windows. In the western side are also rooms for sorting, washing, and drying wools, and for reeling and packing. Be-

neath it is an enormous tank or reservoir, and filter, with 500,000 gallons of water, into which, through a number of conduits, the rain is carried, and, when filtered, applied to the process of the manufacture.

On the top of the warehouses a large iron tank is placed, capable of holding 70,000 gallons of water, drawn by engine from the river, available in case of fire; though, in truth, as the whole of the buildings are fire-proof and roofed with iron, we trust that, for the latter purpose, it will never be required.

The cottages are built of stone, lined with brick-work, and contain a parlor or living-room, a kitchen, a pantry and cellar, and three bed-rooms. Some of the houses are designed for larger families and others for boarding-houses. Each house has a separate yard, a privy, a coal-place, and ash-pit. These houses are fitted up with all the modern appliances of comfort, are well ventilated, and have small plots of ground for a garden in front, with borders of plants and flower-beds.

The baths and wash-houses contain plunge-baths, warm baths, and Turkish and douche baths, washing, rinsing, and steam tubs, drying closets, hydro-extractors, man-gles, and other requisites. The charges made are little more than nominal.

A literary and philosophical institution, with a museum, lecture-hall, and classrooms, is designed.

The almshouses consist of forty-five beautiful buildings, for the accommodation of the aged and infirm of Saltaire, and are capable of holding sixty persons. These almshouses, resembling Italian villas, are supplied with everything required by the poor for whom they are intended: ovens, boilers, and pantries. Generally the rooms are on the ground-floor, but some of them have chambers and bed-rooms above. In front are asphalt-walks and green parterres and flower-beds, while underneath the windows are open spaces, where the honeysuckle, the rose, and the sweetbrier may be trained and cultivated.

The occupants of the almshouses are men or women, single or married, of good character, destitute of means of support, and incapacitated by reason of age or infirmity so as to be unable to earn their living. Each married occupant shall receive a weekly allowance of ten shillings, and each single person seven shillings and sixpence, in addition to rooms free of rent and taxes, and this allowance to continue after the death of the founder. If any inmate shall marry, or willfully disobey any of the rules of the institution, or be guilty of insobriety or immoral conduct, or, by failing to improve in condition, shall have ceased to be a proper beneficiary, the founder or trustees will displace or remove such person.

The social and moral condition of the inhabitants of Saltaire is superior. There are, certainly, some improvident families, who never better their condition because they never attempt it. Those who are industrious have their reward in well-furnished and well-appointed homes, and several have, with their weekly earnings, bought or built cottages.

The Saltaire factory-schools, erected by order of Sir Titus, were opened in 1868. Whatever art could invent or money buy has been brought together here, and every possible aid has been employed to promote education. The school-rooms are lofty, well lighted and ventilated, and the building heated throughout with hot water. The boys' play-ground is provided with gymnastic appliances.

In the year 1858-'59 Sir Titus caused a beautiful Congregational church to be erected at his sole expense, which was opened in April, 1859. A neat and chaste little chapel (Wesleyan) has also been built and fitted up with exquisite taste for the use of the inmates of the almshouses.

An infirmary has also been built, where medicine is dispensed, and where any accidents which may happen at the works are attended to by a competent surgeon.

The Saltaire park, covering fourteen acres, contains sufficient room and all needful appliances for recreation; and in its arrangement the tastes of all in the way of open-air amusements have been carefully consulted, not forgetting provision for boating and for the national game, cricket. Among the regulations made for the government of the park are the following: Intoxicated persons not allowed to remain; children under the age of eight years not admitted except in care of an adult; dogs not admitted unless led; no music, singing, preaching, lecture, or public discussion, and no meeting for the purpose of making any religious or political demonstration, and no allowed without the written sanction of the firm; stone-throwing, disorderly and insulting acts are strictly prohibited; no wine, beer, spirits, or intoxicating drinks are to be consumed in the park; smoking is not allowed in the alcoves, nor spitting on the paths; the play-grounds are not to be used on Sundays.

CROSSLEY ORPHAN HOME AND SCHOOL, HALIFAX, YORKSHIRE.

This orphan asylum, founded by the three brothers, John, Joseph, and Sir Francis Crossley, Bart., M. P., was opened for the reception of children on the 29th of June, 1864, on which day six boys were admitted. The admissions in the early years of the institution were as follows: In 1864, 8; in 1865, 59; in 1866, 67; in 1867, 62; in 1868, 10; first half of 1869, 19; in all, 225 children, consisting of 150 boys and 75 girls, of whom 50 were motherless as well as fatherless. The numbers in the Home on the 30th of June, 1869, were 188; of whom 122 were boys and 66 girls.

The founders having given a preference to orphans born in the county of York, 128 Yorkshire children have already been admitted, of whom 50 are natives of the parish of Halifax.

In the election of children the founders have also given a preference to those belonging to families whose temporal circumstances have been reduced; and it will, doubtless, be interesting to know the profession of some of the parents of the children received: 63 are the children of master tradesmen; 45 of shop-men, mechanics, and others; 26 of ministers and missionaries; 17 of law, bank, and commercial clerks; 11 of civil engineers, architects, and surveyors; 9 of physicians and surgeons; 9 of merchants and commission-agents; 8 of commercial travelers and salesmen; 7 of master mariners, pilots, and fishermen; 5 of railway officials; 5 of farmers; 5 of accountants; 4 of barristers and solicitors; 4 of manufacturers; 4 of school-masters; and 3 of ship-brokers.

The applications received on behalf of these children were only entertained after the most careful investigation, and many of the cases were of a peculiarly painful character. The following particulars regarding three of them abundantly illustrate the value and urgent need of a Home for Orphan Children:

(A.) The skill and taste of this girl's father (a master cutter) assured every one that in a few years he would be second to no firm in the town. In six years the number of his workmen increased from 3 or 4 to about 200; but in 1862, while attending the Exhibition in London, he was seized with insanity. Shortly after he was removed to an asylum, where he died, leaving a widow and five children.

(B.) Two boys, the children of a Baptist minister, who died of typhus fever, caught in ministering to a fever patient who had desired his services. These boys have no male relative.

(G.) This boy's father was a man of high honor and great ability. Having spent several years in England and Spain in the pursuit of his profession as civil engineer, he was induced to assume the heavier responsibilities of a contractor, in which he was for some time very successful. He embarked all his large capital in the carrying out of a contract for extensive water-works in Ireland, which proved ruinous. He met his death in the prime of life from an accidental fall, leaving a widow and thirteen children wholly unprovided for.

The education afforded is regulated by the capacities of the children. All the inmates are taught reading, writing, arithmetic, English grammar, and composition, geography, singing, drawing, and the rudiments of natural science. Those boys who show capacity for such studies are taught Latin and one modern language, also the higher branches of arithmetic, algebra, and geometry. The girls are taught needle-work and such departments of household service as are likely to prove useful to them in after life. Both boys and girls are so trained as to fit them for fighting the battle of life courageously.

In addition to the building and furnishing of the Home, at a cost of £56,000, the founders have provided an endowment of £3,000 per annum toward the cost of maintenance and education.

SIR FRANCIS CROSSLEY'S BENEFACTIONS.

"*The people's park*," covering a little over thirteen acres, laid out by Sir Joseph Paxton, with fountains, waterfalls, lake, and furnished with several large statues in Carrara marble. Original cost, £32,000. On its completion, in 1857, conveyed to the Halifax corporation as trustees for the town, and subsequently endowed to the extent of £6,000, thereby meeting the expenses of gardening, repairs, &c. without any charge on the town's rates.

Twenty-two almshouses.—Style of building somewhat similar to Mr. Joseph Crossley's almshouses, and the rate of payment to alms-people the same. The endowment by the founder yields £500 per annum.

Assistance to young and needy tradesmen.—Sir Francis conveyed to the corporation a sum of £10,000, to be held in trust, and to be lent out in sums of varying amount to Halifax tradesmen, for a period of years, and repayable without interest.

JOSEPH CROSSLEY'S BENEFACTION.

Forty-eight almshouses, forming, with chapel, three sides of a quadrangle, the center being laid out as a garden. The style of architecture Gothic, the houses stone-built and pitch-faced. Cost of land and buildings about £25,000. A weekly dole of 10s. is paid to each married alms-man, and 7s. to each unmarried alms-man or alms-woman. The entire charges on the charity are fully provided for by the founder by endowments amounting to £1,275 per annum.

SIR JOSEPH WHITWORTH.

The benevolent effort of this eminent engineer has been directed into another channel—the encouragement of young men who have a taste for mechanical engineering, as appears from the following extract from an English journal:

WHITWORTH EXHIBITIONS.

Sir Joseph Whitworth, wishing to encourage young men having a mechanical instinct, and who are already possessed of some degree of manual dexterity in the use of tools, proposes to found, in connection with Owen's College, Manchester; King's College, London; and University College, London, a certain number of Whitworth Exhibitions, in order to fit them better to become candidates for the Whitworth scholarship. The competition for these exhibitions is to be as follows: Candidates, not less than sixteen nor more than eighteen years of age, pass a preliminary qualifying examination in English dictation and composition, arithmetic as far as decimals, and the elements of mechanical drawing, at the commencement of the academical year of each college; undergo a practical examination in the use of tools, to be held at each college or elsewhere. This examination is to include at least two of the following handicrafts: filing and fitting, turning, smith's work, pattern-making, and molding.

The successful competitors for the exhibitions will be entitled to receive, during the two years next following the examination, instruction in all such subjects (being part of the course of each college) as shall better prepare them for the Whitworth Scholarship Examination, viz: practical plane and solid geometry, machine-drawing, mathematics, theoretical mechanics, applied mechanics, and freehand drawing, provided always that the right to enjoy the exhibition for the second year shall be contingent on the candidate's success in the college examinations held at the end of the first year. Sir Joseph Whitworth will pay each college annually for four years, as a trial of the success of his proposal, the sum of £100 for or toward, at the option of each college, the academical expenses of the competitors.

[From the report of Inspectors of Factories, 1874.]

PANMURE WORKS, CARNOUSTIE, NEAR DUNDEE.

In visiting factories it is always pleasant to notice any efforts made by the occupiers to promote the social well-being and improvement of their work-people. In this respect Messrs. James Smieton & Sons, of the Panmure Works, Carnoustie, afford a praiseworthy example. Their works consist of a power-loom factory for weaving, calendering, and packing jute and linen cloth, giving employment to about five hundred persons. Of this number about seventy are half-timers, attending a school upon the premises, and carefully instructed in the ordinary branches of education by a well-qualified female teacher, holding a first-class government certificate, and two assistants. The girls, who form the greatest number of the half-timers, have the additional advantage of being taught sewing and knitting, and are also instructed in music, according to the tonic sol-fa system, by a master employed for the purpose. Evening classes are open for such of the workers as are employed in the factory during the day. The expense of maintaining these schools is defrayed solely by the Messrs. Smieton. There is also an evening class, during the winter months, for young men connected with the works, where for a merely nominal sum, instruction is given in the higher branches of education, by a highly qualified male teacher. In connection with these works is an elegant and spacious hall, capable of accommodating six hundred persons, and furnished with piano and harmonium. It is used as a school-room during the day, and in the evening is available when required for public meetings, lectures, &c. There is also a reading-room on the premises for the exclusive use of the work-people. Five daily and two weekly newspapers are supplied by the Messrs. Smieton, besides magazines and occasionally other papers considered amusing or instructive. A bagatelle table and chess and draught boards are also placed in this room. A library, containing about a thousand well-selected volumes, has also been established; and a librarian, paid by the firm, attends twice a week for the purpose of giving out books. Commodious cottages have also been built by the Messrs. Smieton for the work-people, and are let at moderate rents, much lower than could be otherwise procured for similar accommodation in or about Carnoustie. The factory and dwelling-houses are situated in an airy and healthy locality, in the immediate neighborhood of an excellent golf-course, where, during their leisure hours, the male workers may enjoy one of the most exhilarating outdoor games in the country.

It is not asserted that there are no other wealthy manufacturers in England whose beneficence has been directed into channels similar to those marked out by the eminent firms of whom mention has just been made. No doubt there are many such, and, moreover, a much larger number who have devoted munificent sums to various charitable and religious objects. But the devotion, by a manufacturer, of a portion of the wealth he has acquired through the labors of his work-people, to objects especially designed for their benefit, appears to the author to be a disposition of his wealth which is eminently praiseworthy, and which, in effect, is true co-operation, and conforms to the dictates of natural justice. Viewed in this light, the benefactions of Sir Titus Salt are in the highest degree meritorious and worthy of grateful recognition.

The author cannot close this part of his report without the remark that in the bestowal of baronetcies the advisers of the Queen have evinced much wisdom in the selection of worthy recipients. Formerly such honors were bestowed chiefly on men eminent for military prowess; but when on such manufacturers as Sir Titus Salt and Sir Francis Crossley, such engineers as Sir Joseph Whitworth and Sir William Armstrong, on such a man of enterprise as Sir Samuel Cunard, and such a diplomatist as Sir Edward Thornton, these marks of appreciation have been conferred, the wisdom of the selection is apparent, and the fact recognized that eminence in the pursuits of civil life is deserving of at least equal honor to that gained in the profession of arms.

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LABOR IN FRANCE.

In the historical part of this work something has been said in regard to the condition of the working classes, in the territory now known as France, during the latter years of the Roman Empire and the earlier part of the feudal ages. The facts there presented were, however, given with a view to illustrating, to some extent, the general condition of the same classes in the western provinces of the Roman Empire and in feudal Europe during the periods referred to. A continued history of labor in France would have been interesting and highly instructive, and the materials for such a history, especially for that of the manufactures of this nation, so renowned for its varied and highly developed industries, are exceedingly rich and abundant. It would be easy, for instance, to trace the successive improvements in the manufacture of silk from its establishment at Lyons, in the reign of Francis I,* to the present day, from the rude implements first employed to the automatic looms and other machinery which now produce fabrics that challenge the competition of the world. Many other industries, whose artistic products have placed France in this regard far in advance of other nations, might also be traced from their inception in the middle ages to their culmination in recent years, and such a history of the rise and progress of the industrial arts could not fail to be instructive. To do this exhaustively, however, would not only occupy more time than can possibly be devoted to this work, but require a volume of still greater bulk. Indeed it was not even practicable within these limits to present a history of the working people of each of the leading nations of Europe, still less to give a history of the various industries by which they obtain subsistence.

The history of the working classes of our mother country has been presented in some detail, but in the case of France, as in that of most other countries of modern Europe, it must suffice to give such facts and figures as will tend to show the condition of the laborer at the present time, comparing it in some instances with his condition at a period in the recent past.

IMPORTS FROM FRANCE.

Before entering upon the consideration of the cost and condition of labor, however, it may be well to consider the extent and character of the products of French industry which find a market in the United States. Of the imports from that country during the fiscal year ended June 30, 1874, amounting to upward of \$49,000,000, the value of raw materials and other articles which are admitted duty free was but \$2,684,576, while the balance consisted chiefly of articles of luxury.

The following statement exhibits the values of the principal articles imported into the United States from France in the fiscal years 1874 and 1873, and the total value imported in each of the five preceding years:

* The preparation of silk thread dates back to an earlier period—to the time of King Louis XI, (1461-1483,) who introduced the manufacture of silk into France. The construction of the machines employed at that early period is unknown: but they must have been of the most simple character. In the year 1670, at the request of the municipal council of Lyons, that astute statesman, M. Colbert, finance minister of Louis XIV, sent to Bologna for a millwright named Pierre Benay, who erected near Anzenas an establishment for winding and twisting silk, in which the latest improvements invented in Italy were introduced.

Value of imports from France in the seven fiscal years ended June 30, 1874.

Principal articles.	1874.	1873.
Silk, raw.....	\$299,238	\$204,985
Silk, manufactures of.....	11,817,421	5,185,450
Wool, manufactures of.....	9,270,044	3,859,067
Wines, spirits, and cordials.....	5,359,241	5,473,444
Leather, gloves.....	3,319,231	863,750
other manufactures of.....	2,004,117	1,851,871
Cotton manufactures.....	2,300,783	858,223
Fancy goods.....	1,665,028	932,911
Watches and manufactures of gold and silver.....	1,368,900	788,400
Iron and steel, and manufactures of.....	1,032,334	2,253,039
Chemicals.....	1,293,291	2,312,526
Earthen, stone, and china ware.....	622,046	810,821
Buttons, all kinds.....	612,480	251,428
Furs, dressed.....	766,533	563,854
Straw and palm-leaf manufactures.....	819,606	379,219
Other articles.....	9,150,482	7,453,612
Paying duty.....	49,007,320	30,925,977
Free of duty.....	2,684,576	3,051,223
Total.....	51,691,896	33,977,200
Total for fiscal year 1872.....		\$43,140,156
Total for fiscal year 1871.....		28,099,279
Total for fiscal year 1870.....		42,731,138
Total for fiscal year 1869.....		30,284,531
Total for fiscal year 1868.....		25,315,065

EMIGRATION FROM FRANCE.

From the above statement it will be observed that the products of the skilled industry of France are to a large extent consumed in this country; but few, however, of its skilled workmen make their home among us. The well-known attachment of the French to their native land, together with other causes, renders the emigration from that country quite insignificant in comparison with that of other Europeans. In the heterogeneous population of this country, composed, as it is, of many nationalities, the French element is comparatively small, there being but 115,140 natives of France in the whole country in 1870. And while, since 1820, Germany has sent us nearly 2,800,000, and the British Isles over 4,000,000, the direct increment to our population from France, up to June 30, 1874, has been but 280,942. During each of the last five fiscal years the migration into the United States from that country has been as follows: 1870, 4,007; 1871, 3,137; 1872, 9,317; 1873, 14,798; and 1874, 9,613; total, in five years, 40,902; an average of only 8,180 a year. From so sparsely settled a country as Norway, during the same period, the emigration to this country amounted to 60,642, a yearly average of 12,128.

Even after the termination of the Franco-German war, when the industries were paralyzed, and even highly-skilled labor in limited demand, the emigration from France to the United States was only 14,798, of whom but 8,368 were males over fifteen years of age, showing that the number of artisans who sought a market for their skilled labor in the New World, was extremely small.

	1873.
298	\$204, 985
424	5, 155, 450
944	3, 850, 067
244	5, 473, 444
293	863, 750
117	1, 851, 871
783	858, 223
928	942, 911
300	788, 100
434	2, 253, 639
244	2, 312, 523
145	810, 821
180	254, 424
593	563, 881
606	379, 219
482	7, 453, 614
320	30, 925, 977
576	3, 051, 221
896	33, 977, 300
.....	\$43, 140, 156
.....	28, 099, 279
.....	42, 731, 138
.....	30, 284, 551
.....	25, 315, 065

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LABOR IN FRANCE.

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INDUSTRIES OF PARIS.

In 1860 an inquiry into the industries of Paris was instituted by the chamber of commerce, under the direction of M. Moreno-Henriques, and the result published in a ponderous folio of 1,088 pages. This volume gives, in great detail, the history, progress, and present condition of twenty great groups of industries in that city, and of the numerous subdivisions of each group, with the various rates of wages paid to the employés, distinguishing respectively men, women, boys, girls, and apprentices.

The total value of the products of these industries in 1860 amounted to 3,369,092,949 francs, distributed as follows:

Table showing the aggregate and proportionate value of the products of industry of Paris in 1860.

No.	Group.	Value.	Percentage to the whole.
		<i>Francs.</i>	
1	Food	1,087,904,367	32.29
2	Building	315,266,477	9.36
3	Furniture	199,825,948	5.93
4	Clothing	454,538,168	13.49
5	Yarn and woven goods	119,998,751	3.56
6	Steel, iron, copper, &c	163,852,428	4.87
7	Gold, silver, platinum, &c	183,390,553	5.45
8	Chemical and ceramic industry	193,616,349	5.75
9	Printing, engraving, and paper making	94,166,528	2.79
10	Various industries:		
	First division, mathematical instruments and time-pieces	66,040,233	1.96
	Second division, skins and leather	100,881,795	3.00
	Third division, carriages, saddlery, and military equipments	93,849,195	2.78
	Fourth division, wooden ware, baskets, and brushes	27,075,323	0.80
	Fifth division, articles de Paris	127,546,540	3.78
	Sixth division, industries not grouped	141,140,294	4.19
		3,369,092,949	100.00

WAGES.

The rates of daily wages earned by the 416,811 persons employed in the various industries of Paris—ranging from 1 franc to 20 francs for males, and from 1 franc to 10 francs for females—are given in detail in the table on the following page:

* Statistique de l'industrie à Paris résultant de l'enquête faite par la chambre de commerce pour l'année 1860. Paris, 1864.

Table showing the various rates of daily wages of persons employed in each group of industries in Paris in the year 1860.

Rates of wages.	DESIGNATION OF THE GROUPS OF INDUSTRIES.															Totals.
	Food, (alimentation).	Building.	Furniture.	Clothing.	Yarn and woven goods.	Steel, iron, copper, zinc, lead, &c.	Gold, silver, platinum, &c.	Chemicals and pot-tery.	Printing, engraving, and paper-making.	Philosophical instru-ments and time-pieces.	Skins and leather.	Carriages, saddlery, and military equip-ment.	Wooden ware, with low ware, and brushes.	Partisan small wares or fancy articles.	Other industries not grouped.	
<i>Wages per diem of males.*</i>																
Less than 20 cents	635	5	52	5	198	39	38	78	146	2	10	13	13	116	182	1,885
From 20 cents to 30 cents	6,337	40	781	185	664	139	38	461	283	15	16	26	125	665	1,194	10,557
From 30 cents to 40 cents	4,166	66	676	252	291	129	43	361	190	88	16	100	135	424	661	7,310
From 40 cents to 50 cents	3,704	144	346	1,416	344	1,255	98	547	305	98	25	210	121	376	605	6,572
From 50 cents to 60 cents	3,054	1,730	1,859	5,333	1,427	3,157	628	1,845	973	438	41	1,036	121	1,463	1,760	35,950
From 60 cents to 70 cents	2,472	7	1,850	3,948	1,527	2,569	520	1,853	1,453	1,469	708	3,198	989	1,433	1,433	30,501
From 70 cents to 80 cents	2,972	7	1,732	5,500	1,527	4,304	1,076	1,769	1,630	1,383	827	2,069	365	1,122	1,433	29,971
From 80 cents to 90 cents	2,738	11,494	5,821	5,492	2,451	4,304	1,076	1,769	1,630	1,383	827	2,069	365	1,122	1,433	29,971
From 90 cents to 100 cents	1,217	13,885	4,304	3,025	4,304	1,56	1,56	1,56	1,56	1,56	900	2,069	365	1,122	1,433	29,971
From 100 cents to \$1	1,859	16,985	4,304	1,56	1,56	1,56	1,56	1,56	1,56	1,56	900	2,069	365	1,122	1,433	29,971
From \$1 to \$1.10	1,859	16,985	4,304	1,56	1,56	1,56	1,56	1,56	1,56	1,56	900	2,069	365	1,122	1,433	29,971
From \$1.10 to \$1.20	604	3	1,56	1,56	1,56	1,56	1,56	1,56	1,56	1,56	900	2,069	365	1,122	1,433	29,971
From \$1.20 to \$1.30	604	3	1,56	1,56	1,56	1,56	1,56	1,56	1,56	1,56	900	2,069	365	1,122	1,433	29,971
From \$1.30 to \$1.40	290	665	5,38	2,00	36	252	321	1,140	4,57	539	180	484	14	134	135	3,841
From \$1.40 to \$1.50	291	524	711	422	125	52	102	332	133	16	100	19	62	31	42	2,714
From \$1.50 to \$1.60	75	96	504	345	113	287	80	81	259	177	59	112	13	0	0	1,501
From \$1.60 to \$1.80	61	101	131	99	13	42	80	81	185	162	65	30	2	35	41	693
From \$1.80 to \$2.00	83	102	212	136	54	227	139	83	185	162	65	30	2	35	41	693
From \$2.00 to \$2.20	14	12	21	115	16	16	16	16	16	16	16	16	16	16	16	216
From \$2.20 to \$2.40	14	12	21	115	16	16	16	16	16	16	16	16	16	16	16	216
From \$2.40 to \$3.00	16	17	13	10	17	15	63	5	6	10	10	4	4	9	8	57
From \$3.00 to \$4	6	13	13	3	14	10	10	5	6	6	6	4	4	9	8	57
Total males	30,631	70,243	31,905	27,247	10,499	26,700	11,305	10,772	13,834	10,690	5,701	15,980	3,294	10,838	12,009	290,759
<i>Wages per diem of females.*</i>																
Less than 20 cents	1,256	8	1,188	1,188	287	58	23	74	97	7	83	10	10	16	126	496
From 20 cents to 30 cents	2,189	18	365	5,277	2,515	409	410	1,015	1,390	137	45	110	68	917	1,170	723
From 30 cents to 40 cents	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From 40 cents to 50 cents	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From 50 cents to 60 cents	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From 60 cents to 70 cents	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From 70 cents to 80 cents	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From 80 cents to 90 cents	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From 90 cents to 100 cents	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From 100 cents to \$1	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$1 to \$1.10	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$1.10 to \$1.20	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$1.20 to \$1.30	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$1.30 to \$1.40	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$1.40 to \$1.50	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$1.50 to \$1.60	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$1.60 to \$1.80	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$1.80 to \$2.00	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$2.00 to \$2.20	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$2.20 to \$2.40	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$2.40 to \$3.00	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
From \$3.00 to \$4	1,607	16	1,461	13,316	4,415	418	89	1,170	1,456	296	906	214	200	2,613	2,613	13,588
Total females	30,631	70,243	31,905	27,247	10,499	26,700	11,305	10,772	13,834	10,690	5,701	15,980	3,294	10,838	12,009	290,759

From 60 cents to 70 cents

From 70 cents to 80 cents

From 80 cents to 90 cents

From 90 cents to 100 cents

From 100 cents to 110 cents

From 110 cents to 120 cents

From 120 cents to 130 cents

From 130 cents to 140 cents

From 140 cents to 150 cents

From 150 cents to 160 cents

From 160 cents to 170 cents

From 170 cents to 180 cents

From 180 cents to 190 cents

From 190 cents to 200 cents

From 200 cents to 210 cents

From 210 cents to 220 cents

From 220 cents to 230 cents

From 230 cents to 240 cents

From 240 cents to 250 cents

From 250 cents to 260 cents

From 260 cents to 270 cents

From 270 cents to 280 cents

From 280 cents to 290 cents

From 290 cents to 300 cents

From 300 cents to 310 cents

From 310 cents to 320 cents

From 320 cents to 330 cents

From 330 cents to 340 cents

From 340 cents to 350 cents

From 350 cents to 360 cents

From 360 cents to 370 cents

From 370 cents to 380 cents

From 380 cents to 390 cents

From 390 cents to 400 cents

From 400 cents to 410 cents

From 410 cents to 420 cents

From 420 cents to 430 cents

From 430 cents to 440 cents

From 440 cents to 450 cents

From 450 cents to 460 cents

From 460 cents to 470 cents

From 470 cents to 480 cents

From 480 cents to 490 cents

From 490 cents to 500 cents

From 500 cents to 510 cents

From 510 cents to 520 cents

From 520 cents to 530 cents

From 530 cents to 540 cents

From 540 cents to 550 cents

From 550 cents to 560 cents

From 560 cents to 570 cents

From 570 cents to 580 cents

From 580 cents to 590 cents

From 590 cents to 600 cents

From 600 cents to 610 cents

From 610 cents to 620 cents

From 620 cents to 630 cents

From 630 cents to 640 cents

From 640 cents to 650 cents

From 650 cents to 660 cents

From 660 cents to 670 cents

From 670 cents to 680 cents

From 680 cents to 690 cents

From 690 cents to 700 cents

From 700 cents to 710 cents

From 710 cents to 720 cents

From 720 cents to 730 cents

From 730 cents to 740 cents

From 740 cents to 750 cents

From 750 cents to 760 cents

From 760 cents to 770 cents

From 770 cents to 780 cents

From 780 cents to 790 cents

From 790 cents to 800 cents

From 800 cents to 810 cents

From 810 cents to 820 cents

From 820 cents to 830 cents

From 830 cents to 840 cents

From 840 cents to 850 cents

From 850 cents to 860 cents

From 860 cents to 870 cents

From 870 cents to 880 cents

From 880 cents to 890 cents

From 890 cents to 900 cents

From 900 cents to 910 cents

From 910 cents to 920 cents

From 920 cents to 930 cents

From 930 cents to 940 cents

From 940 cents to 950 cents

From 950 cents to 960 cents

From 960 cents to 970 cents

From 970 cents to 980 cents

From 980 cents to 990 cents

From 990 cents to 1000 cents

Total males.....	30,031	30,243	31,905	27,247	10,499	35,700	11,505	10,772	13,834	10,030	5,791	13,950	3,294	10,535	14,022	2,700
Wages per diem of females.*																
Less than 20 cents.....	1,256		8	1,158	927		23	74	37	7	53	10	16	126	499	3,005
From 20 cents to 30 cents.....	1,256		365	5,572	2,515	29	119	303	339	45	238	110	108	723	43,398	
From 30 cents to 40 cents.....	1,656		16	428	10,718	4,525	469	1,015	1,120	137	144	214	260	913	585	24,300
From 40 cents to 50 cents.....	1,657		8	1,461	13,316	4,305	438	1,000	1,200	240	246	402	240	4,017	592	32,533
From 50 cents to 60 cents.....	529		3	649	10,694	2,316	89	1,290	1,829	195	258	643	40	2,624	273	19,968
From 60 cents to 70 cents.....	158	4	376	2,062	1,100											
From 70 cents to 80 cents.....	35	54	54	185	36		729	592	368	131	3	915	99	1,510	84	7,099
From 80 cents to 90 cents.....	9	15	15	184	224		165	22	22	1	6	184	7	184	46	2,359
From \$1 to \$1.20.....	5	15	15	129	30		39	21	4	1	2	64	71	184	46	1,354
From \$1.20 to \$1.40.....	6			97	3		30		7	2	1		1	51	24	270
From \$1.40 to \$2.....				33	1									11	18	146
Total females.....	7,636	35	3,475	47,477	15,637	1,033	3,397	3,431	4,290	788	749	1,769	655	12,676	2,570	106,310
Boys.....	1,183	964	2,517	408	212				1,284	994	56	834	233	1,106	5	14,162
Girls.....	9	54	3,165	471	5		612	2	159	16	1	1	18	1,078		3,321
Total apprentices.....	1,192	964	2,571	3,653	683	1,113	3,629	192	1,383	1,010	57	835	271	2,184	5	19,749
Males.....	30,031	70,243	31,905	27,247	10,499	26,790	11,505	10,772	13,834	10,030	5,791	13,950	3,294	10,535	13,009	898,759
Females.....	7,636	35	3,475	47,477	15,637	1,033	3,397	3,431	4,290	788	749	1,769	655	12,676	2,570	106,310
Apprentices.....	1,192	964	2,571	3,653	683	1,113	3,629	192	1,383	1,010	57	835	271	2,184	5	19,749
Aggregate number of work people.....	38,859	71,242	37,051	73,377	26,810	28,866	18,731	14,397	19,597	11,828	6,597	18,554	4,390	25,698	14,974	410,811

* The average daily wages, as computed from data in the above table, were as follows: males, 82.7 cents; and females, 44.3 cents.
 NOTE.—In the above and in all subsequent statements, the value of the franc has been computed at 20 cents. This is done chiefly for convenience of computation, the more exact equivalent being 19.3 cents, United States coin.

In a note appended to the table on the preceding page the average daily wages earned by males and females respectively in the aggregate industries of Paris are shown. The following table exhibits, however, the average rates earned by men, women, and children in each branch of manufacture named below:

Table showing the number of work-people and wages of men, women, and children, in the following branches of manufacture, in Paris, in 1860.

Manufactures.	Number of work-people employed.	Wages of—				
		Men.		Women.		Child- ren.
		Range.	Average.*	Range.	Average.*	Average.*
Masons	31,676	\$0 50 to \$2 40	\$0 85			
Machinery and engines	2,627	40 to 2 00	91	\$0 30 to \$0 50	\$0 34	\$0 40
Heating apparatus: stoves, furnaces, ovens, &c.	3,559	50 to 2 00	89			35
Foundries: iron, brass, copper, lead, and zinc.	4,026	50 to 2 40	91	30 to 60	43	23
Sewing-machines	453	60 to 1 00	1 07	50 to 70	61	
Fire-arms, swords, &c.	308	70 to 2 00	1 02		35	25
Hardware	297	30 to 1 50	81	35 to 50	43	22
Pottery and tiles	2,254	50 to 1 60	87			35
Bellows and kettles of iron, brass, and copper.	1,539	60 to 2 40	87	30 to 50	40	23
Tin ware	607	60 to 2 60	92	30 to 50	34	30
Powder-ware, tin-foil, and putty	555	50 to 1 20	1 00	15 to 40	35	24
Wool-spinning	2,146	40 to 1 20	73	25 to 65	37	16
Cotton-spinning	1,930	25 to 2 00	75	20 to 90	39	22
Shawls, woollen and cashmere						
Printing and figuring woven-fabrics and dress-goods	566	50 to 1 20	89	20 to 60	46	15
Dyeing threads and tissues	1,007	60 to 2 00	93	25 to 70	41	
Woven fabrics for dresses, house-furnishing, buttons, vests, &c.	2,488	30 to 2 60	86	10 to 70	35	26
Trimming: galleons, buttons, &c.	8,426	40 to 2 60	79	20 to 1 20	39	19
Artificial flowers	7,831	60 to 1 40	70	20 to 2 00	45	15
Corsets and hoop-skirts	2,254	60 to 1 20	70	20 to 1 20	35	20
Photographers	3,291	60 to 2 40	1 04	30 to 80	46	
Tailors	26,128	60 to 2 00	92	20 to 90	42	25
Turners	1,926	50 to 1 40	88			
Monocle-makers	1,142	70 to 2 00	94	15 to 50	20	
Leather-dressers	1,660	60 to 2 10	99	25 to 50	34	22
Boots and shoes	12,082	30 to 2 00	73	15 to 1 20	38	23
Gloves: leather	1,196	60 to 2 00	93	20 to 80	41	19
Fur goods	1,065	50 to 2 00	91	30 to 80	43	26
Military equipments	5,457	70 to 1 60	93	15 to 80	47	31
Hat-making	3,451	40 to 2 20	1 12	20 to 1 60	49	13
Straw hats	901	60 to 2 00	1 09	20 to 1 20	45	
Coaches and carriages	4,957	50 to 2 40	92	40 to 60	41	20
Fine jewelry	5,971	60 to 2 40	1 11	20 to 1 80	50	23
Cheap jewelry	2,937	20 to 2 00	93	10 to 1 20	30	22
Silver ware	691	60 to 2 20	1 17	40 to 80	64	
Workers in the precious metals	1,210	50 to 2 00	96	40 to 90	50	45
Lapidary work	317	60 to 2 40	1 27	40 to 80	51	
Clocks, watches, and watchmakers' materials	2,286	60 to 2 40	1 02	40 to 1 00	57	20
Mathematical and optical instruments	3,108	40 to 2 00	98	30 to 1 20	45	27
Furniture: cabinet-ware	7,531	50 to 2 40	92	35 to 80	47	
Paper-hangings: wall-paper	4,450	50 to 2 40	1 01	20 to 60	28	30
Umbrella canes, whips, &c.	2,222	50 to 2 00	81	15 to 80	41	17
Musical instruments of metal	725	60 to 2 00	1 07			25
Piano-fortes and harps	2,101	60 to 2 40	1 06			25
Brushes	1,737	50 to 1 60	81	25 to 80	41	16
Matches	722	45 to 1 20	63	30 to 1 20	45	21
Printers' type	6,158	50 to 2 40	90	20 to 1 00	42	32
Lithographic printers	3,219	50 to 2 40	1 02	30 to 1 20	45	14
Chemicals and coloring matter	1,749	50 to 2 10	74	25 to 80	42	23
Pharmacists, druggists, &c.	1,511	20 to 1 60	56	30 to 80	41	15
Perfumers	1,483	60 to 2 00	73	20 to 90	39	30

* The figures given in these columns are the computed averages—not the mean rates.

MANUFACTURE OF LEATHER GLOVES.

As an illustration of the completeness of the results of the inquiry, a single branch of industry, the product of which finds its chief market in this country, has been selected, and translations of the letter-press and table are presented on the following pages.

HISTORY.

Before it came to be an article of the toilette, the glove was made use of to protect the hand. From skins and the coarser kinds of cloth, mittens were first made, being a kind of sack without division except for the thumb. Afterward, they were cut at the commencement of the joints of the fingers, so as to leave the fingers at liberty.

In the sixth century the glove of thick skin began to appear; at a later period thin plates of metal were added, forming the gauntlet adopted by the chivalry at the commencement of the fourteenth century. Under the Valois, gloves constituted part of the dress of the lords of the court. The hosiers made mittens of wool, and the glove-makers made gloves of cloth or of skins.

The most celebrated gloves were those made at Paris and at Vendôme; those made at this last-mentioned city were so fine that they could be inclosed in a nut-shell. A and of frangipanni.

To the gloves of skin and of wool were added, under Louis XIII, satin and velvet gloves. The gloves worn in the time of Louis XIV were generally ornamented with ribbons, laces, and fringes of gold and silver.

During the long reign of this king many cities besides Paris and Vendôme acquired a just renown by the perfection of their products. At this period is dated the reputation of the gloves of Grenoble, De Blois, Luneville, Niort, and Béziers. Han produced the gloves known as dog-skin gloves. In the last century French industry had conquered a large quantity of gloves to the trade of Holland, England, and even Flanders and Italy, while we were indebted to those countries for certain other kinds.

The manufacturers of gloves formed an important community, which received its first corporate authority in the time of Philip Augustus, in 1190; these enactments, confirmed in the reign of subsequent monarchs, were renewed in 1656, by Louis XIV. In 1776 the glove-makers, already united to the perfumers and powder-makers, were joined to the wig bag-makers and the girdle-makers. They had at that time the exclusive right to make all sorts of gloves, mittens, and other covering for the hands, to double, to line, ornament, and enrich them with embroideries and lace, with gold and silver, pure or imitated, with silk and all other ornaments, and to wash and perfume them. They were obliged to make their gloves of good skins or other material, with the ends of the fingers well secured, being of correct proportions, and bound and edged with the same material as the rest of the glove, throughout their whole length, and doubled and stitched in accordance with the rules of the art. Gloves were sold by the merchants and small dealers as well as by the master-glove-makers, but the manufacturing of them was prohibited to the former.

According to an ancient proverb, in order to furnish a complete glove, it was necessary that three kingdoms should furnish each its quota of handicraft to the work; Spain, the preparation of the skin; France, the cutting; England, the making of the seam. The dexterity which our workmen have attained in each of these three operations has rendered this adage obsolete, and French products possess now a superiority which is acknowledged by our rivals themselves.

It was after the Revolution that the use of gloves of skins, and the making of them, became an object of special industry. The progress made by the glove-making industry for the past twenty-five years has been very considerable. This is to be attributed in part to the quality of the skins tanned in France.

Annoux, Paris, Grenoble, Romans, and Chaumont prepare kid-skins and lambskins suitable for the making of smooth-finished gloves, and Milhan furnishes the skins in considerable quantity for the making of lamb and castor gloves.

As to the cut of gloves, great improvements have been made of late years, the most important of which are due to Xavier Jonvin. The cut called "Pompepie piece," and the system of measuring invented by this manufacturer in 1835, has resulted in giving to the glove-manufacture a mathematical precision.

Besides, the seaming of the gloves has gained in elegance and simplicity. This result has been attained by the assistance of a little mechanical instrument in the form of a vise, which makes the work more regular. Also by the use of stronger silk, and by the more general use of the pincetraining instruments.

The sewing of the gloves is ordinarily done at the establishments where the business is carried on. The manufacturers of Paris employ very generally the workmen of the neighboring towns of Vendôme, Mortagne, Verneuil, Mitry, Tremblay, and other communes of Oise and Seine-et-Oise.

Paris makes the finest quality of gloves. Grenoble makes the kid gloves of second-quality; Chaumont and Luneville make principally for exportation; Milhan, Niort, Vendôme, and Saint Julien prefer the manufacture of lamb, doe-skin, and castor gloves. Then the Swedish glove, which is made of the refuse of the tanned skins turned, that is to say, the hair-side in, are manufactured everywhere where smooth-finished gloves are made. Paris and Grenoble are the only markets for the sale of gloves. Manufacturers of other cities do not sell at home, they have depots and agents at Paris.

the average
the aggregate
its, however,
each branch

children, in the fol-

Women.	Child-	
	ren.	
Age.	Aver-	Aver-
age.*	age.*	age.*
0 to 10	34	40
10 to 20	35	35
20 to 30	42	35
30 to 40	64	35
40 to 50	35	35
50 to 60	40	35
60 to 70	32	30
70 to 80	35	24
80 to 90	37	16
90 to 100	39	22
100 to 110	46	15
110 to 120	41	15
120 to 130	35	26
130 to 140	39	19
140 to 150	45	15
150 to 160	35	50
160 to 170	40	40
170 to 180	42	25
180 to 190	30	24
190 to 200	34	32
200 to 210	38	23
210 to 220	41	10
220 to 230	43	26
230 to 240	47	31
240 to 250	49	13
250 to 260	45	.....
260 to 270	43	20
270 to 280	42	23
280 to 290	59	23
290 to 300	50	22
300 to 310	64	.....
310 to 320	50	45
320 to 330	51	.....
330 to 340	57	.....
340 to 350	45	27
350 to 360	47	.....
360 to 370	28	30
370 to 380	41	17
380 to 390	35	25
390 to 400	35	25
400 to 410	44	16
410 to 420	45	21
420 to 430	42	32
430 to 440	45	19
440 to 450	42	23
450 to 460	41	15
460 to 470	39	20

mean rates.

f the inquiry, a
s chief market
the letter-press

The gloves of France are so highly appreciated abroad, that the manufacturers of other countries, to facilitate the sale of their products, do not scruple to counterfeit our marks.

So confident were the French manufacturers in the superiority of their goods, that at the time of the investigation relative to the commercial treaty with England, they asked for the free admission of foreign gloves into France. Moreover, the exportation statistics clearly show the prosperity of this industry.

The exportation of gloves which amounted in 1827 to a value of only 5,516,600 francs, reached 25,000,000 in 1843, and 30,998,000 in 1853.

NUMBER OF MANUFACTURERS.

In 1849 there were at Paris 185 glove-makers; in 1860 there were found to be—

Employing more than 10 workmen.....	54
Employing from 2 to 10 workmen.....	79
Employing 1 workman, or working alone.....	51

Total 154
Of which 10 carry on another trade.

The census shows, besides these, 129 fashioners.*

THE MAGNITUDE OF THE GLOVE MANUFACTURE.

With 1,196 workmen the glove-makers manufactured in 1860 to the amount of 14,987,400 francs. The average for each establishment, 97,320 francs; and for each workman, 12,531 francs.

If we add to the number of workmen the 129 fashioners, working with 15 persons, the number will be raised to 1,340, and the average reduced to 11,184 francs. With 26 workmen borne upon their lists, the 129 fashioners have manufactured to the amount of 170,185 francs over and above that of the glove-makers; average for each, 1,319 francs.

RENTS.

The rents of the 154 establishments amount to the sum of 290,645 francs; average for each establishment, 1,887 francs.

Among the fashioners, 9 are "concierges," (doorkeepers.) The unit rents of the remaining 120 amount to 19,585 francs; average for each, 163 francs.

WORKMEN.

Number on the census of 1860: Men, 747; women, 422; children under 16 years of age, (including 26 apprentices,) 27, of which 25 are boys and 2 girls. Total, 1,196 work-people, classified as follows: Dressers, cutters, and "doleurs;" splitters, puncturers, embroiderers, sewers, and claspers.

In 1849, the glove-makers employed 1,950 workmen. The decrease of 754 is explained by the employment of a greater number of workmen in the departments where hand-work is less expensive than in Paris.

WAGES.

Men.—146 work by the day, and 601 by the piece; 9 earn less than 3 francs each per day; 33 earn 3 francs each per day; 33 earn 3.25 francs each per day; 14 earn 3.50 francs each per day; 8 earn 3.75 francs each per day; 145 earn 4 francs each per day; 127 earn 4.50 francs each per day; 284 earn 5 francs each per day; 13 earn 5.50 francs each per day; 68 earn 6 francs each per day; 9 earn 8 francs each per day; 4 earn 10 francs each per day. The workmen earning less than 3 francs are generally boarded by the employer. Those who earn more than 6 francs are the chiefs of shops or skillful cutters working by the piece.

Women.—95 are paid by the day, and 327 by the piece. 45 earn 1 franc each per day; 45 earn 1.50 francs each per day; 29 earn 1.75 francs each per day; 49 earn 2 francs each per day; 39 earn 2.25 francs each per day; 152 earn 2.50 francs each per day; 11 earn 3 francs each per day; 11 earn 3.25 francs each per day; 9 earn 3.50 francs each per day; 2 earn 4 francs each per day.

Children.—A young girl under 16 years of age earns 50 centimes per day as assistant.

Apprentices.—Of 26 apprentices, 11 have neither salary nor gratuity; 3 receive an uncertain gratuity; 12 receive from 50 centimes to 1 franc per day; 3 of them are boarded by the employer.

HOURS OF LABOR.

The working-day consists generally of twelve hours; from 7 to 7 in summer, and from 8 to 8 in winter, of which two hours are taken for meals.

* The "fashioners" (*jaconniers*) appear to be small manufacturers or contractors.

"DEAD SEASON."

Seventy-six glove-makers report no dead season. As for the others the season continues three and one-half months in June, July, August, and September.

MANNERS AND HABITS.

Men.—Out of 747 workmen, 9 have lodgings with the proprietor; 571 furnish their own lodgings; 167 lodge in furnished apartments; 571 are well behaved, (*une conduite bonne*); 38 doubtful; 138 bad; 663 know how to read and write; 59 know how to read only; 25 neither read nor write; 76 keep holiday every Monday.

Women.—Of 422 workwomen, 3 have lodgings with the proprietor; 389 furnish their own lodgings; 30 lodge in furnished apartments; 397 are well behaved; 10 doubtful; 15 bad; 358 can read and write; 15 can read; 49 can neither read nor write; 29 often keep holiday on Monday.

Children.—The young girl lodges with her parents, and can read and write.

Apprentices.—Of 26 apprentices, only 1 is a girl.

Boys.—3 lodge with the proprietor; the rest with their parents; 18 read and write; 2 read only; 5 neither read nor write; 1 only is the son of the proprietor; 1 is a ward of the city of Paris, on account of merit in the schools; the others are placed at this business by their parents; 3 are engaged by contract, and 22 without contract; 7 are engaged for two years; 4 for three years; and 14 for four years. 1 pays 200 francs for the period of his apprenticeship.

The female apprentice is placed in the establishment by her parents, with whom she lodges, and is under contract for two years; can neither read nor write.

MOTIVE POWER.

A steam-engine of 4 horse-power is employed at the glove-making works, and is used in the process of splitting the leather.

DESTINATION OF THE PRODUCTS.

	Francs.
Marketed in France.....	
Exported to the United States.....	4,313,000
Exported to England.....	1,353,800
Exported to Russia.....	548,000
Exported to Germany.....	185,500
Exported to Holland.....	90,000
Exported to Sweden.....	60,000
Exported to other countries.....	1,375,200
Total value.....	7,925,500
	14,987,400

TABULAR STATEMENT.

The number and classification of manufacturing establishments in Paris in 1860, by wards, (*arrondissements*), with the value of the annual product and the amount of rent in each; the number of men, women, children, and apprentices employed, distinguishing the men and women paid by the day from those engaged on piece-work, are given in the table which appears on the following page:

FOURTH GROUP—CLOTHING.

No. 16.—Gloves of skin or leather.

Arrondissement.	Number of manufactur- ers—			Value of products.	Working population in 1860.										Number of—								
	Employing—				Men—				Women—				Resident work-people, (residing constantly at Paris)— Total number of work-people.	Residing temporarily at Paris.	Total number of work-people.	Number of apprentices included in the preceding figures.	Men paid—		Women paid—				
	More than ten persons.	From two to ten persons.	One person alone.		Working—		Total.		Working—		Total.						Children under sixteen years of age, working in the same establishment.	Total number of work-people.		By the day.	By the piece.	By the day.	By the piece.
					In shops.	At home.	In shops.	At home.	Total.	Boys.	Girls.	Total.											
1	9	12	4	17	165	31	50	51	8	210	219	136	46	8	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
2	32	21	5	278	353	41	74	117	8	478	478	246	35	32	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
3	1	1	3	16	24	10	19	19	1	41	41	16	9	3	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
4	1	1	5	17	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
5	1	1	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
6	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
7	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
8	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
9	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
10	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
11	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
12	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
13	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
14	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
15	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
16	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
17	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
18	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
19	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
20	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
21	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
22	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
23	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
24	2	6	1	4	17	5	15	25	10	16	16	9	5	1	By the piece.	By the day.	By the piece.	By the day.	By the piece.	By the day.			
Total	70	21	23	1,000	1,000	40	3	43	30	15	48	4	1	5	96	36	4	43	49	49	227		

[illegible]

	79	21	151	2,907,480	53,120	609	138	717	215	177	422	95	2	27	1,195	.....	26	146	101	96	227
Total.....	79	21	151	2,907,480	53,120	609	138	717	215	177	422	95	2	27	1,195	.....	26	146	101	96	227

[illegible]

	79	21	151	2,907,480	53,120	609	138	717	215	177	422	95	2	27	1,195	26	146	101	96	227
Total.....	79	21	151	2,907,480	53,120	609	138	717	215	177	422	95	2	27	1,195	26	146	101	96	227

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	79	21	151	2,907,480	53,120	609	138	717	215	177	422	95	2	27	1,195	26	146	101	96	227
Total.....	79	21	151	2,907,480	53,120	609	138	717	215	177	422	95	2	27	1,195	26	146	101	96	227

In some departments, such as l'Aisne, l'Anche, les Bouches du Rhône, and la côte d'or, laborers earn over 200 francs (\$10) in the year. In others, such as l'Aviege, la Corréze, les Côtes du Nord, la Finistère, la Haute-Garonne, they do not receive more than 100 francs (\$20.) The additional amount of wages received in kind throughout France is calculated to be about 26 francs (\$5.20.) But there is a much greater difference in the amount paid in kind than in money. In the departments Bouches du Rhône, Gard, and Gironde, it is not customary to pay in kind. In some this description of payment does not amount to more than 10 francs, (\$2) in some it surpasses in value the amount of the money payment (in Aisne, Ande, Hérault.) By adding together both descriptions of payment it will be found that the average amount of wages received by a farm-laborer in France is 171 francs (\$34.20) a year. If to this be added the value of food consumed by the laborer, which may be computed at about 10 cents a day, it will be found that the maintenance of a farm-laborer costs his employer, on an average, about 354 francs (\$70.80) per annum.

The wages of day-laborers vary, according as they are fed or not. In order to facilitate comparison, we will only take into consideration the day-laborer who is not fed by his employer.

From a table presented to the Emperor by the minister of the interior in 1852, it appears that the average daily pay of a day laborer in France was 1 franc 75 centimes, (35 cents.) The highest is 2 francs 50 centimes, (50 cents.) in the department of the Seine, and the lowest 1 franc 13 centimes, (22½ cents.) in the Côtes du Nord. According to the "Statistique Agricole Officielle," the daily pay of a woman in the agricultural districts was 85 centimes, (17 cents.) and that of children 63 centimes, (12½ cents.) The same document shows that the male agricultural laborer works, on an average, 200 days in the year, women 120, and children 80.

If the above figures be correct the day-laborer earns on an average \$70, a woman \$20.40, and a child \$10. The same publication gives the following calculations on the annual expenses of day-laborers, single and married:

Average expenditure of a single man.

	Francia.	
Lodging	27	\$5 40
Food	230	46 00
Clothing	45	9 00
Total	302	60 40

Deducting this from the amount which it was calculated he earned in the year, \$70, only \$9.60 remain for other expenses or for investment.

Average expenditure of a married day-laborer's family, consisting of father, mother, and children.

Items of expenditure.	In French currency.		In United States gold.
	Fr.	C.	
Lodging	42	0	\$8 40
Bread	245	0	47 00
Vegetables	36	0	7 20
Meat	42	0	8 40
Milk	24	0	4 80
Wine, beer, and cider	34	0	6 80
Salt	7	50	1 50
Clothing	91	0	18 20
Firing	32	0	6 40
Taxes	5	45	1 09
Other expenses	32	0	6 40
Total	581	45	116 29

The foregoing is, of course, calculated to meet the requirements of a French, and not of an English laboring-man. For a family consisting of five persons to be able to afford the above expenses, they must all work, and even then the united wages leave but a small margin.

	In French currency.		In United States, gold.
Man's wages	Fr.	C.	
Woman's wages	350	0	\$70 00
Three children, at 50 francs a year	102	0	20 40
Total	150	0	30 00
	602	0	120 40

The married workman is, therefore, according to this calculation, and under very favorable circumstances, still worse off than his single neighbor, for while the latter may, if he is economical, lay by about 48 francs, (\$9.60,) the other will have but a balance of 21 francs (\$4.20) at the end of the year.

But it must be here remarked that among agricultural laborers in France, there are a certain number who supplement their resources by the prosecution of an accessory industry, such as weaving, wood-cutting, sawing, wooden-shoe-making, cask-making, and building. Such an accessory industry may increase a single man's wages by about 130 francs a year, (\$26,) but it is probable that those who carry on a trade in addition to their agricultural labor, cannot work as many days in the year at agriculture, and consequently earn less than the purely agricultural laborer. It is calculated that about 8 per cent. of the agricultural laborers are engaged in some trade.

In order to form a just appreciation of the material condition of a working-man, it is not sufficient to have a knowledge of the average amount of wages he earns in the year; we must also know how much is to be deducted from this sum to defray the necessary expenses of lodging and food.

FOOD.

The food of the French workman is, as a general rule, substantially inferior to that to which the Englishman is accustomed. Many a French factory-hand never has anything better for his breakfast than a large slice of common sour bread rubbed over with an onion to give it a flavor. For dinner, some soup, potatoes or carrots, and sometimes a small piece of pork, which costs about 10 cents a pound; and for their last meal they eat the meat of which their soup was composed. With this frugal fare and some drink only water, others half a bottle of cider, beer, or wine. Bread, vegetables, and fruit are generally to be obtained in France both cheap and good; but meat is bad and dear.

The following is the present price of food in a "cuisine ouvrière" frequented by none but factory-hands at Rouen:

Idol of fare.—A dish of meat and vegetables, 6 cents; bread *ad libitum*, 3 cents; one-half litre, or $\frac{1}{2}$ of a pint of "cidre coupé," or cider and water, 2 cents—11 cents a meal, $\frac{1}{2}$ of a pint of pure cider, 3 cents; a basin of soup, 1 cent—7 cents.

In the north of France an Englishman need make no difference in the amount or the nature of the diet to which he is accustomed. As he approaches, however, the southern districts he should diminish the amount of animal food and substitute for it bread and vegetables. Bread is an article which is always to be obtained of good quality in France, and Frenchmen consume it in much larger quantities than we do. It forms the "pièce de résistance" at every French workman's meal; and all other articles of food are regarded as necessities to what in France is literally the "staff of life." The French have always been renowned for their culinary skill. It is a talent peculiar to the whole nation. The very poorest classes possess it. A French man or woman will manufacture a palatable meal out of the very coarsest, and what, to our ideas, may appear even most repulsive materials. The "soupe," which is to be met with on every French workman's table, is infinitely preferable to the concoction of hot water, pepper, and gravy which the richest millionaire in England is obliged to put up with, if he has to dine at an ordinary English provincial hotel, or even at many an establishment in the metropolis calling itself first-class. And yet it would be injudicious sometimes to look too closely into the composition of the French dish. The result of this is, that a French workman can live, even luxuriously, where an Englishman would starve. As regards beverages, beer and wine are good, wholesome, and cheap. Within the last few years the consumption of beer has increased enormously among all classes. Formerly it was almost unknown in France; now it is the common restaurant beverage of the Parisian middle-class. The workmen, however, still cling to their wine; the beverage commonly consumed by all classes at home. The beer principally drunk is the light Strassburg, which still bears its German name of "bock," though it is of a much milder nature than the original.

The French are very much addicted to the use of the deleterious spirit, called "absinthe," which has a most injurious effect on their health. The Englishman is at all times too prone to indulge freely in drink, but if he has any regard for his health he

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will be careful to avoid dram-drinking, (the "petit verre," composed of all sorts of noxious spirits;) for, in addition to the adulterated character of these spirituous liquors, the dry climate of France will not permit men to take with impunity the amount of spirit which they could, perhaps, drink in England without any positively injurious effect.

According to Dr. Cuvillier the population of France is not sufficiently well nourished. He calculates the daily consumption of alimentary matter by a strong, healthy man to be, at present, from 46 to 49 ounces, viz., 2 ounces water, 11 ounces carbon, and 7 ounces azote or nitrogen. In order, he says, that the matter eliminated should be regularly replaced, there ought to be an excess of carbon and nitrogen. A healthy man ought, therefore, to consume daily 31 ounces of dry food, or 6 cwt. 1 qr. 14.297 lbs. annually. The rations of the French soldier have been fixed upon this calculation.

It is, however, proved that the average daily consumption of the whole population is only 4 cwt. 1 qr. 9.017 lbs., instead of 6 cwt. 1 qr. 14.297 lbs. per man annually; but, if the number of children under five years of age be deducted, the consumption will be 4 cwt. 2 qrs. 3.63 lbs., a difference of from 1 cwt. 3 qrs. 2.416 lbs. to 1 cwt. 3 qrs. 13.439 lbs., or 29 per cent. This consumption, which corresponds to 44 gallons of wheat, 22 gallons of barley or rye, 75.018 pounds of meat, and 80.377 pounds of potatoes, is, according to the doctor, much above the average of the last century, but is, he considers, still insufficient. This must be very much below the average wants of a large portion of the population, because it must be borne in mind that the general consumption is relatively greater among the upper classes and in towns, than among the poorer classes and in the country.

As regards the consumption of wheat alone, the average is stated to have been 33 gallons per man in 1821, and 63 gallons per man in 1862.

The consumption of meat per head since the year 1812 is shown by the following table, in pounds:

Years.	Sheep, pigs, goats.	Oxen.	Cows, calves.	Total.
1812.....	4,409	2,205	15,432	22,046
1830.....	11,031	4,409	17,637	33,069
1840.....	17,637	4,409	17,637	39,683
1852.....	17,637	4,409	24,251	46,297
1862.....	22,046	6,614	24,251	52,911

Taking into consideration the increase of population, the consumption per head for 1871 would be over 72 pounds. In 1862, 1,900,000,000 pounds of meat were consumed in France, (reckoning the kilogramme* at 2 pounds English;) 43 per cent. were oxen, 40 per cent. pigs, 12 per cent. sheep and goats; in all, 16,000,000 of animals were slaughtered.

The following table will show the price of provisions in France during a period of thirty-two years:

Average period of years.	Half a kilo = 1.1-10 of a pound.				Ordinary-sized bird.			Half kilo.	1 dozen.	2 bushels.
	Beef.	Mutton.	Veal.	Pork.	Cocken.	Geese.	Turkey.	Butter.	Eggs.	Potatoes.
1824-1841.....	\$0. 71-5	\$0. 73-5	\$0. 07-3-5	\$0. 08-3-5	\$0. 16-2-5	\$0. 49-4-5	\$0. 72-2-5	\$0. 141-5	\$0. 081-5	\$0. 57-2-5
1841-1843.....	74-5	81-5	8	91-5	17-3-5	52-3-5	72-2-5	15	8-3-5	61-2-5
1843-1853.....	81-5	84-5	83-5	10	19-3-5	57-3-5	84	16	9-3-5	55-3-5
1853.....	93-5	101-5	94-5	121-5	24	67-2-5	1 01-5	18	10-4-5	1 25
1855.....	102-5	111-5	104-5	131-5	27-2-5	73-1-5	1 061-5	19-3-5	11-3-5	1 34-3-5

Annual increase, per cent.

From 1824-1833 to 1834-1843	\$0. 164-5	\$0. 154-5	\$0. 103-5	\$0. 14	\$0. 113-5	\$0. 111-5	\$0. 163-5	\$0. 111-5	\$0. 094-5	\$0. 21
From 1834-1843 to 1844-1853	112-5	142-5	15	172-5	224-5	19	141-5	132-5	183-5	61-5
From 1844-1853 to 1854	583-5	633-5	554-5	88	694-5	69	791-5	50	593-5	1813-5
From 1854 to 1855	2124-5	196	291	161	2832-5	172	1194-5	1774-5	1813-5	178
From 1824-1833 to 1855	341-5	362-5	322-5	411-5	513-5	361-5	354-5	221-5	314-5	1 35

* The kilogramme is equivalent to 2.205 lbs. avoirdupois.

CLOTHING.

The French workman wears a blue linen blouse and trousers. The suit costs 10s. (\$2.42,) and one will last from one to two years. The only difference made in winter is to put on two extra shirts, a woolen one over a cotton. Cloth clothing is more expensive in France than in England; and as there is no occasion for an Englishman who has emigrated to the north of France to make any change, it rests with him to judge whether it would not be more economical for him to adopt the cheaper, but less durable, dress of the country. In either case, he will probably find that clothing costs more in France than in England. In the south of France, however, an English workman ought certainly to adopt the blouse, which is infinitely cooler and pleasanter than his own dress, when there is great heat.

The following prices are those at present charged by a firm in Paris, whose principal dealings are with the working-class:

	Francs.	U. S. gold dollars.
Complete suit.....		
Paletot.....	25 0 to 52 0	5 00 to 10 40
Coat.....	19 0 to 38 0	3 80 to 7 60
Trousers and waistcoat.....	35 0 to 52 0	7 00 to 10 40
Trousers.....	19 0 to 30 0	3 80 to 6 00
Great-coat.....	12 0 to 32 0	2 40 to 6 40
A coat, a pair of trousers, a waistcoat, a hat, a shirt, } a pair of gloves and a cravat..... }	25 0 to 30 0	5 00 to 7 80
The whole for.....	70 francs.	14 00
<i>Working-dress.</i>		
Overalls.....		
Blouses.....	1 60 to 2 75	32 to 55
Shirts.....	1 90 to 4 25	38 to 85
Boots.....	2 25 to 5 50	45 to 1 16
	4 0 to 15 0	80 to 3 00

LODGINGS.

Speaking generally, home-comforts are not to be met with in the dwellings of the French workmen. Their houses in the small towns and in the country are mere lath and plaster erections, ill-calculated to resist either the heat of the summer or the cold of winter. No doubt there are many exceptions to this rule, as in the case of the "Cités Ouvrières," which have been built in Paris, Marseilles, Amiens, and other towns. Many employers have also followed the good example thus set them, and have built as good houses for their work-people as can be met with in the best parts of England. In large towns the artisans usually live in apartments in flats, which are apt to be overcrowded, and, as a rule, dirty. Workmen do not appear to have much difficulty in finding lodgings near their work; but this does not apply to Paris, on account of the local separation of classes.

The "Cités Ouvrières," already mentioned, are not all built on the same plan. Some are large barracks under regulation, in which apartments are let out at a cheap rate to the working-classes. Although these buildings have been erected with every regard to the comfort of the working-man, and the regulations are made as little oppressive as is compatible with the order and regularity which are essential for individual happiness, where large masses of men are brought together under the same roof, still they are never been popular among the classes for whose benefit they were erected. The French workman objects to supervision. On his return home he wishes to be a free man, and to be master of his own household; and the consequence is that for lack of a sufficient number of working-men applicants, many of the apartments in these buildings may be taken as a specimen of this class of building. It is built on the side of the well-known hill which overlooks Marseilles, and which is surmounted by the little chapel consecrated to Notre Dame de la Garde. It consists of a single building of three stories, and contains 150 rooms opening on to long corridors. The rooms are let for 20c. to \$1 and \$1.20 a month. The furniture consists of an iron bedstead, a table, two chairs, a cupboard and a looking-glass. Only men are admitted.

The workmen have the use of a large restaurant in the house at very moderate prices, and a physician attends and gives medicine gratis. Hot-baths are prepared every Sunday, and cost 5 cents.

The *Clé Ouvrière*, in Paris, in the Rue Rochecouart, contains 170 dwellings, besides a *salle d'asile* and a small establishment of baths. Furniture is not provided. The rooms are better than can be obtained by workmen in the neighborhood, and the price about the same. The *Clé Napoleon* was the first *Clé Ouvrière* erected in Paris, and is composed of 15 houses, 920 dwellings for married workmen, and 604 rooms for bachelors. Rent for workmen, \$13.40 to \$50 a year; for employes or clerks, \$50 to \$79. The furnished rooms are let for \$1.60 a month. At Amiens, similar erections have been made. Rent for family, from \$15.60 to \$25.20.

The system, which has really been a perfect success, is that adopted at Mulhouse. The workmen's dwellings consist of rows of two-storied houses, each with a garden attached, and the condition of the lease is such that a workman, after a certain number of years, can obtain the freehold of his house. This has an immense moral influence on the population. There is no irritating system of supervision. The workman feels that he is the possessor of a real home, that in a few years he will become a proprietor; and thus the whole character of the man is changed. His self-respect increases, he feels himself a member of the body-politic, and his interests enlist him on the side of order.

The following passages are extracted from a sanitary report on the condition of Lille which was drawn up and presented to the municipality of that town in 1832. Great improvements have been effected since that date, and several new quarters for the working-classes have been erected; but if the misery is no less now than in 1832, there is still enough left to afford ample scope for improvement:

"It is impossible to imagine the dwellings of our working-classes without seeing them. Through the state of indifference and demoralization in which they live, they bring themselves into a condition of dreadful and deadly misery. In their dark, underground dens, in their rooms, which might be taken for cellars, the atmosphere, however noisome, is never changed. The walls are covered with filth. The beds, when there are any, consist of dirty planks, covered with damp and putrid straw. The coarse sheet, the color and material of which is hidden under a layer of dirt, resembles a sieve in texture.

"The furniture is mildewed, bedaubed, and broken. The windows, always closed, are pasted up with paper so blackened and smoked that the light is unable to penetrate. In some cases the windows are nailed up by the proprietor to prevent the panes of glass from being broken by opening. The floor is worse than all, strewed with rubbish, filth, cinders, and remnants of vegetables picked up in the streets, and infected with vermin of all kinds. The air is unfit to be breathed," &c.

M. Blanqui has thus described the workmen's habitations at Rouen: "The entrance is often by a low, dark, and narrow passage, where a man can hardly stand upright. These passages are the bed of a fetid stream issuing from the different stories and apartments, and which runs into the small court-yard and there stagnates. The staircases are spiral, without light or banisters, bristling with hardened filth, and by them are reached dismal low dens, with windows and doors which scarcely open or shut, and with little or no furniture. The youngest children sleep on a bag of cinders; the rest of the family, father and mother, brothers and sisters, are all huddled together on a miserable litter."

Great efforts have been made to ameliorate the condition of these wretched classes, and much has been effected since the above was written, but the amount of poverty that prevails renders it difficult to keep pace with it.

M. Jules Simon remarks, in speaking of the wretched condition of the working-classes in the French towns, that luckily they are not aware of the extent of their misery, and in proof of this he quotes an old woman lying on some wretched straw in a damp cellar, who, pointing to her neighbor on the wet, bare floor, said, "I am not rich, but, thank God, I have my pallet of straw."

WAGES AND QUALITY OF WORK.

There can be no doubt that the trustworthiness of the workman has an influence in most trades on his rate of wages. Of course, in some mechanical employments, where the workman is but a machine, and where there is no scope for the quality of honesty or dishonesty to make its influence apparent, the former may not be remunerated as it should be; but, on the other hand, in some trades, such as the jeweler's, honesty fetches a high price. The persistent abstraction of an infinitesimal portion of the silk given to the Lyons workmen to manufacture has always weighed heavily on the trade of that city. The workman forgets that the effect of this petty fraud is to increase the cost of production, first, by loss of material; second, by increased expenditure in supervision. He forgets that the manufacturer has to contend with competition; that his competitors are foreigners, who, perhaps, are not so heavily weighted in the race, working, probably, under more favorable circumstances, and where a stricter code of morals prevails. On this subject, M. P. Beaulieu, in his "*Populations Ouvrières*," says: "The

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manufacturer who is the victim of petty larceny is obliged to sell his goods at the same rate as foreign manufacturers, although the cost of production is greater in his case, owing to the frauds to which he is subject. To meet this he has but one resource, viz, the diminution of the rate of wages. Either the factory or work-shop must be closed or wages must be lowered. There is no middle course, and in either case the workman is the sufferer."

In 1856 the French government, alive to the economical consequences of the dearth of 1853, instituted inquiries on the influence which the increased price of food had exercised on the rate of wages, with the following results:

Rate of wages in the principal departmental towns (Paris excepted) during the years 1853 and 1857.

DAILY WAGES OF A WORKING-MAN WHEN BOARDED.

	1853.	1857.	In-crease.
Ordinary pay.....			
Maximum pay.....	\$0 19	\$0 21½	\$0 02½
Minimum pay.....	24½	28	03½
	14½	17	02½

WHEN NOT BOARDED.

	1853.	1857.	In-crease.
Ordinary pay.....			
Maximum pay.....	\$0 37½	\$0 42½	\$0 05
Minimum pay.....	47	51	07
	30½	35	04½

From the above table it would appear that wages, taken *en gros*, increased between 1853 and 1857 at the rate of about 14 per cent., or one-seventh.

But the most important point to ascertain is the ordinary daily rate of wages of workmen not boarded, who compose by far the largest portion of working-men, and form the real laboring class. Under this category it was found that ornamental workmen in stone attained to the highest rate of wages, viz: 68 cents in 1853, and 81 cents in 1857. Some of the more experienced workmen in the same profession received even as much as 94 cents in 1853 and \$1.14 in 1857. After them came the workers in jewelry and precious stones, who received 55 cents in 1853, and 59 cents in 1857. The wig-makers received the lowest wages, 27 cents in 1853, and 33 cents in 1857; and the weavers 24½ cents in 1853, and 31½ cents in 1857.

Among women the artificial-flower makers obtained the highest rate of wages. From 26½ cents their wages rose within the five years to 30 cents. The worst paid were the slop-makers, 19 cents in 1853, and 25 cents in 1857; the stay-makers, the embroiderers, and the seamstresses, who received from 19½ cents to 19½ cents in 1853, and 22½ cents in 1857.

In 1854 and 1855 the following were the rates of wages of workmen engaged in the house-building trade in the principal departmental towns:

Average daily rate of wages obtained by a good workman in the building-trade.

Mason: In 1854, 43 cents; in 1855, 44½ cents.
Carpenter: In 1854, 46 cents; in 1855, 47½ cents.
Joiner: In 1854, 46 cents; in 1855, 48 cents.
Locksmith: In 1854, 47½ cents; in 1855, 49 cents.

The quality of the work executed by French workmen is, as a general rule, good. They have much more taste than the English workmen; they consequently excel in the manufacture of all articles of luxury where refinement and a correct eye for the artistic are necessary; but where solidity or accurate finish is required, especially in iron and steel work, the Englishman is superior.

COTTON MANUFACTURE.

The manufacture of cotton, which now occupies so prominent a position among the industries of the world, was not introduced into France until about the middle of the seventeenth century. In 1816 the French manufactories were employed on more than 12,000,000 kilogrammes (11,810 tons) per annum.

The cotton industry in France has from its very commencement adopted as its *spécialité* the manufacture of fine texture, while England on the other hand has principally aimed at the production of coarse articles at a cheap rate. The French textures, in consequence of their fineness and elegance, have always sold for higher prices than the English, but the proportion between the two prices has always remained about the same.

The average wages of cotton-spinners are from 30 cents to 40 cents; 40 cents is paid for spinning two sides and 30 cents for spinning one side.

The hours of work at Rouen formerly were from 6 a. m. to 7 p. m. They are now reduced from 6 a. m. to 6.15 p. m., and in some establishments only from 6 a. m. to 5.15 p. m.; but the employers state that they are afraid they will not be able permanently to adhere to this reduction on account of the loss which this diminution of labor entails.

The following shows the difference in the wages of the workers in cotton in 1860 and 1870:

PIECE-WORK.—Average salaries per day of good workmen.		
	1860.	1870.
Spinners.....	\$0 32	\$0 34
Weavers.....	50	74
Corders.....	34	34
Winders, (men or women).....	25	30
Children.....	14	25
Average.....	33	37

This augmentation of wages is at the rate of 30 per cent. in ten years.

The proportion between the men, women, and children from twelve to sixteen years of age employed in the cotton-factories of France, is 50 per cent. men, 25 per cent. women, and 25 per cent. children.

In some manufactories a good weaver, employed at piece-work, can gain as much as \$1.19 a day, but this is an exception.

In the Vosges wages are a little lower than those already quoted, but the augmentation during the last ten years has followed the same ratio.

* * * * *

Daily wages in the cotton-trade at Amiens.

	Wages in U. S. gold.
Hocklers.....	\$0 40 to \$0 60
Preparers.....	30 to 40
Spinners.....	30 to 50
Reelers.....	30 to 50
Dollers.....	12 to 45
Weavers.....	40 to 80
Mechanics.....	60 to 1 00
Foremen.....	80 to 2 40

The houses built for their work-people by the *Compagnie Anonyme* consist of four rooms, with a coal-shed and a small garden. The rent before the war was 50 cents, which has now been reduced to 25 cents. The houses of the same class in the neighborhood are let at from 50 cents to 55 cents.

* * * * *

Elhorn.—This town, which holds such a prominent place in the manufacture of cloth, contains from 9,000 to 10,000 workmen permanently residing within its limits; about 20,000 altogether, counting the floating population. The value of the manufactures of this town amounted in 1855 to \$5,000,000 francs, (\$17,000,000.)

The fact that the number of workmen employed for the last half century has not altered, is worthy of notice, although the production has so enormously increased. Thus if we take, for the sake of comparison, the years 1801 and 1853, that is to say, a year in which all the work was executed by hand, and a year in which machinery was employed, it will be found that the same number of men were employed, notwithstanding the difference in the amount produced.

In 1801, 15,500 pieces of cloth were manufactured, while in 1853 82,000 pieces were made. In 1801 three kinds of cloth were made, the average price of which was 24 francs the metre. In 1853 the action of machinery had reduced the average price to 12 francs the metre. The cloth manufactured in 1853 for 12 francs was superior to the cloth which in 1801 sold for 20 francs.

The wages of the workmen in 1801 were 24 cents a day; women, 15 cents; children 4 to 6 cents. In 1853 the average had risen to 55 cents for men, 35 cents for women, and 15 cents for children.

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	1860.	1870.
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..	25	30½
..	14½	25
..	33½	37½

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Wages in U. S. gold.

..	\$0 40 to \$0 60
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..	20 to 50
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..	40 to 80
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..	80 to 2 40

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Lille.—This is a very large center of industry, the cotton-spinners alone amounting to 7,000 or 8,000 in number. The population of the town is over 154,000, and the inhab-
itants are chiefly engaged in the manufacture of lace, tulle, and cotton fabrics. The
climate, like that of Calais and Dunkirk, is very similar to that of England. Men
earn from 50 to 65 cents a day, and the women 50 cents, working twelve hours. In the
cotton-mills wages average from 14 cents to sometimes, but rarely, 70 cents a day.

Gissel.—The wages here are: men, from 60 cents to \$1; women, from 30 cents to 60
cents; youths and girls, from 25 cents to 55 cents; and children, from 15 to 20 cents.

Rouen.—The cost of provisions at Rouen is as follows: meat, 20 cents a pound;
milk, 2 cents the litre; bread, 4 cents a pound. * * * The rate of wages is as
follows: Fitters in engineering works get 87½ cents to \$1.18 a day; turners the same;
smiths working steam-har nets, \$1.50 a day; iron-molders, from \$1 to \$1.25 a day;
"monteurs," being better educated and of rather a superior class, get 14 to 16 cents
per hour. *

The want of the system of apprenticeship here tends to inferior workmanship; and
the employers do not speak very highly of the amount of talent shown by their men,
nor of their evincing much pride in their work. The hours of work vary from eleven
to twelve hours in the town; in the country they are nearly always twelve. In Paris
alone they are ten, but they are scarcely ever ten elsewhere, except in cases where the
business is in the hands of a company who are spending money which is not their own.
All firms who work for themselves work for eleven or, more generally, twelve hours.

At the manufacturing town of Bolbec, in the neighborhood, where there are several
large capitalists, the men work for eleven hours only; and the system adopted there
by these employers, who are endeavoring to better the condition of their workmen,
seems to have resulted in making them more settled, and to have improved the whole
tenor of their character; they evince more pride in their work, and thus repay their
employer by attending to his interests, while their whole *morale* is raised; but this
would hardly be possible in a large town where the proprietors did not all agree to act
in concert in the matter.

Valenciennes has almost entirely ceased to produce the lace which bears its name.
The workmen who make the real Valenciennes lace earn 26 cents a day; those who
make the imitation, as it is made in Belgium, earn 1 franc, 50 centimes, (30 cents) for
twelve hours' work. The workers in coarse lace earn 25 cents.

The large coal-fields in the neighborhood, in what is called the Bassin de Valen-
ciennes, supply three-fourths of the coal obtained in the whole of France, and concen-
trate in this district a large mining population, which numbered in 1861 nearly 17,000
hands. The yield the year before was over 3,000,000 tons of coal. *

Châlons-sur-Marne.—With the exception of a glass manufactory and two stocking
manufactories, which employ a number of women, there are no great industrial estab-
lishments here. The h women get from 50 cents to 60 cents a day. The last prices are
the same as in the spinning factories in the little town of Snipettes, twenty kilometres
from Châlons. Unfortunately the lodgings are of a very low character, damp, and
unhealthy. They cost, unfurnished, from \$30 to \$40 a year for a family of four per-
sons. The climate is healthy. The average temperature varies between 90° Fahren-
heit in the summer, and 15° Fahrenheit, in the winter, the average lying between 50°
Fahrenheit and 60° Fahrenheit. Coal costs 80 cents to 90 cents the 100 kilogrammes,
(1 cwt. 3 qrs. 24 lbs. 7 oz.); bread, per pound, 4 cents; meat, per pound, 18 cents;
butter, per pound, 28 cents; eggs, each, 2 cents; potatoes, per pound, 5 cents; bacon,
per pound, 18 cents; wine, per pint, 5½ cents; beer, per pint, 3 cents.

Lons le Saunier.—Cheese and wine are the staple products of this district. A salt-
mine, employing 150 hands, gives work to the population. A mechanic, in proportion
to his skill and strength, can earn from 45 cents to 70 cents a day. Masons, carpen-
ters, blacksmiths, &c., receive about 4 francs or 5 francs (80 cents or \$1) for a day's
work of twelve hours. Lodgings, consisting of single rooms, cost from \$10 to \$14,
Workmen sometimes live in boarding-houses for \$8 to \$10 a month; but many find it
cheaper to live at home. The climate is a temperate one.

Nancy.—The wages here are very low and workmen are obliged to live with the
greatest economy. Mechanics, for instance, who are the most numerous class here,
only receive from 39 cents to 50 cents a day. The best only get from 60 cents to 80
cents. The skilled workman only receives 80 cents per diem. Beyond these, higher
wages are only given for piece-work to workmen employed in special branches
of industry in large establishments. These can live well on their earnings. Miners
paddlers, plate-rollers, casters, and mechanics can get on, and even live well, if they
are sensible men and economically disposed. The embroiderers and the lace-workers
are very badly paid. In 1852, the lace-workers of Mircourt complained that their
daily labor of twenty hours only produced 35 centimes to 40 centimes (7 to 8 cents)
while formerly they received from 14½ centimes to 19 centimes. *

Rheims is indebted to the manufacture of wool for its important industrial position. It holds the first rank in the amount of production, 30,000 to 40,000 workmen being employed in this branch of industry. Since the introduction of steam-carding the workmen employed in this department have suffered considerably. While an industrious workman requires an assistant to enable him to card by hand, in the year, 715 to 770 pounds, the machine can prepare 33,000 pounds to 45,000 pounds in the same time. Formerly a carder could earn 300 francs (\$60) a year, a sum insufficient to support him comfortably, but now he cannot earn even that.

Taking the average of all the industries in Rheims by hand as well as by machinery the income of the artisan in 1860 was \$100. If we separate those who work by hand from those who work with the aid of machinery, it will be found that the former earned \$80 per year, and the latter \$120.

St. Etienne.—The following table gives the prices of provisions at St. Etienne in 1871:

Articles.	In French currency.	In United States currency.
	fr. c.	
Wheat.....per 100 kilogrammes, 220 pounds.....	26 50	\$5 30
Rye.....per 100 kilogrammes.....	18 00	3 60
Barley.....per 100 kilogrammes.....	20 50	4 10
Oats.....per 100 kilogrammes.....	20 50	4 10
Pense.....per 100 kilogrammes.....	32 00	6 40
Lentils.....per 100 kilogrammes.....	50 00	10 00
Beans.....per 100 kilogrammes.....	27 00	5 00
Potatoes.....per 100 kilogrammes.....	6 50	1 30
Flour.....per 100 kilogrammes.....	40 00	8 00
Bread, white.....per 100 kilogrammes.....	50 00	10 00
Bread, brown.....per 100 kilogrammes.....	45 00	9 00
Bread, black.....per 100 kilogrammes.....	31 00	6 80
Beef.....per kilogramme.....	1 90	*18
Veal.....per kilogramme.....	1 80	*17½
Mutton.....per kilogramme.....	1 90	*18
Pork.....per kilogramme.....	1 60	*15½

* Per pound.

Lyon contains about 300 manufactories of silk, and as several are in the hands of partners, the manufacturers number from about 150 to 500. About three-fifths of the production is for the foreign market. There are 70,000 looms at work, employing 175,000 hands. In 1860 the wages paid were at the rate of 13½ cents per yard. The weaver can make a little more than 1 metres (1½ yards) a day, working from 5 in the morning until 10 at night, which brought in 70 cents. Thirty-five cents out of the above sum went to the owner of the loom, and 35 cents to the workman. Some are better paid, but the average is 36 cents per day.

The majority of the Lyons workmen occupy large houses of five or six stories, built expressly for them. The rooms are made sufficiently lofty to take in a Jacquard loom, and are let separately. The largest part of the room is devoted to the looms, the numbers of which vary from two to six, while the remainder of the space, forming a kind of alcove, lighted sometimes by a window, is divided—thanks to the height of the room—into two divisions, one above the other. The upper part is reserved for the children and assistants; the lower half serves as kitchen, sitting-room, and bed-room for the owner of the looms. The staircases are large and airy. The healthiness of the modern lodgings and the assistance of machinery in weaving have had a marked effect on the health and physique of the population.

The French law for the protection of children is not so stringent as the law in England. Children from eight to twelve years of age may work in France eight hours out of the twenty-four, that is one and a half hours longer than in England. There is also no effective system of supervision. The French law only applies to manufactories and establishments in which machinery moved by mechanical power is used, or in workshops containing more than twenty workmen. The Lyons workshops never hold more than six workmen, and the government has never used the power conferred on it by this law to extend the prohibition. It is, therefore, a dead letter as far as the silk manufacture is concerned.

LABOR IN FRANCE.

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Market and retail prices of provisions at Lyons in September, 1871.

	Market.
Butter, per kilogramme, 2 pounds 3½ ounces.....	\$0.42
Eggs, per 100.....	1.43
Cheese, per kilogramme.....	27
Fresh sea-fish—1st quality, per kilogramme.....	41
Fresh sea-fish—2d quality, per kilogramme.....	21
Fresh-water fish—carp, per kilogramme.....	29
Fresh-water fish—trout, per kilogramme.....	16
Fresh-water fish, pike, per kilogramme.....	89
Bread, per kilogramme.....	Retail.
Beef, per kilogramme.....	27½
Veal, per kilogramme.....	36
Mutton, per kilogramme.....	37

Vin ordinaire, or wine of the country, 7 cents to 12 cents per litre—(1¼ pints.)

Marseilles.—Nothing is manufactured here on a large scale but soap, for which there are large works, with corresponding mills for crushing oil seeds, and one or two large engineering establishments. In these the wages range from 62 cent. to \$1 a day, according to the quality of work. The prices of house-rent, labor, food, and clothing are within 1 or 2 per cent. the same as at Paris; bread, meat, vegetables, clothing, and furniture are slightly cheaper; house-rent, fruit, and wine are cheaper. Most things are brought from Paris, which accounts for the high prices. It would seem that living at Marseilles costs more than in London, or any other large town in England.

Bordeaux.—The purchase-power of money at Bordeaux as regards absolute necessities of life, such as food, clothing, and lodging, is less than in England. The light wines of the country are drunk in preference to beer, and are more suited to the climate, especially in summer. The drainage at Bordeaux, from the poisonous nature of the soil, is naturally very good; workmen can obtain lodgings near their work, and do not suffer from overcrowding. In the manufacture of small articles, French workmen are better as regards finish, but it is not so solid and strong a character as the English. Wages in manufacturing establishments vary from between 20 cents to \$1.20 for men, from 10 cents to 60 cents for women and grown lads, and from 10 cents to 10 cents for girls. The English workman cannot live as well at Bordeaux as in England, nor are his earnings as great. Rent of furnished lodgings is from \$3 to \$162 a month. Fuel costs \$8 to \$9 a ton. Meat 20 cents the English pound. Vegetables, groceries, and clothing are all dearer than in a town of the same size in England. The Englishman being accustomed to animal food, which is twice as dear as bread and vegetables, (upon which the native thrives,) cannot feed himself for less than 3 francs (60 cents) a day; (the same sum sufficing to cover all the expenses of the French workman.)

Montauban.—The climate is very healthy and mild, and epidemics unknown. The temperature in winter rarely goes below 24° F., and that only for a few days. A winter suit of clothes can be got complete for from \$6 to \$10; summer ones, from \$1.25 to \$5. A workman can get good healthy lodgings of two rooms, for from \$2.10 to \$3.10 a month. Food is plentiful and cheap. Eggs cost 1 cent apiece. Chickens, 20 cents to 30 cents apiece. Butchers' meat and vegetables are cheap, as is also fruit. Wine costs 4 cents to 6 cents for ¼ imperial pint. The industry of the place consists in the manufacture of coarse woollen goods and serges, (*Cadix de Montauban*), in spinning silk, and in making furniture. The character of the people is somewhat indolent, and they might, if they chose to be more active, easily double their average earnings, which are from 10 cents to \$1 a day for men, and 10 to 20 cents for women.

Chateauroux.—There are two manufactories here; one of tobacco, in which the men earn about 20 cents; and one of cloth, in which 51 cents is the average of wages. Mechanics earn from 10 to 20 cents in foundries, &c. The ordinary workman earns from 31 to 65 cents a day. In dress-making establishments, where women are employed, wages vary from 25 to 30 cents. The average time they work is ten hours. Food is wholesome and abundant. Meat costs from 35 to 42 cents per kilogramme, (2 pounds 3 ounces.) Turkeys cost \$2.10 to \$3 the pair. Fowls, from 50 cents to \$1.15 a pair. Bread cost 93 cents per kilogramme, (about 1½ cents per pound,) for the first quality. The second costs about 3½ cents per pound.

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Etienne in 1871

in French currency.	In United States money.
£. c.	\$5.20
26.50	3.60
18.00	4.10
20.50	4.10
20.50	6.40
22.00	10.00
27.00	5.00
6.50	1.30
40.00	8.00
50.00	10.00
45.00	9.50
31.00	6.80
1.00	*18
1.50	*174
1.20	*18
1.60	*153

are in the hands of three-fifths of the work, employing 1000 men per yard. The King from 5 in the 10 cents out of the workman. Some are

or six stories, built after in a Jacquard ote to the looms. The space, forming asks to the height of is reserved for the room, and bed-room healthfulness of the had a marked effect

The law in England. eight hours out of the There is also no manufactory and a used, or in work-ops never hold more er conferred on it if er as far as the silk

PRICES OF PROVISIONS IN PARIS, IN 1871.

Articles.		In French currency.	In United States gold.
Bread, first quality.....	per 1 kilogramme..	f. c. 0 15	\$0 00
Bread, second quality.....	per 1 kilogramme..	0 25	05
Meat:			
Beef, first quality.....	per 1 kilogramme..	2 00	40
Beef, second quality.....	per 1 kilogramme..	1 70	34
Beef, third quality.....	per 1 kilogramme..	1 50	30
Veal, first quality.....	per 1 kilogramme..	2 00	40
Veal, second quality.....	per 1 kilogramme..	2 20	44
Veal, third quality.....	per 1 kilogramme..	2 00	40
Mutton, first quality.....	per 1 kilogramme..	1 70	34
Mutton, second quality.....	per 1 kilogramme..	1 40	28
Mutton, third quality.....	per 1 kilogramme..	1 40	28
Fillet of beef.....	per 1 kilogramme..	5 00	1 00
Rump-steak.....	per 1 kilogramme..	3 00	60
Butter, first quality.....	per 1 kilogramme..	2 50	50
Butter, second quality.....	per 1 kilogramme..	2 20	44
Butter, third quality.....	per 1 kilogramme..	1 70	34
Butter, fourth quality.....	per 1 kilogramme..	1 35	27
Milk.....	per litre.....	0 40	08
Cream.....	per litre.....	1 00	20
Sugar, first quality.....	per 1 kilogramme..	0 80	16
Sugar, second quality.....	per 1 kilogramme..	0 75	15
Sugar, third quality.....	per 1 kilogramme..	0 70	14
Coffee, first quality.....	per 1 kilogramme..	2 40	48
Coffee, second quality.....	per 1 kilogramme..	2 20	44
Coffee, third quality.....	per 1 kilogramme..	2 00	40
Coffee, fourth quality.....	per 1 kilogramme..	1 80	36
Tea, first quality.....	per 1 kilogramme..	8 00	1 60
Tea, second quality.....	per 1 kilogramme..	6 00	1 20
Tea, third quality.....	per 1 kilogramme..	4 00	80
Candles, first quality.....	per 1 kilogramme..	1 70	36
Candles, second quality.....	per 1 kilogramme..	1 40	28
Candles, third quality.....	per 1 kilogramme..	1 30	26
Candles, fourth quality.....	per 1 kilogramme..	1 25	25
Lamp-oil, first quality.....	per 1 kilogramme..	1 80	36
Lamp-oil, second quality.....	per 1 kilogramme..	1 60	32
Fire-wood.....	per 1,000 kilogrammes..	70 00	14 00
Coal.....	per 1,000 kilogrammes..	40 00	12 00
Coke.....	per 1,000 kilogrammes..	60 00	12 00
Wine.....	per litre.....	50c. to 70c.	10c. to 14c.

FROM REPORTS OF BRITISH CONSULS.

BOULOGNE CONSULAR DISTRICT.

The following is the price of labor for the day of 10 hours: a mason, 70 cents; a slater, 90 cents; a carpenter, 80 cents; a joiner, 65 cents; a locksmith, 70 cents; a painter, 51 to 62 cents; an ordinary laborer, 54 cents. In the boot trade a workman earns from 60 cents to 70 cents a day by piece-work. In the pen manufactory wages are about 83.75 a week, the day's work being from 8 a. m. to 7 p. m. with the interval of an hour; the women employed on piece-work probably receive as much. In the cement-works, where not much skill is required, the wages are 56 cents a day. In the iron-works the ordinary laborer is paid from 50 to 56 cents, while the skilled workman receives as much as \$1 a day. In the carriage manufactory, which is a very important business, the wages range from 50 cents to \$1.25 a day, according to the degree of skill in the workman.

The following are the prices of provisions in the town of Boulogne: Wheat bread, first quality, 1 cent per pound; beef, ordinary quality, 22 cents per pound; mutton, ordinary quality, 20 cents per pound; veal, ordinary quality, 20 cents per pound; pork, ordinary quality, 18 cents per pound; butter for the table, 32 cents per pound; butter for the kitchen, 25 cents per pound; coffee from 40 to 45 cents per pound; sugar, white, 17 cents per pound; sugar, brown, 13 to 15 cents per pound; coals are from \$6 to \$6.50 per ton.

CALAIS CONSULAR DISTRICT.

Lodgings.—In the neighborhood of Calais the lodgings are tolerably good and healthy, and conveniently situated as regards distance from work.

In the Lille district there are a few unhealthy lodgings, but such cases are rare. In Saint Valéry-sur-Somme lodgings for working-men are very scarce. Laborers employed on public works, such as the embankments, reside generally at a distance of from three to five miles from the town, and have to come to and from their work, according to the state of the tide. Mr. D'Arcy adds, that "healthy premises are very difficult to find, and that the small ill-ventilated cabins, in which the laboring classes reside, in the villages around Saint Valéry, are, in some cases, very unwholesome and dirty, in some places dung-hills and cess-pools being contiguous to their very doors."

I would here observe that there are no factories in the immediate neighborhood of Saint Valéry, the district being purely agricultural.

As regards this part of France there is no special risk for any one living temperately; on the contrary, in the Calais district especially, the people are clean and healthy, and many of them very long lived.

Quality of work. The English workmen in the lace trade are decidedly competent, and take a pride in their work. I should say the same of the French workmen in this particular branch of industry.

Mr. Wilson reports that, with the exception of the weavers, the workmen in his district are not good, and, being badly paid, they take no pride in their work.

As regards the question whether there is any class of artisans whose work can be depended upon as good from the sense of honor they have in executing it, I should say, with, perhaps, the exception of the lace trade, they are governed not by a sense of honor, but by interest. The same remark is made as regards the weavers in the Lille district.

As to the skill of the workmen influencing the rate of wages, those employed in the lace-trade are paid according to the quantity of their work and steadiness in their business, careless or unscrupulous workmen rarely remaining in their situations. Skill and trustworthiness must, therefore, influence the rate of wages.

The rate of wages in the lace trade varies as much as from \$6 to \$44 per week, and is regulated entirely by work done. The hours, too, vary considerably. When the trade is active, the machines are at work day and night; in average seasons, during the day only; and at certain times, known as the "morte saison," i. e., during the autumn, they are at work only during part of the day.

In the Lille district the men earn from 50 cents to 65 cents per day, and the women 50 cents, working 72 hours per week; and in the cotton-mills they earn from 40 cents to 70 cents per day, the latter sum, however, very rarely.

HAVRE CONSULAR DISTRICT.

Purchasing power of money.—It is not very easy to give the absolute rate of wages paid in the Havre district to the different classes of workmen, as it varies, as do the prices of provisions, and house-rent in the different localities being higher at Havre than in the interior. I have, however, endeavored to give the mean of the different rates.

Occupations.	Average daily wages.		Hours of labor, excluding meals.
	French currency.	United States gold.	
Carpenters and locksmiths.....	<i>Fr. c.</i>		
Stone-masons.....	4 00	\$0 80	9-11
Mechanics.....	4 75	95	9-11
Bricklayers.....	4 50	90	11
House-painters.....	4 60	80	9-11
Smiths.....	4 50	90	9-11
Shipwrights.....	1 50	50	9-11
Laborers, ordinary.....	1 75	35	9-11
Dock-laborers.....	3 00	60	9-11
Cotton-spinners.....	5 00	1 00	9-11
Cotton-weavers, (principally women)....	5 00	1 00	9-11
Calico printers and dyers.....	2 50	50	11-12
Flax-spinners.....	4 25	85	11-12
Bleachers.....	4 00	80	11-12
Tanners.....	3 00	60	11-12
Engine-drivers, four classes, average.....	4 00	80	1-12
Smokers, two classes, average.....	7 55	1 47	No fixed time, do.
	4 50	90	

In United States gold

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man, 70 cents; a smith, 70 cents; a trade a workman, manufactory wages, with the interval as much. In 60 cents a day. In the skilled workman is a very important the degree of skill.

Boulogne: Wheat cents per pound; ability, 20 cents per table, 32 cents per 40 to 45 cents per cents per pound;

AGRICULTURAL LABORERS.

Occupation.	Average wages.		Hours of labor.	Observations.
	Currency.	United States gold.		
By the year:	<i>Frs.</i>			
Plowman.....	400—450	\$80 00 to \$90	15	Board and washing found.
Ordinary laborer.....	275—325	55 00 to 65	15	Meal-times included.
Women.....	225—275	41 60 to 55	15	
By the day:				
Men, with food.....	1 50	30	13	Meal-times included.
Women, with food.....	1 00	20	13	
Men, without food.....	3 00	60	13	
Women, without food..	1 75	35	13	

PRICES OF PROVISIONS.

Articles.	Average price.	
	Currency.	United States gold.
	<i>Fr. c.</i>	
Bread, second quality.....per 4 pounds..	0 80	\$0 16
Butter, fresh.....per pound..	1 50	30
Butter, salt.....per pound..	1 40	28
Potatoes.....per pound..	0 07½	1½
Bacon.....per pound..	1 15	23
Beef, second quality.....per pound..	0 93	18
Mutton.....per pound..	0 93	18
Pork.....per pound..	0 93	18
Lard.....per pound..	1 00	20
Sugar, moist.....per pound..	0 66	13
Coffee.....per pound..	2 00	40
Tea.....per pound..	4 50	90
Milk.....per quart..	0 15	03
Eggs.....each..	0 10	02
Soap, white.....per pound..	0 73	14½
Soap, yellow.....per pound..	0 73	14½
Soap, soft.....per pound..	0 40	08
Cider.....per quart..	0 20	04
Beer, common.....per quart..	0 25	05
Wine, common.....per quart..	0 66	13
Brandy.....per quart..	2 50	50

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LABOR IN FRANCE.

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PRICES OF RENT, FUEL, LIGHTS, CLOTHING.

Articles.	Average price.	
	Currency.	U. S. gold.
Rent of rooms.....per week..	<i>Fr. c.</i>	
Coals.....per ton..	3 00	\$0 60
Lights.....	40 00	8 00
Candles.....		
Petroleum.....per pound..	0 76	15
Clothing.....per quart..	0 82	16½
Tweeds.....		
Fastians.....per yard..	8 00	1 60
Flannels.....per yard..	4 50	90
Linen (coarse).....per yard..	3 50	70
Calico.....per yard..	1 25	25
Prints.....per yard..	0 80	16
Merino.....per yard..	1 00	20
Stockings.....per yard..	2 00	40
Shoes, men's.....per pair..	1 50	30
Shoes, women's.....per pair..	12 00	2 40
Shoes, children's.....per pair..	8 00	1 60
Shoes, (sabots).....per pair..	5 00	1 00
Hats, silk.....per pair..	1 00	20
Hats, felt.....each..	12 00	2 40
Caps.....each..	4 00	80
.....each..	3 50	70

MARSEILLES CONSULAR DISTRICT.

Considering the severe disorganization the country has undergone since July, 1870, it is not surprising that the normal scale of wages given to artisans and laborers should have undergone many changes, and it is really difficult, at present, to say what may be considered the standard of wages. In the large engineering establishments in Marseilles the ordinary laborers are paid at the rate of 70 cents a day, and the skilled workmen earn \$1 to \$1.20. In the large soap-works, and in the mills for crushing oil-seeds, the same rates prevail. The porters and laborers employed in loading and discharging vessels, and in the work at the docks and warehouses about the port, are mostly paid at the rate of \$1 a day, or they manage to earn that amount at piece-work. Ship-carpenters, calkers, and blacksmiths are likewise paid at the rate of \$1.20. These are more or less the prevailing rates of wages in this and other large towns, artisans and laborers receiving about 10 per cent. less in the smaller towns in the south of France. Agricultural laborers are paid, on the average, from 40 to 50 cents a day. The foregoing rates of wages sufficed, previously to the war, to keep all the available laborers occupied, and many of them were even enabled to save small sums of money. The savings-banks' returns show that, in Marseilles alone, there were 27,288 depositors in 1861, and 35,966 in 1869. Two-thirds of these, at least, were artisans and laborers. In the former year their average savings amounted to \$70.30 per head, and in 1869 to \$71.10.

There has been a falling off in the savings-banks since the outbreak of the war to the extent of 15 per cent. Considerable sums of money are likewise invested in government stocks, and all sorts of French and foreign securities, by the artisans and laboring-classes. The rate of wages which are thus stated enable the artisans and laborers to obtain the necessary aliments and clothing, as well as to meet their other necessary expenses, house-rent, &c., to about the same degree as the artisans and laborers in England. A great advantage, however, possessed by the working-classes in the south of France is the climate, which is usually so bright and cheering. With the exception of fruit and wine, provisions are not cheaper than in England. Bread, meat, fish, and vegetables are not to be obtained in the south of France below English rates; fuel is dearer than in England, but the winter being shorter in France than in that

country, the annual expenditure thereon amounts to about the same in both countries. House-rent in the large towns is higher, proportionately, than in England.

In the south of France the standard of health is very good; the climate is fine and enjoyable throughout the year, and a fair amount of longevity is not wanting. The summers are warm, but the heat does not prevent the artisans and laborers from carrying out their occupations, whether indoors or out in the open air, and the field-laborers are not prevented thereby from performing their work.

The laboring classes in these parts are frugal and abstemious in matters of diet. This consists principally of bread and wine, and, of late years, the taste for animal food has increased with the growing prosperity of the country. In the towns, especially, the taste for meat is fairly established, and successful work-people live as those in England.

The inhabitants, taken altogether, are better found in clothing than in most countries. The articles of which their clothing is composed are not altogether so good or so substantial as those in general use in England; but the Frenchman is more careful about his clothing, and his garments look better and last longer in this fine dry climate than those usually worn by English artisans and laborers. Warm clothing is absolutely requisite in the south of France, as much so as in England, the changes of temperature being very rapid, and dry, cutting winds which prevail rendering it necessary to use proper precautions for the preservation of health.

Much progress has been made of late years in securing proper lodgings for the working-classes. All the large towns are being rebuilt, and much attention is being paid to the proper ventilation and drainage of the houses. In Marseilles, Lyons, and other large towns in the south of France the working-classes can now find proper and healthy lodgings not too far removed from their work.

The workmen generally employed in the various trades and occupations in the south of France are every way most competent in their respective pursuits when it suits their fancy to display their skill; but as a rule they do not work steadily. There is much instability in their manner of working, and slovenly workmanship is not uncommonly seen. They waste much time about their work, and, considering them altogether, they do not take much pride in their work, or put their character into it.

NANTES.

Wages may be fixed at an average of 80 cents per day. The Parisian workman is paid by the week or fortnight, deducting, of course, the holidays. The mean pay may thus be estimated at \$20 per month, about \$210 a year, but one must not lose sight of the stoppages, ("*marchés saisons*," which, in different trades, vary between two and four months in the year. In short, the Parisian workman cannot be said to surpass \$250 yearly. It would be difficult to say whether this sum is sufficient for his maintenance.

The existence of the Parisian workman is at best a wretched one, and this is, therefore, very probably the reason why change is so popular. The general wish appears to be in favor of the eight-hour legal-labor system, the supplementary hours of work to be paid according to the present custom. This would not, however, benefit all the working-classes. The day's labor of glaziers and house-painters, for instance, varies according to the seasons. They are not paid uniformly by the day, but according to its length; having full days in the height of summer, and nothing to do in winter; their day's labor increasing progressively in spring to decline with the autumn, the pay ranging from 50 to 80 cents, \$1, and \$1.20 per day.

Food.—Workmen find in Paris good and abundant food at moderate prices, though perhaps not very much cheaper than in London. Again, it must be taken into consideration whether the operative be single or married. If the latter, there are many possibilities of obtaining food at more moderate prices, especially if living in the center of Paris. The central markets offer, between four and eight o'clock in the morning, all kinds of food sold first hand. With a little advance, or by clubbing together, a basket of fruit or a quantity of vegetables may be bought at a tenth of the price asked for the same articles a few hours later. The poorer classes of workmen purchase the broken victuals from restaurants and large private houses. If the workman be married, his food is usually prepared at home, and even if working a few miles off, he carries with him his breakfast in a tin box which can stand the heat, and which he will perhaps warm when he takes his wine. If single, he will repair to some "*marchand de rôt*," or some cooking establishment, where regular workmen's meals are prepared whenever any number are laboring in the neighborhood. The pork-butcher's shop is likewise a favorite resort, from whence, after buying cooked meat, sausages, black puddings, sardines in oil, or hard eggs and bread, they proceed to the "*marchand de vin*" to complete their breakfast. The single man will dine as he has breakfasted, while the married man returns to dinner at 7 or 8 o'clock, according to the nature of his labor or to the distance.

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The Parisian workman is highly imbued with professional pride. One constantly sees workmen refusing better-paid work, and preferring to it a less remunerative one in which they excel. Great emulation is to be found among them in this respect. Unfortunately, it is confined to the quality, and not to the quantity; highly honorable and praiseworthy, no doubt, but neither lucrative nor practical; and assuredly inverting the general order of things. Masters eagerly seek out exceptionally clever workmen. Some of them earn as much as \$5 a day, but success, self-love, ostentation, and the tastes and vices inherent in the Parisian character, often reduce these very clever 80 cents or \$1 per day. * * * Rooms in the old houses, many not very healthily situated, are to be had for moderate rents; dwellings containing two or three moderately-sized rooms varying from \$25 to \$28, \$30, and \$40 a year, exclusive of taxes. Single rooms are comparatively dear; one room, without proper ventilation or light, emphatically called *un trou*, (a den,) will cost \$12.

DAILY WAGES IN NANTES.

Occupation.	French currency.	U. S. gold.
Sugar-refiners	2 00 to 3 00	\$0 40 to \$0 60
Cotton-spinners	2 50 to 3 00	0 50 to 0 60
Wool-spinners	3 00 to 4 00	0 60 to 0 80
Weavers	2 50 to 2 50	0 50 to 0 70
Mechanics	4 00 to 6 00	0 80 to 1 20
Workmen in porcelain and china	10 00 to 15 00	2 00 to 3 00
Smiths, strikers, and riveters	4 00 to 6 00	0 80 to 1 20
Ship-carpenters, sail-makers, riggers, and calkers	5 00 to 6 00	1 00 to 1 20
Joiners	2 50 to 3 50	0 50 to 0 70
Carpenters	4 00 to 5 00	0 80 to 1 00
Rope-makers	2 25 to 3 00	0 45 to 0 60
Coopers	4 00 to 10 00	0 80 to 2 00
House-painters	4 00 to —	0 80
Masons	3 50 to 4 00	0 70 to 0 80
Plumbers and glaziers	4 00 to —	0 80
Laborers	2 50 to —	0 50
Scavengers and street-sweepers	2 25 to 2 50	0 45 to 0 50
Agricultural laborers, with food	1 25 to —	0 25
Female workers in the field, with food	0 30 to 0 40	0 05 to 0 05

In short, men's wages in town rarely descend below 45 cents; some earn, as may be seen, 80 cents, \$1, and \$1.20, according to their abilities; the latter price is the general pay of foremen. Here, as in Paris, exceptionally clever workmen receive pay beyond the general tariff; those on piece-work may earn \$2 to \$3, nay, even \$4 per diem in some branches. These, however, are rare exceptions.

The general price paid to workwomen is 15 cents and food, whether for dressmaking, plain work, mending, or ironing. In the manufactories they get 25 cents, without food; many prefer it, nevertheless; they find there cheerfulness, company, (scarcely good, it is to be feared,) and regular work. The length of their day's work is from 8 a. m. to 8 p. m.; subtracting two hours for meals, it leaves ten hours labor; and so a woman, who has employed three years of her existence in acquiring a certain dexterity, ends by earning 14 cents an hour to the end of her existence.

NICE.

At Nice, a good carpenter, working by the day, or at piece-work, will earn on an average about 65 cents, the tools which he uses being found by the master-carpenter; as a general rule the workman is idle during four months of the year, including Sundays and holidays, so that the annual produce of his work will thus be about \$160. If he is unmarried he can make that sum suffice for his wants, but if married and with a family, this result seems very doubtful.

There are one hundred and twenty master-carpenters, who each employ two or three hands; but who, at times, having no work, can scarcely provide for their own wants. There are about forty masters, who may be said to employ a certain number of hands during six or eight months of the year.

Let us take the case of a workshop of the former category, and suppose that the

workshop contains three benches, each one of which, with its tools, is worth about \$20; other tools, such as presses, screws, gvice planes, saws, &c., in common to the whole workshop, are worth about \$50; in all \$110. This capital, which is absolutely necessary, can only be obtained by one workman in four hundred, by seven or eight years of labor and economy.

Let us now consider his expenses:

Rent of workshop.....	\$60 00
Insurance, (obligatory).....	1 50
Rent of lodging.....	30 00
Settling, &c., and replacing tools.....	30 00
Glue, light, and incidental expenses.....	8 00
Patent or permit, (obligatory).....	15 00
Interest on capital, and on, say, \$50 worth of wood, &c., in store.....	2 50
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	157 00

These amounts are given with the strictest care, as they are the result of inquiries made from a large number of masters of this class.

Now, as to the produce. Let us take one of this class of masters in the most favorable circumstances, and suppose that he employs three workmen during six months of the year, and that he gains on the daily wages of each one 15 cents, (and this is a very favorable view of the case,) this will give him about \$22.50.

As he is obliged to devote much of his own time for work in obtaining orders, drawing plans on the wood, directing and overlooking his men, putting up his work when finished, buying wood, and getting in his bills, &c., he cannot work regularly at his own bench, so that his own actual work will scarcely be worth to him 48 cents a day for 185 days, say \$90.

To go further and suppose that he is fortunate enough to have sufficient work to enable him to employ one man during two of the summer months, on whose labors he will gain about \$200, and if during that time he himself may be able to do work worth \$60; add to this a profit of \$60, which he may be supposed to gain on the wood used by him and his workmen during 600 days, assuming that to be 10 cents per day; this, with \$18 profit on the wood used during the summer, will give him a total gain of \$319.

From this is to be deducted the expense of his workshop, as stated before, \$157; the remainder is the profit that a master-carpenter of this class may count upon earning in favorable years at Nice, \$162; as nearly as possible what one of his workmen will gain in the same time.

The average annual gain of one of the forty master-carpenters employing a large number of workmen may be from \$200 to \$100. This result is little calculated to induce English artisans of this class to establish themselves in this district.

It must be said, however, that the amount of work effected here by one man is certainly not two-thirds of that done by an average English workman in one day. The work itself, with rare exceptions, performed by all classes, is ill-conditioned and slovenly, and would not pass inspection in England. Little or no pride is taken by the artisan in his work, and I doubt if any workman in the district would be influenced by a sense of honor to produce work of a high standard; neither do masters care to pay at a higher rate for work of a higher class, that produced being sufficiently good for the wants and for the knowledge of the employers, householders, and proprietors of the district.

As has already been said, the daily wages of the artisan are low; but, as the amount of work he performs in a day is small, and much less than an English workman would accomplish, the final cost of the material on which his labor has been expended is really as dear as in England.

Hours of labor are from or soon after sunrise to sunset, with one hour for breakfast at ten and two hours for dinner at one o'clock.

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LABOR IN FRANCE.

461

Purchase-power of money.

	Local currency.	United States gold.
WAGES.		
Stone-cutter.....	Fr. C.	
Mason.....	4 00	\$0 80
Carpenter.....	25	65
Blacksmith.....	25	65
Laborer.....	1 00	80
Porter.....	2 00	40
Cabinet-maker.....	1 50	30
Wheelwright.....	5 to 8	1 00 to 1 60
Baker.....	3 25	65
Butcher.....	3 00	60
	3 00	60
PROVISIONS.		
Beef.....		
Mutton..... per pound.	1 00	20
Pork..... per pound.	0 90	18
Bread..... per pound.	1 00	20
Sugar..... per kilogramme.	0 45	60
Potatoes..... per pound.	1 00	20
Coffee..... per pound.	0 15	63
Tea..... per pound.	1 80	36
Wine..... per pound.	6 00	1 20
	per quart.	0 40

WAGES AND PRICES IN PARIS.

The foregoing extracts from the diplomatic and consular reports to the British government during 1871, and the first quarter of 1872, furnish as accurate information in regard to wages and prices of provisions as could then be easily obtained. Through the kind offices of General John Meredith Read, then consul-general at Paris, (now our minister to Greece,) an article was prepared for this work by Professor George Renand, a member of the Institute of France, on prices and wages in Paris, (*Prix et salaires à Paris, in 1870 et 1872*), a translation of which is here presented:

I.—EXPENSES OF A WORKING-MAN'S FAMILY.

The average number of persons composing a household in Paris, since the census of 1872, is represented by the co-efficient 2.63; but the unmarried represent each a distinct household, and this explains why it is that in 62,110 households there are only 379,317 comprehending both husband and wife.

There exist also 150,435 widowers or widows; there are therefore 152,358 celibate households. The normal population of Paris of 1,799,250 inhabitants, diminished by these 152,358 celibates, is consequently comprised in 529,752 households consisting of husband and wife, and widowers and widows, which gives as the average of persons of which each of these households is composed the number of 3.11. One can easily estimate at 4 the number of persons in each household when both parents are living. But this average is calculated upon the total number of the middle and working classes, and it is a notable fact that these classes generally have the most children. It may consequently be affirmed without exaggeration that a working family in Paris comprises five persons. How do these five persons live? The husband and wife work; sometimes the children also; the appellation "child" is applied to all individuals under fifteen years of age, but in Paris this last fact is exceptional. As a general rule the child goes to school or is apprenticed to a trade. Moreover, the average income of the workman, taking into account the taxes on income, and the frequency of these taxes, was

* This co-efficient has been obtained by dividing the normal or municipal population, 1,799,250, by the number of households, leaving out the garrisons, inmates of prisons, &c.



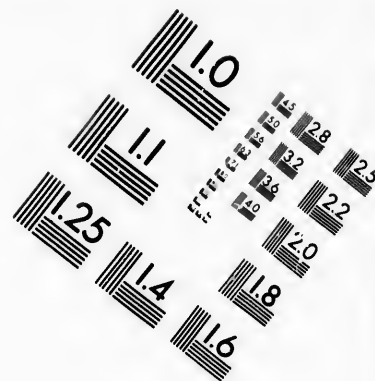
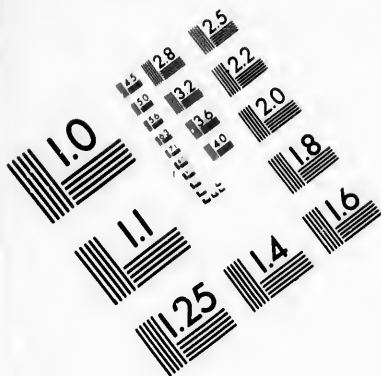
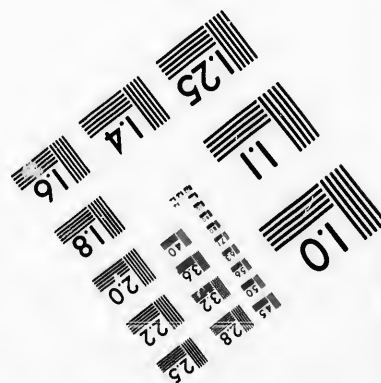
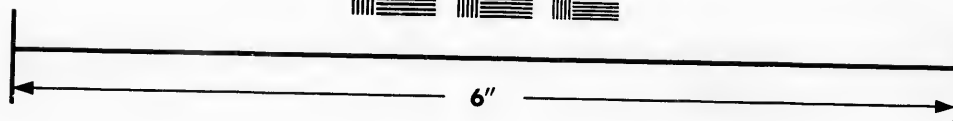
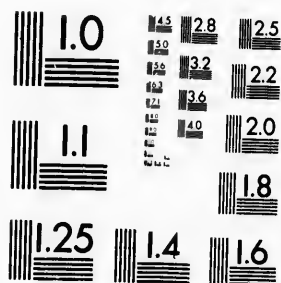


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but about 4 francs 19 centimes (84 cents) in 1860; that of his wife 2 francs 2 centimes (40½ cents). The woman does not live upon the earnings of factory work alone, often having also to work as housekeeper. She earns ordinarily 3½ cents per hour; thus making every day of six hours about 21 cents.

Account must be taken of idle time, which so much reduces the wages of operatives, but has no influence upon that of the housekeeper. Consequently it follows that there must be a deduction made for fifty-two Sundays, and very often Mondays also; but let us not overlook this abnormal respite. The interruption of Sunday leaves to the man only 71½ cents (3.59 francs) per day for food, and to the woman 34½¢ (1.73 francs). There is, moreover, a respite, owing to the regular suspension of work. It lasts generally a quarter of a year, and affects only a third part of the industries. Thus the general average of wages is not reduced beyond one-twelfth, which leaves to a man for his expenses of living but 65½ cents (3.29 francs) per day, and for a woman only 31½ cents (1.59 francs). Moreover, it may be stated that these figures almost sin by excess. They go back to 1860. In 1870 all wages experienced an increase of above one-tenth. Unfortunately, the events of 1870-71 threw a general perturbation into business. There have been terrible stoppages, which are far from diminishing, notwithstanding the resumption of business; consequently, though workmen are scarce, the population of Paris has remained, within about 5,000 inhabitants, the same as in 1866, the city having lost by the insurrection more than 30,000 workmen, exclusive of 30,000 Germans expelled. Wages, too, have a tendency to remain what they were in 1870. They have not risen, on account of the necessity to which the workman found himself subjected to work in order to overcome the loss experienced during the siege and insurrection.

We estimate, then, the average earnings of a working-man at present at 65½ cents, plus 7½ equal to 72 cents; and that of a woman at 35. The home workman, whose children do not earn any wages, must live on 72 cents (3.62 francs), plus 35 cents (1.75 francs), equal to \$1.07½ (5.37 francs) per day, or \$322.44 (1,962.73 francs) per year.

In what manner was this sum of 5 francs 37 centimes (\$1.07½) expended in August, 1872?

The following table gives the reply:

	Per day.	Per year.
6 pounds of bread, at.....	25 ⁹ / ₁₀ ¢	\$93.44
1 pound meat, fish, eggs, &c.....	12	43.50
Fat substance for seasoning.....	3	11.04
Lard, about 1 pint.....	24 ⁹ / ₁₀	8.76
Milk, per litre, (nearly a quart).....	6	21.90
Cheese, ¼ pound.....	5	18.2
Sugar.....	1 ⁶ / ₁₀	5.81
Coffee, 1 ounce.....	3	10.95
Salt.....	⁶ / ₁₀	2.19
Pepper.....	² / ₁₀	.73
Vinegar.....	² / ₁₀	.73
Soap, 5 pounds per month.....	¹ / ₁₀	.73
Potatoes, 1 litre per day.....	1 ⁵ / ₁₀	4.38
Lentils, white haricots, ¼ kilogramme per day.....	3	10.95
Green vegetables.....	1	3.65
Fruits.....	2	7.30
Fuel.....	⁶ / ₁₀	2.19
Lights.....	2	7.30
Wine, 1 litre.....	² / ₁₀	2.02
Brandy, 1 small glass every morning.....	10	36.59
Tobacco.....	2	7.30
Rent, 2 rooms.....	3	10.95
Instruction, education *.....	0	32.90
Linon clothing.....	8	29.20

Direct tax: (the city of Paris receives the taxes on apartments renting at less than 100 francs, \$8-0.)

Medical assistance is furnished him gratuitously by the administration of public assistance.

Occasion is taken to keep an account of expenditures in taverns, which are made chiefly every Sunday and Monday, and which are at least 40 cents per week on an average.

Among the registered workmen this sum may represent the average of earnings realized and placed in savings bank say, per day, 26 centimes (5⁹/₁₀ cents;) per year, \$93.70 francs, (\$193.34.) Total, francs, 1,962.10 (\$292.42.) Many modifications may have to be

* The primary schools in Paris are free, and regarding religious culture, the Parisian workman is too indifferent to impose charges of this nature upon himself.

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962.73 francs) per
ended in August,

Per day.	Per year.
Cents.	£
25½	£9.44
12	43 50
3	11 34
2½	8 76
6	21 90
5	18 2
1½	5 81
3	10 95
6	2 19
7½	73
7½	73
1½	4 28
3	10 95
1	3 65
2	7 30
1½	2 19
2	7 30
1½	2 92
10	36 50
2	7 30
3	10 95
9	22 90
8	29 20

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made in the proportion of these different expenditures: here are given only the approximate averages, but approaching truth, we believe as nearly as it is possible to expect. The condition of the Parisian workman, though poor on the whole, is still superior to that of a working-man in the departments, or in the country, in regard to morality as well as to instruction. The industries of art add much in this amelioration of his condition. Paris produces chiefly for exportation, and it is the superiority of taste manifested in the work which secures a regular market for his products. They are sold to foreign countries at a good price, though scarcely remunerative for workmen even of the best. There is still much to be accomplished, for 10,000 workmen earn less than 3 francs each per day; and the wages of women are lamentably small.

II.—PRICES OF PROVISIONS, GROCERIES, CLOTHING, ETC.

It is difficult to compare the prices of the various articles of merchandise before and after the events which so cruelly afflicted the French capital in 1870 and 1871. The greater portion of these prices have not been inserted in public papers or documents of any kind; we have had to depend on the memory of the parties, that is to say the information in question has but a strictly relative value, though it has been collected with the most scrupulous care and attention. The following prices of various articles of merchandise were obtained either from merchants themselves or from the weekly *mercantiles* (assembly of French parliament held weekly, after vacation,) in regard to provisions exposed for sale in the market:

	In 1870, before the war.	In August 1871.
Bread, per kilogramme, (2½ pounds).....	80 10	80 00
Wheat-flour, the ordinary kind, per 157 kilogrammes, (346 pounds).....		
Wheat-flour, superior, per 157 kilogrammes, (346 pounds).....	11 29	13 10
Wheat-flour, best, per 157 kilogrammes, (346 pounds).....	11 65	13 10
Rye, in the grain, per 115 kilogrammes, (253 pounds).....	11 99	13 90
Barley, in the grain, per 100 kilogrammes, (220 pounds).....	4 32	3 57
Oxen, on the hoof, per kilogramme.....	3 70	3 00
Cows, on the hoof, per kilogramme.....	2½	32
Calves, on the hoof, per kilogramme.....	26	30
Mutton, on the hoof, per kilogramme.....	30	34
Pork, on the hoof, per kilogramme.....	29½	36
Beef, hind quarter, per kilogramme.....	32	32
Beef, fore quarter, per kilogramme.....	29½	32
Beef, loin, per kilogramme.....	29½	32
Beef, neck, per kilogramme.....	29½	32
Veal, first quality, per kilogramme.....	15½	14
Veal, second quality, per kilogramme.....	15½	14
Veal, third quality, per kilogramme.....	15½	14
Mutton, first quality, per kilogramme.....	30½	30½
Mutton, second quality, per kilogramme.....	29½	29½
Mutton, third quality, per kilogramme.....	30½	30½
Leg of mutton, per kilogramme.....	27½	31
Pork, entire or half, per kilogramme.....	29½	31
Pork, in quarter, per kilogramme.....	30½	31
Pork, salt, per kilogramme.....	30½	31
Lard, per kilogramme.....		31
Codfish, dry, per kilogramme.....		21½
Mackerel, fresh, (each).....		36
Butter, per kilogramme.....		26½
Cheese, per kilogramme.....		11
Rice, (East Indies) per 100 kilogrammes, (220 pounds).....	65	60½
Rice, (Piedmont) per 100 kilogrammes, (220 pounds).....	24	40
Rice, (of Java) per 100 kilogrammes, (220 pounds).....	8 70	7 45
Beans, per litre.....	9 75	10 50
Milk, per litre.....		16 00
Eggs, per dozen.....	10	8
	4	6
	19	22

Groceries:

Tea, price extremely variable, according to quality, per pound, from \$0 78 to \$0 80	
Coffee, roasted, per kilogramme.....	80
Sugar, white, per kilogramme.....	26
	36

* This low price is due to the promise of a rich crop in 1872, which promise has been realized.
† The rise in price indicates that France, consequent upon the war requisitions and ravages by the cattle pest, had lost over a million of cattle in one year.

Sugar, cane or moist, per kilogramme.....	from \$0.22 to \$0.24
Molasses, per kilogramme.....	14 14
Soap, common.....	14 18
Starch.....	32 32
Sirup, first-class, white, crystal, 100 kilogrammes.....	15 20
Sirup, thick, 40 degrees, 100 kilogrammes.....	11 40
Sirup, liquid, 33 degrees, 100 kilogrammes.....	9 30
Coal, semi-size, ton.....	8 75
Coal, small-size, ton.....	10 00
Coal, quite fresh, ton.....	7 50
Wood, hard, oak, &c.....	30 00
Wood, pine.....	18 50
Burning-fluid, per kilogramme.....	26 30
Petroleum, litre.....	13 16

Since August, 1872, the price of bread in Paris has fallen. In March, 1873, it was for 2 kilogrammes 80 centimes, (15.6 cents, gold, United States.) The price of 85 centimes (16.55 cents, gold, United States) is still paid in many quarters. In bread-markets and depots bread can be purchased for 15 cents, which, without being of first quality, is equally nourishing. At this price the working-classes, if they had regular work, would not suffer; but it is the absence or inefficiency of work that produces suffering, the progress of which becomes every day more perceptible. Add to this the inordinate rise in the price of meat, and you have an idea of the cruel privations which weigh upon a portion of the population. The consumption of meat has suffered a reduction during this winter, which proves more than any reasoning the constraint of the population. In consulting the tables of the imports into the market of La Violette we find that the average number of sheep offered for sale, which varied from 15,000 to 17,000, has fallen to 10,000 or 11,000. The number of calves has diminished by half. Oxen and cows show a reduction of one-third. Pigs alone show no noticeable difference, but they have reached prices no longer accessible to small purses.

It would be difficult to draw scientific conclusions from these data. These figures have been collected after a certain joint course, during the two years 1871 and 1872. They are not rigorously-calculated averages, but only simple indications to serve as a basis for much larger and more probable estimates. But certain anomalies are observed therein, rare indeed, but which may be due to accidental and isolated influences, having acted upon the markets, which have been here selected at hazard without any possibility of tracing back to the perturbing cause. This is notably observed as regards calves of a much higher price in 1870 than in 1872, as the increase during the first of these two years had reached to one of the most serious crises. It should be noted that outside of merchandise which has a regular course at the market, (halle,) the prices of elementary articles are not absolutely the same in all quarters of Paris. Following a general economic law the most populous quarters are always best provisioned, and consequently the cheapest place for provisions; such are the quarter of the Temple, St. Denis street, the markets, &c. The peddlers prefer to go to these quarters, assured that there they will dispose of their merchandise. The shop-keepers always sell a little higher, when the competing peddler does not oblige them to lower their prices. Still, the prices of shop-keepers in populous quarters are less than those in the old communes, annexed to the capital in 1860, such as Batignolles, Montmartre, &c., and especially at those of the elegant and rich quarters, but with extremely scattered population, such as Passy, Chateaufort, les Champs Elysees, &c., the difference is about one-tenth. It is much the same as regards vegetables. On the whole, the price of living has increased since the war, while wages have remained stationary, in consequence of the too long idle time imposed on workmen by the circumstances, and by the loss of a certain number of markets taken away from the Parisian industry by the enemy. The opening of new centers of sale on the one part, the activity of French agriculture on the other, the perfection of industry on the third; finally, the increase in wages, brought about by the increase of production, will not delay the disappearance of this temporary perturbation.

As regards the price of clothing, this has been modified but little. The stock has long ago been re-supplied, and even the activity of the factories tends more to produce lower prices than higher. The following are the prices of some goods in common use:

	U. S. gold.
Linen, unbleached, for shirts, good quality, 1 franc 10 centimes per metre, per yard.....	\$0.22
Linen, white, 1 franc 75 centimes.....	35
Linen, unbleached, bedding, 1 franc 90 centimes.....	38
Linen, white, bedding, 1 franc 25 centimes.....	45
Flannel, cotton, medium, 1 franc 20 centimes.....	24
Linen for mattresses, good quality, 1 franc 80 centimes.....	36
Calico, 1 franc 10 centimes.....	22

from \$0.22 to \$0.24

14	11
14	18
32 1/2	32
	15 20
	11 10
	9 30
	8 75
10 00	7 80
7 50	4 96
	39 00
	18 30
26	30
13	16

h, 1873, it was for ice of 85 centimes read-markets and of first quality, is regular work, would nices suffering, the the inordinate rise weigh upon a por- tion during this e population. In e find that the av- 7,000, has fallen to n and cows show e, but they have

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U. S. gold.	
etre, per	\$0 29
	35
	28
	28
	45
	24
	26
	23

Muslin de laine, 1 franc 45 centimes	
Satinet, (michenne,) medium quality, 1 franc 20 centimes	
Large boots, 15 francs to 18 francs per pair	
Robes, called fatigue robes, tissue of wool, 61 centimetres wide, 1 franc 45 centimes per metre, per yard	
Scotch cassimere, in all the new colors, 1 franc 65 centimes	
Scotch cassimere, of 62 centimetres, 1 franc 45 centimes to 2 francs 25 centimes,	
Poplins, taitetas, striped, 1 franc 40 centimes	
Mohairs, blue or rosso, 1 franc 25 centimes	
Foulard, 1 franc 40 centimes	
Grenadines, black, 1 franc 75 centimes	
Grenadines, striped, 3 francs 60 centimes	

U. S. Gold.	
\$0 29	
24	
\$3 to 3 60	
29	
33	
39 to 41	
28	
25	
28	
35	
72	

The workman has great facilities for clothing himself in Paris. The extraordinary improvements that have been made in the manufacture and organization of Paris manufacturers has greatly cheapened the work. If they could improve the quality while keeping the low price they would do all that should be expected. Since the factories of Vienna and Carcassonne produce cloths at the low prices of 2, 3, and 4 francs per metre, the Paris clothiers furnish to the workman a complete suit, (pantaloons, waistcoat, and frock-coat,) for 39, 41, and 45 francs, (\$7.80, \$8.20, and \$9.)

III.—RENT OF DWELLINGS.

The price of rent varies according to the quarters, the situation of dwellings, the elevation of rooms, their interior arrangements, whether they front on a street or a boulevard, toward a garden or an interior court-yard. The price for single rooms is very high. Thus, for example, in the center of Paris, Caumartin street, near the station of Saint Lazare and the Madeleine, one room, on the seventh story, quite small, pays 220 francs. At Batignolles, one only rents for 80 to 100 francs. In workmen's quarters, like the quarter Saint Anthony, the place du Frêne Menimouhart, Belleville, Grenelle, the competition of renters, also the risk of non-payment, very frequent in these places, cause the rents to advance. These little lodgings are often the only revenue of houses, of which they form a part. The proprietor is sometimes obliged to put the tenant out of the house by force, or he deprived of all profits from his property. He loses every year a certain number of payments. To make up for these losses he raises by so much, the price demanded from his tenants. Often, through revenge on the part of renters thus expelled, he is menaced, and even maltreated. These are facts common to all large cities, and all working populations in France, England, and Ireland, America, and Prussia. The same facts are found also to exist, more forcibly perhaps, in London, Liverpool, Dublin, New York, and Berlin. Be it as it may, all these risks increase the price, and raise so much more the taxes of small renters. One single room is rented in these quarters for \$20, \$24, and even \$28; for example, in the neighborhood of the City-hall, or on St. Antoine street, two connected chambers cost \$50, \$56, and \$60, and even \$90 or \$100 on the side of the Madeleine or the great boulevards. If there is added a vestibule, an ante-room, a cooler, giving some variety to the two apartments, it costs \$120 and \$140 on the boulevard Saint Michael near the Luxembourg, on the boulevard Sebastopol, Rivoli street, or in the neighborhood of the Madeleine; a similar one pays \$60 and \$70 at Batignolles or Passy.

Suites of three rooms are likewise extremely dear; less in old houses, badly managed, than in new ones, generally better arranged; the former suiting the small purses of the middle classes, but these are the most numerous, and the demolitions in Paris have greatly reduced the number of small tenements. The raising of prices is attended with unlimited speculations, which have beyond measure pushed forward the works of Paris to so great an extent during the last years of the empire. The large apartments, too numerous and too finely furnished, created with a view to attract the stranger to Paris, and to encourage the development of luxury, excluding therefrom systematically the industrial classes, very well conducted and very skillfully decorated, rise now to \$60, \$1,000, \$1,200 and \$1,400, in the sixth story, for example in the Champs Elysees, on the Boulevard Malesherbes, in the street Lafayette. On the second story certain of these apartments in Rivoli street, on the boulevard Montmartre, rent for \$2,000, \$3,000, and \$4,000. The metre of ground has sold as high as \$500; this undoubtedly is not as high as at Liverpool, where one metre of land reaches as high as \$1,200, but still it is considerable for Paris, which does, relatively, much less business than the English port.

One very curious economical fact is that of the prodigious increase in the value of landed property in Paris within a few years; the 7,802 hectares of surface of the capital, equivalent in value as well as in revenue to one-tenth of the total surface of the country. The revenue of the ground of Paris is nearly twenty times the revenue of land elsewhere, namely, \$53,862,000; the average tax is 6 1/2 per cent, which gives an aggregate value of the real estate of Paris of 4 milliards 141 millions of francs, \$22,500,000.

As regards the gross revenue from houses, according to information collected in 1863 in 371 public sales, it varies, by one-seventh between 4 and 6 per cent., more than half of them between 6 and 8 per cent.; finally as to one-third between 9 and 10 per cent., and even more; and, strange to say, the revenue of houses in the neighboring arrondissements is generally much higher than that of houses in old Paris, because the proprietor exonerates himself as much as he can from the expenses for the preservation of health and the security of his tenants. As regards the net revenue, it amounts to about one-tenth of the value. To judge of it by the results of sales during the last months of 1871, it appears that the value of houses has not been sensibly affected by the war and the insurrection. Nevertheless, in regard to the renters, a perceptible decrease has taken place; this is easily understood. Before 1870 there were 19,000 vacant lodgings, while in August, 1871, the number of vacancies amounted to 51,500 on a total of 659,631 apartments. The price of building-ground in the interior of Paris has likewise decreased. Speculation had caused it to rise beyond all measure. Thus it has been seen in 1869, when the metre of ground rose to \$234 at the corner of Rambuteau and Pierre Lescot streets; to \$260 on the Theatre-Français place; to \$360 between Voisine and the Fourth of September street; finally to \$500 on the new Opera Place.

From 1825 to 1870 the price of ground has risen on Saint Lazare street from \$11.40 to \$110; on Saint George's street from \$15.80 to \$120; on La Fermeté-des-Yahumini from \$12 to \$230; on Albosy street from \$8.40 to \$78; on Pascal street from \$1.80 to \$15; Quarter Francis I, from \$8 to \$50 per square metre.

But the situation seems to have changed in a notable manner. Mr. De Lubey, at the meeting of the Politico-Economical Society in July, 1872, mentioned the case of a building constructed in Paris before the war having cost, for ground and erection, \$70,000, which was placed under adjudication at the price of \$50,000, then at \$40,000 and \$30,000, without finding any bidders.

Regarding occupied lodgings, they yield a revenue of \$40,250,000 for 66,000 houses in Paris, an average of \$624 instead of \$170 in the year 1825.

This revenue is thus distributed: \$7,770,000 for 259,604 lodgings, at less than \$50; \$13,770,000 for 153,346 lodgings, at less than \$100; \$16,840,000 for 38,125 lodgings, at less than \$200; \$24,000,000 for 11,866 lodgings, at less than \$300; \$9,000,000 for 17,551 lodgings, of over \$300.

It has been attempted of late to remedy the high prices of lodgings by building houses especially for mechanics and small shop-keepers. Up to the present time nothing has been so successful as the houses on Arras street, No. 3, by the society of masons and stone-cutters, for co-operative society *l'épargne immobilière*, (real-estate savings society.) The ground contained a surface of 715 metres, of which 624 are built upon, and 91 are in litigation. The buildings are of two kinds—those intended for dwellings and stores and those designed for public meetings. The first contains on the ground floor five shops with floor-room 180 metres each; in the second story, two rooms to be divisible according to the needs of the shop-keeper or other occupant; in the third, fourth, and fifth together, 40 lodgings. All lodgings are remarkable for their excellent distribution, for their good arrangement, and for the comforts they unite.

The kitchen is no longer used, and has been replaced by a heating-stove put into the interior of the principal room. This apparatus will give as much heat as is needed in the room in which it is placed, and is so contrived that no culinary vapors are perceptible in the room. They allow the tenants to cook while going on with their own work, which, as the workers earn but little, is a great advantage.

In all these lodgings there are arrangements made for lighting and heating with gas. In all the stories there are city water, wash-tubs, and water-closet on the closed system. The bed-rooms are parquetted and ornamented with looking-glasses. These lodgments rent at \$20 to \$70.20, a really moderate price. Such advantages have been readily appreciated by the public; for 40 lodgings there were 10 renters before the work was completed.

The second building combines a large hall with 1,200 seats, and will accommodate 1,500 persons. It is well lighted and consequently meetings held in the day-time have no expense for light. The price of seats is much less than in other halls in Paris.

Besides this large hall there are in this same building small meeting-rooms which can hold eighty persons at very moderate rents, also for the accommodation of the public whenever required. All these buildings are perfectly healthy, being of brick and iron, and very solid.

The real-estate savings society deserves commendation for carrying out this project, which, in addition to its philanthropic purposes, has achieved a remarkable financial success.

In Paris a furnished room rents very high. Miserable chambers cost 400 and 430 francs. It is by no means a rare thing to have to pay \$10 or \$12 per month for one furnished room. The price of large apartments furnished in proportion very much greater.

The events of 1870-71 have brought about a decline in rents, but only in high rents. Regarding the low rents, they have only had the effect to suspend the rise. The cul-

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gration of strangers and even of provincials, frightened beyond measure by the excitement of the capital, has been considerable. The insurrection has depopulated a good part of the city, as much by the deaths in the civil war as by deportation and emigration of a large part of the inhabitants. Besides, the population of Paris, which, according to its normal rate of increase, would, from 1866 to 1872, have been augmented by about 200,000, has increased only about 5,000 or 6,000.

It is difficult to foresee how the crisis will end, which was caused by the non-occupancy of large tenement-houses. Several building societies have already failed. The grounds were bought at too high a price; the cost of the labor and material was very high. It is difficult, therefore, to lower the price. These apartments cannot be very formed into small lodgings. Tranquillity only can furnish a remedy, by encouraging the return of strangers and citizens from the departments to Paris. In the quarters of Passy and Anteuil, placed directly under the fire of the batteries during the second siege, the houses have been greatly damaged; quite a number of the tenants have abandoned them, and the proprietors sell them at prices exceptionally low. This, however, will last but a little while. Persons of the middle classes, working-people, widows, journalists, men of letters, as well as some capitalists, have a desire to enjoy the verdure and the pure air in the neighborhood of the woods of Boulogne. The construction of new railroads and tramways will hasten the repopling of these quarters.

IV.—PRICE OF PROVISIONS.

I have already referred to the prices of various articles of food. The daily expense for food varies according to usage, habits, taste, and, taking a basis of comparison, people practicing economy intelligently may supply themselves with sufficient for their daily wants at a cost of 40 cents, or even 35 cents, each. A woman, who, in her employment, expends less of muscular force, may sustain herself with an expenditure of 20 or 22 cents. Many expend less, but in such case no doubt the health is injured and the strength declines. This is how a large number of working-men live:

Two meals per day, at 11 and 6 o'clock. At 11 o'clock, or noon, an ordinary, sometimes meat, half ration, 6 cents; at 6 o'clock, soup, 4 cents, half a ration of meat, 6 cents, a dish of vegetables or a piece of cheese, 4 cents, a chop, 6 cents; besides the bread which a laborer carries ordinarily with him from reasons of economy, and of which he consumes about two pounds, say 9 cents. This gives for the day a sum of 35 cents. In a family the individual expense is notably reduced, thanks to the advantages of living in common, which diminishes proportionally the sum of general expense. Before the war, some boarding-houses were found that furnished passable fare for about 35 cents per day, in the quarter "des Ecuies;" they had two meals: soup and a plate of meat *de resistance*, moreover a dessert and wine, in the morning; soup, two plates of meat, vegetables, a dessert and wine, for supper.

Now, since the war all prices have augmented at least one-fourth. There were also, before the siege, restaurants where one could dine at 16 cents, and breakfast for 14 cents. This was neither luxurious nor of superior quality, but one could feel satisfied. All these establishments have disappeared or have advanced their lowest prices to 36 cents.

The bouillon establishment of Duval, which served portions of meat at 5 and 7 cents, has raised its price to 10, 12, and 15 cents. The price of fruits has likewise increased in these establishments, as well as that of wines; and most restaurants have followed this example. It may be said that the price of restaurant living has risen one-fifth at least, since the late events which have deluged our country in blood.

For workwomen the quantity of indispensable nourishment is less. They eat less bread and drink less wine than laborers do generally. They prepare at least one meal at their homes; they can also live at 22 cents, 20 cents, and even less. The woman does most honor to the household affairs with very little. There is certainly in a majority of women more morality, resignation, courage, and less wants than in man. It would be desirable, however, that the limit of remuneration for women's work be extended, and the only way to do this is to give it a higher value by more instruction, greater skill, fewer hours of work in the day, and better pay for the work. Thus the wages will be raised and women will be enabled to procure for themselves the necessary supplies of food for their sustenance and comfort. This is a question of life and death, and it is the key to the future of all that portion of the French people who constitute the bulk of the population of the large cities.

GEORGE RENAUD.

SILK INDUSTRIES OF LYONS.

The following information in regard to the industries of Lyons was obtained for the author of this work and forwarded by the United States consul of that district.

The translation from the French and the valuable explanatory notes were supplied by a practical silk manufacturer, Mr. T. Nelson Dale, jr., of Paterson, New Jersey.

Answers to questions concerning the industries of Lyons (France) submitted to the "Conseil des Prud'hommes" for the silk industry of Lyons, September, 1872.

§ I. GREAT INDUSTRIES.

I. What are the great industries of the department?

The chief and by far the most important within the jurisdiction of the council is the silk manufacture with its numerous auxiliaries.

This industry includes, aside from the raising of silk-worms, cocoon-winding, silk-throwing, branches which, with a few exceptions, are prosecuted within the Lyons district:

1st. The dyeing of thrown and spun silk, worsted and cotton yarns, the dyeing and printing of piece-goods, designing and the engraving of rollers for the same.

2d. The weaving of plain and figured goods, taffetas, satins, velvets, foulards, "lam-pas," materials for ecclesiastical and upholstery purposes.

3d. The making up and winding of trams and organzines; warping, beaming, mounting, and starting of looms; § the making of headles with or without mails; || and the stamping of pattern cards.*

4th. The sheering of velvets, watering, embossing, finishing, and sizing of piece-goods, and the cleansing of pieces soiled in process of manufacture.

And, finally, operations connected with weaving and embroidering in gold and the manufacture of trimmings, comprising the drawing of gold, silver, and brass into threads and strips; the covering of silk and cotton threads with strips of foil; ornamental trimming, embroidering, the manufacture of bindings, hat bands, éclenille, goods with raveled edges and fringes, &c.

Tulles; hosiery and gloves of silk, cotton, and worsted; plain and figured laces of silk and cotton; * stocking-knitting and crochet-work.

The manufacture of felt, with plush, straw, and cloth hats.

II. What is the condition of the operatives in these industries?

There are two classes of weavers—master weavers, who own the machinery; and journeymen weavers, working under the former for half the price paid for the weaving. †

The workshops generally contain from one to four looms—rarely more.

The gross earnings of the master vary from 4 to 6 francs, (80 cents to \$1.20); those of the journeymen, from 2 to 3 francs per day, (40 to 60 cents.)

All extra expenses are defrayed by the master.

Journeymen dyers work by the day or hour, according to the custom of the employer, ten hours constituting a working day.

Most of the men earn from 1 to 5 francs, (80 cents to \$1;) a few as much as 5.50, (\$1.10,) per day.

In addition to the journeymen, laborers are used for work which does not require special skill. They work 11 hours, and earn from 3 to 4 francs, (60 to 80 cents,) averaging 3.50, (70 cents.)

Some of the manipulations before and after the dyeing, such as the undoing and making up of silk, §§ require female labor, which is paid at the rate of from 2.25 francs (45 cents) to 2.50 (50 cents) per day of 11 hours.

Overtime is paid 50 to 60 centimes (10 to 12 cents) per hour for men, and 30 (16 cents) for women and apprentices.

From these rates a deduction should be made for loss-time.

* Council of selectmen for the silk industry; † a committee composed of both employers and operatives, for the amicable settlement of controversies, established by law in 1806, as a court of arbitration.

‡ Rich silks with satin ground and large taffeta figures in relief. The reverse of damask.

§ Belling together a number of skeins into a hank, and then knotting it to prevent the silk from getting tangled. This is done both before and after dyeing.

|| Mounting: Passing the warp through reed and harness. Starting: Regulating the number of shots, of shuttle per hank of fabric, also the tension of warp, &c., to make the required quality of goods.

¶ Some headles are made merely with a loop for the warp-threads, others are provided with small steel or brass rings.

* The design is first made on paper, then the cards for the loom are stamped accordingly.

† The silk belongs to the manufacturer. He sends it out from his office to the dyer, winder, weaver &c., and pays them per weight or length for their labor.

‡ These "works" consist simply of a large room of sufficient size to accommodate the looms, and of a small adjoining bedroom and kitchen combined, for the weaver and his family.

§ I take it there are no worsted tulles or laces, as the original seems to imply.

|| Organzines and trams come from the spinner (throwster) done up in knotted rolls. The dyer has to undo these, straighten out the skeins, count them, and mark them with variously knotted strings, so as to distinguish the lots. After the dyeing, the silk is made up into rolls again.

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The moral influence of loss-time is at least as bad as its material result. Operatives without work live on credit at first, run in debt, become discouraged, are reduced to poverty, and poverty is a bad adviser.

In Lyons, two-thirds of the hands employed in dyeing lose on an average 20 days a year, and the other third as much as 40 or 50 days.

Higher wages are paid for the weaving of silk trimmings than gold trimmings; but, owing to the little loss-time made in weaving the latter, the workmen of both trades earn the same in amount, an average of 3.25 francs (65 cents) per day.

The manufacture of trimmings by hand furnishes occupation to about 400 women and 100 men, at the rate of 1.75 francs (35 cents) per day; but this kind of work is gradually being replaced by loom-work.

In both of these industries the master weaver, who furnishes the looms, makes a net profit of 1 franc (20 cents) a day per loom.

The earnings of the master metallic-thread makers* at piece-work cannot be readily estimated; workmen earn about 3.60 francs (72 cents) per day of 11 hours, and women 2.50 francs, (50 cents.)

In gold-thread drawing, men earn 3 francs, (60 cents,) and women 2.25, (15 cents.) Masters work under the same conditions as master metallic-thread makers; ten hours constitute a working day.

Embroidering and fancy trimming are done almost exclusively by women; they earn on an average 1.75 francs (35 cents) per day.

Tulle-makers on piece-work receive 1½ centimes per 100 threads,† for plain goods and at that rate earn, on an average, from 3 to 4 francs (60 to 80 cents) per day.

In the hat manufacture the operatives are generally on piece-work, and earn—men, 3.25 francs (65 cents,) women, 1.37 francs (28 cents) on an average, loss-time deducted.

III. *Are there a great number of hands employed in these industries? Estimate the number of men, women, and children in each.*

The number of men and women employed in weaving amount to about 115,000; 35,000 of whom live in Lyons and vicinity, and the remaining 80,000 inhabit the department of the Rhone and the neighboring departments of the Ain, the Isere, and the Loire, where there are large manufactures of woven goods, as well as many private looms, worked for manufacturers in Lyons.

This number (115,000) is composed of 56,350 men, equal to 49 per cent.; 50,635 women, equal to 44 per cent.; 8,015 children, equal to 7 per cent.

There are two classes of dyers—color-dyers and black-dyers, numbering together from 3,500 to 4,000, proportioned as follows:

Men, 75 per cent.; apprentices, from 13 to 18 years of age, 10 per cent.; women, 15 per cent.

The manufacture of gold and silk trimmings furnishes occupation to about 1,000 men and 500 women; metallic-thread making to only 100 men and 600 women; gold-thread drawing, to 150 men and 300 women; embroidery, to 200 women; fancy trimming, to 500 women.

There are about 4,000 persons engaged in the manufacture of tulles in Lyons and its suburbs, viz: 2,500 men, (overseers included), 1,000 women, and 500 children.

The number is much larger in the places about Lyons where the tulle embroiderers (women) live.

There are two kinds of hat-makers:

1st. Fullers and finishers, (or cleaners?) numbering about 1,500 men.

2d. Those employed in trimming hats, in pulling out the coarse hairs from the fur, and in cutting the fur from the skin for making felt, numbering some 800 women.

The winding of thrown and spun silk, worsted and cotton, is done entirely by women operatives, apprentices, and overseers.

One winder should be reckoned for every five weavers, making 23,000 winders for the 115,000 weavers in Lyons.

The overseers (women) earn on an average from 3 to 4 francs per day.

Each "winding-shop" contains from one to four winding-frames,‡ which are the property of the overseer alone. The hands are generally engaged by the year, at the rate of from 150 to 250 francs, board, washing, and lodging included.

Warping is done on the same plan. There are about 3,000 warpers, earning on an average from 1 to 5 francs per day. The hands are engaged on the same terms as the winders, with this exception, that they receive a bonus of 30 francs a year.

* i. e. winding or coiling a narrow, thin strip of metal, gold, silver, or brass, spirally around a thread or number of threads of cotton or silk, so as entirely to cover up the cotton or silk. The metallic thread thus made is used in the manufacture of military trimmings, &c., &c.

† These frames are circular and rotary, operated by foot. The operative, remaining seated, causes the portion of the frame which carries the skeins to revolve past her, and regulates each skein in turn.

IV. *What is the general character of the relations existing between employers and operatives?*

In the weaving and in the tulle industries, instability is their principal feature. Employers and operatives are entirely independent of each other. They make and close engagements with each other with the greatest facility.

The question of interest is the ruling one. The workman works for his employer, and the employer pays him for it.

In this, as well as in the other industries within the jurisdiction of the council, the relations between employers and operatives are generally amicable.

Measures calculated to reconcile the different interests have been carried into effect by the efforts of the "council" during the last few years, and have produced the happiest results.

Among gold-weavers and trimming-makers, differences arising out of the question of salary have created a certain uneasiness in the relations of employer and operatives, especially since 1869. Before that time the situation was more satisfactory.

V. *Give an account of the institutions for the improvement of the condition of operatives.*

Operative weavers have established, with the consent of the government, a joint-stock company for the manufacture and sale of silk goods.

They have also formed a "protective and industrial society" for the purpose of resisting a reduction of wages, and furnishing the members with information on all matters related to their work.

There are a number of co-operative stores in different parts of the city for the sale of groceries at retail. Some of them have added to their business the sale of bread, charcoal,* and sausage-meats. It is desirable that these societies should grow, extend, and multiply themselves, so as to popularize, in their experimental stage, the various kinds of co-operative societies for purposes of production, credit, and consumption.

There is a loan board in Lyons established by government for the purpose of affording relief to master workmen in distress (for want of orders.)

Those provided with good recommendations can borrow a sum not exceeding 40 francs (\$8) for each of their looms for plain goods, and 50 francs (\$10) for each one for figured goods.

The rate of interest is 5 per cent. If the loan is not returned when due, the company is re-imbursed by a retention of wages to the extent of 4.

As regards the dyeing industry, some employers have endeavored to better the condition of the workmen by assisting them by means of voluntary contributions in becoming interested in the "mutual-aid societies" and "pension banks," or by giving them, in the way of a premium, a share in the profits of the establishment, or else by providing them with a physician in case of sickness.

The workmen have formed a "mutual society," which is at present in a flourishing condition. Employers are admitted as honorary members. A few journeymen dyers belong to the "mutual-aid societies" and "co-operative stores" of the place. In 1863 some journeymen dyers formed themselves into a "co-operative joint-stock company, with a variable amount of capital." Twenty men are employed in the works.

The dyers have also established a "protective and industrial society" to oppose a reduction of wages and afford relief to the victims of accidents (members only) and to those who have been rejected by the mutual societies. Members pay 50 centimes (10 cents) a month.

Hatters have five "mutual-aid societies" in the department, including the women hat-trimmers' society.

In the tulle and trimming industry there are no such organizations.

VI. *Has there been an increase in wages in the department?*

The question of wages is a vital one, especially in commerce and the more important manufactures. It is one of the most formidable problems of modern society. For several years wages have been gradually and regularly increasing with a corresponding increase in the prices of the various articles manufactured. Thus, the price of velvets has increased 50 to 60 per cent.; "patterns,"† figured and fancy goods, 30 to 40 per cent.; tulle and plain goods, 15 to 20 per cent.; dyeing (during the last 2 years alone,) 10 to 12 per cent.

In the tulle manufacture, the rates of wages remain on an average nearly stationary, following the fluctuations of supply and demand. Men earn 4 francs, (=0 cents,) and women 2.50 (50 cents,) and women embroiderers working at home in the country earn from 60¢ centimes (12 cents) to 1.50 francs (30 cents.)

In the hatters' trade there has been a reduction of 30 per cent. in all hand work for which machine work has been substituted. The price of "brushed hats, Flemish style,"‡ has increased 20 per cent.

In gold-weaving, &c., the rates have increased 20 per cent., and in the manufacture of trimmings, 17 per cent.

* Charcoal is extensively used in France for cooking and heating purposes.

† Goods in which there is any variety in the play of the threads, (as serges,) simple designs, but not flowers, figures, &c.

‡ Hats with a long silk plush.

VII. *Has there been an increase in the cost of the necessaries of life?*

Yes, to a remarkable extent.* The price of articles of food has risen from 30 to 40 per cent. The price of meat, especially, has increased to such an extent during the last few years as to make the condition of the working classes worse and worse.

VIII. *Under what conditions are agricultural and industrial pursuits combined?*

The population of the Lyons district is engaged almost exclusively in manufactures; that of the neighboring departments is engaged in both agriculture and manufactures, pursuing them alternately, according to the season. Those who are thus employed are weavers, hatters, embroiderers, &c. Their lot is, in general, preferable to that of the city operatives, who receive higher wages, but whose expenses are greater and heavier, who are subject to more "loss-time," and whose occupation is more uncertain.

IX. *What is the state of education among the operatives? Do the children attend school?*

After considering the material wants of the workman, if you inquire into his real condition, it will have to be acknowledged with regret that not only is his education very limited, but in some cases entirely neglected. Parents pressed by straitened circumstances only send their children to school up to their twelfth year. The knowledge which they acquire there is very elementary and soon forgotten in the midst of surroundings so unfavorable to its retention and so much more unfavorable to its cultivation.

There are indications of progress in the education of the laboring-classes, but there is much wanting. The native Lyonnese can generally read and write. Parents are usually willing to send their children to school, and the attendance is pretty regular; but the number of schools is far from sufficient in many districts of the city, and in some there are none at all. In the trimming industry operatives have about the amount of education necessary for their occupation, and their children generally attend school.

X. *Has any society been established within the department for the purpose of enabling workmen to become owners of real estate? What is the status of these societies—chartered or independent? What share have employers had in them? What have been the results?*

There is no institution with such an object in view; but manufacturers cheerfully make advances toward the purchase of a loom to any one of their workmen whose work has won their approval. In this way workmen become master-weavers. The loan is refunded by retaining one-eighth of the wages. Ten per cent. of the present master-weavers began in this way.

The "mutual aid societies" are very numerous. They embrace nearly all the industries represented in the council. There are many societies of this kind, with a large number of participating and honorary members. Especially worthy of mention is the great weavers' society of Lyons, under the patronage of the chamber of commerce. Its members number 5,000, viz., 1,600 men and 3,400 women. The former pay 2 francs (40 cents) a month; the latter 1.50 (30 cents). In case of sickness, the society provides its members gratuitously with medicines, the attendance of its physician, and a substitute. An additional charge of 6 centimes (6 cents) per day for men and women respectively. 2 francs (40 cents) and 1.50 francs (30 cents) per day for men and women respectively. A benefit of 1 cent (a pound) weighed at the "public silk conditioning office,"† for the benefit of this society. The amount received annually from this source, 100,000 francs, (\$20,000), is set aside for the purpose of duplicating the deposits of the members of the society at the "pension bank."‡

The trimming-makers have a "mutual aid society," to which nearly all the employees belong as honorary members.

* In 1857 there were in France 3,600 of these societies, with a "participating" membership of 450,000. In 1860 the number of the societies had increased to 4,410. Some of them are under government supervision.

† Some, if not all, of these societies defray also the funeral expenses of members.

‡ As silk absorbs moisture very readily, its weight varies according to the dampness of the atmosphere. To secure dealers and buyers against losses arising from variations in the weather and from fraudulent moistening, public offices for ascertaining the amount of moisture in silk have been opened in all cities, where silk is largely used for manufacturing purposes. A sample of each bale is carefully weighed, then perfectly dried in a heated metallic box and weighed again. If per cent. is added to the weight dry, which is considered as representing the amount of moisture absorbed by silk from the atmosphere on an average day of the year. Silk can absorb as much as 33 per cent.

All raw silks pass through these offices. Daily registered and signed certificates of tests are furnished, not only of the amount of dampness, but also of that of gum and foreign substances in raw and thrown silks, and of the average size, strength, elasticity, and of the twist and general nature of silk fibers, all of which may be of consequence to the manufacturer.

§ An institution under the control of a government commission, having for its object the assurance or annuities to the superannuated railroad companies, omnibus lines, and other corporations, sometimes makes deposit, in this bank for pensioning off its employees when they become too old to work. The number of policy-holders in 1858 was 10,331, of whom 3,692 were operatives.

XI. Do joint-stock societies tend to supplant private manufacturing-enterprises?

By no means. Several unfortunate attempts have been made by workmen in that direction, but they seem to have abandoned the idea. There are no such efforts to report on the part of manufacturers.

XII. Are there any instances within the district of large manufacturing-enterprises being conducted by a company or society of workmen?

There are none, except that of the weavers' society and that formed by a few journeymen dyers, which are still in operation.

§ II.—MINOR INDUSTRIES.

I. What are the minor industries of the department of any commercial importance?

In the silk manufacture the minor industries are pasteboard-box-making, making packing-cases, handle-making, twisting and drawing in,* beaming, warping, reeding, pattern-card-stamping, the manufacture of Jacquard machines, shuttles, reeds, and other weavers' implements, and the construction of looms.

There are also minor industries connected with dyeing, as the dyeing and cleansing of piece-goods soiled in process of manufacture, (and garments.) A very moderate investment suffices for a small business which is sustained by local wants. The owner does the work himself, and in busy times employs one or more assistants.

The laundry business should also be mentioned, which is moving from the city to the country. It is becoming quite extensive, and even sustains some large establishments.

II. Are the minor industries inclined to maintain or extend themselves, or become absorbed by the great ones?

III. If they are becoming absorbed, state the most apparent cause of it.

They are rather inclined to maintain themselves, because of the cheapness and simplicity of the necessary machinery and implements.

There is no danger of absorption, either at present or in the future.

IV. Are there any minor manufactures in the department carried on by a company or society of workmen?

None.

V. Has there been an increase in the rates of wages in these industries? Have the prices of the necessities of life increased?

The same answers are given as to questions V and VI, under the head "Great industries."

The increase in wages is, on an average, only from 20 to 30 per cent.

LETTER FROM THE UNITED STATES CONSUL AT LYONS.

The following letter from the consul of the United States at Lyons gives some additional facts in regard to the cost and condition of labor in that seat of the silk industry:

UNITED STATES CONSULATE,
Lyons, France, November 7, 1873.

DEAR SIR:

On the whole there is a very great difference in the nature of work and the mode of living of the workmen in this country and in the United States, and in my opinion it is almost impossible to judge of the relative agreeableness of the work and the well-being of the laborer by placing the kind of the former and the cost of the various articles of food, clothing, and of house-rent in the two countries into a comparative position with the earnings in wages.

The labor market of the Lyons region is governed and absorbed to the greatest extent by the manufacture of silks. This complicated industry divides itself into a great number of separate manipulations, so much so that—a few cases excepted—the manufacturers cannot keep the progress of their work under their direct control. Their business consists principally in distributing the materials as they advance to the different degrees of perfection, among the various sections of their workmen. These take the materials to their homes, and there perform the task assigned to them. In this way it happens that a lot of silk, after being spun and dyed to be made into a piece of dress-goods, passes eight or nine times through the manufacturer's office before the piece arrives finally on his shelves, ready for sale.

*Twisting and drawing in; i. e., attaching the threads of a new warp, one by one, to the thrums or ends of a warp which has just been woven out, and then drawing the new warp by means of the thrums through the harness and reed. In case the harness and reed are used for the first time, the threads have to be passed through both by means of hooks.

This mode of proceeding and the nature of the work admit the employment of all male and female members of a family above the age of twelve years. By thus remunerating the wages, a family earns sufficient to meet all its wants, and, besides, a surplus for times of sickness or want of employment, although the daily wages appear to be very moderate.

The earnings of an adult in the various kinds of labor connected with the silk industry are from 2 to 5 francs (10 cents to \$1) a day. A single person may have good board for \$1.75 to \$2 a week; lodging for 50 to 75 cents a week.

A family of two adults and one child of about fourteen years earns not less than \$10 a week; they may live comparatively well in expending from \$3 to \$4 in the same time, while they can rent an *appartement*, containing rooms for their utensils, (looms, &c.) one or two bedrooms, and kitchen for from \$60 to \$80 a year, or about \$1.25 or \$1.50 a week.

The classes of people in question live principally on soup, cooked with vegetables, meat, bread, and light red wine; the latter article is used by everybody and by both sexes, and forms an essential portion of the daily food.

Coffee is comparatively neglected, and replaced by a thick and very substantial broth.

Tea is used only in case of sickness. Of bread, only white (wheaten) bread, and of meat, fresh beef and mutton, have the preference; occasionally smoked ham and sausages come in by way of variation.

All French men, as well as women, are perfect cooks, and understand how to prepare with the above main ingredients most excellent and healthy dishes. The light red wine taken with their meals costs from 21 to 40 cents a gallon.

The silk industry employs some 80,000, perhaps 100,000, looms, demanding with the auxiliary manipulations about 200,000 hands. All other labor is necessarily influenced by such an army as regards wages and conditions.

After these few remarks, respectfully made, and intended for the easier appreciation of the situation of the French laborer in and about Lyons, I have the honor to return the inclosed blanks, filled up as far as the case admits.

I am, sir, &c.,

Hon. EDWARD YOUNG,

Chief of Bureau of Statistics, Treasury Department, Washington, D. C.

P. J. OSTERHAUS.

WOMEN WORKERS IN PARIS.

The following extract shows the number of women employed in various branches of industry in Paris:

In Paris alone above 178,000 females earn their livelihood in some department of trade, 161,795 being *bona-fide* workwomen; and of these, half are engaged in trades having to do with dress, the grand total of 130,625 being divided among twenty-two occupations in the accompanying proportions. Seamstresses number 51,163; bleach-ers, 20,396; shirt and linen makers, 20,579; artificial flower and feather makers, 7,132; milliners, 6,153; boot and shoe makers, 6,241; tailoresses, 4,619; hat and cap makers, 3,138; glove, braches, and dress-makers, 2,479; embroiderers, (of women's attire,) 2,353; button-makers, 201; cane and umbrella makers, 529; comb, brush, and dressing-case makers, 525; dyers, 484; embroiderers in silver and gold, 463; perfumers, 392; straw-hat makers, 261; furriers, 250; stocking-makers, 138; barbers, hair-dressers, and wig-makers, 126; gaiter-makers, 110; calenderers, 87; wooden-shoe makers, 16. Under the somewhat pretensions division of "Science, letters, and art," we find enumerated 2,551 book-binders; 779 employed in printing, engraving, and lithography; 350 in paper-making; 93 in the manufacture of musical instruments; 91 in making various necessities for the writing-table; 25 in type-founding; 73 engaged at theaters and concerts; 78 on newspapers and review, and 67 editors of books and music, (actresses, singers, and newspaper editresses are classified with the followers of liberal professions.) Among 778 ministers to luxury and amusement are 256 makers of toys and playing-cards; 261 producers of works of art; 5,666 workers in gilding, jewelry, and allied callings; and 1,443 women employed in tobacco-manufactories. Of 1,559 workwomen connected with the *commerce*, 255 are engaged at restaurants, taverns, and such places of entertainment; and precisely the same number are set down as bakers. The preparation of ice, chocolate, and cream occupies 210, and 78 are employed by pastry-cooks. One only figure among the millers, two among sugar-refiners, and five among the brewers. Then there are 133 find-preserved vegetables. The dairywomen number 13, and 17 in the concoction of bread in the slaughter-houses. After that we are not surprised to learn Paris boasts 9 female boat-builders, and 245 "wheelwrights, carriage-makers, farriers, and saddlers." Military equipments afford employment to 291 females; 40 help to produce fire-arms

and ammunition, and 3 to make swords and bayonets. Eight thousand seven hundred and ninety-three workwomen are employed in the manufacture of textile fabrics, and 2,859 in the production of articles of furniture; 782 of these being catalogued as cabinet-makers, 1,123 as upholsterers, 758 as bedding-makers, and 39 as looking-glass makers. Connected with building, we are astonished to see 3 architects, 8 sawyers, 46 carpenters and joiners, 8 masons and slaters, 99 marble and stone cutters, 7 chimney-makers and sweeps, and 1 plumber; then come 75 paper-hangers, 89 painters, glaziers, plasterers, and decorators, and 10 ornamental-decorators. Ceramic manufactories afford employment to 116 women, chemical works to 376, candle-factories to 53; 12 are engaged in the making of gas, 445 in various methods of manipulating leather, 299 in metal and hardware work, 225 in turning, box-making, and other trades coming under the heading of wood, and 37 are employed in the manufacture of cast iron, steel, copper, and other metals. With the exception of the milliners, who are boarded by their employers, and receive an annual salary, embroiderers appear to be the best paid, since they can depend upon earning from 14 to 17 shillings a week all the year round; while 2 shillings a day represents the income of the ordinary good workwomen in most other trades.

THE WORKING WOMEN OF FRANCE.

A series of articles under the above caption, translated from the French of M. Jules Simon, which recently appeared in the New York Evening Post, are of such interest that copious extracts are here presented:

ARTIFICIAL FLOWERS.

The best Parisian artificial flowers may well dispute the palm in point of freshness of appearance with those which bloom in gardens. The lovely women of both worlds buy at Paris the flowers with which they dress their hair. Italy formerly stood first in the manufacture of flowers, silks, and laces; subsequently Lyons was celebrated for its flowers. At present Paris stands pre-eminent. Nearly five thousand women are engaged in this branch of trade. The most skillful are artists who study natural flowers with real enthusiasm, and imitate them with greater fidelity than the best painters. Their receipts sometimes amount to three francs for a day's work of eleven hours. A *fleuriste* can live very comfortably, if she is not seized with a desire to deck her own person with the wreaths she makes and exhibit them at the *Mabille*.

CUTTERS OF PRECIOUS STONES.

Every one understands why Paris should be the center of flower-making, but by what strange and inexplicable anomaly has the cutting of precious stones been established on the summit of one of the Jura Mountains? Diamonds are cut at Amsterdam; but rubies, sapphires, aquamarines, amethysts, and opals are all cut and polished in the heart of the mountains. These rude children of the Jura remain faithful to the occupations and customs of their fathers, and all the riches which pass through their hands do not make their cottages appear colder or their bread harder. They have lately made some advances in analogous branches of trade. The women make false stones with a skill which is unequalled. They pierce rubies as pivots for watches, and even begin to make mosaics with stones sent from Florence. Their work-tables are placed near the windows of their cottages, and there father, mother, and children work all day, when household cares, preparation for meals, cutting wood in the mountains, or the sowing of some poor piece of ground does not call them away. The women who cut rubies often earn tolerably good wages, yet, notwithstanding this, wages of one franc fifty centimes (30 cents) are the exception. The average is seventy-five centimes, (15 cents.)

STRAW-HAT BRAIDERS.

Quite an important branch of trade, and one which has to do with the feminine toilet, is the manufacture of straw hats. Nancy is one of the great centers of this industry, and, if the merchants are to be believed, they export hats even to America. Most of the men's so-called straw hats are really made of the bark of the catanier, or Bourbon palm. The Nancy manufacturer buys the bark, has it dressed and torn into long strips with a sort of metal comb, and then sends it to be braided and made up. The maker is paid fifty centimes (10 cents) for a hat. It is necessary to work all day, and to be far more skillful than the generality of workwomen, in order to finish two. Panama hats, and those made of finely-sewn plaits, are made in France, the first from the leaves of the yppapa, which come from Panama, and the second with plaits bought at Florence, and charged with an exorbitant duty. It is this duty, and, in a few instances, the fine quality of the raw material, which explains the enormous cost of some hats. A Panama hat which cost two thousand francs was on exhibition some years ago at a Paris store. The Nancy manufacturer had sold it for sixty francs, and he had probably paid three francs to the woman who braided it.

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TOY-MAKERS.

Toy-making gives employment to a large number of poor women. There are some women whose work consists in pasting colored paper on myriads of tiny toys. A very few of the best workers earn excellent wages; the others vegetate during the good season, and are subjected to long periods of forced idleness. In November and December there are not enough women to dress the dolls and ornament the bonbons. Those who work have to sit up all night and strain every nerve. To this actively succeeded, without the slightest transition, long months of forced idleness.

GLASS-CUTTING.

Glass-cutting comprises four different operations: smoothing down, which is done on an iron wheel, with pure, fine, damp sand; the first polish done on a tin wheel, the second polish done on a wooden wheel, with powdered pumice-stone, dampened, and the final polish done on a cork wheel, with dry powdered tin. If glass is to be engraved, recourse is had either to a diamond point, or to a process which is quite complicated, and consists in covering all the surface with a slight varnish of wax and turpentine, drawing the design on the wax and pouring fluor-hydric acid on the parts laid bare by the burin. The business of cutting is generally intrusted to women in the factories. They do it marvellously well, as it requires only patience and skill. Unfortunately, it is a very unhealthy trade, as the necessity of bending over the wheel and having their hands in water all day, exposes them to dangerous pulmonary affec-

tions. Women are employed, in considerable number, at the ir trade, at which they make very fair wages.

OTHER TRADES.

Women are to be found also in stone-cutters' shops. There are some among gilders, bronze-mounters, bronze-varnishers, pewterers, engravers, manufacturers of polished-metal plates, jewelers, gold-beaters, &c. Most of the women employed in these trades are burnishers, polishers, and borers. It is not at all fatiguing work, and pays well. A skilled workwoman can earn four francs a day and more. Her wages depend on the rapidity with which she works. Many of the women do not earn more than one franc; they then become discouraged and seek some other trade. The borers put the finish-
ing touches on carvings of copper, bronze, and even more precious metals. Fewer ornaments of bronze and copper are now made than in the early part of this century, and for three months of every year the borers work only two days in the week. Women are very successful in boring. The work, which requires assiduity, precision, and a light, skillful hand, seems to be made expressly for them. The few women who have devoted themselves to wood engraving easily earn five francs a day. In 1860, a course of instruction in this art was opened at the School of Design, and the experi-
ment wrought excellent results.

The want of a good education or apprenticeship reduces a great number of women and young girls to trades which scarcely suffice to support them, such as basket-making, esparto work, straw-mat, broom, and feather-duster making, and stuffing chairs. The poor women who make wreaths of immortelles and shavings of ox-horns earn barely enough to buy bread with. In general, talent only is well paid. Persons who are endowed neither with talent nor physical strength, can find profitable employment nowhere but in factories.

Women find employment also in stationers' and booksellers' shops as folders, gath-ers, and stitchers. Their wages vary as they do everywhere from one franc, (20 cents) to two francs fifty centimes (45 cents) a day, but rarely fall below two francs, (40 cents.) They are beginning in printing establishments to employ women to set type. They compose very well, nothing but exactness and perseverance being generally necessary. It is always hard labor, as it obliges them to stand up all the time, and is very fatiguing to the eyes. It often requires, also, a good elementary education, which is not within the reach of all young girls.

The last-named trades are carried on in enormous workshops. This is the case, too, with glass-cutting. Every one is aware of the difference between cut and pressed glass. In order to give the glass those clean edges which so enhance its value it is necessary to subject it to the action of several grindstones; for glass is a dry, brittle substance, which cannot be cut like wood, stone, or metals.

FACTORY-LIFE.

The women employed in the factories where woollen fabrics are made, have also a hard lot. There are always cleaners, packers, and *rattacheuses*, as wool necessitates divers operations of division, greasing, and again removing the grease. Nevertheless it produces less dust than cotton, and has not the same disadvantage of poisoning the air and adhering to the hair and clothes of the operatives. The odor of the oil which is applied to the wool for the purpose lubricating it, and facilitating the operations of carding and combing, is only disagreeable to visitors; the women employed do not notice it. In general wool-spinning is less troublesome and dangerous than cotton-spinning. Several wool-spinning factories are remarkable for their neatness and elo-

gance. Preparations of hemp, flax, and above all of tow, emit, on the contrary, quantities of very unwholesome dust. It is impossible to card and spin them, except in very hot rooms, and with the aid of abundance of water. Few sights are more unpleasant than a badly kept flax-spinning establishment. The water floods the brick floors, and the smell of the flax in the heated atmosphere produces sometimes an intolerable stench. The greater part of the workwomen are obliged to lay aside most of their clothes, are crowded together in this pestilential atmosphere, and stand all day long perspiring, and with naked feet, the water often reaching their ankles. When, after twelve hours' hard work, they leave the factory for their homes, the wraps with which they cover themselves barely afford an adequate protection against the cold and damp.

THE WAGES.

The health of a woman has a great deal to do with the question of her receipts; the will, perhaps, still more, since energy and resolution can triumph over a weak body and exhausted powers. The most favorable estimates do not fix the mean of the female weaver's daily receipts at more than one franc fifty centimes.

Let us, in order to make the best of it, state the average of her salary to be 1.75 francs (35 cents,) which would be 525 francs a year for 300 days of hard work. With 1.75 francs a day it is possible indeed to live, but to live very poorly. If 72 francs (20 centimes a day) are not deducted from the year's income for a lodging, the lodging must be a mere shed. If more than 150 francs are not deducted for washing, shoes, and clothes, the Lyons workwomen will scarcely be able to get more than what is absolutely necessary. There remain then something like 80 centimes a day for food and other expenses. Most of these women take their meals at the master weaver's. This arrangement, though not always practicable, is much the best. Although women are naturally sober, and generally less in need of strong food than men, we should remember that these women work at a fatiguing trade, which requires a certain degree of strength, if only to accomplish a good day's work. To be miserably lodged, clothed, and fed, and with all this to be obliged to work, at the very least, twelve hours a day, is the fate of a female weaver, as favorably situated as possible.

WEAVERS AND LACE-MAKERS.

We should form a very mistaken idea of the trade of spinning and weaving did we suppose that it had completely done away with manual labor. The old-fashioned loom is still encountered everywhere, in cellars and cottages. After visiting one of those vast factories where five hundred looms are working together with a deafening clatter, it produces a singular effect to cross the street, descend a few steps, and suddenly find oneself in the workshop of a weaver of the old school. The cellar is lighted, as all cellars are, by a trap-door. The atmosphere is damp enough to prevent the thread from breaking, but not so damp as to injure it. Sometimes, often indeed, the loom completely fills the cellar, and the weaver is obliged to creep under the frame, and squeeze himself between the levers, in order to tie the broken threads. The large, heavy, rough-hewn posts, the warp moving with a creaking noise, the cords grating in the pulleys—the primitive simplicity of all these accessories contrasts strangely with the elegant little machine which is driven by steam with such rapidity. The old-fashioned weavers usually work alone. Sometimes they have two looms in one room, rarely more. When they spend their days thus, seated on their stools, their feet on the levers, and their hands on the battants, they might easily imagine that there have been no revolutions either in society or in trade, and that the steam-engine is still an invention of the future.

Cotton is woven by machinery in Alsace, Normandy, and the north of France. Hand-loom is there the exception, and their number is daily diminishing. Some old houses have retained them because they involve no expense, and patterns can be varied on them with more facility than on power-loom. Here and there, to be sure, may be seen a hand-loom; but it is a family heritage, and the children continue their father's trade with their father's implements. The knitting-loom, such a source of revenue to country-women, does not suffice for the support of a Parisian workwoman.

This is the case also with regard to another branch of industry, lace-making, the products of which are priceless, and the labor miserably paid. At Paris, where living is expensive, lace has rarely or never been made, for the gold and silver lace manufactured in Paris ranks properly among *passenterie*. For the same reason, very little of the so-called Valenciennes lace is made at Valenciennes. It is difficult work, requires a long apprenticeship, absorbs all of the maker's time, and is so miserably paid for that the working population of the north find more lucrative employment. As it takes several months, and sometimes even a year, to make a coupon three yards in length, and as it is impossible for the lace-maker to wait so long a time for her wages, it is the custom to pay by *bandes*, there being three *bandes* in a yard, and twelve in a coupon. The result of this is that the employer incurs both risk and expense, as he is obliged to furnish the thread and pay almost the whole amount due the maker a long time before he receives the work. At the present time there are but three lace-makers at Valenciennes, earning from one franc thirty centimes to one franc fifty centimes for twelve hours' work. What is known as Valenciennes lace is made extensively at

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Yprés, Courtray, Ghent, Bruges, and in almost all parts of Flanders. The price of a lace-maker's cushion varies from eight to ten francs, the patterns from seventy-five centimes to one franc. Beside this the woman is obliged to provide her pins and spindles, and rarely are less than four hundred spindles and fifteen hundred pins used in making a coupon of Valenciennes lace.

Point d'Alençon is made in a very different manner from Valenciennes. In the latter instance the same person makes the net and the flowers; but the women who make the lace or net, the *bourreuses*, who do the heavy embroidery, the *modistes*, who do the open work, and the *brodeuses*, who make the border destined to surround and support the pattern. An apprenticeship of three months is sufficient, and if they do not injure their hands by doing heavy work, they can attend to all their household duties. They can begin a piece of lace, leave it and take it up again, as they could knitting or embroidery. They earn on an average one franc a day.

NEEDLE-WOMEN.

It appears that twenty years ago, out of 112,000 workwomen mentioned by the commissioners of examination, at least 60,000 supported themselves by various kinds of needle-work. This estimate includes only those regularly hired. There are a large number of others who work alone.

The highest wages paid before the war were five francs daily for milliners and embroiderers, four francs fifty centimes for the seamstresses employed by tailors, four francs for *reprises*, *dar* seamstresses, corset-makers, and the women who work for the *lingeries*. The *reprises* and the seamstresses who work for shoemakers and upholsterers earn three francs fifty centimes. On the other hand, wages sometimes fell as low as seventy-five centimes for workers on tapestry, kid gloves, and old clothes; fifty centimes for dress-makers, vest-makers, corset-makers, cap-makers, and embroiderers; forty centimes for the women employed by shoemakers and those who stitched cloth gloves, and fifteen centimes for those employed in the *lingeries*.

The general average of salaries earned by Parisian workwomen in 1847 was about one franc sixty-three centimes. Nine hundred and fifty women earned less than sixty centimes; one hundred thousand and fifty from sixty centimes to three francs; and six hundred and twenty-six more than three francs. Seamstresses who worked at home earned on an average one franc forty-two centimes, and those in the shops about two centimes. These rates have doubled since that time.

A good Parisian work-woman is, in a certain sense, an artist. It is natural that she should be much sought after and well paid. As wages have gradually risen, only women endowed with an exceptional degree of talent have profited by the change, while the increasing competition, the new commercial organization, and the dissemination of the sewing-machine have combined to lower the value of mere manual labor. Tailors who make to order pay a woman from four to six francs for making a vest. She is obliged to furnish her own sewing-silk, &c., the expense amounting to about fifty centimes, and, if a good worker, she can make a vest a day. The merchants, however, who furnish ready-made clothing to the Parisian shops pay a woman only one franc fifty centimes to two francs fifty centimes for the same labor. There, then, may be two women, both following the same trade, one of whom will earn five francs fifty centimes a day, and the other only one franc twenty-five centimes. The exporting merchants pay their women from seventy-five centimes to one franc twenty-five centimes; the thread and other materials which must be supplied will cost, say, twenty centimes. If they can make three plain vests in two days, they will have a profit of about eighty-five centimes a day.

Ladies' cloaks and mantillas are always given by large houses to women who superintend the work done by their hired hands, and who themselves do everything requiring taste and discrimination. The workwomen do nothing but sew. They earn two francs or two francs fifty centimes for twelve hours' work, out of which one hour is allotted for rest and meals.

Wholesale ready-made clothing establishments manage things very differently. The house will order, for example, three dozen paletots at one shop. These paletots cost two francs apiece, of which the mistress of the shop deducts fifty centimes. The woman who sews spends fifteen centimes on her thread, and her profits amount to only one franc thirty-five centimes. By working from 7 in the morning till 8 in the evening, and scarcely taking time for her meals, a skillful workwoman can make three paletots in two days. To accomplish this she must sew steadily for thirteen hours without one instant's pause or rest. To this gloomy picture we must add cold feet in winter, and six hours' work by dim candle-light. It is under such circumstances that a seamstress who is more than ordinarily clever can earn two francs.

Linon drapery, or *lingerie*, comprises a great variety of articles, from sheets and the aprons worn by *valets de chambre* to ladies' morning-caps finished in the most dainty style. A clever workwoman, who is able to cut and finish a fine cap, can earn from five to six francs a day. Generally, these are women who have small shops, and make this their peculiar branch of trade.

Among the regular workwomen, a few of the best earn three francs, and almost all earn two francs, or two francs fifty centimes, for thirteen hours' work. The easiest work falls below this estimate; for example, eighty centimes are paid for one dozen *fichu* bodies, and a very good seamstress can make two dozen in thirteen hours. Sheets, towels, and napkins rarely bring the needlewoman more than one franc a day, or seventy-five centimes when she works for large establishments. They are the resource of most women when work is slack.

Upholsterers employ a great many seamstresses. The commissioners counted two thousand, and, with the increase of population and the rapid increase of luxurions habits, undoubtedly a much larger number are now engaged in this trade. They invariably receive one franc seventy-five centimes a day, unless they are *doublées*, in which case they receive two francs, as they are obliged to stand up all the time. Their day's work lasts in winter from 8 in the morning till half past 6 in the evening, with an hour's intermission; and in summer from 7 in the morning till half-past 6 in the evening. Extra work is paid at the rate of twenty-five centimes until midnight, and fifty centimes from midnight until 6 in the morning.

GLOVE-MAKERS.

Not less than 12,000 women are employed in the glove-trade in the department of the Loire alone. In the Grenoble factory there are 1,200 who cut the gloves, making on an average four hundred and fifty dozen a year. A single house at Chaumont (Haute-Marne) employs 2,051 stitchers.

There are three separate kinds of work in glove-making—cutting, stitching, and finishing. Men usually do the cutting; but lately they have employed at the Grenoble manufactories four or five hundred women, who place the leather upon the iron band, cut it with the aid of a *balanceur*, and prepare it for sewing. It is not very hard work, and the women receive twenty centimes a day. They can earn from forty-five to seventy francs a month. This depends, of course, upon their skill, and the time they have to give to the work. The stitchers are paid for one dozen single-buttoned ladies' gloves four francs fifty centimes, and for two-buttoned gloves four francs seventy-five centimes. The mistress deducts fifty centimes, and the workwoman is obliged to furnish the silk, at a cost of about forty centimes; three francs thirty centimes remain for one dozen pairs, or thirty centimes a pair. A good worker can make at most four pairs a day, but the majority of women do not make more than two and a half.

Glove-stitching requires the most exquisite neatness. The stained gloves are not only left on the workwoman's hands, but she is obliged to pay for the material. Four pairs a day would amount to one franc twenty centimes. In the Haute-Vienne, where gloves are made of lambskin, in l'Aveyron, in the Haute-Marne, and even in l'Isère, the price of a dozen often falls as low as three francs. The workwoman's receipts are then reduced almost to nothing.

The following extract from the Paris correspondence of the Chicago Tribune, supposed to be from the pen of the editor, Mr. Medill, affords additional information of an interesting character in regard to the employment of women in France:

Women seem almost to monopolize every avocation in the cities for which they possess the requisite physical strength. They constitute the great bulk of the visible shop-keeping class. Male clerks are scarce in France; the women having taken their places. The hotels and boarding-houses are managed by females. All the lighter mechanical trades are largely filled with women, who manufacture most of the clothing, head-gear, slippers, dolls, toys, and a thousand articles of commerce, with which the French supply the markets of the world. In the country, all French women work out of doors, on the farms, side by side with their male relatives. It would be a safe estimate to state that half the productive industry of France is the result of female labor.

But that in which the French more particularly excel is economy. They live upon just about one-half what the Americans do. The wife in every French family knows to a nicety what quantity of each kind of food is the least that will suffice to make a comfortable meal, and not a particle more than that is ever cooked or served. Servants are never permitted to waste or steal food. The lady of the house looks after her marketing, her kitchen, and her pantry, with sharp eyes and unflagging care.

In the matter of clothing, also, the same economy prevails, and yet they all seem to be nicely, cleanly, and comfortably dressed. There is no vast element of indigent, ragged, miserable paupers, living on public charity. Every one appears to be self-supporting.

CONDITION OF LABORERS' DWELLINGS.

M. Jules Simon, from whose interesting account of labor in France copious extracts have been presented on the preceding pages, has also investigated the condition of the working-classes. In regard to their wretched abodes, the collection of rents, and the hours of labor, he says:

It is not an uncommon thing to find w. knen who have inhabited the same room for a number of years, not because they are comfortable, but simply because they are there, and have no idea of looking elsewhere for a home. The most striking examples of this indifference is in the case of two old people who lived some years ago in a small house in the Rue du Milieu, in the parish of St. Germain. When interviewed the husband was eighty-three and the wife eighty-two years old. They had been married sixty-three years, and had lived in this lodging fifty-seven years, almost suffocated with smoke when they made a fire, chilled by the wind which whistled through the badly-joined panels of the door, and overflooded by the water of the drain. This Quartier de la Veilliere is a gloomy abode. It seems to be asleep, and is a sickening sight, for it is old without being venerable. Among other proofs of abject misery there is a ground-floor lodging there, comprising two small rooms, badly paved with small stones, and the inner room, having no windows, is in constant darkness. It also joins a bone depository, belonging to the neighboring house, and which diffuses so horrible an odor that it is impossible to bear it for more than a few moments. The man who, with his wife, inhabits this wretched dwelling, is employed in a neighboring factory; they have a daughter twenty years old, and five other children of tender years. Amiens is, notwithstanding all this, a fair, smiling city, with superb boulevards, long and well-built streets, a magnificent promenade, and one of the finest cathedrals in the world. It only remains for the inhabitants to believe that misery does not exist at all, that the workmen have food and fuel, and that no old man is in want of a bed on which to repose his wearied limbs. The contrast is, perhaps, more striking in Rheims, because trade is more animated there. That marvelous cathedral, those galleries in the open air which call to mind the covered bridges at Lucerne, the Rheims Mount-ain, which lifts its smiling vine-wreathed summits against the horizon, the well-aired, flannel, avalanches of cotton and woolen cloths, scarcely permit us to suspect the existence of the misery which is concealed not two steps off.

THE HOMES OF FAMINE AND RUIN.

Yet there stands a row of houses built at the foot of the ancient ramparts, the floors of which are washed away by floods of rain in the winter; there are lodgings, too, in the Cour Jeneus, the Cour St. Joseph, the Place St. Maise, the Cemetery of la Madeleine, and the Rue du Barbâtre, more desolate and abandoned than dungeons; long lines of rooms where the water drips through the dilapidated roofs, where space, air, and light are wanting, yet where people live, buried in cellars, perched in garrets, crowded, pressed, crammed one against the other in damp and choking alleys, the fearful abodes of famine, sickness, and debauchery. There still remains in the Cour No. 133, on the Boulevard Coris, a closet under a staircase, some two yards long by one and a half wide; it is impossible to stand upright in it, even at the highest part of the staircase. There is no window, and in order to have a little light and air it is necessary to leave the door open. It is no longer anything but a bake-house, but a paralytic woman once lived there, if it could be called living, two years and a half. With the single exception of Mulhouse, equally wretched abodes may be found in every manufacturing town throughout France.

COLLECTING RENTS.

Some landlords collect their rents themselves, and have no other business. One round is scarcely completed before they have to begin another, for every one, of course, will readily perceive that all rents are not paid at the first demand, and that it is necessary to return on Monday, Tuesday, and sometimes on Wednesday. A landlord who is resolved to be paid at any hazard allows of no arrears. It is possible with great difficulty to get 1 franc or 1 franc 50 centimes at a time, but 4 or 5 francs are an impossibility. The woman who cannot pay her rent on Monday is obliged to take her children and seek admittance at some other door. When there are no vacant lodgings to be had the tenants refuse to move, and it is hard enough to get them to go away. The most severe method consists in removing the door and windows. A few years ago there was a landlord at Lille who left his house in the morning drawing a little

hand-car. When a tenant refused to pay he took away his door and windows with his own hands. This worthy individual always returned home at night with large receipts, and yet he did not die a millionaire.

HOURS OF LABOR.

In 1836 the workman's day was fifteen hours long at Mulhouse, Dornach, and Lille, and sixteen at Bischerville. A report made before the Industrial Society at Mulhouse in 1837 stated that it was eighteen hours long in many French manufactories. Adults are now limited by law to twelve hours' labor per day. Adding to this the hour and a half usually allowed for rest and meals, it makes the absence of a mother from her family thirteen and a half hours. This is in case, we suppose, her house is near the factory, which it rarely is. Generally, it takes an hour to go and return, which makes altogether an absence of fourteen or fifteen hours for the mother, and of solitude for the children. It is clear that, under such conditions, the room must be neglected; it is neither washed nor swept, nor put in order. Yet no one can have the heart to reproach for this the unhappy creature who, when she returns from the shop, has barely strength enough to prepare supper and put her children to bed.

It is, then, impossible for a woman employed in a factory to perform her duty to her children. During her absence the visitor will not unfrequently find the children gathered around the fireless stove, sad and motionless. Their weakness rather than their mother's injunctions keeps them at home. The first idea which occurs to us on seeing them is that they have never smiled. There is another difficulty about schooling. It is necessary to be rich in order to go to the free school. A child of six years can wind; at eight he can enter a manufactory. Supposing that there are two or three children between the ages of six and twelve years, how is it possible to support them on the wages of one man? They must do their week's work as well as their father and mother. With what impatience do the peasants await the age fixed for entering the factory! Is it because they undervalue education? No, it is because they dread starvation.

LABOR IN FRENCH PRISONS.

According to M. Simon, there are three classes of prisons in France, the central prisons, the department prisons, and the houses of correction. In the first are confined all women condemned to hard labor, as are also some men condemned to a like punishment; all persons condemned to solitary confinement, and all persons condemned to more than one year of imprisonment. The prisoners usually remain about three years. There are twenty-five of this kind of prisons, and they are the only ones where the work is properly regulated, or is of any importance. There are not less than fifty-four trades carried on in these central prisons. A contractor-general buys the hands of the prisoners, and lets them to subcontractors. The tariff of wages fixed by the government, and accepted by the contractor, is precisely the same as that of free workmen. The contractors supply food and clothing for the prisoners, and a debit and credit account is kept between the State and the contractor-general, an account which, on the side of the State, always ends in debit. The prisoner is lodged, clothed, fed, warmed, and has his washing done, gratuitously. He has no family—at least he may be considered as having none, since he cannot support it. He is never in want of work. If he is ill he is not obliged to pay for medical attendance. Finally, it is out of his power to spend either time or money in the pursuit of pleasure. If, therefore, he be as well paid as a free laborer he ought to save a great deal of money. He really does, since he receives a certain number of tenths, not of the real price of the day's work paid by the subcontractor, but of the price named in the tariff, and accepted by the contractor-general as his base of operation and as equivalent to the day's wages of a free laborer. This sum is always reduced by one-fifth, which is deducted by the contractor-general in payment of the materials and tools with which he furnishes the prisoner.

* * * * *

PRODUCTION OF IRON AND STEEL IN 1873.

The following statement of the production of iron, and of iron and steel rails in France, during the year 1873, will be read with interest:

The total make of pig-iron in France in 1873 was 1,331,000 tons, being only 17,000 tons less than that of 1872; the largest that was ever reached having been 1,329,000. Compared with 1872, the increase has not been less than 200,000 tons. The total output of manufactured iron in 1873 amounted to 200,715 tons against 223,069 tons in 1872, showing an increase of 23,000 tons. There is a falling off, however, of 126,000 tons compared with the extraordinary make of 1870. The total production of steel during the year reached 167,677 tons against 138,552 tons in 1872, or an increase of 29,125 tons. Since 1867 the steel manufacture in France has increased tenfold, and the upward movement is likely to continue. The sum total of iron and steel rails which the various dry railway companies ordered from the home works and steel rails which the Sarum-Railway alone consumed during the year 1873 is 4,285,150 tons of steel rails, 11,625 tons; the West, 9,871 tons. Compared with 1872, the consumption of iron rails increased 20,750 tons, and that of steel rails 11,003 tons. Adding to the above figures 8,541 tons of iron rails and 2,000 tons of steel rails imported during the year, it is found that there has been a consumption, by all the French railways, of 134,400 tons of iron rails and 66,008 tons of steel rails, or an aggregate of 199,408 tons.

STEEL-WORKS AT LE CREUSOT.

Having, at a later period, visited the renowned steel-works of Mr. Krupp, at Essen, in Westphalia, an extended notice of which appears on subsequent pages, the author more keenly regrets that he did not extend his journey from Paris to Le Creusot, where the celebrated works of Mr. Schneider are situated. The following communication, which appeared in the American Manufacturer, of Pittsburgh, Pa., gives an interesting account of the extent and production of the works, but makes no reference to the earnings of the workmen:

I have just returned from a visit to Le Creusot, the largest works I have ever visited. I spent four days there, and am under many obligations to Mr. Schneider, the owner of three-fourths of these magnificent works, for the very kindest of attention shown me during my visit. I had the pleasure of inspecting the works under the personal guidance of Mr. Schneider, who has a warm feeling for Americans, as several American iron-men can testify.

There are employed at these works 15,000 workmen, who turn out a daily product of 500 tons of iron and steel.

The building of the rolling-mills is 1,318 feet long and 360 feet wide, under a succession of spans, four in number, all of iron. They have twelve sheet and plate mills here, and are putting in the three high Lanth. They have ten blast-furnaces, which produce 500 tons of pig-iron per day. Have four converters, (Bessemer,) and make 200 tons per day. They have also the Siemens-Martin process at work. Mr. Schneider informed me that they do not have any difficulty in making a uniform article of steel. I can say I want steel soft to-morrow, hard the next day, medium the next, and am sure to get it, as he says, there is no trouble with steel, but with iron there is. They use the African ore mostly. Mr. Schneider assisted a company with their mines, and in return they agreed to deliver him £30,000 tons of ore per year. This agreement is to last for the next fifteen years. He gets it very cheap.

They make all kinds of machinery, from a marine-engine down. Are building the engines for the steamer Lafayette, to run between Havre and New York. Are building the one hundred locomotives per annum. All the principal parts are made of steel, and have a splendid finish. Thirty large steam-lammers are constantly at work on their forgings. I saw a drill-press bore thirty-five holes at the same time. They have a steam-riever to make boilers. The boiler is suspended over the machine, and in two blows the rivet is in its place finished. The company have iron-mines of their own, and four collieries with veins in a kind of pockets, 30 feet thick, and nearly vertical. They took out 700,000 tons last year, and expect to run over a million tons this year. What they use of the railroad company. Their pumping-engine is of the Wolf system, compound capacity, 135,000 cubic feet per stroke. Mr. Schneider is erecting an iron building 1,500 feet long and 100 feet wide, in which to manufacture steel and axles for railways, and expects to make eighty thousand wheels and forty thousand axles for the American and Russian markets.

This company bring their water four miles now, and must go twenty for more, as they have not enough. The population of Le Creusot is about 25,000. Mr. Schneider has four schools, that he pays for himself, for the education of his workmen's children.

INDUSTRIAL PRODUCTION IN FRANCE.

On a previous page the value of the industrial products of Paris in 1860 was stated at 3,339,092,919 francs; the following table shows the value of products of industry in each of the eighty-nine departments of France, in a subsequent year, the aggregate amount of which reaches the sum of 9,755,030,000 francs.

Table showing the total value of industrial production in the several departments of France in the year 1871.

Departments.	Value of product.	Departments.	Value of product.
	<i>Francs.</i>		<i>Francs.</i>
Seine	1,939,638,733	Sarthe	48,962,710
Nord	769,331,100	Nièvre	48,807,410
Rhône	600,556,819	Manche	48,363,330
Seine-Inférieure	419,331,031	Meuse	46,249,433
Bouches-du-Rhône	271,851,370	Deux-Sèvres	45,793,220
Loire	224,338,675	Haute-Vienne	41,355,855
Eure	213,136,019	Var	41,260,885
Haut-Rhin	196,258,280	Aveyron	43,428,723
Aisne	184,935,418	Charente	43,337,065
Seine	176,525,767	Eure-et-Loir	42,385,500
Marne	161,907,783	Indre-et-Loire	41,736,807
Loire-Inférieure	161,010,884	Haute-Saône	40,606,370
Ardennes	160,144,311	Vendée	39,611,836
Pas-de-Calais	158,081,790	Cher	38,609,850
Bas-Rhin	148,184,655	Jura	39,440,000
Ardeche	141,259,135	Charente-Inférieure	35,563,842
Ille-et-Vilaine	113,813,200	Morbihan	35,512,055
Oise	131,329,920	Aude	34,331,683
Moselle	121,000,280	Allier	32,667,811
Gironde	122,432,000	Haute-Marne	32,361,882
Isère	116,235,728	Yonne	31,701,983
Gard	115,608,116	Gers	30,893,530
Seine-et-Oise	109,619,500	Vienne	28,603,925
Vosges	101,172,915	Mayenne	26,720,520
Vaucluse	101,780,500	Loir-et-Cher	26,516,225
Haute-Garonne	99,241,062	Landes	26,115,075
Cantades	97,331,820	Haute-Loire	25,726,270
Hérault	91,458,470	Tarn-et-Garonne	25,544,910
Seine-et-Marne	88,782,550	Côtes-du-Nord	24,832,331
Orne	82,061,623	Ariège	22,906,650
Saône-et-Loire	78,101,635	Lot	20,228,960
Piémont	76,326,020	Basses-Pyrénées	19,583,436
Côte d'Or	75,019,620	Hautes-Pyrénées	19,171,619
Maine-et-Loire	71,300,800	Pyrénées-Orientales	15,981,975
Aube	69,920,950	Alpes-Maritimes	15,675,110
Doubs	65,618,510	Corse	14,147,309
Drôme	65,438,010	Basses-Alpes	11,019,480
Tarn	60,161,337	Creuse	13,742,300
Loir-et-Garonne	57,170,911	Hautes-Alpes	11,828,963
Ain	52,677,470	Savoie	9,351,220
Pay-de-Dôme	52,421,952	Haute-Savoie	6,963,700
Indre	50,038,208	Lozère	6,075,675
Meurthe	49,833,456	Corrèze	5,713,940
Loiret	49,197,500	Cantal	3,567,458
Dordogne	48,958,818		

Total value of product in francs, 9,755,030,000.

Total value in dollars, 1,900,161,808.*

Total value of products of industry in the United States of America in 1860, \$1,885,861,676, gold; in 1870 \$1,232,325,442, currency.

* Computing the franc, in this instance only, at 19.3 cents, gold.

MANUFACTORIES IN THE BOUCHES-DU-RHÔNE.

In the department of the Bouches-du-Rhône there were in 1872, as stated by Mr. Consul Osterhaus, the following manufacturing establishments:

Manufactories of soap, 37; oil, 51; tobacco, 1; matches, 12; awnings, 3; billiards, 4; corks, 12; candles, 5; bricks, 2; enamel, 2; cards, 3; book-binding, 10; hats, 15; shoes, 17; shirts, 10; wax, 5; sales, 4; cream of tartar, 1; vegetable hair, 6; ink, 4; manure, 6; tin in sheets, 2; crockery, 3; paper, 9; metal foundries, 15; Italian pâtes, 1; pianos, 3; pipes, 3; shot, 5; pens, 1; saddles and carriages, 2; semoule, 1; sirups, 3; silks, 6; sulphur, 4; water-proof cloth, 2; sugar, 2; bags and bagging, 4; linen, 7; tubes and pipes, 3; coral, 1; vermouth, 5; glass-ware, 3; vinegar, 1; wooden shoes, 1; vermicelli, 3; ceruse, 1; molds, 7; cotton, 1; lime, 5; machines, 1; capers, 1; brooms, 2; Indian goods, 3; almond candy, 1; pottery, 4; liquors, 1; chemicals, 5; resin, 1; brandy, 1; cords, 1; woolen-factory, 1; and sausages, 3.

PROPORTION OF THE INDUSTRIAL TO OTHER CLASSES.

The following table gives the absolute and relative number of persons who, in 1866, were supported directly or indirectly by the occupations and professions mentioned:

Employments.	Males.	Females.	Total.	Proportion to 10,000 inhabitants.
Agriculture.....	9,737,295	9,860,820	19,598,115	5,194
Industry.....	5,574,818	5,384,273	10,959,091	2,879
Commerce.....	737,675	779,483	1,517,158	399
Professions connected with agriculture, industry, and commerce.....	607,491	483,296	1,090,787	287
Various professions.....	89,855	108,754	198,609	52
Liberal professions, and persons living on their own means.....	1,782,089	1,825,206	3,607,295	948
Various occupations.....	288,077	276,264	564,341	147
Professions unknown.....	193,749	329,889	523,638	139
Total equaling the population.....	19,014,079	19,052,985	38,067,064	10,000

It will be noticed from the above table that there were supported by various industrial occupations, exclusive of agriculture, 10,959,091 persons, or nearly 27 per cent. of the whole population.

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Value of pro-
duct.

France.
48,902,710
48,897,410
48,306,390
46,219,433
45,793,220
44,355,855
44,290,885
43,124,723
43,337,065
42,385,500
41,746,807
40,606,370
39,611,826
38,609,850
39,480,900
35,563,812
35,512,975
34,431,081
32,667,811
32,361,382
31,704,983
30,893,530
28,603,925
26,729,520
26,516,225
26,115,075
25,726,270
25,544,910
24,832,331
22,906,650
20,225,930
19,583,936
19,174,619
15,981,975
15,675,110
14,147,300
14,019,490
13,742,300
11,825,968
9,351,220
6,963,700
6,087,675
5,713,940
3,567,455

America in 1860,

8, gold.

PRICES OF FARM AND MECHANICAL LABOR IN 1873.

The following rates of wages paid for farm-laborers and for skilled workmen in the places mentioned were furnished by the consuls of the United States:

Table showing the rates of wages paid for farm and mechanical labor in the Department of Loire Inférieure, and in Nice, Lyons, and Marseilles, in 1873.

Occupation.	Department of Loire Inférieure.	Nice.		Lyons.	Marseilles.
	Daily wages, without board.	Daily wages, without board.*	Monthly wages, with board.	Daily wages, without board.	Daily wages.
FARM-LABORERS.					
Experienced hands in summer.....	\$0 40	\$0 57	\$11 40	\$0 60	\$0 25
Experienced hands in winter.....	30	57	11 40	.....	.....
Ordinary hands in summer.....	25	42	6 20	.....	70
Ordinary hands in winter.....	20	42	6 20	.....	.....
Common laborers at other than farm-work.....	20	42	6 00	.....	18
Female servants.....	39	38	5 70	\$1 to \$2 per mo.	.....
SKILLED WORKMEN.					
Blacksmiths.....	\$0 40 to 80	76	.....	.....	80
Bricklayers or masons.....	50 to 80	\$0 76 to 95	.....	\$0 80 to 1 00	1 00
Cabinet-makers.....	40 to 1 00	.....	.....	80 to 1 00	80
Carpenters.....	60 to 1 00	70	.....	80 to 1 00	1 20
Coopers.....	40 to 80	1 50	.....	80 to 1 00	80
Miners.....	.....	2 28 to 3 04	.....	1 00 to 1 25	80
Machinists.....	60 to 1 00	57	.....	1 00 to 1 25	80
Painters.....	70 to 1 00	60	.....	80 to 1 00	80
Plasterers.....	60 to 1 00	60	.....	80 to 1 00	80
Shoemakers.....	60 to 80	60	.....	80 to 1 00	80
Stone-cutters.....	60 to 1 00	57 to 45	.....	1 00 to 1 25	\$0 100 to 1 20
Tailors.....	40 to 80	60	.....	50 to 80	1 20
Tanners.....	30 to 60	76	.....	80 to 1 00	1 20
Tinsmiths.....	40 to 80	85	.....	80 to 1 00	1 20
Wheelwrights.....	40 to 80	85	.....	80 to 1 00	80

* Price of board for workmen during month of October, 1873, \$1.75 per week; for workwomen, \$1.55.
† On piece-work.

PRICES OF PROVISIONS, GROCERIES, HOUSE-RENT, ETC.

Prices of provisions, groceries, and other eating articles of consumption, also of board and house-rent, in the manufacturing towns of Lyons, Alir, Marseilles, and Nantes, France.

[illegible]

or workwomen, \$1.55.

Articles.		Retail prices in 1911.			
PROVISIONS.		Lymes.	Nice.	Marseilles.	Nantes.
Flour, wheat, superfine.....	per barrel				
" " extra family.....	do.				
Corn meal.....	do.	\$9 00			
Beef, fresh, roasting-piece.....	per pound	02		1c per lb.	5c per lb.
" " soup-piece.....	do.	01		1c per lb.	
" " rump-ends.....	do.	18	\$0 14	3c per lb.	
" " corned.....	do.	18	03		
Veal, fore-quarters.....	do.	18			
" " hind-quarters.....	do.	18		21	
Mutton, fore-quarters.....	do.	18			
" " leg.....	do.	18	24		
" " clips.....	do.	18	21		
Pork, fresh.....	do.	18	14		
" " cured or salted.....	do.	18	24		
" " lardon.....	do.	20		22	
" " hams, smoked.....	do.			19	
" " shoulders.....	do.			19	
" " sausage.....	do.	18	30		
Lard.....	do.	18	30	30	
Cod-fish, dry.....	do.	10	30		
Mackerel, pickled.....	do.	10	24		
Butter.....	do.	10	19	32	
Cheese.....	do.	20	15		\$0 15
Potatoes.....	do.	20		25	12
Rice.....	do.	55	\$0 35 to 40	25	
Beans.....	per bushel	55	20	28	25
Milk.....	per pound.	07	14 ct. per lb.	22	25
" " per quart.....	do.	08	\$0 66 to 68	1 et. per lb.	22
Eggs.....	do.	09	65	\$0 44 to 65	
" " per dozen.....	do.	24	18	67	69
GROCERIES, ETC.					
Tea, Oolong, or other good black.....	per pound				
Coffee, Rio, green.....	do.	50	95 to 1 20		
" " roasted.....	do.	24	43	1 00	1 60
Sugar, good brown.....	do.	25	50	25	40
" " yellow.....	do.	20			
Coffee B.....	do.	16	14	14	
Molasses.....	do.	16	16	15	
Syrup.....	do.	09	12	16	
Soap, common.....	do.	07		16	
Starch.....	per pound.	07		06	
Fuel, coal.....	do.	41		06	
" " wood, hard.....	do.	10	14	08	
" " pine.....	per cord	\$1 60 to 6 00	\$3 50 to 10 00	00	
Oil, coal.....	do.		5 60	6 20	8 00
" " per gallon.....	do.		4 50		
DOMESTIC DRY-GOODS, ETC.					
Shirts, brown, 4-4, standard quality.....	per yard			1 12	1 00
" " bleached, 4-4, standard quality.....	do.	10			
Sheetings, brown, 9-8, standard quality.....	do.	15	25 to 24	15	
" " bleached, 9-8, standard quality.....	do.	24	47	16	
Cotton flannel, no dim quality.....	do.	24	28	25	
Tickings, good quality.....	do.	24	28	25	
Mouseline de laines.....	do.	34	42	35	
Satinets, medium quality.....	do.	25	28	25 to 30	
Boots, men's, heavy.....	per pair.	23	25 to 47	30	
" " do.....	do.	23	45 to 4 25		
HOUSE RENT.		4 00	1 92 to 2 30	4 10	
Four-roomed tenements.....	per month				
Six-roomed tenements.....	do.		2 25 to 3 20	5 00	\$25 to \$40*
" " do.....	do.		3 10 to 4 10	7 00	
BOARD.					
For men, (mechanics or other workmen), per week					
For women employed in factories.....	do.	1 75 to 2 30		2 50	
" " do.....	do.	1 55 to 2 00			

* Per annum.

* Per annum.

EXPENDITURES OF WORKMEN'S FAMILIES.

The circular request for statements of the weekly outlay by the families of laboring men for provisions and other necessary articles of subsistence, and for house-rent, clothing, &c., met with but few responses from France; there being but one from Nice and two from Marseilles.

NICE.

Average weekly expenditures of a family consisting of two adults and three children.

Bread.....	27	\$2 50	Fruits, (green or dried).....	\$0 15
Fresh meats.....	65		Fuel.....	25
Butter.....	15		Oil or other light.....	25
Cheese.....	15		Other articles.....	25
Sugar.....	18		Spirits, beer, and tobacco.....	1 00
Milk.....	18		House-rent.....	35
Coffee.....	19			
Fish.....	10			
Soap, starch, salt, &c.....	35		Clothing per year.....	7 24
Eggs.....	18		Taxes per year.....	50 46
Potatoes and other vegetables.....	35			1 00

MARSEILLES.

Mr. Consul Price, in transmitting a statement of the weekly earnings and expenditures of the families of two laboring men in Marseilles, makes the following explanation:

The following table represents, as exactly as possible, the average wages and expenses of a family of working people of two classes, between which there exists a hardly appreciable difference. It results from these figures that the laborer earning the least wages saves the most at the end of the year, because he is more sober. Spirituous liquors do not figure in the table of expenses because they are not consumed in the family, but only at the saloon or café. The item of light is insignificant, for the reason that the hearth-fire suffices to light the living-room, and the laborer goes to bed early and rarely lights a lamp. The item of combustibles can only be estimated; for, in general, the laborers collect and gather up in the factories the *débris* of wood, charcoal, and coke, which serves them for fuel.

Average weekly earnings and expenditures of the families of two laboring men, each family consisting of two adults and two children.

Earnings:

	No. 1.	No. 2.
Man per week.....	\$3 30	\$1 80
His wife.....	90	90
Total weekly earnings.....	4 20	5 70

Expenditures:

Bread, 23 pounds.....	\$1 50	
Wine, 6 quarts.....		14
Fresh meats, 24 pounds.....	50	80
Lard and oil.....	16	20
Cheese.....	20	12
Sugar.....	10	11
Milk.....	07	12
Coffee.....	05	10
Soap and starch.....	19	30
Salt and pepper.....	03	05
Potatoes and other vegetables.....	21	29
Light.....	04	03
Tobacco, spirits, &c.....	14	20
Rent.....	20	30
Educational and religious purposes.....	06	16
Total expenses per week.....	3 10	4 32

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... 30	20
... 16	20
... 20	12
... 10	11
... 07	12
... 05	10
... 19	30
... 03	05
... 21	20
... 04	09
... 14	20
... 20	30
... 06	16
... 3 10	4 32

LABOR IN FRANCE.

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Result:

52 weeks' expenses, at \$3.10.....	\$161 20	at \$4.52	\$724 61
Clothing for one year.....	21 00		50 00
52 weeks' earnings, at \$4.20.....	15 20		271 64
Balance, saved in one year.....	218 40	at \$5.70	2,900 10
	33 20		21 71

EDUCATION AND CRIME IN MARSEILLES.

In reference to education and to penal offenses in Marseilles, Mr. Consul Osterhaus writes as follows:

Education.—There is, perhaps, no better way of giving a proximate idea of the educational advantages and condition of this people than by giving the statistics of population, number of schools of primary instruction, and the number of scholars. There are in this department three arrondissements, which, according to the census of 1872, contain a population as follows: Arrondissement of Marseilles, 352,250; of Aix, 114,033; of Arles, 88,107. This number is composed as follows:

Of boys and unmarried men.....	157,252
Of married men.....	106,642
Of girls.....	132,245
Of married women.....	107,618
Of widows.....	29,764
Total.....	554,735

Of this number 511,169 are French and 40,556 are foreigners.

From the report of the superintendent of primary instruction, it appears that there are in this department 742 primary schools, divided as follows: 171 public schools for boys, 131 public schools for girls, 128 free schools for boys, 287 free schools for girls, and 21 mixed schools of all kinds. The 171 public schools for boys receive together 23,449 children. One hundred and twenty-three schools, containing 41,153 scholars, are directed by lay-teachers; and 48 schools, with 11,867 scholars, are sectarian. The 131 public schools for girls receive together 11,976 scholars, of which 2,229 are taught by lay-teachers, and 12,547 are under the direction of sectarian teachers. The whole number of scholars who frequent the primary schools of the department is 145,478, and classified as follows:

Public schools for boys.....	Scholars.
Public schools for girls.....	23,449
Free schools for boys.....	11,976
Free schools for girls.....	6,623
Mixed schools.....	13,150
	1,409

The Protestant and Jewish sects have several schools in the department, and in sufficient number to respond to the needs of those different sects for religious teachings.

Penal offenses.—During the year 1872 the courts of Aix have rendered 1,160 decisions; the court of assizes of the department has tried 135 prisoners, of whom 31 have been acquitted, 54 condemned to infamous penalties, and 18 sentenced to correctional punishment. The tribunal correctional of Marseilles has, in 1870, judged 2,692 prisoners, of whom 321 were acquitted; and the correctional tribunals of Aix and Tarascon have tried 729 prisoners.

LABOR IN GERMANY.

If, instead of a report on the cost and condition of labor, this volume were a history of the various industries of Europe, it would be interesting to ascertain the origin and to trace the development of the principal manufactures of those states which now compose the German Empire.

The woollen goods of Rhenish Prussia and Saxony, the linens of Silesia and Westphalia, the cottons of Alsace and Berlin, the leather of the Rhine country, the steel of Essen, the bronzes of Berlin and Munich, the toys of Nuremberg and Sonneberg, the carved work of the Hartz Mountains, the philosophical instruments of Berlin and Cassel, to say nothing of the numerous peculiar industries of Berlin, Chemnitz, Frankfurt, Stuttgart, Cologne, and Elberfeld—all of which find extensive markets in the United States—would form rich subjects for historical investigation, and the publication of the results prove highly instructive. On some other person with more leisure, and with equal sympathy for the industrial classes, must this pleasant work be devolved.

IMPORTS FROM GERMANY.

The products of German industry, which comprise the principal imports from that country during the last two fiscal years, as well as the total annual value of our imports since 1868, are shown in the following table:

Articles.	Value of imports.	
	1874.	1873.
Cloth and cassimeres.....	\$3,216,365	\$4,758,363
Dress-goods.....	1,016,384	1,309,576
Other manufactures of wool.....	2,041,025	2,635,365
Silk manufactures.....	5,611,936	13,118,480
Cotton hosiery.....	2,964,863	3,660,602
Other manufactures of cotton.....	3,263,436	4,451,622
Fancy goods.....	1,520,910	1,909,751
Leather, and manufactures of, except gloves.....	1,360,724	2,154,910
Gloves.....	920,261	1,169,620
Buttons.....	811,013	1,149,133
Jewelry and watches.....	1,210,835	2,618,692
Precious stones.....	580,249	692,980
Furs, dressed.....	585,816	931,009
Glass and glassware.....	1,588,623	1,962,956
Iron and steel, and manufactures of.....	1,478,877	1,836,158
Pig-lead.....	896,478	962,736
Books, pamphlets, maps, &c.....	851,536	916,067
Chemicals.....	1,011,062	1,158,155
Wines, spirits, and cordials.....	252,262	443,203
All other merchandise.....	12,821,257	13,206,018
Total imports of merchandise.....	43,909,852	61,401,756
Total in 1872.....		\$46,243,713
Total in 1871.....		25,093,635
Total in 1870.....		27,015,321
Total in 1869.....		25,057,957

IMMIGRATION INTO THE UNITED STATES FROM GERMANY.

Unlike France, from which we receive the products of the labor of her skilled artisans, but not the artisans themselves, Germany has contributed not only her workmanship, but her workmen. Our annual receipts of her products, as appears from the foregoing statement, average in value over \$33,000,000, while of her sons and daughters, embracing a large number of skilled workmen as well as men of talent and enterprise, we received in a single year, 1851, the large number of 206,651, whose material value at the average stated in another work* by the author of this report, viz, \$800, reaches nearly \$165,000,000.

The immigration into this country from Germany during the fifty-four years, from 1820 to 1874, was as follows:

1820-'30	7,729
1831-'40	152,454
1841-'50	431,626
1851-'60	951,667
1861-'70, (closing with December)	822,007
1871	107,201
1872	155,595
1873	133,141
1874	56,927
Aggregate	2,821,347

This large addition to our population in a little over half a century has furnished, at the rate above indicated, an increment to our material wealth of \$2,257,077,600.

The census of 1870 shows that of the various nationalities which compose our foreign-born population no less than 1,690,533 were natives of Germany; while of the cities of New York, Chicago, Saint Louis, and Cincinnati from 16 to 20 per cent. of the whole population were of German birth. New York City contained in 1870 more native Germans than the two manufacturing towns of Barmen and Chemnitz; Saint Louis more than the city of Brunswick, and Chicago more than Metz.†

* Special Report on Immigration, accompanying Information for Immigrants, by Edward Young, Ph.D. Government Printing-Office, Washington, 1871.

† The large German population of several cities of the United States, as compared with the whole population of cities and towns of Germany, will be best illustrated by the following statement:

German population of United States cities in 1870.		Aggregate population of German cities in 1871.	
New York	151,206	Munich	169,612
Saint Louis	59,040	Barmen and Elderfeld	146,849
Chicago	52,316	Cologne	129,251
Philadelphia	50,746	Leipsic	102,575
Cincinnati	49,448	Frankfort-on-the-Main	90,748
Brooklyn	36,769	Bremen	82,990
Baltimore	32,276	Aix-la-Chapelle	73,722
Milwaukee	22,599	Düsseldorf	69,462
Buffalo, N. Y.	22,249	Chemnitz	68,150
Newark, N. J.	15,873	Brunswick	57,380
Cleveland	15,856	Essen	51,768
New Orleans	15,239	Metz	51,707

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	1873.
5	\$4,758,363
4	1,360,576
3	2,635,365
2	13,118,480
1	3,660,602
0	4,451,022
0	1,909,751
1	2,154,940
1	1,469,620
3	1,119,433
5	2,618,692
9	692,980
6	931,009
3	1,962,956
7	1,836,158
8	962,736
6	916,007
2	1,158,455
2	449,203
7	13,206,018
2	61,401,756
...	\$46,243,748
...	25,033,635
...	27,015,321
...	25,087,987

COST OF LABOR AND OF SUBSISTENCE IN LOWER SILESIA IN 1868.

Before presenting detailed statements showing the results of personal inquiry into the cost and conditions of labor in Germany in 1872, it may be well to submit the rates of wages existing before the advance in price which followed the termination of the Franco-German war.

A work, published by Mr. Jacobi, on the rates of wages and the material condition of the working-classes in Lower Silesia during the years 1867 and 1868, affords information of great value, especially in regard to factory-operatives at that period. From the numerous and detailed statements only a few have been selected, translations of which are here presented.

Table showing the rates of wages paid for factory and other labor in Lower Silesia during the year 1868.

[Rates expressed in United States coin.]

Branches and occupations.	Wages per day.		
	Males.	Females.	Children.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Bleachers:			
Ordinary hands	18 to 36	14½ to 18	
Bleachers	27 to 33		
Manglers	36 to 42		
Foremen	48 to 60		
Bookbinders	32 to 58		
Brewers	21 to 36		
Brickyards:			
Ordinary work	20 to 24		
Molders	29 to 39		
Chamotte-molders	33 to 48		
On contract-work	36 to 60	14 to 20	10 to 17
Average summer wages	24 to 42	16 to 18	10 to 18
Cane-factories:			
Turners	36 to 66		
Engravers	36 to 60		
Joiners	48		
Laborers	28 to 42		
Chemical-works:			
Average wages	31½		
Fireworks	24 to 36	8 to 15	4 to 6
Cigar-factories:			
Strippers		16 to 18	6 to 10
Skilled hands	\$1 to \$2	24 to 40	
Wrappers		18 to 24	
Rollers	24 to 72		
Assorters	72 to \$1 03		
Packers	36 to 48		
Foremen	\$1 50		
Distillers	8 to 36		
Earthenware, glassware, &c.:			
Pottery, molders	60 to 72		
on ordinary work	24 to 60	14 to 22	
Stoneware, ordinary work	18 to 24		
turners	24 to 48		
painters	24 to 42		
Porcelain, glazing-makers	30 to 36	18 to 24	
burners	30 to 42		
gilders	36 to 42	12 to 18	
potter-turners	48		
foremen	96		

Branches and occupations.	Wages per day.		
	Males.	Females.	Children.
Glass-works, polishers.....	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
melters.....	60	10 to 21	.....
painters and gilders.....	40 to 72	18 to 36	.....
skilled hands.....	60 to 96	.....	.....
bottle-makers.....	48 to 60	.....	.....
ordinary hands.....	24 to 36	12 to 18	12
Flour-mills:			
Laborers.....	92 to 20	.....	.....
Assistant millers.....	36 to 60	.....	.....
Firemen.....	24 to 29	.....	.....
Machinists.....	33	.....	.....
Foremen.....	72	.....	.....
Gas-works, laborers.....	24 to 36	.....	.....
Hatters:			
Ordinary hands.....	48 to \$1	24 to 36	.....
Skilled hands.....	\$1 65 to \$2	.....	.....
Iron-works:			
Laborers.....	18 to 28	.....	.....
Locksmiths.....	24 to 60	.....	.....
Machine-builders.....	60 to \$1 08	.....	.....
Molders.....	42 to 72	.....	12 to 20
Turners.....	52	.....	.....
Machinists.....	40 to 72	.....	.....
Watchmen.....	48	.....	.....
Enamellers.....	36 to 72	.....	.....
Cutters.....	60 to 72	.....	.....
Lime-kilns:			
Laborers, in winter.....	20 to 30	.....	.....
summer.....	24 to 26	.....	.....
Mining:			
Ordinary labor.....	18 to 24	12	16 to 20
Miners.....	48 to 60	.....	.....
Drivers.....	36	.....	.....
Oil-refiners.....	18 to 42	16	.....
Paper-mills:			
Ordinary laborers.....	21 to 48	10 to 24	8 to 16
Cutters.....	24	.....	.....
Holland miller.....	36	.....	.....
Machinists.....	36	.....	.....
Printers.....	42 to 48	12 to 24	.....
Railroad-car shop:			
Smiths.....	40 to 72	.....	.....
Locksmiths.....	36 to 96	.....	.....
Turners.....	42 to \$1 08	.....	.....
Screw-cutters.....	30 to 60	.....	.....
Tinner.....	42 to 60	.....	.....
File-cutters.....	48 to 72	.....	.....
Wheelwrights.....	48 to 96	.....	.....
Carpenters.....	42 to 66	.....	.....
Painters.....	48 to 66	.....	.....
Upholsterers.....	36 to 60	.....	.....
Laborers.....	31	.....	.....
Starch-factories.....	18 to 36	12 to 17	.....
Silversmiths.....	60 to 84	24 to 60	12 to 15
Saw-mills:			
Laborers.....	26 to 48	.....	.....
Machinists.....	36 to 60	.....	.....
Foremen.....	48	.....	.....
Spinning flax:			
cotton.....	24 to 42	12 to 30	12 to 24
wool.....	20 to 42	12 to 18	9 to 12
	18 to 48	14 to 24	6 to 18

Rates of wages paid for factory and other labor in Lower Silesia—Cont'd.

Branches and occupations.	Wages per day.		
	Males.	Females.	Children.
	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Sugar-refiners.....	11 to 36	9 to 15	-----
Tanners.....	36 to 60	12 to 15	-----
Toy-factories:			
Ordinary laborers.....	18 to 36	10 to 21	-----
Turners.....	36 to 48	-----	-----
Sculptors.....	36 to \$1.08	-----	-----
Watch-factory workmen.....	24 to 72	-----	15
Woolen-factories:			
Carders.....	20 to 51	11 to 18	-----
Fullers.....	24	15	-----
Shearers.....	29 to 36	-----	-----
Foremen.....	\$1.08	-----	-----

The regular wages of workmen average, in summer and winter, from 16.8 cents to 24 cents (gold) per day; of females, from 8.4 to 14.1 cents per day, more nearly approaching the higher rate. During the short winter days workmen receive, for eight hours' labor, from 10 to 14.1 cents; the females, 7.2 cents; while in summer, for twelve to thirteen hours' labor the relative wages are from 19.2 to 28.8 cents, and from 14.4 to 19.2 cents, respectively. The wages of those working in the royal forests are so regulated as to average 24 cents per day for males, and 14.1 cents per day for females, in some mountain countries the latter receive but 12 cents.

In larger cities wages rise above these rates, especially for skilled labor. Men working on railroads receive in summer from 28.8 to 36 cents per day; and women from 16.5 to 26.1 cents. In the larger cities ordinary female help in house-keeping is paid from 24 to 36.4 cents.

Work done by the piece, or by contract, is paid about one-third more than the customary wages. A common laborer expects, in contract work, from 36 to 48 cents; at railroad work, even more.

When work is scarce the wages often fall to about 16.8 cents per day for males, and 9.6 cents for females.

Labor is often paid by the hour, at from 1.1 to 3 cents for males, and 0.4 to 2 cents for females; 2.4 cents per hour are the wages of an able field laborer in the mountains.

During the summer, especially, opportunities for work are offered to children, who receive from 6.11 to 7.2 cents per day, and in winter about 4.8 cents.

Wherever the work rises above mere manual labor in a trade or factory, the daily wages of men are from 30 to 48 cents, and often rise to 60 cents. Miners at tunneling are frequently paid 72 cents, (1 thaler;) in the district of Görlitz, a brick-maker, aided by his wife, averages 80 cents per day; in the district of Jauer from \$5.76 to \$7.20 per week. Skilled workmen of large experience receive from \$360 to \$132 per annum. The wages of the molders and enamellers in iron-foundries, of the locksmiths and joiners in machine-works, in piano factories, amount to from 72 cents to \$1.08 per day; the same in manufactories of glass, silver-ware, and watches, and hat-factories. The highest wages paid to a very skillful joiner in a piano-forte factory were \$12.21 per week.

Wages for female labor are more uniform throughout; 18 cents per day can be earned by a skillful hand; 24 cents per day very rarely.

Juvenile laborers in factories begin with wages of 48 cents per week, for 10 hours' work daily, and rise to 72 cents per week. The law prohibits the employment of children under twelve years of age; from twelve to fourteen years it permits 6 hours, and from fourteen to sixteen years, 10 hours daily.

The general average of daily wages is as follows: Males, for 12 hours' work per day, in the country, 19.2 cents; in cities, 24 cents; harder labor, 30 cents; in cities, 36 cents; skilled labor, 60 cents.

The wages of master-workmen, overseers, &c., are not included in the above average, but are at least \$172 per annum.

In regard to the time of work, laborers in factories are employed 11 to 12 hours per day, (exclusive of time for meals;) where work is continued day and night, the hours for the day are from 6 to 12 a. m., and 1 to 7 p. m.; for the night, from 7 p. m. to 6 a. m., with $\frac{1}{2}$ hour recess; in a few districts 10 hours constitute a day's work. In many cloth-factories and wool-spinneries, males and females work 12 to 13 hours, and some even 16 hours per day. As an example, a cloth-factory employs firemen and machinists 16 hours, spinners and dyers 14 hours, all others 12 hours, exclusive of time for meals.

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LABOR IN GERMANY.

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In glass-works, the nature of the work requires from 16 to 18 hours for melters, 13 to 15 hours for blowers; but then one party rests while the other works.
The wages of journeymen in the following trades, including board and lodging, are as follows:

	Per week.
Bakers.....	\$0 92
Butchers.....	72
Smiths.....	1 08
Timmers.....	2 52
Wheelwrights.....	2 16
Furriers.....	2 16
Saddlers.....	2 16
Locksmiths.....	72
Tailors.....	2 52
Shoemakers.....	2 52
Fresco-painters.....	1 44
Cabinet-makers.....	3 42
Cloth-weavers.....	\$2 88 to 3 60
	1 44 to 2 16

From the reports of the chambers of commerce of Germany the following labor statistics are collected:

In the coal-mines of Rhenish Prussia, average daily wages of 3,664 laborers, with families of 8,572 persons, males.....	\$0 64
Iron-foundry, (Duisburg,) average wages per day, founders.....	\$0 65 to 72
Other skilled workmen.....	54
Laborers.....	43
Machinists and locksmiths.....	58
In two iron-foundries, same district, average daily wages, respectively.....	58 and 65
Iron-bridge establishment.....	55
Safe-factory, average yearly earnings.....	182 80
Zinc establishments, average wages, first-class hands.....	91
second-class hands.....	72
other laborers.....	53
Cotton-factories, average wages per hand, including children.....	41
Cotton-spinning, average wages per hand, (mostly young persons).....	36
Average weekly wages paid in the coal-mines of Planen, (Saxony): To miners, \$3.10; to laborers, \$1.98; and to boys, 40 cents.	

WAGES AND COST OF LIVING IN DIFFERENT DISTRICTS OF LOWER SILESIA.

1. District of Bollenhain.

The annual expenses of a family of about five persons. (three children,) belonging to the working class, were as follows:

Provisions, (per day, 11.1 to 16.8 cents.) per year.....	\$60 00
Rent, (8 thalers).....	5 76
Fuel.....	3 60
Clothing, linen, &c.....	11 40
Furniture, tools, &c.....	7 20
Taxes: State, 0.72; church, 12; commune, 36.....	\$1 20
School for two children.....	2 50
Total.....	3 70

The expenses of a laborer's family being 24 to 26.1 cents per day, the earnings should be 28 to 30.8 cents per day, which the head of the family cannot earn. While his earnings are from 17 to 19 cents, the wife earns 8 to 10 cents, and the children must help as soon as old enough. Miners in this district have 21 to 29 cents daily wages; factory-men from 19 to 29 cents; mechanics receive 18 to 54 cents per week, besides board; male house-servants \$17 to \$30, and females \$12 per annum, exclusive of board and lodging.

Expenses of a family:

2. District of Landshut.

	In the country.	In a city.
Rent, per annum.....	\$5 76	\$10 72
Provisions, (per week, 90 cents,) per annum.....	46 80	56 10
Fuel and light, per annum.....	11 40	16 42
Taxes, &c., per annum.....	3 60	4 22
Clothing, &c., per annum.....	8 56	10 00
Other expenses, per annum.....	7 20	8 57
Total.....	86 32	106 13

The income of laborers' (weavers') families does not generally reach these amounts. Many are permitted to gather their wood from the royal forests, and spend little for clothing, which they beg from charitable neighbors. A weaver earns here from 48 to 72 cents, \$1 and \$1.50 per week; most weavers have two looms in operation, and together with their wives earn from \$1.50 to \$2.16 per week. The average earnings of weavers are given at 96 cents per week, or about \$5.00 per annum.

3. District of Hirschberg.

The lowest cost of living for a laborer's family is given at \$64.80 to \$72 per annum, of which are expended for provisions, \$43.30; for clothing, \$17; taxes, \$3.16; fuel, \$3.00; rent, \$4, &c. In the summer the wages for 12 hours' daily work, for males, are from 15 to 30 cents; for females, 5 to 17 cents per day; in winter from 3 to 7 cents less. A male farm-hand receives \$12 to \$22 per year; a boy, \$9 to \$11; a maid-servant, \$12 to \$18 per annum with board.

The annual expenses of a laborer's family, living in a comfortable manner, without luxuries, will be nearly double the amount actually expended above.

The following is an estimate:

Rent, (one room, alcove and bed-room)	\$8 61
Fuel and light	14 40
Provisions, (breakfast, coffee; at noon, potatoes, dumpling -10 cents; evening, bread, a little brandy - 5 cents; supper, soup, bread, vegetables - 6 cents)	75 00
Clothing, (husband, \$6.18; wife, \$5.76; children, \$7.20, soap, 72 cents)	20 16
Taxes, &c.	2 16
Schooling of children, (2½ cents per week per child)	3 60
School-books	72
To lay by for sickness, &c.	8 58
Unforeseen expenses	8 58
Total	141 84

4. District of Schönan.

The ordinary yearly wages, in addition to board, paid to servants in this rural district, were as follows: Man-servant, \$11.40 to \$21.60; boys, \$8.61 to \$12.96; maid-servants, \$8.61 to \$17.28; child's nurses, \$5.76 to \$12.96.

During the harvest the daily wages for fourteen hours' work are as follows: Mowers, from 19.2 to 28.8 cents; laborers, (males,) from 19.2 to 24 cents; females, from 11.4 to 17 cents.

In other seasons males receive, for ten hours' daily labor, from 11.4 to 19.2 cents, and females 12 to 11.4 cents per day; and in winter males receive 12 cents, and females 7.1 to 9.6 cents. A laborer in the cities receives from 24 to 28.8 cents per day; the "fellows" (journeymen) of trades receive from 60 cents to \$1.20 per week, and board.

A laborer's family of five persons requires for its subsistence during the year the following amount: For provisions, \$72 to \$85.72; rent of one room and three bedrooms, \$132; clothing, &c., \$10.50; fuel, &c., \$3.60; taxes, &c., \$3.60. Total, \$108.01.

5. District of Goldberg.

The cost of living of a laborer's family (husband, wife, and two children) in this district is thus given: Provisions, \$75.00; rent, \$132; fuel, \$7.20; clothing, \$10.02; furniture, tools, &c., 72 cents; taxes, &c., \$2.25. Total, \$100.11. In less expensive times provisions have been estimated at \$20 less.

In the rural portion men receive 21.6 cents, women 11.4 cents for a day's work; this average includes higher wages for skilled labor.

On a farm a man-servant receives \$17.20 per year, in addition to board, &c., which may be estimated at \$13.20; a maid-servant receives \$11.40, besides board.

Laborers in stone-quarries earn from 24 to 43.2 cents per day; in cloth factories, 1.8 to 2.2 cents per hour, while the daily wages of carpenters are from 33.6 to 38.4 cents; masons, 33.6 to 45.6 cents; roof-slaters, 33.6 to 45.6.

Shoemakers and tailors receive from 9 to 10 cents, besides their board and lodging, which is valued at 12 cents.

6. District of Löwenberg.

The yearly expenses of a family with three children are estimated at from \$93.60 to \$108, namely:

	City.	Country.
Rent	\$10 60	\$4 32
Provisions, (\$1.20 per week)	62 40	55 72
Fuel and lights	12 66	10 80
Taxes, school, &c.	3 60	3 60
Clothing, &c.	12 85	12 85
Other expenses	5 76	5 76
Total	107 87	93 05

LABOR IN GERMANY.

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Wages are as follows:

Men, day-laborers, from 11.4 to 28.8 cents per day; women, 12 to 18 cents per day; men, with board, 9.6 to 11.1 cents per day; women, with board, 7.2 to 12 cents per day. From ten to fourteen hours constitute a day's labor; more hours and harder work secure higher wages.

Male servants per year, \$11.30 to \$36, and board; female, per year, \$8.57 to \$21.00, and board.

Journeymen in trades obtain the following:

Wages per week with board and lodging.	In cities.		In the country.	
	Minimum.	Maximum.	Minimum.	Maximum.
Smiths				
Wheelwrights	\$0 54	\$0 72		
Shoemakers	54	72	\$0 42	\$0 72
Tailors	54	60	42	72
Cabinet-makers	54	72	42	72
	54	72	42	72

7. City of Greifenberg.

The subsistence of a workingman's family, consisting of five—man, wife, and three children—is thus given:

INCOME.

A mason receives 33.6 cents per day, regular work, thirty-two weeks in the year	\$61 52
Weaving or other work, four months, at 48 to 60 cents per week, say	8 00
Yearly earnings of wife	7 20
Total	79 72
A day-laborer receives 24 cents per day, or \$1.14 per week, regular work, forty weeks	\$57 60
During the rest of the year he and his wife may earn	11 40
Total	72 00

A carpenter earns a little more than a mason, his chances for winter-labor being better. A weaver, working at home, makes less than the day-laborer; those in the factory earn per year, \$72.

EXPENSES OF A FAMILY.

Rent, \$8.64; clothing, \$14.40, (shoes being a large item); light, \$1.11; fuel, \$5.01; repairing tools, 72 cents; taxes, \$1.41; school for three children, \$1.41. Total, \$33.42.

Provisions.—The meals consist of potatoes and bread, their means not being sufficient to allow meat: Potatoes, twenty bushels, \$10.08; bread, (6 cents per day,) \$21.30; coffee, (chicory, four pounds per week,) \$2.88; butter, (one-half pound per week,) 1.44; lard, 1.44; herring, salt, (21 cents per week,) \$12.48. Total, \$47.26. Aggregate expenses, \$80.38, suffering often takes place.

8. District of Gölitz.

Here the condition of the laborer appears more comfortable, since work can be found throughout the year.

Masons and carpenters earn 36 to 43.4 cents per day; railroad-laborers, 26.4 to 28.8; field-laborers, 21.6 to 28.8, and females, 14.5 to 24.

The lowest expenses for a family consisting of four or five persons are thus computed:

Provisions	\$57 60	to	\$85 72
Rent, lights, and fuel	11 52	to	21 10
Clothing	13 57	to	18 00
Tools, &c.	1 14	to	2 88
School	1 41	to	2 88
Taxes	72	to	1 44
Total	86 29	to	132 02

each these amounts, and spend little for us here from 48 to operation, and to-verage earnings of

to \$72 per annum, taxes, \$3.16; fuel, work, for males, are r from 3 to 7 cents 4; a maid-servant,

le manner, without ove.

.....	\$8 64
.....	14 40
st, evening,	
cent(s)	75 00
(s)	20 16
.....	2 16
.....	3 60
.....	72
.....	8 58
.....	8 58
.....	141 84

s in this rural dis-1 to \$12.96; maid-s follows: Mowers, males, from 11.4 to

1 to 19.2 cents, and ts, and females 7.1 per day; the "tel-ck, and board. ng the year the fol-d three bedrooms, 1, \$108.01.

o children) in this ; clothing, \$10.02; In less expensive

a day's work; this o board, &c., which board.

cloth factories, 1.8 33.6 to 38.1 cents;

board and lodging,

d at from \$93.60 to

City.	Country.
.....	\$10 60
.....	\$1 32
.....	62 40
.....	55 72
.....	12 66
.....	10 80
.....	3 60
.....	3 60
.....	12 85
.....	12 85
.....	5 76
.....	5 76
.....	107 87
.....	93 05

By careful inquiries it has been ascertained that a family can earn from \$93.60 to \$144 a year, so that some lay up small savings.

For the city of Görlitz the average income of a laborer's family is estimated at \$95 to \$144 a year; the expenses for four or five persons, from \$115 to \$172.80, namely:

Rent, lights, and fuel.....	\$22 72	to	\$32 15
Clothing, &c.....	11 40	to	21 60
Tools, furniture, &c.....	1 41	to	5 76
School.....	1 32	to	5 01
Provisions.....	72 00	to	108 25
Total.....	114 85	to	172 80

9. District of Glogau.

Farm laborers' income:

Males: 6 weeks in harvest, at 30 cents per day.....	\$18 80
11 weeks, (sowing and haymaking,) at 24 cents per day.....	20 16
15 weeks, fall and spring, at 18 cents per day.....	16 20
15 weeks, winter, at 14.4 cents per day.....	12 96
Total, 50 weeks.....	\$60 12
Females: 6 weeks, at 12 cents per day, (5 days per week).....	\$3 60
11 weeks, at 9.6 cents per day.....	6 72
15 weeks, at 8.4 cents per day.....	6 30
15 weeks, at 7.2 cents per day.....	5 40
Total, 50 weeks.....	22 02
Grand total.....	\$82 14

Expenses of a family of three children:

16 sheffels* rye, at \$1.32.....	\$21 12
2 sheffels wheat, at \$1.80.....	3 60
2 sheffels barley, at \$1.20.....	2 40
2 sheffels peas, at \$1.11.....	2 22
2 sheffels millet, at \$1.11.....	2 22
24 bags potatoes, at 3.4 cents.....	9 22
52 pounds butter, at 19.2 cents.....	9 98
183 quarts milk, at 24 cents.....	4 40
Meat, (2 quarters mutton, \$3.00; 1 pig, \$10.80).....	11 40
52 pounds salt, at .024.....	1 35
Rent, \$8.76; light, \$1.32.....	7 34
Fuel, (wood, \$9.72; coal, \$3.18).....	12 90
Clothing.....	18 72
Taxes, and other expenses.....	8 00
Total.....	\$119 03

As, according to these statistics, a man and wife can earn but \$82.14 per year, a deficiency of \$36.89 must be made up by the work of the children, or by extra labor in the summer, especially at harvest-time.

10. District of Liegnitz.

Expenses of a family with three children:

Provisions—bread, 1 pound of flour per head, daily.....	\$26 52
potatoes, $\frac{1}{2}$ bag, or 75 pounds per week, at 18 cents.....	9 36
barley, 2 sheffels, at 96 cents.....	96
peas, 1 sheffel, at \$1.08.....	1 08
butter, 1 to 1 $\frac{1}{2}$ pounds per week, 71 $\frac{1}{2}$ pounds per year, at 19 cents.....	13 73
milk, 4 quarts daily, at 4 cents.....	5 81
meat, 1 swine for fattening, or 1 pound per week.....	5 56
salt, 1 pound per week, at 2.4 cents.....	1 25
coffee, chicory, sugar.....	4 32
wheat flour for cake on holidays.....	1 32
beer.....	90
Total.....	70 81

* 1 sheffel equals 1.56 bushels, United States.

from \$93.60 to

estimated at \$95
2.00, namely:

22 72	to	\$32 15
11 40	to	21 60
1 41	to	5 76
1 32	to	5 01
72 00	to	108 25
11 88	to	172 80

...	\$10 80
...	20 16
...	16 20
...	12 96

..... \$60 12

...	\$3 60
...	6 72
...	6 30
...	5 40

..... 22 02

..... 82 11

..... \$21 12

.....	3 60
.....	2 40
.....	2 88
.....	2 88
.....	9 22
.....	9 98
.....	1 40
.....	11 50
.....	1 55
.....	7 28
.....	12 90
.....	18 72
.....	8 00

..... 119 03

1 per year, a del-
extra labor in the

..... \$26 52

.....	9 36
.....	96
.....	1 08
.....	13 73
.....	5 81
.....	5 56
.....	1 25
.....	4 32
.....	1 32
.....	90

..... 70 81

LABOR IN GERMANY.

497

Rent for a room, a garret-room, and small space, per annum.....	\$7 20
Light, oil for 36 to 39 weeks, 4 to 4 pound, at 6 cents.....	2 31
Fuel, during 6 winter-months, 20 cents; summer, 10 cents per week.....	8 00
Clothing—husband, 2 shirts, at 72 cents; coat, &c.....	\$1 44
1 pair of boots.....	2 88
pantaloons, (three pairs in two years).....	72
coat, &c.....	72
wife—2 chemises.....	1 41
1 pair of shoes.....	1 20
dress, &c.....	2 64
children—6 shirts, at 36 cents each.....	2 16
3 pairs of shoes.....	2 16
clothing.....	2 16
Soap, for washing.....	6 48
Tools, for repair of.....	1 20
Taxes—income, 72 cents; communal, 384 cents; school, including books, \$2.560.....	1 41
Total expenses.....	3 60

Income of a family with two children:
Husband averages 305 days, at 21.6 cents..... \$65 88

Wife averages 250 days, at 10.01 cents..... 25 00

Oldest child averages 60 days, at 7.2 cents..... 4 32

Every married woman receives—

1 sheffel wheat.....	\$1 80
2 sheffels rye.....	2 16
2 sheffels barley.....	1 92
1 sheffel peas.....	1 08

He can raise on a patch of land 10 bags potatoes, valued at..... 6 96

And glean at harvest 3 sheffels of rye or barley..... 2 88

For extra work through the year..... 3 06

For a fat pig..... 8 64

..... 5 76

In the city of Liegnitz the average expense of a laborer's family is estimated at
\$141.81 per year. 123 50

WAGES IN GERMANY IN 1870.

The following information, in regard to the rates of wages paid in other parts of Germany in the year 1870, was obtained from another source:

Coal-mines in Hanover, Deister River.—Workmen employed, 502; average annual earnings, \$135.53.

Coal-mines at Kniggenbrücke.—Workmen employed, 141; average monthly earnings, \$10.08 to \$12.24.

Turkish carpet factory in Silesia.—Males, \$1.80 to \$2.88 per week; females \$1.08 to \$2.16 per week.

Silk-manufactures in Crefeld.—Employed in 1867: masters, fellows, and apprentices, 20,149; total wages paid, \$2,591,387; average per capita, \$126.70. In 1870, masters, fellows, and apprentices, 28,213; total wages paid, \$3,820,711; average per capita, \$135.45.

The wages of carpenters and builders increased 15 to 20 per cent. in 1870.

Weaving in Osterode.—Weavers and spinners, per day, 3⁰ to 36 cents; children, per day, 12 to 18 and 24 cents.

Iron-mines near Duisburg.—Employed in 1870, 694 miners, &c.; wages, \$181,400; annual average, \$150.13. Hands, furnaces, &c., employed, 305; wages, \$56,963; average, \$186.56.

Iron-works, "Vulcan."—Melters, per day, 72 cents; job-workers, 53 cents; contract-workers, 63 cents; ordinary hands, 46 cents.

Manufacture of crucibles, retorts, &c.—Hands employed, 159; wages, \$33,409.14; average, \$210.12.

Wharves at Ruhrort.—Laborers, in summer, 72 cents per day; in winter, 48 cents per day.

Iron-works at Borbeck.—Employ 237 men, at average daily wages of 53 cents.

Zinc-works at Borbeck.—Employ 295 men; total wages for the year, \$65,900.16; average, \$223.40.

Iron-works at Kupfrevier.—Employ, in mines, 226 men, at average daily wages of 57 cents; in near furnaces, 181 men, at average daily wages of 52 cents.

First class melters, per day, 99 cents; second-class melters, per day, 76 cents; third class melters, per day, 62 cents; firemen, per day, 99 cents; laborers, per day, 51 cents.

Salt-works at Luenburg.—Employ 120 men; total wages, \$41,356.89; average, \$419.61.

Iron-works at Luenburg.—Employ 290 men; total wages, \$40,521.66; average, \$439.73.

Gypsum-factory at Luenburg.—Employs 46 men; total wages, \$3,272.10; average, \$71.14.

Manure-factory at Luenburg.—Employs 70 men; total wages, \$5,400; average, \$77.14.

Cooper-shop at Luenburg.—Employs 34 men; total wages, \$5,703.81; average, \$167.76.

Coal-mines near Lauban.—Hewers, per day, 46 to 52 cents; drawers, per day, 30 to 41 cents; ordinary laborers, per day, 14 cents.

Railroad-works near Lauban.—Employ 175 hands; total wages, \$33,336; average, \$490.49.

FACTORY-LABOR IN 1871.

The following statement of the rates paid for factory-labor has been prepared from the Annual Report of the Chamber of Commerce of Plauen, Saxony, for 1871:

Occupations.	Weekly wages.
Iron-foundries:	
Pattern-makers	\$2 88
Locksmiths	2 16
Laborers	1 11
Apprentices	1 06
In the Upper Erz Mountains:	
Molders	\$2 88 to 5 04
Molders' apprentices	2 16 to 3 60
Carpenters	3 60
Polishers	2 72 to 3 60
Blacksmiths	2 72 to 3 60
In foundries at Crammit-schau:	
Foreman	7 20 to 10 30
Molders	2 56 to 5 04
Joiners	3 60
Apprentices	2 16 to 3 60
Smiths	2 56 to 3 96
Iron-foundries at Reichenbach:	
Molders	3 60
Apprentices	72 to 2 52
Other hands	1 80 to 2 16
Machine-works:	
Turners	3 60 to 8 64
Locksmiths	2 56 to 4 32
Joiners	2 56 to 5 04
Other mechanics	2 16 to 2 58
Apprentices	72 to 2 16

LABOR IN GERMANY.

499

oyed, 159; wages,
ents per day; in
daily wages of 53
ges for the year,
men, at average
at average daily
melters, per day,
men, per day, 99
ages, \$11,356.80;
ages, \$40,521.66;
wages, \$3,272.10;
al wages, \$5,400;
wages, \$5,703.81;
2 cents; drawers,
cents.
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y-labor has been
of Commerce of

Weekly wages.

..... \$2.88
..... 2.16
..... 1.41
..... 1.06
..... \$2.82 to 5.04
..... 2.16 to 3.60
..... 3.60
..... 2.82 to 3.60
..... 2.82 to 3.60
..... 7.20 to 10.50
..... 2.82 to 5.04
..... 3.60
..... 2.16 to 3.60
..... 2.88 to 3.96
..... 3.60
..... 7.20 to 2.52
..... 1.80 to 2.16
..... 3.60 to 8.64
..... 2.88 to 4.32
..... 2.88 to 5.04
..... 2.16 to 2.88
..... 7.20 to 2.16

Machine-works at Werdan:	
Workmen	\$2.16 to \$3.60
Machine-works at Zurekun:	
Locksmiths, turners, &c.	3.21 to 4.32
Other mechanics	2.42 to 2.88
Apprentices	7.20 to 2.16
Machine-works at Reichenbach:	
Smiths	4.32
Turners and joiners	3.60
Locksmiths	3.25
Apprentices	7.20 to 2.88
Machine-works at Planen:	
Locksmiths	2.88 to 3.60
Turners	3.24 to 3.60
Smiths	2.88 to 3.24
Joiners	7.20
Apprentices	2.42
Laborers	2.16 to 3.44
Machine-works at Lower Schlema:	
Turners	2.52 to 4.32
Locksmiths	2.64 to 4.32
Joiners	2.88
Blacksmiths	1.06
Apprentices	1.80 to 2.88
Machine-works at Aue:	
Turners, locksmiths, &c.	2.16 to 2.88
Founders	2.16 to 2.88
Musical-instrument factories:	
Average	3.10
Some as high as	5.42
Violin-string makers	8.04
Other factories pay, average wages	2.16 to 3.24
the best hands	5.01
Clock and watch factories:	
Superintending the erection of large clocks, per day	\$1.80
Watch-makers	per week
Clock-makers	2.16 to 2.88
Apprentices	2.52
Case-makers	96
Joiners	2.40
Sign-painters	2.88
Chain-makers	2.16 to 2.88
Other workmen	1.41
Tin-ware factory:	
Tinsmiths	1.80 to 2.16
Silver-ware:	
Workmen	2.16 to 3.60
Spoon-factories:	
Cutters, polishers, &c.	1.20 to 2.16
Overseer	
Silver-ware works at Reichenbach:	
Workmen	1.80 to 3.60
Boys	4.32
Sand-paper factories:	
Workmen, with board	2.16 to 3.60
Boys	7.20 to 1.08
Glass-works:	
Laborers	2.52 to 2.88
Dye-stuff and varnish factories:	
Males	1.08 to 1.41
Females	1.41 to 3.60
Confectioners:	
Males	.41c. to 60c. per day
Females	2.46 to 3.60
Textile factories:	
Yarn-spinning, girls (over 14 years)	1.41 to 2.34
Wool-sorters	3.55 to 5.40
Washers	1.25
Cleaners	1.44 to 1.66
	3.06
	2.16 to 3.06
	2.10

FACTORY LABOR IN 1872.

In the months of August and September, 1872, the author of this report personally visited the principal manufacturing towns in Germany, especially those in Saxony and Rhenish Prussia, for the purpose of obtaining information in regard to the cost of labor, the condition of the workmen and their families, and the cost of provisions and other articles of domestic consumption. In the prosecution of the inquiry he was aided by the United States consuls, and particularly by the agents of a well-known mercantile firm in New York,* who, at the request of their principals, obtained from the manufacturers from whom they make extensive purchases, statements of the prices paid in each establishment for the various kinds of labor. In submitting the information thus obtained by himself and others, the author expresses his conviction that the utmost confidence can be placed in the accuracy of the figures contained in the following statements:

I.—RATES OF WAGES IN GERMANY.

Statements showing the rates of wages paid by manufacturing establishments in Germany in the year 1872.

[Prussian thaler computed at 72 cents United States gold coin.]

Occupations.	Men.	Women.	Children.
COTTON MANUFACTORIES.			
<i>Manufacture of white cotton goods and embroideries in Leuna, Saxony.</i>			
Machine-loom, weavers, (12 hours per day)	Per week. \$2 88 to \$3 03	Per week.	Per week.
Machine-loom, spoolers, (12 hours per day)	1 86		
Machine-loom, foremen, (12 hours per day)	4 32		
Hand-loom, weavers, (11 hours per day)	2 16 to 2 52	\$1 68 to \$1 80	
Spoolers and cutters		2 16 to 2 42	
Cleaners and winders	4 32 to 5 76		
Finishers	2 88 to 4 32		
Weavers, (chiefly piece-work)	4 32 to 7 20		
Machine-embroiderers paid by the number of stitches		1 80 to 2 16	
Needle-threaders of embroidering-machines		1 50 to 2 16	
Quilters		2 16 to 2 52	
Mull-weavers			
<i>Auerbach, Saxony.</i>			
Quilters		1 44 to 2 16	
Threaders, at machines		1 44 to 1 80	
Threaders, at machines, children, (half-timers)	2 88 to 5 04		72 to 84
Machine-embroiderers			
<i>Eibenstock, Saxony.</i>			
Machine-embroiderers	4 32 to 5 04		
Yarn-threaders			
Machine-tender		2 04 to 2 16	72 to 96
(Hours of labor, 10 to 12 per day.)			

* Messrs. A. T. Stewart & Co.

Rates of wages paid by manufacturing establishments in Germany—Cont'd.

Occupations.	Men.	Women.	Children.
<i>Employés working mostly at home:</i>			
Sewers or embroiderers.....	<i>Per day.</i>	<i>Per day.</i>	<i>Per day.</i>
Ironers, quilters, &c.....	.....	\$0 30 to \$0 60	.....
Machine-embroiderers.....	.....	24 to 30	.....
Lace-makers.....	.....	72 to 1 08	.....
Corset-sewers, cutters.....	.....	29 to 36	.....
Glove-cutters.....	.....	24 to 30	.....
Leather-dyers.....	\$0 72 to \$0 96	.....	.....
Glove-sewers.....	48 to 54	.....	.....
(Hours of labor, 11 to 12 per day.)	.....	36 to 42	.....
<i>Johanngeorgenstadt, Saxony.</i>			
Ribbon-purlers.....	.....	12 to 14	.....
Ribbon-quilters.....	.....	24 to 36	.....
Embroiderers of table-covers, &c.....	.....	36 to 60	.....
Sewers of kid gloves.....	.....	24 to 30	.....
Cutters of kid gloves.....	1 08 to 1 44	.....	.....
Fancy-box joiners.....	48 to 60	.....	.....
Assistants.....	<i>Per week.</i>	<i>Per week.</i>	<i>Per week.</i>
	1 80 to 2 16	.....	.....
<i>Buerenwalde, Saxony.</i>			
Lace-factory.....	.....	1 44 to 2 16	.....
Embroiderers.....	.....	1 80 to 2 16	.....
Finishers.....	2 16	.....	.....
Chantilly-lace workers.....	.....	1 44 to 2 16	.....
(Hours of labor, 12 per day.)	.....	.....	.....
<i>Crefeld, Prussia.</i>			
Silk-velvet factory:	.....	.....	.....
Weavers.....	4 32 to 5 04	.....	.....
Warpers.....	2 88 to 3 24	2 88 to 3 24	.....
Spoolers.....	.....	.....	\$1 44 to \$1 80
Dressers.....	3 60 to 4 32	.....	.....
(Hours of labor, 60 per week.)	.....	.....	.....
<i>Rheydt, Prussia.</i>			
Silk-velvet factory:	.....	.....	.....
Weavers.....	3 60 to 4 68	.....	.....
Warpers.....	2 16 to 3 24	2 16 to 3 24	.....
Spoolers.....	.....	1 32 to 1 80	1 32 to 1 80
Dressers.....	2 52 to 3 24	.....	.....
Day-laborers.....	1 44 to 2 16	.....	.....
(Hours of labor, 60 per week.)	.....	.....	.....
<i>Tiersen, Prussia.</i>			
Silk-velvet factory:	.....	.....	.....
Weavers.....	3 60 to 5 04	.....	.....
Warpers.....	2 88 to 3 24	2 88 to 3 24	.....
Spoolers.....	.....	1 44 to 1 68	1 44 to 1 68
Dressers.....	2 88 to 3 60	.....	.....
(Hours of labor, 60 per week.)	.....	.....	.....
<i>Crefeld, Prussia.</i>			
Piece-silks:	.....	.....	.....
Dyers.....	3 24 to 4 32	.....	.....
Spoolers.....	.....	1 44 to 1 80	1 44 to 1 80

Rates of wages paid by manufacturing establishments in Germany—Cont'd.

	Children.	Occupations.	Men.			Women.			Children.		
			Per day.			Per week.			Per week.		
0 60		Piece-silks—Continued.									
30		Warpers.									
08		Weavers, on ordinary taffeta silk			2 88			2 16			
36		Weavers, on medium taffeta silk			3 60						
30		Weavers, heavy taffeta silk			3 60 to 4 32						
		Weavers, satin, cotton wool			2 88 to 3 60						
		Weavers, Turquoise, cotton wool			3 60 to 4 32						
42		Weavers, reps, cotton wool			2 88 to 3 60						
		Weavers, dressers			3 24 to 4 32						
		(Hours of labor, 10 to 12 per day.)									
		Rheydt, Prussia.									
14		Piece-silks:									
30		Weavers, silk			2 16 to 5 04						
00		Weavers, satins			2 88 to 5 04						
30		Spoolers, silk									
		Spoolers, cotton				\$1 44 to 2 16			\$1 44 to 2 16		
		Warpers				1 15 to 1 68					
		Dressers			2 88 to 3 60						
		(Hours of labor, 10 per day.)									
		Silk ribbons, Wernelskirchen, Prussia, work people			2 88 to 4 32			1 80 to 2 88			
		Silk ribbons, Langenberg, Prussia			2 88 to 7 20			1 44 to 3 60			
		Annaberg, Saxony.									
		Fringe-factory:									
		Weavers working on looms, fine work			3 60 to 4 32						
		Weavers, ordinary work			2 16						
		Fringe-makers						2 16			
		Sewers of loop-lace and other ornaments									
		(Hours of work, 10 to 11 per day.)						1 68 to 2 16			
		Buchholz, Saxony.									
		Fringe-factory:									
		Silk-fringe weavers			2 16 to 2 88						
		Cotton-fringe weavers			1 44 to 2 16						
		Sewers, on trimmings, &c.						1 80 to 2 16			
		(Hours of labor, 10 per day.)									
		Buchholz, Saxony.									
		Fringe-factory:									
		Half silk, and silk fringes, loom-work			1 80 to 2 52						
		Half silk, and silk fringes, hand-work						1 44 to 2 16			
		Half silk, and cotton trimmings, &c.			1 44 to 2 16						
		Woolen lace			1 08 to 1 80						
		Silk guipure-lace			1 20 to 1 44						
		(Hours of labor, 12 per day.)									
		Hohenstein, Saxony.									
		Cotton hosiery:									
		Workmen at Paget machine			2 64 to 3 60						
		Edgers			2 88 to 3 60						
		Workers on round looms						1 20 to 1 44			
		Formers						1 08 to 1 44			

Rates of wages paid by manufacturing establishments in Germany—Cont'd.

Ocupations.	Men.	Women.	Children.
Cotton hosiery—Continued.	<i>Per week.</i>	<i>Per week.</i>	<i>Per week.</i>
Finishers.....	.....	\$0 96 to \$1 20	.....
Press-hands.....	\$2 52 to \$2 88	.....	.....
Packers.....	2 88	.....	.....
Hands on sewing-machines (Hours of labor, 10 to 10½ per day.)	.....	1 20 to 1 44	.....
<i>Lichtenstein, Saxony.</i>			
Yarn-spoolers.....	.....	1 44	.....
Hands on machines.....	.....	1 44 to 1 80	.....
Finishers.....	2 88 to 3 60	1 44 to 1 80	.....
Hands on round machines.....	2 16 to 2 52	1 44 to 1 80	.....
Hands on Pagot machines.....	3 24 to 3 60	2 52	.....
Hands on edging machines.....	4 32	.....	.....
(Hours of labor, 12 per day.)	.....	.....	.....
<i>Hartmannsdorf, Saxony.</i>			
Paget-loom makers.....	2 88 to 5 04	.....	.....
Foreman, exclusive of free rent and fuel.....	5 76	.....	.....
Firemen, exclusive of free rent and fuel.....	2 88	.....	.....
Packer.....	3 60	.....	.....
<i>Apolda, Saxony.</i>			
Manufacture of woolen hosiery:			
Smooth work on round looms, ac- cording to power of machine, per Zollpfund*.....	06 to 14	.....	.....
Catching machine, round loom.....	04 to 08	.....	.....
Chain, power-loom.....	06 to 36	.....	.....
Articles of English yarn, up to No. 14. Articles of fine yarn, according as the pattern is more or less difficult.....	12 to 1 08	.....	.....
Articles of, on covering machines.....	24 to 72	.....	.....
Articles of stitching.....	36 to 1 08	.....	.....
Articles of catching machines, (hand loom).....	12 to 20	.....	.....
Stocking-weavers, according to abil- ity and kind of work.....	2 88 to 5 04	.....	.....
Hands on machines.....	.....	1 80 to 2 88	.....
Packers and other common laborers.....	2 16 to 2 88	.....	.....
Sewers.....	.....	1 44 to 2 16	.....
(Hours of labor, 10 per day.)	.....	.....	.....
<i>Limbach, Saxony.</i>			
Round-loom makers.....	2 88 to 3 60	.....	.....
Packers.....	2 88 to 3 60	1 44 to 1 80	.....
Sewers.....	.....	1 80 to 2 16	.....
(Hours of labor, 12 per day.)	.....	.....	.....
<i>Oberlungwitz, Saxony.</i>			
Weavers, ordinary goods.....	1 44	.....	.....
Weavers, middling goods.....	2 10	.....	.....
Weavers, fine goods.....	2 88
Weavers, best workers.....	3 60

* Zollpfund=1.102 pound, United States.

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Rates of wages paid by manufacturing establishments in Germany—Cont'd.

Occupations.	Children.		
	Per week.		
<i>Hohenstein, Saxony.</i>			
Weavers, average.....	Per week. \$1 80 to \$3 24	Per week.	Per week.
<i>Schönaue, Saxony.</i>			
Hands on machines.....	2 52 to 3 24		
Finishers.....	4 32		
Press-hands.....	3 24		
Finishers.....		\$1 20 to \$1 63	
(Hours of labor, 11 per day; overwork paid per hour at the same rate.)			
<i>Greiz, Saxony.</i>			
Hand-loom for merinos.....	2 42		
Hand-loom for cashmeres.....	2 42		
Hand-loom for reps.....	3 84		
In very few cases only Thibets, or merinos and cashmeres, are woven upon hand-loom at this day.			
Cleaning yarn, 100 packs, (at 1,300 Leipzig ells each,) 15 cents, daily work (7½ hours) 800 packs.....	1 08		
Spooling, for weaving, 100 packs, 18 cents, daily work (7½ hours) 800 packs.	1 08		
Machine-weaving:			
Every good workman attends two looms, using, per week, 1,000 packs or more of yarn, at 36 cents per 100 packs.....	3 60 to 5 76		
Attendants at machines.....	4 32 to 5 76	2 16 to 2 88	
Loom-masters.....			
(Hours of labor, 11 per day.)			
<i>Reichenbach, Saxony.</i>			
Flannel-factory:			
Wool-assorters.....	2 40	96	
Wool-washers.....		1 20	
Attendants at carding-machines.....	2 28		
Men at spinning-machines.....	2 16 to 3 60	1 44 to 1 80	\$0 72 to \$0 96
Boys at spinning-machines.....	2 16 to 2 28		
Workers at hand-loom.....	2 16		
Fullers and finishers.....	2 40		1 20
Dyers.....		1 32	
Nappers.....		1 20	
Press-hands.....			
Packers.....			
Drying-machine hands.....			
Workmasters.....	3 60 to 8 64		
(Hours of labor, 11 per day.)			
<i>Gera, Saxony.</i>			
Woolen cloth:			
Finishers.....	2 88 to 3 60		
Machine-loom weavers.....	2 16 to 4 32		
Hand-loom weavers.....	2 88 to 4 32		
(Hours of labor, 12 for No. 1 and 2; irregular hours for No. 3.)			

Rates of wages paid by manufacturing establishments in Germany—Cont'd.

Occupations.	Men.	Women.	Children.
<i>Glauchau, Saxony.</i>	<i>Per week.</i>	<i>Per week.</i>	<i>Per week.</i>
Machinweaving:			
Weavers	\$1 80	\$1 66	\$1 66
Spooling		1 44	1 32
Shearing	3 94		
Putting in beams	3 81		1 03
Turning in	2 81		
(Hours of labor, 11 per day.)			
<i>Linden, Hanover.</i>			
Cotton-velvet factory:			
Weavers	\$3 60 to 4 32	\$2 16 to 2 88	
Day-laborers	2 88 to 3 60		
(Hours of labor, 60 per week.)			
<i>Sorau, Lower Lusatia.</i>			
Cloth-factory:			
Wool carders and pickers		1 80	
Wool-spinners	2 16 to 3 24		
Weavers on power-loom	2 16		
Weavers on hand-loom	2 88 to 4 32		
Warpers	2 52		
Pressers	2 16 to 3 24		
Spoolers		1 44 to 2 14	
Firemen	2 88		
Machinists	5 04		
<i>Duren, Rhenish Prussia.</i>			
Cloth-factory:			
Wool-assorters	1 30 to 1 58		
Washers	2 88 to 3 60		
Dyers	2 16 to 2 60		
Carders	2 30 to 2 60		
Fine spinners	2 88 to 3 60		
Fullers	2 30 to 2 60		
Shearers	2 88 to 3 60		
Weavers	2 88 to 3 98		
<i>Schwiebus, Saxony.</i>			
Cloth-factory:			
Wool-assorters, (9 hours per day)		84	
Wool-pickers, (9 hours per day)		81	
Wool-shearers, (13 hours per day)		1 35	
Wool-pressers, (13 hours per day)	2 16		
Wool-dyers, (13 hours per day)	2 16		
Weavers, masters, (13 hours per day)	2 88 to 4 32		
Machinists, (13 hours per day)	2 16 to 2 52		
<i>Luckenwalde.</i>			
Cloth-factory:			
Dyers, males, per day, (13 hours)	39 to 42		
Wool-assorters, females, per day, (13 hours)		18 to 19	
Knotters, per piece of 30 yards			9 6 to 12
Chain-shearers, for 100 pieces yarn			9
Spinners, girls, per day, (13 hours)			26 4
Fine spinners, per 1,000, from 36 cents to 48 cents; per week	3 60 to 4 32		

Rates of wages paid by manufacturing establishments in Germany—Cont'd.

Children.		Occupations.				Men.		Women.		Children.	
Per week.						Per week.		Per week.		Per week.	
1 66	\$1 66	Cloth-factory:				\$3 60 to \$1 32					
1 44	1 32	Weavers, according to work and rates				1 92 to 2 04					
	1 08	Roughers, (13 hours per day,) per week				3 60 to 4 32				\$1 06 to \$1 32	
		Shearers, girls, (13 hours per day,) per week									
		Fullers, per week.									
Görlitz, Silesia.											
88		Cloth-factory:						\$1 14			
		Wool-sorters				2 40					
		Wool washing and drying				2 61					
		Cleaners						1 68			
		Carders						1 20			
		Knotters									
80		Spinners, (contract work)				3 60 to 4 32					
		Weavers				2 40 to 3 76					
		Fullers and washers				2 40 to 2 88		1 68			
		Nappers				2 52 to 2 88					
		Shearers				2 52 to 2 88					
		Dressers				2 52					
		Dyers				2 16					
14		Spongers				2 76					
		Card-setters				2 88					
Sagan, Silesia.											
		Master-workmen.									
		Per week.									
		Cloth-factories:									
		Spinning—									
		Wool-sorters				2 16 to 2 88		\$1 26 to 1 44			
		Washers				1 44 to 1 68		1 14 to 1 41			
		Warpers				2 16 to 1 88		1 14 to 1 41			
		Carders				2 88 to 3 60		1 14 to 1 41		1 14 to 1 44	
		Fine-spinners				2 88 to 3 68		1 80 to 2 52			
81		Weavers				\$4 32 to 7 20					
81		Nappers				4 32 to 5 76					
38		Fullers				4 32 to 7 00					
		Finishers				2 54 to 2 88					
		Cleaners				3 60		2 16 to 2 52			
		Pressers				4 32		1 44 to 1 80			
		Spongers				3 60					
		Fasteners				2 16 to 2 52					
		Card-setters, dyers, and heaters, from 41 cents to 45 cents per day.				2 16 to 2 52		2 16 to 2 58			
Leipzig.											
19	9.6 to 12	Merchant-tailoring establishment:									
	9	Making waistcoat, 72 cents to \$1.08.				4 32 to 5 04					
	26.4	Making pantaloons, 84 cents to \$1.08.				4 32 to 5 04					
		Making coat, \$3.00.									
		Making frock-coat, \$4.32.									
		Repairing, per hour, 7½ cents.									

Rates of wages paid by manufacturing establishments in Germany—Cont'd.

Occupations.	Men.	Women.	Children.
DULKEN, PRUSSIA.			
Weavers.....	\$3 24 to \$5 04		
Warpers.....	2 16 to 2 58	\$2 16 to \$2 88	
Spoolers.....			\$1 44 to \$1 80
Dressers.....	3 24 to 4 32		
PITNA, SAXONY.			
Weavers.....	2 88 to 4 32		
Spoolers.....		2 16 to 2 52	
PETERSWALDE, BOHEMIA.			
Weavers.....	3 06 to 4 14		
Spoolers.....		1 98 to 2 34	

CLOTH-FABRIQUES, GROSSENHAIN, SAXONY.

Wool-assorters, per day, 38.4, 43.2, and 48 cents; wool-dyers, per day, 36 cents; overwork per hour, 2.6 cents. Spinners: from 1½ to 3 hanks per pound, per 100 hanks, 20 cents; from 3½ to 6 hanks per pound, per 100 hanks, 21.6 cents; from 6½ to 2 hanks per pound, per 100 hanks, 24 cents; cleaners per hour, 2.6 cents; warpers per day, 25.2 cents; overwork, per hour, 2.6 cents; carders (girls) per hour, 1.6 cents; spinners (boys) per day, 12 cents.

Satin-faced-cloth weavers—machine looms: 5,000 threads per hank, 1.2 cents; 6,000 threads per hank, 1.4 cents; 7,000 threads per hank, 1.6 cents; 8,000 threads per hank, 1.8 to 2 cents; crossweaving 5,000 threads per hank, 1 cent; 6,000 threads per hank, 1.2 cents; 7,000 threads per hank, 1 cent. White-cloth weavers, per hank, ¾ cent; colored-cloth weavers, per hank, ½ cent.

Fullers, carders, shearers, hands at the press: Fullers per day, 31.2 to 33.6 cents, for over-hours, 2.6 to 2.8 cents; card-fitters per day, 30 cents; over-hours, 2.6 cents; hands on machine, per week, \$3.24.

Wages of foremen vary greatly, according to ability.

Cloth factory of Schweibus, Saxony.

	Males.	Females.
Washers.....	\$1 32	
Dyers and spongers.....	2 16	
Pressman.....	2 16	
Machinist.....	2 52	
Fireman.....	2 16	
Fullers, (13 hours per day).....	\$1 80 to 2 04	
Wool-whelpers, (13 hours per day).....	1 92	
Wool sorters and pickers, (9 hours).....		\$0 84
Wool washers and dryers.....		84
Wool-carders.....		1 50
On self-actors.....		1 38
Shearers, (13 hours).....		1 08
Nappers.....		84
Chain spoolers, (females,) per chain of 120 meters (min, 130 yards).....	10 cents.	
Chain shearers, (females,) per chain of 120 meters.....	12 cents.	
Chain gluers, (males,) per chain of 120 meters.....	12 cents.	
Power-loom weavers, (females,) per 24 meters.....	48 cents.	

The overseers of the various factory branches receive, for six working-days, from \$2.88 to \$4.32.

en.	Children.
2 58	.....
	\$1 44 to \$1 50
2 52	.....
2 34	.....

day, 36 cents; over-
d, per 100 hanks, 29
u 6½ to 2 hanks per
arpers per day, 25.2
1.6 cents; spinners

unk, 1.2 cents; 6,000
00 threads per hank,
threads per hank,
per hank, ¾ cent;

2 to 33.6 cents, for
ars, 2.6 cents; hands

	Males.	Females.
.....	\$1 32	
.....	2 16	
.....	2 16	
.....	2 52	
.....	2 16	
80 to 2 04	1 92	
.....	\$0 84	
.....	84	
.....	1 50	
.....	1 38	
.....	1 05	
.....	84	
.....	10 cents.	
.....	12 cents.	
.....	12 cents.	
.....	48 cents.	

working-days, from

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FRINGE-MAKING—SCHLETTAU, SAXONY.

The Messrs. Greifenhagen & Co. having their manufacturing done at the homes of the operatives, pay them by the piece and not by the day. For the manufacture of every article several kinds of work-people are required. Therefore, if the skilled laborer will obtain proportionate wages, several must work together in preparing and finishing one and the same design or piece, as for gimps, loops, cloak-trimmings, ornaments, &c.

The lowest wages are paid to those who stitch the design to the prepared paper, viz, ¼ cents to 1½ cents per hour, while those who take off such design earn from 1½ to 1¾ cents per hour. For finer and more complicated designs, from ½ to ¾ of a cent additional are demanded. While there are laborers of more or less skill, the average earnings for ten working-hours are: for adults, from 16.8 to 28.8 cents; and for children from 9.6 to 11.4 cents.

When business is brisk and labor scarce, much higher wages are paid for these articles, which are nearly altogether manufactured at the houses of villagers.

It has been found impracticable to fabricate these articles in factories, where regular wages could be paid, for two reasons: First, the articles being dependent upon fashion, the demand for them is very irregular; and secondly, few skilled women could be induced to work at establishments to the neglect of their domestic duties.

Weavers of fringes, gimps, &c., are also paid by the piece or meter, and earn, according to skill and industry, from \$1.44 to \$2 per week, of ten hours per day.

The preparatory and incidental labor, which is chiefly manual, is paid at from 1½ to 2 cents per hour.

Makers of hand and loom curtain-band holders, having become greatly reduced in number on account of the previously very low wages, now command from \$2.16 to \$2.88 per week.

The manufacture of this article also requires much preparatory and incidental labor, for which from \$1.08 to \$2.16 is paid per week, of ten hours per day.

The lowest wages, viz, ¾ to ¾ cents per hour of persevering labor, is paid for the twisting of the bullion fringes, usually performed by children or other unskilled persons.

Occupations.	Men.	Women.	Children.
	<i>Per week.</i>	<i>Per week.</i>	<i>Per week.</i>
Linens, table-linen, Gross Schenau, Saxony:			
Weaver, narrow goods.....	\$1 08 to \$3 24		
Weaver, wide goods.....	1 50 to 4 32		
(Working hours, 12 per day.)			
Bleachers.....		\$1 44 to \$2 16	
(Working hours, 12 to 15 per day.)			
Manglers.....			
Dressers.....	1 44 to 2 16	1 44 to 2 16	
(Hours of labor, 12 per day.)			
Waltersdorf, Saxony:			
Weavers, narrow goods.....	1 00 to 2 40		
Weavers, wide goods.....	1 44 to 3 60		
Bleachers.....		1 25 to 1 60	
Manglers.....		1 50 to 1 68	
Dressers.....	1 15 to 1 68		
(Hours of labor, 12 per day.)			

Occupations.	Men.	Women.	Children.
Fancy Hocking, Gross Schenau, Saxony:			
Weavers.....	<i>Per week.</i> \$1 41 to \$1 80	<i>Per week.</i> \$96 to \$1 08	<i>Per week.</i>
Spoolers.....	.....	.....	.....
Treaders.....	96 to 1 08	.....	.....
Dyers.....	1 80 to 2 16	.....	.....
Dressers.....	1 68 to 2 16	.....	.....
Overseer, dyeing department.....	3 60 to 3 94	.....	.....
Overseer, dressing department.....	2 88 to 3 24	.....	.....
(Hours of labor, 12 per day.)	.....	.....	.....
Striped drill, Sebritz, Saxony:			
Weavers, on power-loom.....	2 16 to 2 88	2 16 to 2 88	.....
Spoolers.....	.....	1 08 to 1 44	.....
Treaders.....	1 08 to 1 44	.....	.....
Overseer.....	3 60 to 4 32	.....	.....
(Hours of labor, 11 per day.)	.....	.....	.....
Jacquards, Oberlangenbickau, Silesia:			
Weavers, mechanical.....	2 52 to 2 88	.....	.....
(Working hours, 12 per day.)	.....	.....	.....
Weavers, hand.....	1 44 to 3 60	.....	.....
Spoolers.....	.....	72 to 1 08	.....
Dressers.....	2 16 to 2 88	.....	.....
(Hours of labor, 15 per day.)	.....	.....	.....
Carpets, Schmiedeberg, Silesia:			
Spinners.....	2 88	1 44	.....
Dyers.....	1 92	.....	.....
Weavers, on hand-loom.....	2 16 to 2 88	.....	.....
Weavers, on power-loom.....	1 44 to 1 80	.....	.....
Knotters.....	.....	1 44 to 2 16	.....
(Hours of labor, 12 per day.)	.....	.....	.....
Leather goods, Freiberg, Saxony:			
Pocketbook-makers.....	2 52 to 5 76	.....	.....
Cabinet-makers.....	2 88 to 4 32	.....	.....
Steel-workers.....	2 64 to 5 04	.....	.....
Harness-makers.....	3 24 to 3 60	.....	.....
Polishers.....	2 88 to 4 68	1 44 to 1 56	.....
Day laborers.....	96 to 1 68	.....	.....
(Hours of labor, 11 per day.)	.....	.....	.....
Leather goods, Offenbach-on-the-Main:			
Pocketbook-makers.....	3 60 to 7 20	.....	.....
Book-binders.....	3 60 to 5 04	.....	.....
Girdlers.....	3 60 to 5 04	.....	.....
Steel-workers.....	3 96 to 5 04	.....	.....
Steel-polisher.....	3 96 to 4 86	.....	.....
(6 days of 11 hours each.)	.....	.....	.....
Oil-cloths, Crefeld, Prussia:			
Printers.....	5 40	.....	.....
Blackeners.....	3 60 to 5 04	.....	.....
Day laborers.....	3 36	3 36	.....
(6 days of 12 to 13 hours each.)	.....	.....	.....
Glass beads, Bayreuth, Bavaria:			
Women and children.....	.....	1 62 to 1 80	\$0 60 to \$1 08
Families with many children earn 2, 40 to 2, 88, (6 days of 11 hours each.)	.....	.....	.....

PAPER-MILL, BAUTZEN, SAXONY.

Machinists, \$1.68; paper-cutters, \$3.60; grinders, \$3.24; firemen, \$3.12; rag-cutters, \$2.88; bleachers, \$2.88; laborers, \$2.16 to \$2.52; packers, \$3.12. Children: Assorters of rags; \$1.44; assorters of papers, \$1.44. Hours of labor, 81, per week.

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GOLD AND SILVER FRINGES, LACES, ETC., FREIBERG, SAXONY.

Goldsmiths, per week, \$1.80 to \$2.76; 12 hours per day. Wire-drawers, per week, \$2.88 to \$5.76; work at home. Fringe-makers, per week, \$2.64 to \$3.60; work at home. Spinners and embroiderers, (girls,) 72 cents to \$1.41; 12 hours per day. Lace-makers, (women,) 25 cents to 84 cents; work at home.

MACHINE-SHOP, SACHSENHAUSEN.

	Per week.	Piecework.
Machine-locksmiths.....	\$1 24	\$6 48
Building-locksmiths.....	3 24	6 48
Turners in iron.....	3 24	6 48
Turners in brass.....	3 24	6 48
Turners in wood.....	3 24	4 86
Tinmen.....	3 24	5 67
Iron-founders.....	3 24	4 86
Joiners.....	3 24	4 86
Engineers.....		Per month.
Master-workmen.....	\$24 30	to \$28 35
Master-fitter.....	32 40	to 40 50
Foreman.....	20 25	to 28 35
	40 50	to 48 60

CHIEF MANUFACTURING TOWNS OF GERMANY.

Having in the preceding pages presented statements showing the rates of wages paid for factory-labor in many of the smaller manufacturing towns of Prussia and Saxony, classified by industries, it is now proposed to continue to give similar statements, classified by towns, selecting such as are engaged in the fabrication of articles which, to a considerable extent, find a market in the United States.

BARMEN AND ELBERFELD.

These towns are in fact but one, there being no natural boundary between them, and the stranger who passes along the principal street of this seat of industrial activity is unable to discover where the one terminates and the other commences. The United States consulate being in Barmen, the consular district bears that name.

EXPORTS TO THE UNITED STATES.

The following statement, furnished by Mr. Consul Hoechstler, will show the kind as well as the value of goods which find a market in this country in a single year:

Statistical statement showing the description and value of merchandise exported to the United States from the consular district of Barmen during the year ended September 30, 1873.

Cotton goods, (braids, trimmings, galloons, &c.).....	\$571, 155
Cotton and half-silk ribbons and hat-bands.....	724, 081
Manufactures of wool and of cotton and wool mixed.....	831, 739
Dress and piece goods of silk, half-silk, satins, tullefas.....	156, 576
Velvets and velvet ribbons.....	214, 508
Buttons and button-stuffs.....	118, 737
Woolen cloth.....	701, 489
Steel, iron, brass, and hardware and cutlery.....	522, 066
Dyes and chemicals.....	136, 102
Miscellaneous.....	97, 414
Total.....	4, 073, 867

Shipped by way of—

Bremen.....	\$2, 984, 255
Hamburg.....	728, 603
Antwerp.....	170, 779
Rotterdam.....	160, 391
Liverpool and London.....	22, 763
Havre.....	7, 076
Total.....	4, 073, 867

\$1.12; rag-cutters,
children; Assorters
week.

WAGES IN MANUFACTURING ESTABLISHMENTS.

The following statements show the weekly earnings of operatives employed in various industries in the consular district of Barmen, Prussia:

Occupations.	Men.	Women.	Children.
Silk and ribbons, Barmen.....	\$3 96 to \$1 32	\$2 52 to \$2 88	\$1 68 to \$1 80
Ribbon and silk weavers having their own looms.....	7 20 to 10 08	.....	.....
Hours of labor, 10 per day.	.....	.....	.....
Cotton-braids and trimmings, 10 hours per day.....	3 60 to 4 32	2 16 to 2 88	1 44 to 1 80
If they work by the piece the average weekly earnings are.....	5 76 to 8 64	.....	.....
Fancy dress-buttons, weavers, 10 hours per day.....	3 60 to 7 20	2 16 to 4 32	.....
Half-silk goods, (Elberfeld:)	.....	.....	.....
Weavers of grenadines, satins, &c.	3 96 to 4 14	2 64 to 2 88	1 68 to 1 80
Furniture stuffs, (Elberfeld:)	.....	.....	.....
Weavers of worsted damask.....	4 58 to 5 04	.....	.....
Weavers of silk damask.....	5 40 to 5 76	.....	.....
Weavers of worsted brocade.....	6 48	.....	.....

Woolen mills, Barmen, average weekly wages for 11 hours of labor.

Occupations.	Men.	Women.	Children.
Wool-sorters.....	\$2 88	.....	.....
Wool-washers.....	3 60	.....	.....
Wool-dyers.....	2 52	.....	.....
Overseers.....	4 32	.....	.....
Pickers.....	.....	\$1 80	.....
Carders.....	.....	2 04	.....
Spinnets.....	\$3 60 to 3 96	.....	.....
Warpers and beamers.....	4 08 to 4 32	.....	.....
Reelers.....	.....	.....	\$1 98
Overseers.....	4 68 to 7 20	.....	.....
Assistants.....	3 24 to 3 60	.....	.....
Weavers.....	3 60 to 3 96	.....	.....
Burlers.....	1 92 to 2 16	\$1 92 to 2 16	.....
Overseers.....	4 32 to 4 68	.....	.....
Fullers.....	2 52	.....	.....
Dressers or giggers.....	3 36	.....	.....
Finishers.....	2 52	.....	.....
Press-tenders.....	2 52	.....	.....
Drawers.....	2 88	.....	.....
Brushers.....	.....	.....	2 04
Packers.....	2 88	.....	.....
Overseers.....	4 68 to 6 48	.....	.....
Assistants.....	3 60 to 3 96	.....	.....
Engineers.....	3 96	.....	.....
Mechanics.....	2 52	.....	.....
Laborers.....	2 52	.....	.....
Foreman.....	4 68	.....	.....

ROLLING-MILLS.

Forge-masters.....	\$10 80
Assistants.....	6 48
Foremen of strikers.....	5 40
Strikers.....	4 32

ENTS.

of operatives em-
barmen, Prussia:

	Children.
88	§1 68 to §1 80
88	1 44 to 1 80
88	1 68 to 1 80

ours of labor.

	Children.
80	
04	
	§1 98
6	
	2 04

§10 80
6 48
5 49
4 32

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Puddle-masters.....	§8 64 to §9 36
Puddlers.....	5 40
Workmen for blooming and looping.....	6 48
Looping-rollers.....	8 64
Preparatory rollers.....	5 76
Rollers.....	5 04
Drawers and stretchers.....	4 32
Welders.....	12 96
Assistants.....	7 20
Foremen of finishing rollers.....	10 80
Assistants.....	5 76 to 7 20
Turners and blacksmiths.....	8 64
Machinists.....	5 40
Laborers and firemen.....	8 64
Hours of labor, 12 per day.....	5 76
NOTE.—The cost of puddling iron is 75 cents per 10 centner = 1102.3 pounds; of steel, 84 cents per 10 centner.	4 32
The coal is about fifteen English miles distant, and costs §1.14 per centner; the ore is from 8 to 10 miles off.	

IRON-FOUNDRIES AND MACHINE-SHOPS.

	Per week.
Iron-molders.....	§7 20 to §8 64
Machinists, best.....	7 20 to 8 64
Machinists, ordinary.....	5 04 to 6 48
Helpers.....	4 32
Riveters.....	5 76 to 6 48
Helpers.....	4 32 to 5 04
Flangers.....	5 76 to 6 48
Helpers.....	4 32 to 5 04
Blacksmiths.....	5 76 to 6 48
Helpers.....	4 32 to 5 04
Pattern-makers and carpenters.....	5 76 to 8 64
Turners.....	4 32 to 5 04
Fitters.....	5 40 to 6 12
Laborers.....	5 04 to 8 64
Hours of labor, 12 per day.....	4 32 to 5 76

FACTORY-LABOR IN 1867.

The following valuable and interesting information in regard to the rates of wages in the factories and industrial establishments of Barmen was collected and drawn up with evident practical knowledge by a resident manufacturer, and embodied in a statistical report, published by order of the town council of Barmen. Although the rates of wages in 1867 were much lower than they have been since the war, yet, as they are given in great detail, are presented here:

Statement showing the rates of weekly wages in the town of Barmen during the year 1867.

Trades.	Classification of workmen.	Weekly wages.	Hours of work per day.
Turkey-red yarn-dyers.....	Journeymen.....	§1 24	11
	Workwomen.....	1 80	11
Color-dyers.....	Journeymen.....	3 60	11
	Workwomen.....	2 16	11
Dressing and finishing works.....	Dressers.....	5 04	11
	Assistants.....	2 88	11
Staff-printing works.....	Apprentices.....	2 16	11
	Journeymen.....	3 12	11 to 11½
Piece-dyers.....	Apprentices.....	1 62	11 to 11½
Bleaching works.....	Workmen.....	3 12	11
	Journeymen.....	3 24	11 to 11½
	Apprentices.....	1 62	11 to 11½

Statement showing the rates of weekly wages in the town of Barmen, *etc.*—Continued.

Trades.	Classification of workmen.	Weekly wages.	Hours of work per day.
Knitting-yarn and sewing-thread	Workmen, (at piecework)	24 32	11
	Workmen	3 81	11
	Workwomen, (at piecework)	2 10	11
	Workwomen	1 80	11
	Boys	1 80	11
Silk-goods manufactory	Jacquard-workers, (piecework)	24 28 to 4 32	11 to 11 1/2
	Treadle-workers, (piecework)	1 41 to 2 55	11 to 11 1/2
Zanalla textile fabrics	Workwomen, (piecework)	2 16	11 to 11 1/2
	Workmen	3 40	11 to 11 1/2
Lastings, textile	Workmen	2 52	11
	Workwomen	2 16	11
Cotton-mill	Girls	2 16	11
	Weavers, (piecework)	2 40 to 3 72	12
Silk and woolen ribbon, cord, and head man- ufactures	Master ribbon-weavers	5 76	
	Common sorts, (piecework)	8 61	
	Better sorts, (piecework)	2 52 to 3 60	13
	Workmen	2 52	13
	Female reel-workers	2 16 to 2 55	13
Silk and woolen ribbon and cord manufac- tures	Workmen	1 80 to 2 16	13
	Tap-weaver, with his own loom, (piecework)	3 96	12
	Boys	72 to 1 41	(*)
	Power-loom weavers		
	Journeymen	3 42	10 1/2
India-rubber manufactories	Journeymen, (piecework)	3 60 to 7 92	10 1/2
	Winders		
	Men, (piecework)	2 52 to 3 06	10 1/2
	Women, (piecework)	2 16	10 1/2
	Boys, (piecework)	1 80 to 2 16	(*)
Factory-lands	In binding-room	2 68 to 3 32	10 1/2
	In cutting-room	2 16 to 3 21	10 1/2
	Reel-workers, women	2 16	10 1/2
	Out-workers, women	5 76 to 11 52	10 1/2
	Hand winders	1 08 to 1 80	10 1/2
Soap and candle manufactories	Machine-winders	1 41 to 2 88	10 1/2
	Workmen	2 88	11
	Workwomen	1 68	11
	At the reverberating furnace	4 80	10 1/2
	At the pyrites furnace	3 96	10 1/2
Chemical works	At other processes	3 42 to 3 96	10 1/2
	Hand-labourers	3 60 to 3 96	10 1/2
	Drivers	3 24	10 1/2
	Helpers	3 06	10 1/2
	Smiths	2 88 to 3 60	11
Iron, steel, and hardware manufactories	Average workmen	2 88	11
	Apprentices	1 08 to 2 16	11
	Molders	3 60	11
	Journeymen	2 64	11
	Turners	3 60	12
Roller and machine makers	Roller-makers	3 60	12
	Smiths	4 32	12
	Hammerers	3 24	12
	Apprentices	1 80 to 2 52	12
	Workmen	3 96	10 1/2
Percussion-cap manufactories	Workwomen	1 98	10 1/2
	Boys and girls, (piecework)	72 to 1 08	(*)
	Boys and girls from 17 to 20 years of age, (piecework)	1 41 to 2 64	11
	Cutters, (piecework)	2 40 to 3 12	11
	Stampers, polishers, &c., (piece- work)	3 21 to 4 32	1.
Plating-works	Turners, (piecework)	4 32 to 5 76	(*)
	Boys and girls	1 16	(*)
	Workmen	3 81	(*)
	Boys and girls	1 57	(*)
	Workmen	2 70	11
Whip-manufactories	Piano-forte makers	4 04	
	Organ-builders	4 50	
	Other workmen	3 60	
	Workmen	3 60	10 1/2
	Typesetters	4 32	10
Lithographic establishments	Printers	2 88	10
	Workmen	2 88	10 1/2
	Journeymen masons	3 48	12
	Assistants	2 72	12
	Carpenters	3 48	12
Bookbinding	Well-makers, (piecework)	3 60	12
Masons, builders, bricklayers, plasterers			

* As regards boys and girls, or "juvenile operatives," the hours of labor are limited in conformity with the regulations laid down by the industrial code, *Gewerbe-Ordinung*.

MECHANICAL AND FARM LABOR IN 1873.

The daily wages of mechanics in Barmen and vicinity in the year 1873 were as follows:

Blacksmiths, bricklayers or masons, carpenters, miners, machinists, painters, tailors, tanners, and tinsmiths, 96 cents and upward; cabinet-makers and coopers from 72 cents to 84 cents; stone-cutters and wheelwrights, \$1.08; tailors receive, with board, \$1.44 per week.

Agricultural laborers, ordinary hands, receive \$86.40, and experienced hands \$108, yearly, with board.

The price of board, per week, ranged from \$2.52 to \$2.88 for workmen, and \$2.16 to \$2.52 for workwomen.

In a letter, transmitting the above statistics of labor, Mr. Consul Hoechst, under date of October 17, 1873, writes:

Since my last year's report on the same subject, there has been no change in the condition of the laboring classes in this consular district. In some instances strikes occurred during the last summer, and employers were obliged to raise the wages of their workmen about 25 per cent., especially in the hardware and cutlery trade, but owing to the dullness of business in autumn the wages went down again, and are now about the same as last year. As business gradually grew worse many of the factories were obliged to dismiss a part of their workmen. Some of them left for other places, but the greater part found employment as common laborers on street improvements, and principally on the street railways which were built this year in the cities of Barmen and Elberfeld.

DÜSSELDORF.

This old town, more celebrated for the fine arts than for manufactures, having a school of painting and a school of architecture, exports to the United States woollen cloths and a variety of other articles, the products of the mills and factories in the neighborhood. The following table shows the value and kind of the principal articles which find a market in the United States:

Statement showing the description and value of merchandise exported to the United States from the consular district of Düsseldorf in the year ended September 30, 1873.

Articles.	Value.
Woollen cloths	\$ 1,116,000
Hardware and cutlery	44,693
Oil paintings	3,577
Chromolithographs and engravings	3,562
Artists' colors and materials	21,518
ribbons, bands, braids, and trimmings	32,365
Mixed worsted and cotton goods	15,432
Miscellaneous	
Total	1,116,000

PRICES OF FACTORY AND OTHER LABOR.

In transmitting the following rates of wages Mr. Lewis, United States consular agent, makes the following observations in regard to the rise in the price of labor over that of former years:

MY DEAR SIR: In reply to your circular I beg to submit the following answers to your inquiries, remarking that the prices here given are exceptional and are in many instances double what they were at this time last year. That these prices will be maintained is doubtful, but it is the opinion of the owners of these works that they may somewhat recede, but not to the standard of former years. The causes have been chiefly owing to the great advance in the price of all necessities of life and also in house-rent, and the consequent rise in the price of labor, and as this is the great question of the day here, until that question is settled on a permanent basis, these great fluctuations will continue. All the raw material is at least 50 per cent. higher than it was at this time last year, and in some articles, such as pig-iron and coal, the advance has been 100 per cent. The wages of the work-people have not, I find, advanced in the same ratio, the advance being on the average not more than 37 per cent.

IRON FURNACES.

Cost of pig-iron per ton October, 1872	\$43 29
Cost of pig-iron per ton in 1870-71	21 60
Cost of coal at works, per ton, 1872	4 23
Cost of coal at works, per ton, in 1870-71	\$2 52 to 2 28

Daily wages of skilled workmen: Smelters, 84 cents; furnace-feeders, 72 cents; mixers or puddlers, 60 cents; coke puddlers, 60 cents; slag carriers, 65 cents; enginemen, 66 cents; firemen, 60 cents; laborers, 60 cents; smiths and fitters, 70 cents; model-makers, 77 cents; carpenters, 68 cents; masons, 96 cents; ore and limestone puddlers, 70 cents; limestone breakers, 96 cents; coke burners, 84 cents.

Hours of labor from 6 a. m. to 6 p. m., and the reverse, the labor being continued through the night. Out of this one hour is allowed for dinner and one-half hour for breakfast, and the same at 4 o'clock, making in all 10 clear hours of labor. A certain portion of the labor of these works must be carried on on Sundays as well as on week-days, and these men obtain an advance price for Sunday-work.

ROLLING-MILLS.

Cost of pig-iron	\$43 20
Cost of coal at works here	4 60
Labor:	
Puddlers, per ton, first quality	2 60
Puddlers, per ton, second quality	1 78
Puddlers, per ton, third quality	1 55

A good puddler, with an assistant, will make from $1\frac{1}{2}$ to $1\frac{3}{4}$ tons per day, and will earn, after paying his assistant, from \$1.08 to \$1.44 per day.

IRON-FOUNDRIES AND MACHINE-SHOPS.

Machinists and turners, (best workmen)	\$0 96 to \$1 08 per day.
Machinists and turners, second class	68 to 72 per day.
Machinists and turners, inferior	48 to 55 per day.
Boiler-makers	1 44 per day.
Assistants or riveters	68 to 72 per day.
Helpers or laborers	68 per day.

WOOLEN MANUFACTORIES.

The working hours are from 6 o'clock in the morning until 7 in the evening, with the same time for meals as in the foundries, viz: one hour for dinner, and half an hour each for breakfast, and coffee at 4 o'clock. The prices of the different kinds of labor are as follows:

Wool-sorters from 84 cents per day; wool-washers from 86 to 96 cents per day; girls for carding from 24 to 29 cents per day; women from 34 to 38 cents per day. Spinners generally work by the piece and earn from \$1.08 to \$1.20 per day; children from 14 to 15 years of age from 24 cents to 27 cents per day; children from 15 to 20 years of age from 41 cents to 46 cents per day.

Much of the above work is also done by the piece, and the earnings depend on the industry of the workmen.

MECHANICAL LABOR.

Carpenters, first class, earn from \$1.08 to \$1.20 per day. Time of work from 7 in the morning to 7 in the evening, in summer; half hour allowed for breakfast and at 4 o'clock, and one hour for dinner.

Cabinet-makers, 84 cents per day. Time of labor as above. Masons from 96 cents to \$1.08 per day. Time of work in summer from 6 in the morning until 7 in the evening. In winter from 7 in the morning until dark. Work here can be carried on the greater part of the winter; the average loss of time from very cold weather, when such work cannot be done, would not be more than one month.

Ornamental plasterers	\$1 08 to \$1 44 per day.
Common plasterers, (or assistants)	72 per day.
Plasterers	1 08 to 1 32 per day.
House painters and grainers	84 to 1 08 per day.
Gas-fitters and housesmiths	72 to 1 20 per day.
Shoemakers, first class	84 to 96 per day.
Shoemakers, second class	72 to 84 per day.
Tailors	60 to 84 per day.

LABOR IN GERMANY.

517

AGRICULTURAL LABOR.

Laborers in this district are seldom employed by the year. When such is the case they receive from \$2.88 to \$4.32 per month, with board, and sleep on the farm where they are employed, usually over the stables. Married people are seldom or never hired in this manner; they rent or buy a small cottage and small plat of ground which they cultivate, usually keeping a goat or cow; if the latter, it is employed in plowing and hauling the little two-wheeled cart of the proprietor.

AIX-LA-CHAPELLE, PRUSSIA.

This town, where Charlemagne was born, lived, and is entombed; where till 1558 the German emperors were crowned; where the treaties of 1668 and 1748 were held, celebrated also for its sulphur baths, is a center of Rhenish industry, among which the cloth manufacture is the most extensive. Indeed, a reference to the following statement will show that woolen cloths comprise 74 per cent. of the value of exports from this district to the United States:

Exports from Aix-la-Chapelle to the United States during the year 1872.

Articles.	Value.
Woolen cloth	\$2,018,131
Wool and hair	322,491
Kid gloves	122,276
Glass ware	90,161
Pins and needles	67,389
Miscellaneous	42,617
Total	2,742,356

FACTORY AND MECHANICAL LABOR.

The following tables show the rates of wages paid for factory and other kinds of labor in Aix-la-Chapelle and vicinity:

CLOTH-FACTORIES.

	Per week.
Wool-glossers	\$1 50 to \$2 16
Wool-sorters	2 16
Wool-dressers	1 86 to 2 16
Wool-spinners	3 60 to 4 32
Wool-weavers	3 60 to 5 76
Fallers	2 88
Carders	2 88
Wool-pickers	1 80 to 2 16
Sheeters	2 88
Dyers	2 88
Firemen	2 88
Press-hands	4 32
Loom-enters	2 88 to 3 60
Spooler	2 88
Gluer	1 80
Card-setter	3 60
Barbers	5 40
Spinners' foreman	2 88
Weavers' foreman	5 76 to 7 20
Carders' foreman	5 04 to 5 76
Spoolers' foreman	4 32 to 5 04
Fallers' foreman	4 32
Sheeters' foreman	4 32 to 5 76
Dyers' foreman	4 32 to 5 04
Foremen at the press	5 04 to 5 76
Spinners of worsted yarns	4 32 to 5 04
Master weavers of worsteds	7 20

MACHINE-WORKS.

	Per day.	Piece-work.
Machine-mounters	\$0 96	\$1 29
Adjusters	72	96
Turners	72	96
Borers	67	86
Clay-molders	72	96
Sand-molders	60	80
Coal-miners, at piecework	81	96
Coal-dumpers, at piecework	72	—
	Per day.	
Machinists		\$1 08
Blacksmiths		72
Locksmiths		96
Carpenters	\$0 67 to	86
Cabinet-makers	72	72
Masons	72 to	83
Painters		60
Plasterers		83
Shoemakers		72
Harness and saddle makers		60
Agricultural labor		45

CARRIAGE-MAKERS.

	Per day.
Body-makers	\$0 92
Trimmers	1 08
Varnishers	72
Blacksmiths	66

GLOVE-MAKERS.

Cutters	\$0 63
Tanners	72
Dyers	72
Workwomen	86
Workwomen on fine work	1 41
Hours of labor, 66 per week.	

NEEDLE MANUFACTURE.

	Per week.
Whettors	\$6 91
Cutters	3 96
Blue-dyers	4 68
Polishers	3 65
Makers of sewing-machine needles	6 71
Hours of labor, 54 per week.	

COLOGNE, PRUSSIA.

Although this old Roman town is now more celebrated for its cathedral, its perfumed water, and the two bridges over the Rhine—the one of boats for ordinary travel, and the other the railway bridge, a fine specimen of modern engineering—than for its industrial establishments, yet in its vicinity there are mills and factories which produce goods for the American market, as the following statement will show:

Statement showing the exports from Cologne to the United States in the year 1872.

Articles.	Value.
Velvets and ribbons	\$379,167
Lead	463,416
Iron, raw	127,522
Steel	142,177
Cutlery	72,155
Wood manufactures of	65,678
Miscellaneous	326,250
Total	1,764,123

LABOR IN GERMANY.

519

Weekly wages of mechanics.

Trades.	Wages.	Hours per day.
Blacksmiths.....		11
Carpenters.....	\$5 76	11
Carpenters, on piecework.....	\$5 04 to \$5 76	9
Coopers.....	6 48 to 7 20	11
Masons.....	4 32	11
Masons, on piecework.....	5 04	11
Machinists, skilled workmen.....	6 48 to 7 20	11
Painters.....	6 48 and upwards.	11
Plasterers.....	4 32 to 5 76	9 to 10
Shoemakers.....	5 76 to 8 64	9
Shoemakers, with board.....	2 88 to 4 32	
	1 44 to 2 16	

On piecework larger earnings are obtained. Tanners, tinsmiths, and wheelwrights, \$5.76 and upward; bakers, \$4.32 to \$8.64—12 to 13 hours.

Laborers in sugar and other factories earn from \$2.61 to \$3.60 per week—working 11 hours per day.

Women are generally paid 36 cents, and girls 24 to 28 cents per day of 10 to 11 hours.

Experienced factory laborers per day, without board, 72 cents; ordinary farm-laborers, with board, 43 to 48 cents; common laborers, without board, 60 cents; female servants, per month, \$2.16 to \$3.60.

NOTE.—Workmen's families pay rent for one room, from \$1.44 to \$2.16 per month; and for two rooms, from \$2.88 to \$4.32. No family occupies more than two rooms.

Children are required by law to attend school until 14 years of age. School fee, 12 groschen (29 cents) per month.

There has been but little change in the rates paid for mechanical and farm labor in the district of Cologne, since the visit of the author in 1872. Mr. Hölcher, United States consular agent, transmitted the following figures expressive of the daily wages of the above classes during the year 1873:

Blacksmiths, bricklayers, or masons, carpenters, machinists, and tailors, 1½ thalers per day, (\$1.08); stone-cutters, \$1.20; cabinet-makers, \$1.44; plasterers, \$1.80; hod-carriers, tanners, tinsmiths, and wheelwrights, 96 cents; painters, 84 cents; coopers and shoemakers, 72 cents; and miners, from 84 cents to \$1.44; farm-laborers, from 43 to 48 cents, with board, in summer; and from 34 to 38 cents in winter. Laborers, at other than farm work, earned 60 cents per day without board.

Female servants obtained from \$2.16 to \$3.60 per month with board. Price of board per week, from \$1.68 to \$2.52 for workmen; and \$1.44 for workwomen.

BERLIN.

This famed capital of Prussia, and now, also, of the German Empire, affords employment to thousands of work people in the iron, woolen, leather, and various other industries for which she is celebrated.

The manufactures which find a market in the United States are indicated in the following statement of exports from that consular district:

Per day.	Piece-work.
\$0 96	\$1 20
72	96
72	96
67	86
72	96
60	80
84	96
72	—

Per day.
\$1 08
72
96
\$0 67 to
72
72 to
83
60
83
72
60
45

Per week.
\$8 91
3 96
4 68
3 66
6 71

ated for its cathe-
the Rhine—the one
way bridge, a fine
ial establishments,
produce goods for
show:

in the year 1872.

	Value.
	\$570, 96
	461, 43
	127, 57
	142, 17
	79, 13
	65, 13
	326, 26
	1 794, 01

Value of goods, wares, and merchandise exported to the United States from the Berlin consular district during the year ended September 30, 1873.

Articles.	Value.
Woolen cloth and cloakings	\$1,302,766
Woolen shawls	68,031
Ready-made ladies' dresses, cloaks, woolen, &c.	499,650
Worsted yarn	41,426
Dyed worsted yarn, embroideries	294,312
Cotton goods	85,936
Linen goods	331,574
Silk goods	155,232
Basket wares	8,210
Manufactures of leather, wood, iron, zinc	262,071
Fancy paper, cards, and paper boxes	110,718
Books, lithographs, prints, paintings, &c.	234,259
Chemicals, apothecaries' utensils	150,170
Scientific apparatus, surgical, optical, musical	71,800
Leather gloves	195,128
Imitation jet, ornaments of black glass	16,688
Glass and porcelain wares	110,536
Liquors, wine, sirup &c.	46,911
Lead and machinery	402,232
Miscellaneous goods	200,621
Total	4,430,021

* The thaler computed at 72 cents.

FACTORY LABOR.

The following rates of wages were paid in 1872 by the proprietors of cloth and other factories in or near Berlin :

Occupations.	Hours of labor per day.	Per week.		
		Men.	Women.	Children.
Shawl-factory:				
Spinners	10		\$2 16 to \$2 52	
Warpers	10	\$1 78 to \$5 76		
Weavers on hand-looms	10	4 32 to 5 76		
Weavers on power-looms	10		2 52 to 2 85	
Washers	10	3 21		
Dyers	10	3 21		
Ginners	10	3 00		
Carders	10	2 68 to 3 21		
Fullers	10	3 60 to 4 32	1 80 to 2 16	
Sheeters	10	1 80 to 2 16		
Dressers	10	5 04 to 5 76		
Beaters	10	5 76		
Hurlers	10		2 16 to 3 21	
Laborers	10	2 68 to 3 21		
Fringe-makers	10		2 52	
Ladies' cloaks:				
Seamstresses, (cloaks)	10 to 12		2 16 to 5 04	
Seamstresses, (costumers)	10 to 12		1 80 to 5 76	
Cutters out	10 to 12	4 68 to 7 20		
Tracers	10 to 12		4 32	
Embroiderers	10 to 12		3 60 to 7 20	
Fancy silk trimmings:				
Makers of fringe, gimps, &c.	10	5 04 to 8 61	1 80 to 4 32	\$1 25 to \$1 80
Overseers	13	28 20 to 36 00		
Gold and silver trimmings:				
Fringe-makers	10 to 12	4 32 to 5 04		
Platers	10 to 12	4 68 to 6 48		
Wire-drawers	10 to 12	5 76 to 6 84		
Spinners	10 to 12	5 40 to 7 20		
Spinners on power-looms	10 to 12		1 80 to 2 52	
Hand-made goods	10 to 12		2 16 to 2 68	

* Per month.

MECHANICAL LABOR.

Rates paid for mechanical labor in Berlin.

	Value.
*81,202.72	
65,039	
499,656.96	
41,436	
222,312.21	
85,636	
334,541	
155,222.24	
7,210	
262,694	
110,818.88	
231,250	
150,157.50	
71,800	
195,125	
66,688	
51,566	
46,911	
402,292	
206,621	
4,490,221	

Occupations.	Per day.*	Occupations.	Per day.
Skilled workmen:		Skilled workmen—Continued.	
Basket-makers	£0 66	Nail-makers	£0 66
Blacksmiths	72	Paper-makers, (fancy,) men	72
Brewers	72	Paper-makers, (fancy,) women	45
Carpenters	1 20	Plano-makers	90
Carvers	72	Ready-made garments, makers of,	72
Cigar-makers, males	72	women	66
Cigar-makers, females	42	Roofers	96
Coopers	72	Saddlers	72
Coppersmiths	72	Salesmen or clerks	72
Engineers, steam	72	Seamstresses	72
Factory-hands, men	72	Shoemakers	66
Factory-hands, women	60	Stokers	72
Factory-hands, children	36	Tailors	72
Glove-makers	66	Tanners	66
Joiners	72	Turners	72
Locksmiths	96	Weavers	72
Machinists	72	Laborers	66
Masons	72	In city	72
Millers	1 20	In country	60
	66		

* Hours of labor, from 6 a. m. to 7 p. m.

WAGES IN IRON-WORKS.

The largest and most celebrated establishment in Germany for the manufacture of all kinds of engines and machinery is that of Mr. Borsig, in Berlin. Want of time prevented a personal call at his works, which are open to the public on payment of a small fee; and it was deemed highly important to obtain the rates of weekly wages for the various kinds of skilled labor employed in the works. A request by our consul at Berlin for the desired information elicited a polite but evasive note from the proprietor,* which was equivalent to a refusal; while an application to the Statistical Bureau of Prussia proved equally unsuccessful. But the difficulties that beset this search after knowledge served to stimulate to increased exertion, which resulted in complete success, for Mr. Kreismann shortly afterward obtained from the German Amalgamated Engineers' Society the following official statement of the wages received by the members of this union, not only in the works of Mr. Borsig, but in all other establishments of a similar character.

* Under date of Berlin, October 22, 1873, Mr. Borsig writes: SIR: In reply to the communication of the 10th inst.

Sir: In reply to the communication of the 18th inst., I regret to be unable to furnish the statistics desired, as, in my works, no such tables of rates of wages as the blanks enclosed call for are made up. I, therefore, return them herewith.

Respectfully,

A. BORSIG.

Mr. H. KREISMANN,
Consul of the United States of America, Berlin.

Women.	Children.
0 to \$2 50
2 to 2 50
.....
0 to 2 16
0 to 2 16
.....
2 50
0 to 5 01
0 to 5 70
4 32
0 to 7 20
0 to 4 32	\$1 20 to \$1 80
.....
0 to 2 52
0 to 2 58

Statement showing the average rate of wages paid, in 1873, to persons employed in the iron-foundries and machine-shops in the city of Berlin, Prussia.

Occupations.	No. of persons.	Average weekly wages, (in United States gold coin.)
Iron-molders	1,800	\$7.20 to \$8.61
Machinists, best	500	7.20 to 7.20
Machinists, ordinary	1,700	5.76 to 7.20
Machinists, inferior	870	4.32 to 5.76
Helpers	300	2.88 to 4.32
Boiler-makers	600	6.48 to 7.20
Helpers	1,000	4.32 to 6.48
Riveters	100	5.76 to 7.20
Holderson	150	4.32 to 5.76
Flangers	50	7.20 to 8.61
Helpers	400	3.60 to 4.32
Blacksmiths	800	7.20 to 8.61
Helpers	1,000	3.60 to 5.04
Foremen	400	8.61 to 10.80
Engineers	700	5.76
Pattern-makers and carpenters	900	5.76 to 7.20
Assistants	300	3.60 to 5.04
Laborers, carters, &c.	2,000	2.88 to 4.32
Apprentices	200	72 to 9.16
Millwrights	300	7.20 to 10.68
Assistants	400	5.76 to 6.48
Drum-founders	150	7.20 to 8.61
Fitters	400	3.60 to 5.04
Turners	500	6.48 to 8.61

Hours of labor per week, 60.

Products: Locomotives, machine castings, columns, tubes, pipes, machines, steam-engines and tools, steam-boilers, pipes, agricultural machines, implements, railroad-cars.

RUD. RAUSCH.

Secretary of the Berlin branch of the German Amalgamated Engineers' Society.

BERLIN, November 15, 1873.

The value of the foregoing table is enhanced by the fact that of the 16,800 employes whose weekly earnings are therein given, the number engaged in each of the various subdivisions of labor is stated, thus affording data for an accurate computation of the average earnings of skilled and of unskilled laborers engaged in the various iron-works of Berlin.

The average weekly wages of the 10,100 skilled workmen is \$6.88; of the 4,500 helpers and assistants, \$4.38; of the laborers and carters, \$3.60; and of the 200 apprentices, \$1.41—computed in United States gold coin.

BUILDING-TRADES.

The influx of material wealth, after the termination of the war with France, gave a marked impetus to new enterprises, largely advanced the price of real estate, and induced the erection of a large number of buildings in Berlin.

Real estate advanced as rapidly, and changed hands as frequently, as in some of our western cities in previous years. The owner of a corner property in the celebrated Unter der Linden, not far from the Brandenburg gate, was, at one time, offered only 100,000 thalers, which he was advised to refuse, but in a few months afterward he obtained upwards of 200,000 thalers.

The activity in the building-trades caused a great demand for skilled labor which rapidly advanced in price, reaching figures previously unknown in Germany.*

* Since the above was written the price of real estate has declined, the demand for skilled labor has been less active, and the rates of wages have, consequently, been reduced.

The following tables show the rates existing in Berlin during the eight months ending with the month of August, 1874:

WAGES OF MASONS AND CARPENTERS IN BERLIN IN 1874.

Statement showing the number of men actually employed by the Association of Master Masons, Carpenters, and Builders, with prices paid per day of ten hours.*

MASONS—MASTER WORKMEN.

Month.	\$1.02.	\$1.03.	\$1.14.	\$1.20.	\$1.26.	\$1.32.	\$1.38.	\$1.44.	\$1.50.	\$1.56.	\$1.62.	\$1.68.	\$1.60.
January.....	1	2	4	15	11	28	21	64	21	14	7	26	28
February.....	2	2	14	12	31	19	79	13	23	10	19	30	30
March.....	1	5	28	17	33	15	98	13	16	6	29	30	16
April.....			55	20	55	11	108	12	14	5	20	14	14
May.....			34	18	46	11	112	11	15	5	25	16	18
June.....			41	27	42	14	117	11	16	7	21	19	19
July.....			35	26	41	12	108	4	22	7	21	18	15
August.....													

PERCENTAGE OF MASTER MASONS EMPLOYED AT EACH OF ABOVE RATES.

Month.	0.42.	0.83.	1.64.	6.20.	4.55.	11.57.	8.67.	26.45.	8.67.	5.78.	2.69.	10.74.	11.53.
January.....	0.42	0.83	1.64	6.20	4.55	11.57	8.67	26.45	8.67	5.78	2.69	10.74	11.53
February.....	0.79	0.79	5.50	4.73	12.20	7.48	31.10	5.12	9.05	3.91	7.45	11.81	11.81
March.....	0.37	1.49	10.41	6.34	12.30	36.52	4.85	6.40	2.24	7.45	6.46	6.46	6.46
April.....			17.35	6.72	17.35	4.42	34.67	3.75	4.42	1.58	6.32	4.42	4.42
May.....			1.65	11.22	6.60	15.51	4.62	36.97	3.30	4.55	1.65	8.25	5.28
June.....			13.79	5.29	14.81	4.61	38.49	4.62	5.26	1.31	7.57	6.25	6.25
July.....			12.46	7.54	15.08	3.61	37.65	2.20	6.89	2.29	6.89	5.90	5.90
August.....			11.59	8.61	14.57	3.98	35.74	1.33	7.29	2.32	9.60	4.97	4.97

CARPENTERS—MASTER WORKMEN.

Month.	8.	26.	25.	25.	5.	32.	5.	10.	3.	12.	11.	11.	11.
January.....	8	26	25	25	5	32	5	10	3	12	11	11	11
February.....	8	24	19	25	9	52	4	10	3	11	11	11	11
March.....	8	25	23	26	9	39	4	11	4	7	7	7	7
April.....	3	11	37	46	11	43	8	11	4	1	6	9	9
May.....	3	36	33	29	9	41	3	12	3	8	8	8	8
June.....	8	29	26	21	7	49	3	10	2	7	7	7	7
July.....	3	43	27	23	8	50	3	13	2	8	8	8	8
August.....													

PERCENTAGE OF MASTER CARPENTERS EMPLOYED AT EACH OF ABOVE RATES.

Month.	4.84.	16.04.	15.49.	15.49.	3.09.	13.75.	3.09.	6.17.	1.55.	7.40.	6.79.	6.79.	6.79.
January.....	4.84	16.04	15.49	15.49	3.09	13.75	3.09	6.17	1.55	7.40	6.79	6.79	6.79
February.....	5.12	15.38	12.11	16.12	5.77	20.51	2.56	6.41	1.92	7.05	7.05	7.05	7.05
March.....	4.48	15.24	14.02	15.85	5.49	23.78	2.14	6.71	2.41	4.27	4.88	4.88	4.88
April.....	1.58	5.79	14.22	21.51	26.74	8.14	25.00	4.06	4.06	0.58	3.49	5.22	5.22
May.....			19.22	17.37	15.26	4.74	33.16	1.58	6.32	1.58	4.20	4.20	4.20
June.....			17.65	16.04	11.93	3.71	26.21	1.61	5.35	1.05	3.75	5.35	5.35
July.....			16.48	11.58	11.93	7.38	26.13	1.13	7.39	1.13	4.55	4.55	4.55
August.....			22.87	11.36	12.23	4.25	26.60	1.60	6.91	1.07	3.19	5.32	5.32

JOURNEYMEN MASONS.

Month.	Und'r \$0.96.	\$0.96.	\$1.02.	\$1.08.	\$1.14.	\$1.20.	\$1.26.	\$1.32.	\$1.38.	\$1.44.	\$1.50.	\$1.56.*
January.....	45	121	432	611	250	14	10	5	1	1	.....	.....
February.....	45	161	492	648	140	15	13	4	.....	.....	.....	.....
March.....	31	90	418	1,031	502	83	10	5	.....	.....	.....	.....
April.....	2	163	411	1,711	232	30	.....	.....	.....	.....	.....	.....
May.....	2	11	141	1,985	314	81	7	6	.....	.....	.....	.....
June.....	14	73	1,917	769	131	12	6	.....	.....	.....	.....	.....
July.....	1	16	49	1,779	1,094	167	14	6	.....	.....	.....	.....
August.....	16	46	1,560	1,112	136	7	3	1	10	.....	.....	.....

* In the original tables the prices are stated by the hour at one-tenth of the rates in the above statements. For a working day of nine hours, as in England, the respective rates would be: .91, .97, 1.03, 1.08, 1.14, 1.18, 1.24, 1.26, 1.35, 1.35, 1.45, 1.52, 1.62 per day.

Statement showing the number of men actually employed, &c.—Continued.

PERCENTAGE OF JOURNEYMEN MASONS EMPLOYED AT EACH OF ABOVE RATES.

		3.01	8.31	22.93	40.92	16.71	0.95	0.68	0.34	0.06	0.06	.....
January	.....	2.98	10.77	32.50	42.54	9.19	0.99	0.85	0.26	.....	.....	0.12
February	.....	1.73	4.58	32.35	32.64	13.34	4.22	0.50	0.25	0.40	.....	.....
March	.....	0.08	0.34	16.10	66.52	9.79	1.17	0.37	0.22	.....	.....	.....
April	.....	0.08	0.42	5.50	57.07	13.05	3.32	0.37	0.22	.....	.....	.....
May	.....	.....	0.48	2.49	65.43	26.25	4.75	0.40	0.20	.....	.....	.....
June	.....	0.03	0.52	1.60	55.79	35.69	5.41	0.45	0.19	0.03	0.26	.....
July	.....	.....	0.57	1.63	54.11	38.19	4.76	0.25	0.11	0.03	0.45	.....
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

JOURNEYMEN CARPENTERS.

		31	105	424	429	173	54	23	7	2	3	1
January	.....	77	127	3-0	339	169	67	32	8	2	3	.....
February	.....	9	50	173	422	359	179	54	18	7	2	3
March	.....	7	39	169	582	430	292	34	.....	.....	.....	.....
April	.....	2	35	130	639	412	203	39	10	2	.....	.....
May	.....	.....	18	116	747	457	185	39	2	.....	.....	.....
June	.....	.....	1	9	75	841	501	215	48	26	3	5
July	.....	.....	10	68	900	539	186	47	21	3	3	.....
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

PERCENTAGE OF JOURNEYMEN CARPENTERS EMPLOYED AT EACH OF ABOVE RATES.

		2.37	12.60	32.26	32.77	13.22	4.12	1.68	0.54	0.45	0.22	0.07
January	.....	6.39	10.55	31.56	28.17	14.63	5.56	2.66	0.66	0.17	0.25	.....
February	.....	0.70	3.99	13.56	33.06	28.12	14.63	4.23	1.40	0.54	0.11	0.23
March	.....	0.47	2.42	11.31	39.07	28.55	15.57	2.48	.....	.....	.....	.....
April	.....	0.13	2.34	8.74	42.66	27.50	13.53	2.61	.....	.....	.....	.....
May	.....	.....	1.16	7.40	46.21	29.00	12.60	2.50	1.35	0.12	0.19	.....
June	.....	0.06	0.52	4.35	48.09	29.18	12.45	2.78	1.51	0.17	0.29	.....
July	.....	.....	0.56	3.83	50.64	30.33	10.47	2.65	1.18	0.17	0.17	.....
August	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....

RECAPITULATION.

Month.	MASTER WORKMEN.					
	MASONS.			CARPENTERS.		
	Number employed.	Total daily wages.	Average wages per day.	Number employed.	Total daily wages.	Average wages per day.
January	212	\$255 12	\$1 15.8	162	\$180 72	\$1 11.5
February	251	336 06	1 32.6	156	196 56	1 25.0
March	252	350 56	1 45.9	164	228 88	1 39.3
April	317	426 24	1 34.4	172	241 92	1 40.6
May	303	430 56	1 42.1	190	250 20	1 36.4
June	204	434 16	1 43.8	177	254 88	1 36.3
July	205	435 60	1 43.8	176	242 64	1 37.8
August	362	452 00	1 43.2	182	258 48	1 37.5
JOURNEYMEN.						
January	1,493	\$1,337 04	\$0 89.5	1,360	\$1,172 88	\$0 89.6
February	1,524	1,521 24	1 00.0	1,204	1,213 20	1 00.7
March	1,964	1,673 28	1 55.2	1,376	1,424 28	1 11.1
April	2,572	2,751 84	1 06.9	1,490	1,674 56	1 11.0
May	2,550	2,891 40	1 09.6	1,498	1,667 52	1 11.3
June	2,930	3,011 04	1 02.7	1,593	1,771 50	1 11.6
July	3,065	3,397 68	1 10.8	1,727	1,933 20	1 11.9
August	2,891	3,207 60	1 10.9	1,777	1,982 88	1 11.5

continued.

ABOVE RATES.

1	0.06	0.06	
0			0.12
1		0.11	
1		0.09	
1	0.35		

7	42.42	3	1
7	42.42	3	
0	3.2		1
0	5		
3	3		

ABOVE RATES.

4	0.15	0.22	0.07
6	0.17	0.25	
1	0.11	0.23	
2	0.13		
2	0.19		0.07
7	0.29		
7	0.17		

CMEN.

CARPENTERS.

Total daily wages.	Average wages per day.
\$1-0 72	\$1 11.5
1 20 56	1 2.9
2 36 89	1 3.3
2 41 92	1 4.6
2 59 20	1 36.4
3 36.4	1 36.4
3 37.4	1 37.4

EN.

Total daily wages.	Average wages per day.
\$1,172 88	\$0 89.6
1,214 20	1 00.7
1,349 28	1 11.1
1,451 56	1 10.0
1,667 52	1 11.3
1,771 27	1 11.6
1,933 20	1 11.9
1,982 22	1 11.5

LABOR IN GERMANY.

525

CHEMNITZ, SAXONY.

The town of Chemnitz is situated in the most extensive manufacturing district of Germany, fully three-fourths of the inhabitants of which may be classed as work-people. The extent and value of the imports into the United States from that district are shown by the following table:

Statement showing the value of exports to the United States from the consular district of Chemnitz during the two years ending September 30, 1873 and 1874.

Articles.	Value.	
	1873.	1874.
Cotton hosiery.....	\$2,622,363	\$1,807,957
Danasks.....	41,674	25,963
Dress-goods.....	10,328	25,307
Dress-trimmings.....	354,335	126,496
Embroideries.....	104,279	71,139
Fancy goods.....	22,284	60,106
Gloves.....	453,606	519,002
Laces, (cotton and silk).....	190,227	265,002
Musical instruments.....	144,782	51,900
Miscellaneous.....	12,657	21,625
Toys.....	47,840	29,163
Woolen shawls and yarn.....	9,454	6,244
Total.....	4,015,009	3,073,521

MECHANICAL AND FACTORY LABOR.

Before presenting the rates of factory labor obtained during a visit to this enterprising district in 1872, the following statements of the earnings of mechanics, factory hands, and others in preceding years are given. They were obtained in the respective years indicated, and published in the reports of the Chamber of Commerce of Chemnitz:

Table showing the average weekly rates paid for labor in the district of Chemnitz, Saxony, in the respective years 1860, and from 1864 to 1868, inclusive.

Trades.	Males.						Females.					
	1860.	1864.	1865.	1866.	1867.	1868.	1860.	1864.	1865.	1866.	1867.	1868.
Accordeon-makers.....	\$2 16	\$3 60	\$2 52	\$2 52	\$2 52	\$2 52	\$1 08	\$1 08	\$0 96	\$0 96	\$0 96	\$0 96
Artificial-flower-makers.....	1 08	1 44	2 40	2 40	2 52	2 52	1 08	1 08	0 87	0 87	0 87	0 87
Bakers.....	1 17	1 44	2 16	2 16	2 52	2 52	1 08	1 08	1 44	1 44	1 44	1 44
Barbers.....	1 80	2 52	1 92	1 92	2 16	2 16	1 08	1 08	1 44	1 44	1 44	1 44
Basket-makers.....	1 80	2 52	1 92	1 92	2 16	2 16	1 08	1 08	1 44	1 44	1 44	1 44
Barrel-makers.....	3 21	3 60	3 60	3 60	3 60	3 60	1 08	1 08	1 44	1 44	1 44	1 44
Boys-drawers.....	3 21	3 60	2 16	2 16	2 16	2 16	1 08	1 08	1 44	1 44	1 44	1 44
Bolt-makers, workers in bronze.....	1 08	1 44	2 88	2 88	2 88	2 88	1 08	1 08	1 44	1 44	1 44	1 44
Blanchers.....	2 28	2 52	2 52	2 52	2 52	2 52	1 20	1 44	1 44	1 44	1 44	1 44
Bookbinders.....	2 04	2 52	2 40	2 40	2 64	2 88	1 08	1 44	1 44	1 44	1 44	1 44
Brass-founders.....	2 52	3 21	3 12	3 40	2 64	2 88	1 08	1 44	1 44	1 44	1 44	1 44
Bricklayers.....	1 80	2 16	72	72	72	72	1 08	1 44	1 44	1 44	1 44	1 44
Brick-makers.....	2 52	2 52	2 88	2 88	2 88	2 88	1 08	1 44	1 44	1 44	1 44	1 44
Butchers.....	1 92	2 52	3 21	3 21	3 60	3 60	1 08	1 44	1 44	1 44	1 44	1 44
But-ton-makers.....	1 08	1 30	2 16	2 16	2 52	2 52	1 08	1 44	1 44	1 44	1 44	1 44
Card-makers, (playing).....	2 88	3 21	2 88	2 88	2 88	2 88	1 08	1 44	1 44	1 44	1 44	1 44
Card-makers, (carding).....	2 16	3 21	2 52	2 52	2 88	2 88	1 08	1 44	1 44	1 44	1 44	1 44
Cabinet-makers.....	2 16	2 88	2 16	2 16	2 16	2 16	1 08	1 44	1 44	1 44	1 44	1 44
Carpenters.....	2 64	2 56	2 50	2 79	2 88	3 24	1 20	1 44	1 44	1 44	1 44	1 44
Cartoon-makers.....	3 21	3 21	2 52	3 21	3 21	3 21	1 20	1 44	1 44	1 44	1 44	1 44
Cigar-makers.....	2 72	2 72	1 16	2 16	2 16	2 40	90	1 08	72	1 08	1 20	1 20

Table showing the average weekly rates paid for labor in the district of Chemnitz, &c.—Cont'd.

Trades.	Males.						Females.					
	1860.	1861.	1863.	1860.	1867.	1868.	1860.	1861.	1863.	1866.	1867.	1868.
Chair-framers	\$2 16	\$2 16	\$2 52	\$2 52	\$2 88	\$2 88						
Chemical manufacturers	1 02	1 08	2 40	2 40	2 40	2 40	\$0 72	\$0 96				
Chimney-sweepers	1 02	1 02	72	72	72	72						
Cloth-dishers	2 37	2 37	3 21	3 21	3 24	3 24	00	1 08	\$0 96	\$0 96	\$0 96	\$0 96
Cloth-weavers	2 01	2 40	2 88	2 88	3 12	3 60	72	72	84	84	84	84
Cloth-shearers	1 80	2 52	2 88	2 88	2 88	2 88						
Cloth-printers	3 24	2 16	3 24	3 21		3 60	1 41	1 62	48			* 48
Comb-makers	1 08	1 30	1 44	1 44	1 44	1 44						
Confectioners	2 16	2 88	1 44	1 44	1 80	1 80						
Coopers	2 40	2 88	3 60	3 60	3 60	3 60						
Cotton-spinners	2 16	2 88	2 88			3 00	1 08	1 20	1 08			1 08
Crockery-ware artists	4 32	5 04	4 32	5 04	5 04	5 04						
Crockery-ware workmen	2 88	2 88										
Day-laborers	1 68	1 92	2 04	2 07	2 16	2 31						
Distillers	3 18	3 18	1 44	1 44	1 44	1 44						
Dyers of silk and wool	1 44	1 60	2 88	2 88	2 88	2 88						
Engravers	3 96	2 88	3 60	3 60	3 60	3 60						
File-cutters	2 16	2 88	2 88	2 88	2 88	2 88						
Fringe-makers	1 92	2 16	2 16	2 16	2 16	2 40						
Furriers	1 56	1 80	2 42	2 42		3 60						
Gardeners	1 20	2 16	1 44	1 44	1 44	1 44						
Glaziers	1 08	1 26	2 64	2 64	2 88	2 88						
Glass-workers	2 16	2 88	2 88	2 88	2 12	2 96						
Glove-sewers	2 52	3 60	2 88			1 44	96	1 02	1 08	1 08	1 08	1 08
Goldsmiths		3 12	3 24	3 21	3 21	3 21						
Gunsmiths	2 16	2 40	1 68			1 68						
Hatters	1 68	3 16	2 16	2 16	2 32	2 32						
Harness-makers	2 16	2 34	96	96	1 08	1 08						
Iron and steel workers:												
Iron-founders	2 52	\$2 16	2 88			3 12						
Machine-builders	3 24	3 24	3 12	3 12	3 17	3 24						
Locksmiths	2 16	2 88	2 88	2 88	3 00	4 32						
Cutlers	1 20	1 44	2 16	2 16	2 16	2 40						
Nail-makers		2 52	2 40	2 40	2 40	2 40						
Blacksmiths	1 08	1 20	96	96	1 08	1 08						
Screw-makers		2 52	2 88	2 88	3 60	4 32						
Lithographers	3 96	3 96	4 12			4 32						
Loom-builders	2 16	2 88	2 52	2 52	2 52	2 52						
Millers	2 05	2 15	1 92	1 92	1 92	1 92						
Milliners							1 26	1 41	1 41	1 44	1 80	1 44
Mining:												
Carpenters	4 32	5 04										
Miners	4 68	4 68										
Drawers	2 52	3 52										
Day-laborers	2 30	2 50										
Needle-makers	2 16	3 60	72	72	96	96						
Oleoth-makers	1 80	1 92	2 04	2 16	2 28	2 40						
Potters	2 16	2 88	2 40	2 40	2 40	2 40						
Printers:												
Compositors	3 60	3 60	3 24	3 24	3 60	3 60						
Dyers	1 06	1 04	72			96						
Rope-makers	1 08	1 08	96	96	96	96						
Saddlers	84	96	96	96	96	96						
Saw-mill laborers	2 16	2 52	2 52	2 70	2 88	2 88						
Slaters	1 80	1 80	1 92	1 92	1 92	1 92						
Shoemakers	1 20	2 44	1 68	1 68	1 68	1 68						
Shoemakers' tools	1 20	1 44	2 88	2 88	2 88	2 88						
Soap-makers	1 80	2 12	2 52	2 52		2 88						
Stocking-weavers, (ma- chine)	3 96	3 96	3 96			5 04						
Stone-masons	2 16	2 64	2 64			3 60						
Stone-cutters	3 36	3 36	5 76			6 48						
Stone-quarrymen	1 08	2 16	2 16	2 16	2 16	2 16						
Tailors	1 20	1 68	2 88	2 88	2 88	2 88						
Tanners	1 08	1 20	1 08	1 08	1 08	1 44						
Turners	96	1 08	96	96	1 08	1 08						
Tapestry-makers	2 52	2 88	2 40	2 40	2 40	2 40						
Watchmakers	1 08	1 08	2 16	2 16	2 40	2 88						
Wheelwrights	2 16	2 52	2 28	2 40	2 52	2 88						
Worsted-work			1 44	1 68	1 68	1 68	60	48	48	48	60	60
Wire-cloth makers	2 52	2 88	2 16	2 16	2 16	2 16						
Weavers, (silk)	2 16	2 16	2 16	2 16	2 40	2 40						
Wool-combers	2 88	3 21	2 52	2 52	2 70	2 88	1 02	1 08	1 08	1 08	1 08	1 20

* Children.

LABOR IN GERMANY.

527

Table showing the average weekly rates of labor paid in the district of Chemnitz, Saxony, in the year 1871.

Trades.	CLASS I.—Chemnitz, about 70,000 inhabitants.	CLASS II.—Towns with 10,000 to 25,000 inhab- itants: Chemnitz, Müch- litz, Annaberg, Döb- sch.	CLASS III.—Towns with 5,000 to 10,000 inhab- itants: Frankenberg, Rudolstadt, Schleiz, Mittweida, Hainichen, Borna, Penig, &c.	CLASS IV.—Towns with less than 5,000 inhab- itants: Lichtersheim, Lützen, Camburg, Mühlbach, Mücheln, Tauscha, Kötzsch, Zsch- witz, &c.
Artificial-flower makers, fe- males.....	\$1 41 to \$1 57			
Bakers.....	*1 32 to 1 68	62 16	*20 60 to \$1 20	*21 04 to \$1 11
Brewers.....	2 22	2 16	2 16 to 2 32	1 50 to 2 28
Blanchers.....	2 68 to 3 60	3 60	2 16 to 4 32	1 41 to 4 32
Bookbinders.....	1 92 to 1 54	{ 2 52 to 2 88	2 52 to 2 88	2 52 to 3 60
Basket-makers.....	3 96 to 4 32	2 64 to 3 21	{ 1 41 to 2 16	{ 2 52 to 4 32
Brass-founders.....	3 00	*1 41 to 1 80	2 96 to 1 68	2 52 to 4 32
Brick-layers, (see tile-layers)		*1 04 to 1 56	*1 04 to 1 56	1 08 to 1 40
Bronze-makers.....		2 88 to 3 60	2 88 to 3 60	1 80 to 2 16
Brush-makers.....				
Butchers.....	2 76 to 3 88			*56 to 1 40
Button-makers.....	1 08	2 16	*60 to 1 80	*56
Cabinet-makers.....	3 60			1 11 to 2 88
Calico-printers.....	4 08	3 24	2 52 to 3 60	1 68 to 2 88
Calico-printer laborers.....	2 68 to 3 60	{ 2 68 to 3 60		1 80 to 2 88
Carpenters.....	1 68 to 4 02			
Carpenters.....	2 88 to 3 24			
Chair-framo makers.....	1 54	3 36 to 3 60	2 31 to 4 32	2 52 to 4 32
Chemical factories, laborers.....	3 36		{ 2 88 to 4 68	1 29
Chimney-sweepers.....	2 28 to 3 60			
China manufacture:	2 16	2 52		
Day-laborers.....	2 59	2 16 to 2 88	2 01 to 2 88	1 15 to 2 16
Cigar-makers.....	{ 2 64 to 2 88	{ 2 88 to 1 41	{ 1 04 to 3 60	{ 1 08 to 4 32
Clock-case makers.....	96 to 1 44		{ 2 16 to 4 32	{ 1 08 to 4 32
Comb-makers.....			{ 2 16 to 4 32	{ 1 08 to 4 32
Confectioners.....	*1 20	3 60	*1 08	3 28
Coopers.....	3 60			
Crochet and netting work.....	*1 20	*1 80	1 80 to 2 52	*1 04 to 1 20
Crimline-makers.....	3 60	1 08 to 1 72	72 to 1 20	
Distillers, brandy.....		5 40 to 1 80	136 to 72	
Dyers in silk and wool.....	3 60	2 52 to 2 88	*72 to 2 52	*2 52
Engravers.....	3 60 to 3 96	1 56	1 92 to 4 32	2 16 to 5 04
Farriers or horseshoers.....	4 32	3 24 to 4 32	3 96	
File-makers.....	*1 92	3 60	2 16 to 3 24	
Fringe-manufacturers.....	5 76	2 16	2 16 to 2 88	2 88 to 3 60
Furriers.....		2 52	1 41 to 1 80	
Fullers and wool-washers.....		3 21	1 41 to 3 21	*1 80
Gardeners.....				
Glass-stainers.....	{ 2 70 to 2 16	{ 2 16 to 2 88	{ *1 20	{ 2 16 to 2 52
Glaziers.....	1 41 to 1 80	2 88	1 80 to 5 76	2 88 to 3 60
Glove-sewers, females.....	3 96 to 4 32	2 52 to 4 32	2 88 to 1 62	2 16 to 3 60
Gold and silver workers.....	1 08	1 41 to 1 72	2 88 to 3 60	*1 08 to 1 80
Grinding and p-ishing estab- lishments.....	5 76		60 to 1 80	72 to 1 80
Gunsmitlis.....	5 76	3 21	129 to 48	*1 68 to 2 16
Hair dressers.....			3 60	
Harmonicon-makers.....	3 60 to 4 50	2 16 to 2 52	1 98	
Harness-makers.....	2 88			
Hatters.....	2 88	2 88	1 41	
Hose-manufacturers.....	{ 3 60 to 3 96	{ 2 16 to 2 88	3 06 to 3 24	*96 to 1 41
Iron-founders.....	1 20 to 1 80			
Lithographers, males.....	3 21	3 60 to 4 32	2 88 to 4 68	1 80 to 2 68
Locksmiths.....	*43 to 48	3 21 to 4 32	3 60 to 1 41	
Loop-sewing, females.....	3 36 to 5 04			
	3 60 to 5 76			
	36 to 1 80			
	4 50			

* Besides board and lodging.

{ Children's wages.

Table showing the average weekly rates of labor paid in the district of Chemnitz, &c.—Cont'd.

	CLASS I.—Towns with about 50,000 inhabitants.	CLASS II.—Towns with from 10,000 to 50,000 inhabitants, Rauha, Annaberg, Jock vau.	CLASS III.—Towns with from 5,000 to 10,000 inhabitants, Rauha, Annaberg, Jock vau, Mittweida, Hainichen, Bohna, Penitz, &c.	CLASS IV.—Towns with less than 5,000 inhabitants, Rauha, Annaberg, Jock vau, Mittweida, Hainichen, Bohna, Penitz, &c.
Machine-building:				
Machine-smiths.....	\$2 64 to \$4 20	\$4 33	\$2 10 to \$5 70	\$2 16 to \$4 24
Machine-wood-workers.....	2 76 to 3 24	\$3 60 to 5 04	2 52 to 4 32	
Other workers.....	3 12 to 3 96	2 16 to 2 88	3 00 to 4 32	
Masons.....		2 52 to 4 32	2 52 to 4 32	
Match-manufacturers, males.....				2 40 to 4 00
Mechanicians and opticians.....	4 32			2 64 to 3 36
Millers.....	6 00	2 88 to 3 36	1 68 to 2 16	1 12 to 1 44
Metal.....	2 52		1 44 to 2 16	1 44 to 2 24
Slate.....			1 12 to 1 36	
Stone.....			1 44 to 2 16	
Coal.....			1 12 to 1 36	
Modistes or milliners, females.....	2 16 to 2 32		4 32 to 6 48	
Nail factories.....	2 16 to 3 96		4 32 to 6 48	
Needle and pin makers.....		72 to 96	72 to 1 20	72 to 2 52
Painters and varnishers, or furniture.....	5 04 to 3 96	2 88 to 4 68	3 24 to 6 48	1 20 to 1 44
Paint-lace workers, females.....	3 48 to 2 52			1 20 to 4 32
Oil-cloth manufacture.....		1 44		96 to 1 20
Paper manufacture.....	3 60 to 3 84			1 20
Pavers.....		3 24 to 4 32	2 88 to 3 60	1 72 to 2 16
Potters, general work.....	5 76		3 60	2 16 to 5 04
Portfolios, leather and fancy goods.....			2 16 to 2 88	1 20 to 2 88
Pattern-drawer.....			1 20 to 1 44	1 20 to 4 32
Photographers.....	5 76 to 7 20			5 04 to 2 88
Plaster of Paris or gypsum manufacture.....	*2 52 to 11 08	3 60		
Playing-card manufacture.....	3 60 to 4 32		2 52 to 3 24	
Powder-mills.....	*1 80		1 20 to 2 16	
Printers or typesetters.....	5 40	3 96 to 1 68	2 88 to 5 76	2 88
Printers, boys and girls.....	72 to 1 44	1 08 to 1 44	1 08 to 2 16	2 52 to 3 10
Parse, glove, and cap makers.....	3 24 to 4 32	2 88	2 52 to 3 24	*96 to 1 08
Quarrymen.....	3 60		1 60 to 4 32	2 52 to 4 32
Ribbed-manufacture.....				1 44 to 3 60
Roofing-factories.....	2 88 to 3 36			
Rope-makers.....	4 32	1 08 to 1 20	1 12 to 1 62	2 88 to 60
Saddlers.....	3 24	2 88	1 44	1 20 to 2 52
Saw-mills.....	3 24	2 88 to 3 24	*1 44	2 16 to 3 44
Screw-manufacture.....				1 44 to 2 16
Sculptors.....	5 04			
Shoe-makers.....	2 40	2 16 to 2 52	1 44 to 2 88	
Sieve-makers.....	2 52			
Slater or roof-coverer.....	4 14	2 88	2 16 to 4 68	2 52 to 4 32
Smiths:				
Copper-smiths.....	6 00	2 88 to 4 32	*1 20 to 2 16	2 40
Engraving-smiths.....	3 60	*1 08 to 1 44		
Bailor-smiths.....	5 16			
Technical instruments.....	4 32		2 34 to 2 88	
Nail-smiths.....			2 16 to 3 24	
Blacksmiths.....	*1 08	3 60	2 16 to 3 24	1 96 to 3 10
Snap-hammers.....	3 60	2 52		1 20
Spinning:				
Cotton.....	1 80 to 4 32		96 to 3 96	
Loose yarn.....	1 62 to 2 34			
Can-yarn.....	3 24 to 1 62			
Flax spinning.....	136 to 4 48		2 52 to 3 36	
Stitch or loop work.....	2 16 to 2 88		11 68	
	1 44 to 1 68		2 88 to 1 20	2 88 to 4 32
	112 to 4 48			1 44 to 1 80

* Besides board and lodging.

† Children's wages.

LABOR IN GERMANY.

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Table showing the average weekly rates of labor paid in the district of Chemnitz, &c.—Cont'd.

	CLASS IV.—Towns with less than 10,000 inhabitants: Leipzig, Geyer, Emsdorf, Lützen, Tannenberg, Zwickau, &c.	CLASS I.—Chemnitz, about 70,000 inhabitants.	CLASS II.—Towns with 10,000 to 50,000 inhabitants: Glauchau, Rochlitz, Annaberg, Döbeln, &c.	CLASS III.—Towns with 50,000 to 100,000 inhabitants: Leipzig, Rochlitz, Mittweida, Hainichen, Borna, Penig, &c.	CLASS IV.—Towns with less than 10,000 inhabitants: Leipzig, Geyer, Emsdorf, Lützen, Tannenberg, Zwickau, &c.
Stocking-weavers:					
Hand.....	\$1.10 to \$3.24	\$1.41 to \$1.80	.....	\$1.08 to \$2.16	\$1.41 to \$2.88
Machino.....	2.40 to 4.48	1.50 to 72	.....	.....	1.08
Stocking-frame builders.....	2.40 to 4.48	2.16 to 5.76	.....	.....	1.08 to 1.80
Stone-cutters.....	1.15 to .84	4.32	.....	.....	1.80 to 2.88
Stone-workers, serpentine.....	1.41 to 4.32	3.24 to 7.20	.....	.....	3.60 to 5.76
Stone-cutters.....	1.41 to 2.88	3.96 to 5.76	.....	.....	2.16 to 3.60
Straw-hat manufacture.....
Strings for musical instruments.....
Sweeney factory.....
Steam-engine firemen.....
Tailors.....	72 to 2.52	3.24	.....	.....	2.34 to 1.44
Tanners.....	3.96	.....	.....	1.94
Tile or brick layers.....	3.24 to 3.60	.....	.....	3.60
Tile-makers.....	1.68 to 4.32
Tile-founders.....	5.76 to 7.20	.....	.....	2.16 to 3.60
Tinkers.....	1.08	.....	.....	2.16 to 5.04
Turners in metal.....	2.64 to 5.76	.....	.....	2.88 to 3.96
Turners in wood.....
Umbrella-makers.....	2.88 to 3.12	.....	.....	2.52
Upholsterers & trunk-makers.....	2.76 to 1.80	.....	.....	.....
Walking-stick or cane-manufacturers.....	2.52 to 3.96	.....	.....	.....
Watch and clock makers.....
Weaving-slate makers.....	1.62 to 3.24	.....	.....	1.80
Weaving-chair makers.....	90 to 1.44	.....	.....	1.98 to 2.52
Weaving silk-weaver.....	3.24	.....	.....	.....
Head-weavers:
On damask.....
On plaid.....	2.16	.....	.....	.....
On quilts and carpets.....
On fastian and lining.....	2.40	.....	.....	.....
On calico.....
Wheelwrights.....
Wire-cloth weavers.....	4.08	.....	.....	.....
Wood-polishing.....	2.52	.....	.....	.....
Wood-work, boxes and cases.....
Wood-work, wooden toys.....
Wood-card manufacture.....	3.60 to 1.92	.....	.....	.....
Woolen-cloth weavers.....
Woolen-cloth shearers.....
Wool-printing.....

* Besides board and lodging.

† Children's wages.

WAGES IN SAXONY IN 1870.

Basket-making in Zwenkau, Saxony.—In 27 factories, with 73 skilled laborers and 30 apprentices, good workmen earn per week 4 thalers = \$2.88; three of the above factories manufacture exclusively children's cradle-baskets.

Chair-makers in Waldheim, Saxony.—Chair-makers, per week, from \$2.16 to \$2.88; polishers, per week, from \$3.60 to \$4.32; packers, per week, from \$1.44 to 1.80.

Casks and barrel-factory in Döbeln, Saxony.—Coopers, per week, from \$1.32 to \$7.20; finisher of small casks and barrels, per week, from \$2.16 to \$4.32.

Day-laborers in cooper-shops, for 12 working-hours, receive 40 cents; unskilled laborers, 30 cents.

Straw-plaiting in Zwenkau, Saxony.—This industry is chiefly carried on by women and children, besides their housework and school-hours; such of the men as are occupied during the summer-months in brick-kilns, &c., plait straw in the winter. The earnings for men per day are not less than 18 cents; women, 10 cents; children, while attending schools, 4 cents.

Paper and pasteboard manufacture, Chemnitz, Saxony.—Wages vary from 96 cents to \$3.60 per week.

Pasteboard boxes and other articles of pasteboard, Buchholz, Saxony.—Men, per week, from \$2.52 to \$1.32; women, \$1.20 to \$1.80; children, 36 cents to 39 cents.

The above industry consists of the manufacture of boxes for chocolate, candies, soaps, perfumeries, gloves, hose and half-hose, trimmings, labels, envelopes, tickets, &c.

Playing-card factories at Chemnitz, Saxony.—Wages per week for men, \$2.16 to \$3.60; wages per week for women, 84 cents to \$1.80.

Manufacture of Chinese lanterns, &c., Zwenkau, Saxony.—Children, over 12 years of age, working from 3 to 4 hours per day, earn weekly from 36 cents to 48 cents; men, working 12 hours per day, earn daily from 36 cents to 48 cents.

Printing-offices in Chemnitz, Saxony.—Type-setters and printers, per week, \$2.88 to \$5.76; women and girls, \$1.20 to \$1.80; apprentices, 72 cents to \$1.68.

Leather-belting for machines, &c., Chemnitz, Saxony.—Men, per week, \$2.52 to \$4.32; women, \$1.20 to \$1.68.

Kid-glove sewing at Oberwiesenthal, Saxony.—Wages, for 1 dozen gloves, sewed, 54 cents.

Felt and cloth shoe factory, Waldheim, Saxony.—Men, per week, \$3.60.

Cigar factory, Waldheim, Saxony.—Rollers and assorters, per week, (male and female,) \$1.20 to \$3.60; girls, 12 to 16 years of age, 72 cents to \$1.68; children, under 14 years of age, 36 cents to 72 cents.

Slate-quarries, Rochlitz, Saxony.—Daily earnings from 36 cents to 40 cents.

Earthen and stone ware manufacture, Chemnitz, Saxony.—Weekly earnings of men, \$2.16 to \$5.76; women and boys (14 to 16 years of age,) \$1.20 to \$1.44. Working-hours in summer-time, 12; in winter, 10.

Cloth-weaving establishments in Meerane, Saxony.—Weekly earnings of men, \$2.16 to \$3.60; weekly earnings of women, \$1.62; weekly earnings of children, 36 cents to 48 cents.

Plush-weaving, Frohburg, Saxony.—Men, \$1.44 to \$1.80.

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CITY LOCAL-EXPRESS COMPANIES IN SAXONY.

Place.	Name of company.	Year of organization.	No. of expressmen.	Wages per week.
Annaberg.	Express	1862	30	\$1.80, without percentage.
Chemnitz.	Müller's Express Company	1861	60	\$2.16 to \$2.50.
Do.	Expressmen's Institution, (yellow marks of distinction)	1868	50	\$1.80 to \$2.52.
Do.	United Expressmen Institution, (white marks of distinction)	1868	25	\$1.62.
Döbeln.	Expressmen's Institution	1862	3	These expressmen work for their own account and pay a weekly amount of 18 cents for the loan of tools, &c.
Waldheim.	Expressmen's Institution	1862	3	\$1.92.
Leisnig.	Express	1867	5	\$1.41 to \$2.16.
Mittweida.	Express Company	1861	6	

The above consists mainly in unskilled labor of every kind, garden work, transportation and packing of furniture and other articles, carrying of circulars, cards, bills, &c., &c.

PRICES OF FACTORY-LABOR IN CHEMNITZ IN 1872.

The statements presented in the preceding six pages show the rates paid for mechanical and other labor in the district of Chemnitz during the year 1860, and in the years from 1861 to 1868, inclusive; also the weekly wages which obtained in the year 1871, classified according to the population of the respective towns, which tables, as well as the given statement of wages in Saxony in 1870, have been translated from the reports of the Chemnitz chamber of commerce. It will be observed that the rates in the latter years exhibit a considerable increase over those of 1860.

The rates which prevailed in 1872, when the author visited this district, and which are presented in the following pages, showed a decided advance over those of 1871:

Occupation.	Hours of labor per day.	Per week.		
		Men.	Women.	Children.
Hosiery factories.*				
Stocking-weavers, according to skill and industry.....	10	\$2.88 to \$3.60		
Ordinary hands.....	10	1.41 to 2.16		
Superintendent of factory.....	10	3.04 to 8.61		
Machinists.....	10	3.60 to 5.04		
Locksmiths.....	10	3.60 to 5.04		
Spoolers, weavers, &c.....	10	3.60 to 5.04		
Beaters.....	10		\$1.80 to \$2.88	
Edging-machine workers.....	10	3.12	1.44	
Hydraulic-press men.....	10	2.88 to 5.76		
Finishers, assorters, stampers.....	10	2.88 to 5.04		
Spoolers.....	10		1.44 to 1.80	
Weavers, on piecework.....	10		2.40	
Cutters, on piecework.....	10	4.41	2.04	
Sowers, on piecework.....	10		1.08 to 1.26	
Formers, on piecework.....	10		1.92 to 2.88	
Finishers.....	10		1.20	
Master-finishers.....	10	4.68 to 6.48		
Finishers' assistants.....	10		1.68 to 2.16	

* This establishment, beside the fixed wages, pays a bonus according to the number of pairs of socks made by each man in a week.

* This establishment, beside the fixed wages, pays an extra percentage for good work.

Factory labor—Continued.

Occupation.	Hours of labor per day.	Wages per week.		
		Men.	Women.	Children.
Hosiery factory—Continued.				
Formers	10		\$2 16 to \$2 88	
Dressers	10		1 56 to 1 68	
Pressers	10	\$3 60 to \$1 32		
Another factory:				
Stocking-weavers	10, 40	3 24		
Spoilers	10, 40		1 44	
Glove-makers	10, 40		2 16	
Glove embroiderers and quilters	10, 40		2 88	
Glove and stocking formers	10, 40		1 62 to 2 16	
Cotton-glove finishers	10, 40		1 20 to 1 56	
Cotton-glove cutters	10, 40		1 08 to 1 44	
Weavers of gloves on frames	12		1 44 to 1 80	
Weavers of glove-cloth on power-loom	12	1 80 to 2 52		
Girls, at piecework	12		1 44 to 1 80	
Girls, ornamenting and embroidering	12		1 44 to 1 80	
Girls, making band silk-points	12		0 72 to 1 50	
Girls, making button-holes, &c., by hand	12		0 72 to 1 30	
Girls, finishing	12		1 08 to 1 68	
Yarn factory:				
Spinners, on piecework		4 32	1 44 to 1 92	\$1 08 to \$1 32
Cotton-spinning:				
Assorters, &c., per 10,000 spindles			1 80 to 2 16	
Turning-in on self-acting machines				1 08
Twistlers			1 44 to 1 80	
Weighters, packers			1 80 to 2 16	
Grinders, polishers		3 24 to 3 60		
Spinners		3 24 to 3 42		
Locksmiths		4 68 to 5 40		
Watchmen and day-laborers		2 52 to 3 24		
Carding and spinning master, machine-builder, &c.		17 20 to 17 92		
Machinists, gas-fitters, &c.		3 06 to 3 24		
Manufactures of Tibbets, &c.:				
Weavers, on power-loom	12 to 13	3 42		
Weavers, on hand-loom	12 to 13	2 40	1 98	
Dyeing:				
Foreman	11	7 20		
Assistant foreman	11	4 32 to 5 76		
Dyers	11	2 88 to 3 60		
Firemen	11	2 88 to 3 60		
Laborers	11	2 40 to 2 88		
At other work	11	2 16 to 2 40	1 44 to 1 80	1 44 to 1 68
Danmark factory:				
Machine-loom	11	2 88	1 80	
Finishers	11	3 24	1 36	
Chain-shears	11	2 52 to 3 24		
Hand-loom weavers	11	2 52 to 4 32		
Work-masters	11	3 24 to 6 48		
Preparatory machines	11			1 32
Machine-works:				
Borers, planers, screw-smiths		4 50		
Turners		5 04		
Pounders and molders		5 04		
Hammer-smiths		5 76		
Strikers		2 58		
Tinsmiths		6 72		
Coppersmiths		7 20		
Braziers, (kettle-makers)		6 80		
Varnishers		2 88		
Pattern-makers		3 48		
Polishers		4 54		
Blacksmiths		6 48		
Grinders		4 56		
Smelters		3 24		
Locksmiths		3 96		
Saddlers		3 78		
Joiners		1 32		

* Seventy-three hours of labor produce, on the average, 13,000 pounds of stocking-yarn No. 20.

† And house-room.

‡ The difference between the wages of male and female labor consists, mainly, in the manufacture of finer articles, entrusted to the former.

§ Hours of labor per week, 60.

LABOR IN GERMANY.

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Factory labor—Continued.

es per week.

Women.	Children.	Occupation.	Hours of labor per day.	Wages per week.		
				Men.	Women.	Children.
16 to \$2 78		Machine-Works Association:				
56 to 1 68		Kettle-factory:				
		Braziers		53 60 to 5 70		
		Braziers, on piecework		6 45 to 7 44		
		Strikers		2 88		
		Lays		1 41		
		Copper-works:				
		Coppersmiths		3 96 to 4 32		
		Coppersmiths, on piecework		5 04 to 5 76		
		Assistants		2 88		
		Brass-foundry:				
		Founders		4 32 to 7 20		
		Cast-polishers		2 88 to 4 32		
		Boys		1 62		
		Smith-shop:				
		Smiths		3 60 to 4 32		
		Smiths, on piecework		5 04 to 7 20		
		Strikers		2 88		
		Turners' shop:				
		Turners		2 88		
		Apprentices, first to third year		2 88 to 3 60		
		Boring-machines:		36 to 1 08		
		Borers		2 16 to 3 60		
		Borers, on piecework		4 32 to 5 04		
		Planing-machines:				
		Planers		2 16 to 3 60		
		Planers, on piecework		5 76 to 7 20		
		Locksmiths' shop:				
		Machine locksmiths		3 24 to 4 32		
		Machine locksmiths, on piecework		5 76 to 8 64		
		Cabinet-shop:				
		Model-makers, carpenters		3 60 to 4 32		
		Model-makers, carpenters, on piecework		5 04 to 6 48		
		Tinsmith:				
		Tinsmiths		3 60 to 4 32		
		Tinsmiths, on piecework		5 04 to 6 48		
		Assistants		1 98 to 2 88		
		Wire-weaving shop:				
		Weavers, (chiefly on piecework)		5 76 to 6 48		
		Unskilled laborers		2 52 to 2 88		
		Machine-works, making embroidery machines:				
		Cabinet-makers and pattern-makers		6 48 to 10 08		
		Locksmiths		5 04 to 10 08		
		Iron-turners		5 04 to 8 65		
		Planers		4 32 to 7 92		
		Borers		3 60 to 5 76		
		Polishers		3 60 to 5 76		
		Smiths		5 76 to 8 65		
		Machine-builders, (setting up machines)		8 64 to 18 00		
		Apprentices		1 44 to 3 60		

Although the preceding statements show the price of labor in the manufacturing establishments of Chemnitz as prepared chiefly by the respective proprietors, yet as it is believed that some of the notes of the author, taken as he visited the factories, will afford additional information on the subject, they are reproduced here:

Hartmann & Co.'s machine-works.

CHEMNITZ, SAXONY, September 16, 1872.

Accompanied by Mr. Rider, United States consul, visited the works of the Saxon Machine Company, (Hartmann & Co.,) the largest establishment of the kind in Saxony, and, except Borsig's, at Berlin, the largest in Germany. About 200 men are employed.

cking-yarn No. 20.

only, in the manufacture of

The following are the rates of wages or weekly earnings of the men: Molders on piecework, from 6 to 8 thalers, \$4.30 to \$5.76. Machinists and riveters, average \$1.68.

Carpenters and wood-workers, 5 thalers, \$3.60. (These formerly worked by the piece and earned more.)

Common laborers, 4 thalers, \$2.88.

Apprentices, first year, 20 groschen per week, (48 cents;) second year, 84 cents, and an increase of 10 groschen, (24 cents,) each subsequent year. There are about 75 apprentices and 125 young men under instructions employed; 200 in all.

(Hours of labor, 10 per day.)

Coal now costs 7 thalers (\$5.04) per ton, formerly 5 thalers. It is brought from the district of Zwickau, about 60 miles.

They import part of the pig-iron used from England and Scotland.

They make cotton and woolen machinery, locomotives, and a variety of other machinery.

Hüssel & Co.'s damask-factory.

Visited the factory of Hüssel & Co., who make damasks, velvets, reps, &c., some all wool. They employ a few men and 800 women. Wages average as follows:

Women, 23 thalers per week, \$1.98.

Men in mill, 4½ to 5 thalers, \$3.24 to \$3.60.

Men dyers, 4½ to 5 thalers, \$3.24 to \$3.60.

An allowance of 1 thaler (72 cents) per month for rent is made to the married men who have been employed in this establishment for more than one year, and 20 silver groschen (48 cents) if under a year.

Many of their working-people live out of the city and bring their dinners. They are very frugal, living largely on coffee and potatoes. They had little kettles with coffee, some had bread, others potatoes, some both. They cooked their potatoes and warmed their coffee in the mill. Men with families live in two rooms, paying from 3 to 4 thalers (\$2.16 to \$2.88) per month in the city, but in the country only about 30 thalers (\$21.60) per year.

Wages of masons.—Men and women at work on an addition to the factory earn as follows:

Bricklayers, per week, 5 thalers, \$3.60.

Master masons, 6 thalers, \$4.32.

Women to mix mortar and assist the masons, earn during the building season 4 thalers, (\$2.88.) These women are chiefly from Bohemia, who return home and remain during the winter.

Nottingham Knitting Company. (Mr. Felkner, manager.) Established by Mr. Mundella, M. P., of England, who is one of the principal stockholders.

Wages of men in factory, average \$3.60 per week.

Wages of females in factory, \$1.50 to \$2.50 per week; average, \$1.44.

Their principal factory is at Pausa, a small village of about 200 inhabitants, near Hof, and not far from Bavaria, where from 2,000, chiefly females, are employed. They have their knitting-frames at their homes, where all the members of the family work, and even but from 3 to 4 thalers per week, at piecework. They receive from 4 to 130 sgr, (\$1.06 to \$3.12,) per dozen. On the finest hose, selling at 8 thalers per dozen, the price paid is but 130 groschen, and as a family of ordinary size can complete but 1 dozen per week, their earnings (\$3.12) are very small. In the factory at Pausa the females earn but from 1 to 2 thalers, (72 cents to \$1.44,) per week.

H. Starke & Co., manufacturers of common cotton hosiery, employ about 300 hands.

The men earn 5 thalers per week, \$3.60.

Women to finish goods, $2\frac{1}{2}$ to 3 thalers, \$1.80 to \$2.16.

LEIPSI, SAXONY.

The two annual statements of Mr. Consul Stenart, as given below, exhibit the kind and value of merchandise manufactured in this district which in the years indicated found a market in the United States.

Statement of the description and value of merchandise certified at the Leipzig consulate and exported to the United States during the years ending September 30, 1873 and 1872.

Kind of merchandise.	Value.	
	1873.	1872.
Woolen and half-woolen goods		
Furs and skins	\$89,634	\$1,306,639
Cotton and linen goods	523,782	430,399
Books, music and pictures	322,776	363,560
Musical and other instruments	370,770	280,505
Laces and trimmings	255,833	273,955
Drugs	169,976	279,658
Kid gloves	83,409	99,144
Human hair	90,616	163,577
Toys and fancy-ware	86,265	87,564
Bristles	55,556	66,315
Machinery and iron-ware	35,447	47,619
Miscellaneous	6,515	14,064
Total value in United States gold dollars	53,438	29,430
	2,929,057	3,448,540

Leipzig is celebrated for its three annual fairs, and for its extensive book-making establishments. Its book trade being the largest in the world, the following brief notice may prove interesting.

THE BOOK TRADE OF LEIPSI.

It is a fact well known to the literary and scientific world that this city distances all others in the book trade, particularly for works in the German tongue; and not for that alone, but also in the majority of modern and dead languages.

As the American author intrusts his manuscript to a publisher in New York, Boston, or Philadelphia, so does the French writer with one in Paris, the English with one in London, and the German, and, it might almost be said, those of the rest of Europe, with the publishers of Leipzig, this being the metropolis of German letters, and only a few good works are published at other places in the German Empire.

The sale of books forms one of the most important branches of commerce here; it alone is said to amount to two millions of dollars yearly. In fact the whole book trade of Germany is centered on the spot, and every bookseller in Germany and the adjoining countries has an agent here. Six hundred booksellers sometimes assemble at the Easter fair to settle their annual accounts and purchases, and there are 130 residents and 40 printing-offices. They have an exchange of their own called the Deutsche Buchhändler Börse, where they meet and transact business.

Among the most distinguished publishers are F. Brockhaus, editor of the far-famed Conversations-Lexicon, and Baron Tauchnitz.

The Leipzig City Directory for 1871 gives the names of 249 book-firms in a population of 106,925, smaller than that of Washington City, of which 114 are publishers, part of them having their own printing-establishments; 21 are book-commission-merchants; 21 are music-publishers and dealers; 6 are antiquarians, some of them being firms of great importance.

The celebrated Leipzig auction-sales of books and objects of art are conducted by three book-firms, at certain regular stated periods. In 1868, twelve such auctions were held, resulting in the aggregate sales of 54,200 works, comprising some 260,000 volumes, and net proceeds of \$36,000. In 1869, there were eleven auction-sales, with 69,000 works and 250,000 volumes, an aggregate sale of \$54,600. The most important sale during this year was that of the library of the late Emperor Maximilian of Mexico, which realized \$16,560, and attracted purchasers not only from England and France, but from the United States.

Besides these book-auctions, there were two autograph-auction-sales, consisting of 3,300 numbers, and six auctions of objects of art, numbering 15,000.

In the year 1870, in consequence of the Franco-German war, there were but seven auctions of books and six of objects of art.

Comparative statement of the works published by the German book-trade of Leipzig during the years 1868, 1869, and 1870.

Subject of works.	1868.	1869.	1870.
Encyclopedias; works of reference; science of literature.....	196	262	271
Theology.....	1,410	1,697	1,470
National economy and law; politics and statistics.....	970	1,141	1,411
Medical, surgical, veterinary sciences.....	528	517	412
Natural sciences; chemistry and pharmacy.....	636	675	535
Philosophy.....	186	157	103
Educational and text books.....	966	1,151	957
Juvenile.....	246	322	245
Classics and oriental languages; antiquity and mythology.....	440	471	369
Modern languages.....	332	335	297
History and biography.....	710	634	692
Geography.....	290	369	274
Mathematics and astronomy.....	131	121	114
Military science and horses.....	281	308	212
Commerce and industry.....	425	424	411
Architecture, machinery, railroads, and navigation.....	190	213	192
Forestry and hunting; mining and smelting.....	83	93	91
Housekeeping, agriculture, and gardening.....	290	305	331
Belles-lettres.....	958	999	739
Fine-arts; copy-books and stenography.....	437	435	346
Freemasonry.....	11	8	381
Miscellaneous works.....	381	364	369
Slavic and Hungarian works.....	38	62	50
Periodicals.....	237	235	271
Total for each year.....	10,348	11,161	9,866
Total for three years.....	31,375		

LEIPSIK FAIRS.

This quaint old city reposes in its normal inactivity, except during one of those seasons of the year when it becomes the principal mart and exchange of Northern Europe.

Three large fairs are held here annually, one beginning the first of January, called *Neujahrs messe*; another, the second Sunday after Easter, or the *Oster messe*; and, lastly, the Michaelmas *messe* in October. Of these three, each of them lasting three weeks, the Easter fair, already referred to, is by far the most important. These fairs are visited by merchants and foreigners from the most distant parts of the globe,

of 249 book-firms
Washington City, of
in printing-estab-
music publishers
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aggregate sales of
net proceeds of
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The most impor-
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of Leipzig during the

1868.	1869.	1870.
196	902	871
1,436	1,007	1,150
970	1,141	1,013
528	547	419
636	675	535
126	157	103
966	1,131	997
246	322	235
410	471	369
332	335	297
710	634	692
270	269	254
134	124	114
281	308	242
425	424	411
199	213	192
53	93	91
280	265	331
958	909	739
437	435	346
14	8	381
384	364	389
34	62	59
237	335	274
10,348	11,161	9,808
31,375		

, except during
principal mart

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day after Easter,
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sometimes to the number of its actual population. The money transac-
tions at one time amounted to 80,000,000 of thalers annually, though of
late they have fallen short of this sum.

These fairs date back to the middle ages, and for a long period have
been well known throughout all Europe. Indeed, among all the multi-
tude of foreigners who flock together every spring to transact their
business in Leipsic, it is probable that many a well-educated Greek and
Asiatic knows more about this one city than he does about the country
to which he belongs. During the fair all the principal squares and
streets of the city are filled with long lines of temporary booths, in addi-
tion to the ordinary shops, in which goods of all kinds are exposed for
sale—hardware, cloths, Bohemian glass and porcelain, furs of every
variety, pottery, boots and hats, artificial flowers and hair, jewelry, toys,
pipes and amber-work—in short, it is one great bazaar, where no pro-
duct of human industry seems to be without its mart.

Every hotel and lodging-house is filled to overflowing; the streets
are thronged with strange costumes and faces. Persians and Arme-
nians, with their peculiar manners and dress; Polish Jews, with their
long black buttoned-up frocks reaching to the ankles, gaunt, wily-look-
ing men, and excellent specimens of the typical Israelite; Tyrolese,
Americans, and English, Greeks and Turks, are mingled together as in
a masquerade. The real business of the fair is seldom seen by the
tourist, being carried on at the exchange, or bourse, as it is called, where
the merchants meet and transact their business.

Most of the countries of Europe send representatives here with their
produce. Three or four hundred guests sit down daily at the table-
d'hôte of some of the principal hotels; gardens and coffee-houses are
thronged; theaters are filled, and the concert and beer-gardens, as well
as the circus-tents, crowded.

Reaching Leipsic a few days before the October fair, the author was
nevertheless prevented, owing to previous arrangements for visiting
manufacturing districts which constituted the main purpose of his visit,
from remaining during its continuance. Its near approach was indicated
by the booths which were in course of erection, as well as by the crowded
state of the hotels, and the consequent increase of prices for accommoda-
tion.

MECHANICAL LABOR.

Rates of wages in Leipsic and vicinity in 1872.

Trades.	Time.		Wages.
	Per day.	Per week.	
Blacksmiths	\$0 41 to \$0 92
Bricklayers	76 to 97
Cabinet-makers	65 to 72
Carpenters	76 to 92
Coopers	3 57 to 4 23
Machinists	3 57 to 4 23
Plasterers	4 28 to 5 71
Shoemakers	3 57 to 4 65
Stone-cutters	5 00 to 5 47
Tailors	3 57 to 4 65
Tanners	3 57 to 4 23
Tim-smiths	3 21 to 3 57
Wheelwrights	3 21 to 3 57

FARM LABOR.

Experienced hands in summer, per day, 65 cents; in winter, 60 cents.
Ordinary hands in summer, 60 cents; in winter, 57 cents.
Female servants, per month, \$1.70, with board.

FACTORY LABOR.

The rates of wages in many of the manufacturing towns in the consular district of Leipzig appear, on previous pages, under the heading "Factory labor in Germany." The following information in regard to a glove-factory in Altenburg was furnished in a letter from the proprietors, under date of August 20, 1872:

KID-GLOVE FACTORY, ALTENBURG, DUCHY OF SAXONY.

The number of workmen consists of 1,800 persons, men, women, and children, some 300 of whom are employed in the factories, while the remainder of them take the work to their homes.

The average weekly earnings are as follows:

Glove-makers, from 6 thalers, \$4.32, and upward.

Tanners, (kid,) 6 thalers, \$4.32.

Dyers, 4 to 4½ thalers, \$2.88 to \$3.24.

Day-laborers, 4 to 4½ thalers, \$2.88 to \$3.24.

Sewers, (children included,) 1 to 2 thalers, \$0.72 to \$1.44.

The usual hours of labor are from 6 a. m. to 7 p. m., with an interruption of half hour for breakfast, one hour for dinner, (at noon,) and half hour for luncheon, (at 4 p. m.)

It is difficult to give the exact amount of the expenses either of a family or of a single person; and a general rule in regard to the expenditures of the laboring classes cannot be accurately stated, as the outlay is governed by the income, which is usually all expended.

Although France has almost monopolized the production of goat-skin gloves, in which she excels, yet Germany manufactures to a large extent the medium qualities, which, being less expensive, are more readily sold. Germany was represented at the World's Exhibition at Vienna by many of its most important glove-manufacturers. Favorable local circumstances, enabling the manufacturer to combine tanning and dyeing with the production of gloves, and the introduction of new methods for perfecting the article, has conduced to make German gloves an important article of export. There are in the German Empire towns whose principal branch of industry is glove-making, such as Altenburg, above referred to; Halberstadt, in Prussia; Erlangen, in Bavaria; Arnstadt, in Thuringia; Haynan, in Silesia; and Esslingen, in Württemberg.

DRESDEN, SAXONY.

The capital of the kingdom of Saxony is more celebrated for its art-treasures than for manufactures. Few European capitals contain a greater number of objects calculated to gratify a refined taste. Enriched with extensive collections of paintings and statuary, with museums of antique and modern art, libraries, and public gardens, it has become a favorite resort for the wealthy of all nationalities, large numbers of whom make it their place of permanent abode. It is a favorite residence of English and American families, and among its inhabitants may be found many men of learning and talent. Dresden gives its name to the renowned porcelain ware which is made in its vicinity, chiefly at Meissen, about 28 miles distant. Although manufactories and other industrial establishments have not hitherto been erected, yet, as the United States consul at that place states in his communication, "the steamships on the river Elbe, which divides the city into two parts, the old and the new, (Altstadt and Neustadt,) and which is navigable from a point a little above Prague in Bohemia to Hamburg on the German Sea, and the iron-horse on the land, were irresistible in opening even the city of Dresden, euphemistically called 'Elbe Athens,' to the inroads of an industrial era."

DRESDEN-WARE.

China ware or porcelain was originally brought from the country after which it is named, and was first made in Europe at Meissen, in 1710, by

one Böttcher, an alchemist, who, after wasting a great deal of the gold of his patron (Augustus I, King of Poland and Elector of Saxony) in his search for the philosopher's stone, stumbled, by accident, upon a more sure method of producing the precious metals by the discovery of an art which has served to enrich his countrymen. This manufactory, so celebrated in the time of Augustus II, was annihilated in the "seven-years' war," being then plundered and its workmen and models carried away by Frederick the Great. It continued to enjoy royal patronage at a heavy expense to the private purse of the Saxon sovereign, but the king has lately ceded it to the government. It is now carried on for profit, and cheapness being the object, it now produces a revenue, but the articles made are very inferior to those of former times.

EXPORTS TO THE UNITED STATES.

That the market in the United States for the productions of the Dresden consular district is by no means extensive, will be shown by the following table:

Statement showing the exports to the United States from the Dresden consular district during the year ended September 30, 1873.

Description.	Value.	Description.	Value.
Drugs		Musical instruments and merchandise	\$132, 721
Earthen ware and lava goods	\$37, 834	Photographic paper and paper goods.	44, 243
Glass ware	68, 397	Porcelain	25, 522
Gloves	394, 388	Toys and ornaments	28, 295
Hosiery	75, 689	Watch-movements	17, 970
Laces, embroideries, and trimmings	150, 455	Woolen and half-woolen goods	90, 110
Linon and half-linen goods	104, 209	Sundries	79, 993
	34, 509		
		Total.....	1, 219, 995

The following information was furnished by Mr. Brentano, United States consul at Dresden, and although not classified under distinct headings, in uniformity with similar data from other manufacturing districts, yet it is deemed best in this instance to insert the report entire:

LABOR IN THE MANUFACTURING DISTRICTS OF SAXONY AND BOHEMIA.

Annaberg and the surrounding mountainous country, including Buchholz, carries on chiefly the manufacture of laces, gimps, guipures, fringes, gloves, &c.

Laces are made by women and girls in villages surrounding the before-named towns; good workers and such as have experience make from 2½ to 3 thalers (\$1.80 to \$2.16) a week, working fourteen hours a day; girls and old women do not exceed 1 to 1½ thalers (\$0.72 to \$1.08) a week.

Board is cheaper in the country than in town; working-girls pay about ⅔ thaler (48 cents) a week; a family of five expends about 3 thalers, (\$2.16.)

Children in the country are obliged to attend school as regularly as those in town, but only three to four hours a day, and up to their fourteenth year.

Fringes, &c., are chiefly made in town, by men, women, and children, and they mostly work in their dwellings. The working-hours for men are from 7 to 12 a. m. and from 1 to 7 p. m., (eleven hours,) and they earn from 3 to 4 thalers (\$2.16 to \$2.88) a week. Women and children do the lighter part of this work; they labor fourteen hours a day and earn from 2 to 3 thalers (\$1.44 to \$2.16) a week. A family consisting of five members, (man, wife, and three children,) if diligent, can make about 7 thalers (\$5.04) a week.

Children attend school regularly five hours a day, from their sixth to their fourteenth year, inclusive.

Embroiderers, (girls,) who work in stores ten hours a day, earn from 2 to 2½ thalers (\$1.44 to \$2.22) a week.

Board and lodging for an unmarried laboring-man ranges from 1½ to 2 thalers, (\$1.08 to \$1.44), for a girl, 1 thaler (72 cents) a week. A family consisting of five members generally uses up the earnings of a week, *i. e.*, 7 thalers, (\$5.04.)

Gloves.—A good glove-knitter, working twelve hours a day, may earn 7 to 8 thalers (\$5.04 to \$5.76) a week; girls working in the factory ten hours a day make 2½ to 3 thalers (\$1.80 to \$2.16) a week. Girls who sew at home and work twelve hours a day earn 1½ to 2 thalers (\$1.08 to \$1.44) a week. Children are not employed in glove-making.

Markneukirchen, as well as the villages and small towns around it, form a district in the southwest corner of Saxony, where a specialty is made of the manufacturing of musical instruments of various descriptions.

There are only men employed in these manufactories. They work eleven hours a day, and earn during that time from 22½ groschen to 1 thaler, (51 to 72 cents,) *i. e.*, 4½ to 6 thalers (\$3.24 to \$4.32) a week.

The expenses of a married laborer for rent may be estimated at 30 to 40 thalers (\$21.60 to \$28.80) a year. Unmarried workmen pay from 2½ to 3½ thalers (\$1.80 to \$2.52) for board and lodging a week.

Children are obliged to attend school from the seventh to their fourteenth year, but there are advantages offered for further improvement.

Olbernhau, Zschoppau, Waldkirchen, &c., is a district in Saxony where, chiefly, toys are manufactured.

Men working in these toy-factories, either by the piece or by the hour, (twelve hours a day,) earn from 3 to 5 thalers (\$2.22 to \$3.60) a week.

Women and girls working on the same conditions make from 2 to 3 thalers (\$1.44 to \$2.16) a week.

Children work eight hours a day—the remaining four hours being devoted to their school—and receive 1 thaler (72 cents) a week. They cease attending school when fourteen years old.

Board and lodging for an unmarried man ranges from 1.20 to 1.25 thalers (\$1.24 to \$1.32) a week; for an unmarried woman or girl, from 1.05 to 1.10, (84 to 96 cents.)

Freiberg, a town of about 20,000 inhabitants, 1,200 feet above the level of the sea, known for its excellent Mining Academy, has also one of the largest manufactories of gold and silver laces, trimmings, fringes, sandal laces, &c., in Saxony, probably in all Germany.

Here, as well as in all other manufacturing districts of Saxony, most of the work is done by the laborers in their dwellings; in this instance chiefly that of wire-drawing, fringe-making and lace-making. The latter work is usually performed by married women and their grown daughters, and as they have also to perform their household duties, it is difficult to give a certain number of hours for their working time.

The wages of employés in this branch of manufacturing are as follows:

1. Men who work in the manufactory 12 hours a day receive from 2.15 to 3.25 thalers (\$1.80 to \$2.76) a week.

2. Wire-drawers working at home make from 4 to 8 thalers (\$2.88 to \$5.76) a week.

3. Fringe-makers who also work in their dwellings earn from 3.20 to 5 thalers (\$2.64 to \$3.60) a week.

4. Girls who either spin or embroider work on machines in the manufactory, 12 hours a day, earn from 1 to 2 thalers (\$0.72 to \$1.44) a week.

5. Lace-makers, (married women,) working in their homes, earn from 1 to 1½ thalers (\$0.21 to \$0.84) a week.

In regard to board and lodging it may be said that girls usually live with their parents and pay nothing, their earnings being so little.

Unmarried men pay annually for rent from 15 to 20 thalers, (\$10.80 to \$14.40.) Generally the expenses for living may be considered the same as stated in the districts of Markneukirchen and Annaberg.

The glass-manufacturing district of Northern Bohemia.

Workmen in this branch of manufacturing are divided into two classes, viz: class A, those who live in their own dwellings and do the polishing, painting, gilding, and the lower kind of engraving; and class B, those who work in establishments or *ateliers*. The former do not keep certain hours, but work as they please, and earn, according to the demand for labor, from 9 to 15 florins (\$3.60 to \$6) a week, while the latter adhere to a working time of 8 hours a day, and receive a fixed pay, which varies, according to their abilities, from 12 to 20 florins (\$1.80 to \$8) a week.

Women are only employed for polishing the glass and gilding, and for packing the goods, and earn from 3 to 5 florins (\$1.20 to \$2) per week.

Children are not employed until they are fourteen years of age, and, consequently, free from school duties. After that time they are apprenticed as painters or engravers, these being the easiest employments. They are obliged to serve four years, unless the apprentice has the means to pay to his master board and lodging for the first year; in that event he serves only three years.

There is a great difference in the habits and in the social standing and enlightenment of these work-people, which, in fact, is indicated by the kind of labor which they perform.

The people belonging to class A are, if I may term it so, a rough class, and have to subsist on 6 florins (\$2.40) per week for each family.

Those belonging to class B, among whom are found real artists, and who also live not work) in their own dwellings, cannot support their families upon less than from 15 to 20 florins (\$6 to \$8) a week.

Unmarried men of class B pay from 6 to 10 florins (\$2.40 to \$4) a week for board and lodging.

MECHANICAL AND FARM LABOR.

Statement showing the wages of skilled and other workmen in Dresden, Saxony.

Occupations.	Per day.	Per week.
Skilled workmen:		
Blacksmiths.....	\$0.60 to \$0.84	\$3.60 to \$5.04
Bricklayers or masons.....	60 to 74	3.60 to 5.04
Cabinet-makers.....	72 to 96	4.32 to 5.76
Carpenters.....	72	4.32
Coopers.....	72	4.32 to 5.76
Machinists.....	60 to 84	3.60 to 5.04
Painters.....	54 to 72	3.24 to 4.32
Shoemakers.....	72	4.32
Tailors.....	72	4.32
Tim-smiths.....	48 to 72	2.88 to 4.32
Farm-hands:		
Expert-hand hands.....	48	Per month.
Ordinary hands.....	36	7.20
Common labor, (not farm).....	24	5.40
Female servants.....		2.16 to 3.60

FRANKFORT-ON-THE-MAIN.

Frankfort, formerly a free town, was the seat of the German Diet down to the year 1866, when it was annexed to Prussia. It lies on the right bank of the Main, and is connected by a stone bridge with the suburb of Sachsenhausen on the left bank. In 1871 it had 90,748 inhabitants, of whom 3,000 were Jews. Many of the houses in the new town, especially in the principal street, called Zeil, in the Neue Mainzer and Tamms-Strasse, and on the quays facing the Main, inhabited by rich merchants, bankers, or diplomatists, are palaces. Nothing is more pleasing here than the belt of boulevard gardens, replacing the ramparts and studded with handsome detached villas.

The old town, on the other hand, with its narrow streets and quaint wooden buildings, with gables overhanging their basement-stories, forms a complete contrast to the new. Many of the houses are of great antiquity, especially in the quarter around the cathedral and Römerberg, and preserve all the characteristics of "the ancient imperial free city."

Frankfort has long been the financial metropolis of continental Europe; the cradle of the Rothschilds. In the Jews' quarter the old house, so long occupied by the family, and where the grandmother of the present Baron Rothschild died in a recent year, was standing in 1872.

Exports to the United States.

The following statement shows the exports to the United States from the consular district of Frankfort-on-the-Main for the fiscal year ended June 30, 1873:

Articles.	Value.	Articles.	Value.
Leather, hides, and skins	\$454,131 35	Mineral-water	\$6,999 93
Hares and hatters' fur	183,636 55	Frankfort printing-black	8,939 11
Jewelry, precious and imitation stones	146,529 48	Perfumery and soap	3,631 37
Wine, brandy, beer, and cider	139,186 46	Type and copper matrices	2,338 43
Linen, wooden, and cotton goods	173,171 79	Emery-stones	1,497 33
Human hair and hair works	97,323 08	Seed	10,731 58
Leather goods	8,457 98	Macaroni	63,141 11
Silk and silk goods	35,635 59	Clay-models	7,413 65
Fancy goods	3,299 53	Earthen ware	5,499 35
Iron, hardware, iron goods, and machines	16,516 53	Shoe and horn buttons	5,218 55
China and glass ware	21,812 40	Hops	10,390 59
Pipes	14,680 50	Prunes, fruit-juice, and dried fruit	31,140 11
Drugs, chemicals, and dyes	45,924 58	Marble blocks	2,817 30
Gum	9,964 45	Crimenillerie	16,693 32
Kid gloves	31,857 71	Toys	1,497 14
Stationery, paper, books, prints, &c.	17,467 84	Sundries	3,833 61
Cement	2,227 41	Total	1,628,634 97

RATES OF WAGES IN 1874.

The advance in the prices paid for labor in Frankfort and vicinity, especially in building-trades, is thus stated by Hon. W. Prentiss Webster, United States consul-general:

There has been a great advance in the rates of labor and a corresponding increase in the prices of rent and provisions. There is now going on in nearly every city of Germany an immense and wholly unparalleled amount of building, as well as many public improvements, such as water-works, sewers, and similar undertakings. This great amount of work in cities has drawn not only the men and boys from all the villages, leaving the women to do the work in the country, but has also drawn thousands of skilled laborers from the northern part of Italy, who find employment as masons, carpenters, painters, and some as laborers. Still the supply of labor does not equal the demand.

LABOR IN GERMANY.

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Daily wages of skilled workmen in the building-trades.

Trades.	Wages.
Bricklayers or masons.....	\$1 00 to \$1 30
Carpenters.....	80 to 1 20
Painters.....	80 to 1 00
Plasterers.....	1 00 to 1 20
Stone-cutters.....	1 20 to 1 60

Daily wages of farm-laborers and others.

	With board.	Without board.
Experienced hands.....	20 10 to 29 30	10 80 to 21 00
Ordinary hands.....	30 10 to 50	20 to 30
Common laborers at other than farm-work.....	50 to 70	30 to 50
Female servants.....	2 00 to 3 00	70 to 80
	per month.	

Weekly wages of skilled workmen in the city of Frankfurt and in the neighboring town of Offenbach.

(The dollar computed at 40 cents, United States gold.)

Occupations.	Frankfurt.	Offenbach.
Bakers, (including board).....	\$1 00 to \$6 00	\$2 80 to \$1 60
Bonnet-makers.....	4 00 to 5 20	2 80 to 4 00
Bookbinders.....	4 20 to 4 80	4 80 to 8 00
Braziers.....	6 00 to 8 00	4 80 to 6 40
Carpenters.....	5 20 to 6 00	4 80 to 6 40
Cigar-makers.....	4 00 to 4 80	4 00 to 1 80
Confectioners, (including board).....	4 00 to 6 00	2 20 to 3 60
Coppers.....	4 80 to 7 20	5 00 to 6 40
Engravers.....	4 90	4 80 to 7 20
Furriers.....	4 80 to 6 00	3 20 to 4 00
Goldsmiths.....	6 40 to 8 00	6 00 to 8 00
Joiners.....	6 00 to 7 20	4 80 to 8 00
Kettle-makers.....	4 80 to 6 00	6 30 to 7 20
Leather-dressers.....	8 40 to 9 60	6 00 to 7 20
Machinists.....	6 00 to 9 60	4 80 to 10 00
Marble-cutters.....	7 20 to 9 60	5 60 to 7 20
Marble-polishers.....	5 00 to 6 00	4 80 to 6 00
Masons.....	7 20 to 8 40	6 00 to 7 20
Painters, house.....	4 80 to 6 00	4 80 to 7 20
Printers.....	4 80 to 6 00	5 60 to 7 20
Proof-readers.....	4 80 to 6 00	5 60 to 7 20
Pump-makers.....	7 20 to 8 40	5 60 to 7 20
Saddlers.....	7 20 to 9 60	5 00
Shoemakers.....	4 80 to 6 00	4 00 to 4 80
Slaters.....	6 00 to 7 20	4 00 to 4 80
Stone-cutters.....	7 20 to 9 60	5 60 to 7 20
Tailors.....	4 20 to 6 00	4 00 to 6 00
Trunk-makers.....	4 80 to 6 00	4 00 to 6 00
Upholsters.....	4 80 to 6 00	4 00 to 6 00
Waiters, (including board).....	4 80 to 6 00	4 00 to 6 00
Waiters in hotels, (including board).....	4 80 to 6 00	4 00 to 6 00
Watchmakers.....	4 00 to 6 00	4 80 to 7 20
Workmen, unskilled.....	4 20 to 4 80	2 80 to 4 80

* On piecework.

STUTTGART, WÜRTENBERG.

The manufacture of textile fabrics, chiefly of cotton and of half wool, of gold and silver articles, gloves, leather, and musical instruments, constitutes the principal industries of this famed city. The cotton-spinning manufactories employ upward of 270,000 spindles and 3,850 operatives. The number of power looms employed in weaving cotton tissues has increased since the year 1861 from 2,250 to 3,000; the number of hand-looms in use is about 12,500.

The value of the annual production of cotton fabrics was estimated

German Diet
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bridge with the
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in the year 1861 at upward of \$5,000,000. Stuttgart, although by no means equal to Leipsic, yet holds a high position in the book-trade, having numerous book-selling establishments. The Stuttgart book-trade is reputed to produce annually \$1,500,000.

LABOR IN WÜRTTEMBERG IN 1872.

Unable from a want of time to visit any part of this kingdom, the author availed himself of the proffered services of Mr. J. Oberndorf, formerly of Baltimore but now a resident of Stuttgart, to procure information in regard to the cost of labor and of provisions. The following statement not only gives the prices of both at different periods, but their absolute and relative increase. It is gratifying to learn that as compared with 1830 the advance in wages has been greater than in the necessities of life, and the condition of the working classes has been consequently improved.

STUTTGART, September, 1873.

The feeling of security since the close of the great German-French war, and the general belief in the probability of a lasting peace, have given a great impetus to the development of industrial enterprise in Germany during the past few years, and the increased demand for labor has resulted in a considerable advance in the rates of wages. Tables given below are based on reliable information obtained during the autumn of 1872, from manufacturers, mechanics' unions, and official authorities all over Württemberg, and are compared with those given in the report of the chamber of commerce for the year 1865. They are the average wages paid to adult males:

I.—Wages in factories, (by decades.)

Industrial establishments.	1830-'39.	1840-'49.	1850-'59.	1860-'65.	1872.
Cotton-spinning	\$0 27	\$0 30	\$0 33½	\$0 41	\$0 56
Cotton-weaving	27½	27	32	40	55
Wool-spinning	27	27	32	44	62
Woolen-cloth factories	26½	28	33½	41	51½
Chemicals	27½	27	33½	38	46
Paper	24	27	33	38	52
Wall-papers	28	29	36	48	60
Silver-ware	43½	47	57	70	80
Jewelry	40	47	50	64	97½
Pianos	36	41½	50½	61	97
Outfry	27	32	40	41	52
Japaned tin-ware	36	46	56	60	70
Printing	41	50	50	67	97½

NOTE.—The prices in this and subsequent statements were given in florins, which have been computed at 40 cents.

II.—Daily wages of mechanics, (by decades.)

Occupations.	Württemberg.					City of Stuttgart.
	1830-'39.	1840-'49.	1850-'59.	1860-'65.	1872.	1872.
Blacksmiths	\$0 23½	\$0 27	\$0 37	\$0 42	\$0 51	\$0 70
Bricklayers and masons	27	31	37	52	63½	83
Carpenters	27	30	36	49	61½	84
Coppersmiths	25½	29	33½	42	61½	67
Outfry	26	29	33½	40	51½	60
Dyers	27½	31½	37	42	51	70
Harness-makers	24	27½	32	38	53½	60
House-painters	37	43	52	66	78	96
Joiners	25	28	33	40	55½	60
Laborers on public works	24	24	28	34	47	70
Locksmiths	26	28	33	41	55	60
Shoemakers	21	23	28	31	48	52
Stone-masons	34	39	47	64	82	1 40
Tailors	21½	24	29½	31½	52	60
Tanners	28	30	35	41	53	60
Turners	25½	28	33½	39½	60	60
Turners	24	25½	31½	36	53	60
Average for factory hands, (male adults) ..	31½	35½	41½	51½	67½	69
Average for mechanics, (male adults) ..	26	29½	34½	42½	52½	62½

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	1872.	1872.
	\$0 51	\$0 70
	63½	83
	61½	84
	61½	67
	51½	60
	51	70
	53½	60
	78	66
	50½	60
	47	70
	55	60
	48	62
	58	1 40
	52	60
	53	60
	60	60
	53	60
	67½	63
	42½	43

LABOR IN GERMANY.

545

The former custom of journeymen and apprentices boarding and lodging with their employers is, as a general thing, only kept up yet in the country; in the larger cities only exceptionally. Where board and lodging are given, it is calculated at the average rate of 2½ kreutzers (1½ cents gold) per day.

Wages of masons and other mechanics employed in house-building, especially in the city of Stuttgart, have increased more than that of other trades on account of the extraordinary growth of the city and the consequent demand for masons, bricklayers, carpenters, painters, &c.

At present a good stone-mason can earn about 5 florins per day in Stuttgart. This is of importance to the neighboring villages, who furnish a considerable proportion of these workmen. As a consequence agricultural pursuits are more neglected, and the tilling of the soil left more to the female part of the family, because the father, with his sons, finds employment in the stone-quarries much more profitable. The vine-culture in these places suffers from the same cause.

It is to be regretted that the fondness of drink, (although generally only of beer and not of stronger beverages,) prevents the working people from saving any considerable part of their now relatively-good earnings.

The percentage of increase in the rates of wages was as follows:

Classes.	In 1872 as com- pared with 1850-55.	In 1872 as com- pared with 1860-65.
I.—Factories:		
Cotton-spinning.....	Per cent. 107	Per cent. 26
Cotton-weaving.....	132	37
Wool-spinning.....	124	41
Woolen-cloth factories.....	92	17
Chemicals.....	97	21
Paper.....	117	37
Wall-papers.....	114	37
Silver-ware.....	85	11
Jewelry.....	143	52
Pianos.....	162	52
Cutlery.....	95	18
Japaned tin-ware.....	94	17
Printing.....	121	46
The average advance paid to men employed in factories.....	114	31
II.—Mechanics:		
Dyers.....	85	21
Turners.....	88	30
Stone-masons.....	159	51
Bricklayers and other masons.....	132	22
Builders and carpenters.....	130	26
Plaster-painters.....	111	18
Blacksmiths.....	137	45
Locksmiths.....	110	34
Coppersmiths.....	142	46
Cutlers.....	97	28
Turners.....	137	52
Tailors.....	154	41
Boat and shoe makers.....	132	50
Harness-makers.....	131	41
Joiners.....	141	46
Turners.....	121	38
The average advance paid to mechanics.....	119	46
III.—Day-laborers on public works.....	124	37
	133	37

But this advance has not entirely contributed to improve the condition of the working classes, as on the other hand the prices of the necessities of life have advanced in a similar ratio. The price of dwellings in Stuttgart has advanced within the last ten years from 50 to 75 per cent. In the country the advance has been comparatively small. Now, let us see the advance in the price of bread, meat, beer, and firewood:

Years.	Average prices per 100 pounds (which is 1½ per cent. less than the hundred-weight in America, the latter being equal to 101.6045 German pounds) of—				Average prices per pound of—		
	Spelt.	Grain.	Rye.	Barley.	Beef.	Pork.	Vreal.
1833-'42.....	\$1 33	\$1 55	\$1 29	\$1 37	\$0 05.8	\$0 05.47	\$0 05
1856-'65.....	1 53	2 47	1 59	1 66	9.63	9.07	7.93
1872.....	2 21½	3 11	2 34	2 06	11.67	14.67	14

Advance in 1872.

Years.	On spelt.	On grain.	On rye.	On barley.	On beef.	On pork.	On vreal.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
1872 compared with 1833-'42 ..	66	67	75	50	153	168	180
1872 compared with 1856-'65 ..	28	26	36	24	61	62	76

Years.	Average advance in the price of—	
	Breadstuffs.	Meat.
From 1833-'42 until 1872	<i>Per cent.</i> 65	<i>Per cent.</i> 157
From 1856-'65 until 1872.....	26	76

The prices of beer and of fire-wood were as follows:

Years.	1 schoppen beer = 0.44 liter.	1 cord wood = 144 württ. cubic feet = 31.500 württ. cubic metrs.	
		Thickery.	Pine.
1830-'39.....	\$0 01.17	\$6 90	\$5 30
1850-'65.....	1.67	9 49	6 49
1872.....	2.27	11 60	6 90

This makes the average advance in 1872:

Years.	On beer.	On thickery wood.	On pine wood.	On pine and thickery wood to- gether.
	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>	<i>Per cent.</i>
Compared with 1833-'42.....	91	68	31	77
Compared with 1856-'65.....	36	23	6	15

The advanced prices of fire-wood have caused the consumption of coal and coke to assume much larger proportions. These are preferred by all whose first object is

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economy, as they are much cheaper than wood, and many of the old-fashioned wood-
stoves now take the place of coal-stoves even in the country.
If we put together, for purposes of comparison, the ADVANCE of wages and of the
price of bread, meat, beer, and wood, the following result:

average prices per pound of—

Beef.	Pork.	Veal.
05.8	\$0 05.47	\$0 07
9.03	9.07	7.99
11.67	14.67	14

Years.	Wages of me- chanics and in factories.	Breadstuffs.	Meat.	Beer.	Wood.
From 1830-39 or 1832-42 to 1872.....	Per cent. 119	Per cent. 65	Per cent. 167	Per cent. 94	Per cent. 50
From 1860-65 or 1866-65 to 1872.....	34	26	66	36	15

Compared with 1830, the advance of wages has been greater than the advance in the
prices of the necessities of life; so in general, and especially with some of the branches of
trade, the condition of the working-classes has experienced a considerable amelioration.

INDUSTRY OF WÜRTENBERG IN 1871.

The following information in regard to labor in Württemberg in the
years 1870 and 1871, before the advance in the rates of wages resulting
from the termination of the Franco-German war had taken place, is con-
densed from the British consular reports:

Out of a population of 1,748,332 inhabitants, 50 per cent. are employed in agricul-
ture, and 269,077 in other kinds of industry. These last are distributed as follows:

On beef.	On pork.	On veal.
Per cent. 153	Per cent. 168	Per cent. 180
61	62	76

Average advance in the price of—	Breadstuffs.	Meat.
Per cent. 65	Per cent. 17	Per cent. 11
26		

Classes.	Employed in—		Total.
	Manufactures and handicrafts.	Commerce and carrying-trade.	
Employers and overseers.....	111,339	21,719	133,058
Workmen.....	111,141	9,023	120,164
Workwomen.....	13,741	2,120	15,861
Total.....	236,221	32,862	269,077

It has been calculated that the capital of the nation, by aid of the laboring popula-
tion, returns a revenue of 10 per cent.

The following statistics will help to give a further idea of the mode in which labor
is distributed among the different branches:

Forty-four thousand three hundred and forty-four persons are employed in the prep-
aration of food. The principal establishments in this class of manufactures are—

Grain-mills.....	2,684
Distilleries.....	18,000
(N. B.—Of this number only 55, or 60 per cent., are at present at work.)	
Breweries.....	2,367
Chicory manufactories.....	4
Beet-root sugar manufactories.....	5

Four establishments, employing 325 hands and 5,200 spindles, are engaged in spinning
flax. Linen is mostly hand-woven in Württemberg. This trade employs 19,567 work-
men and 19,379 looms. The number of power-looms in present use is 27.

Seventy-five establishments are engaged in spinning woolen yarn, employing,
in the aggregate, 60,000 spindles and 2,300 workmen.

Three manufactories for carding wool, employing 20,000 spindles and 13,500 workmen,
are employed in the manufacture of woolen tissues.

Twenty-two, working with 144 hand and 45 power looms, and occupying 836 work-
men, are engaged in the manufacture of flannels and mixed stuffs.

There are upward of sixty manufactories engaged in Württemberg in the construc-
tion of machines; six of these engaged on metals in the construction of locomotives.

Thirty-four establishments are engaged in working precious metals. Besides these,
there are many large factories working in all classes of iron, bronze, and zinc manu-
factures, and employing a large portion of the industrial population, the number of
which does not appear in the official returns published.

The present average rate of wages may be generally stated as follows:

1 cord wood = 144 württ. cubic feet = 31,000 Württ. cubic meters.	Hickory.	Pine.
17	\$6 00	\$5 20
17	9 40	6 40
17	11 00	6 40

On pine and hickory wood to- gether.	On pine wood.
Per cent. 31	Per cent. 6
15	

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WAGES IN TOWNS.

For the most ordinary class of labor, 40 cents to 48 cents per day, or \$2.40 to \$2.88 per week; while skilled labor in the higher branches of industry, *e. g.*, of an engine-builder, or first-class mechanic, commands as high as \$6 to \$8 a week.

The worst paid labor is that of journeymen tailors and cobblers. On the occasion of a threatened strike of cobblers in May, 1870, it was represented that the rate of payment for piecework was so low that it was impossible, even by working fourteen and fifteen hours a day, to earn more than four or five florins (\$1.60 to \$2.00) per week. The masters maintained that good work could obtain double that amount of wages. They, however, agreed to raise their former wages from 15 to 25 per cent.

WAGES IN THE COUNTRY.

Wages vary considerably, according to the time of year. In winter labor is very cheap; while in summer, and particularly during the harvest time, it will command even higher wages than in towns. Instances are not rare where as much as 75 cents and 78 cents a day have been paid for day laborers. When in receipt of equal wages, the position of the country laborer is naturally far better than that of the workman in town; his wants being much more easy to supply, especially in the item of lodging, the rent of which is very high in the larger towns, and constantly on the increase. A married workman in Stuttgart has, at the present moment, to pay from \$35 to \$50 a year for a lodging consisting of two rooms and a kitchen, while in the country he could easily lodge himself for half that sum.

The rates of wages in factories vary according to the distance of the factories from the capital. In the cotton-spinning manufactory near Esslingen, about four miles from Stuttgart, the wages for a good male spinner vary from 36 cents to 75 cents a day; a good female hand receives 36 cents a day. The working hands in this establishment have the advantage of procuring excellent lodgings built by their employers, and consisting of four good rooms each, with kitchen and cellar, at the moderate rent of from \$20 to \$30 a year.

In the calico manufactory at Heidenheim, the present rates of wages are 37 cents a day for a male hand, and 22 cents for women's and children's labor. It may be observed, however, that Heidenheim is situated in one of the cheapest districts of Württemberg, and the purchasing power of wages is accordingly higher than in other parts of the country. Wages in this factory have increased 12 per cent. since 1855, and 4 per cent. in the last year.

The most marked rise in wages is in the building trade in Stuttgart. This business was one of the first to suffer at the outbreak of the war; but within the last year it has received such an impetus as to have affected the price of labor in various other branches of industry, and over a very extended radius.

The following rates of daily wages of workmen employed by the Stuttgart Building Society was furnished by the secretary of the society:

Class of laborers.	Amount.	Class of laborers.	Amount.
Ditchers and diggers.....	\$0 66	Locksmiths.....	\$0 64
Bricklayers.....	79	Blacksmiths.....	54
Ordinary laborers, hodmen.....	58	Butchers.....	58
Ordinary laborers, boys.....	45	Thimble makers.....	60
Masons.....	91	House-painters.....	74
Carpenters.....	72	Room-painters.....	81
Plasterers.....	1 00	Upholsterers.....	54
Joiners.....	66	Paviors.....	83
Glaziers.....	62		

BAVARIA.

Interesting as a visit to Bavaria, and especially to its art-renowned capital, would have been, its manufacturing industries were not sufficiently varied and extensive to induce the author to depart from his prescribed route through the manufacturing towns of the continent. The population of Bavaria is principally engaged in agricultural pursuits. Its manufactures are chiefly connected with science and the fine arts. They comprise philosophical instruments, paint colors, lithographic stones, gold and silver leaf, carriages, and cloth-stuffs. It is

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Workers.	Amount
.....	\$0.66
.....	54
.....	55
.....	68
.....	67
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.....	54
.....	83

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noted particularly for its breweries, of which there are five thousand six hundred, making one hundred million gallons of beer annually, mainly consumed within the country. Nearly two-thirds of the revenue of the state is derived from this source. Next to beer, coarse linen is the most important product of manufacturing industry, and of late years a number of cotton-factories have been erected. Leather is somewhat extensively manufactured, as are also paper, articles of straw and wood, porcelain, glass, nails, needles, jewelry, beet-root sugar, and tobacco.

Munich, it is true, has some eminently good iron, bronze, and bell foundries, but its chief glory consists in its fine galleries of painting and sculpture. It owes its prosperity chiefly to the amount of court-favor bestowed upon it. Within the last fifty years this town, as a focus of artistic activity, has been largely developed, and its material prosperity augmented in a proportionate degree; and now there are few, if any, towns in Europe, of the same size, which count in so many public edifices and institutions devoted to the purpose of art and science, as this, the capital of Bavaria, and the acknowledged metropolis of South-ern Germany. It has a university with seventeen hundred students, and a library containing 147,000 volumes and 5,294 manuscripts. Twelve newspapers are published in the town. Its porcelain is exported, like that of Dresden, to different parts of Europe.

AGRICULTURAL LABOR IN GERMANY.

Professor Dr. Freiherr v. d. Goltz, of Königsberg, who has undertaken the elaboration of the "Investigation into the condition of the rural laborers in Germany," initiated by the congress of German agriculturists, has recently published, in the *Concordia*, preliminary tables of the wages usually paid to agricultural laborers in different parts of Germany. These tables refer to such laborers only as, although not under contract-obligations, are steadily employed during the whole year, earning no other emoluments. The rates of wages for summer and winter represent the average of all reports received, aggregating nearly one thousand four hundred, so that each amount in the seventy-three classes enumerated below represents the mean of nearly twenty reports.

Statement showing the daily wages in summer and winter, respectively, of agricultural laborers in the under-mentioned 73 districts of Germany, in the year 1874.
[30 Silbergroschen = 1 thaler = 72 cents, United States gold.]

Districts.	Places.	In summer.	In winter.	Average.
Province of Prussia:				
1 District of Gumbinnen	\$0.56.10	\$0.46.80	\$0.51.60
2 District of Königsberg	31.65	19.68	25.66
3 District of Danzig	32.60	21.60	27.10
4 District of Marienwerder	31.32	21.36	27.1
Average		31.25	19.86	25.55
Province of Pomerania:				
5 District of Gdansk	33.84	26.40	30.12
6 District of Stettin	29.36	22.61	25.98
7 District of Stralsund	37.81	29.52	43.65
Average		33.68	26.40	35.04
Province of Posen:				
8 District of Bromberg	38.88	21.12	30.00
9 District of Posen	27.84	18.24	23.04
Average		33.36	19.68	26.52

Statement showing the daily wages in summer and winter, &c.—Continued.

District.	Places.	In summer.	In winter.	Average.
Province of Brandenburg:				
10	District of Potsdam	30.42	29.26.88	30.34.14
11	District of Frankfurt-on-the-Oder	33.12	31.24	32.18
	Average	31.56	30.26	31.26
Province of Silesia:				
12	District of Liegnitz	24.96	18.96	21.96
13	District of Breslau	23.52	17.56	20.54
14	District of Oppeln	18.96	14.64	16.80
	Average	22.48	17.12	19.80
Province of Saxony:				
15	District of Merseburg	36.72	28.32	32.52
16	District of Magdeburg	41.76	29.28	35.52
17	District of Erfurt	38.88	22.80	31.84
	Average	35.12	26.80	30.96
Province of Hanover:				
18	District of Hanover	36.72	30	33.36
19	District of Hildesheim	31.80	29.28	30.54
20	District of Lüneburg	42	31.44	36.72
21	District of Osnabrück	39.12	34.32	36.72
22	District of Amberg	43.92	31.92	37.92
23	District of Stade	52.08	36	44.04
	Average	41.44	32.16	36.80
24	Province of Schleswig-Holstein	48.24	31.68	39.96
Province of Westphalia:				
25	District of Münster	39.60	31.68	35.64
26	District of Minden	32.16	28.08	30.12
27	District of Arnberg	51.84	39.36	45.60
	Average	41.28	34.12	37.20
Province of Rhenish Prussia:				
28	District of Düsseldorf	47.76	37.20	42.48
29	District of Cologne	42.72	32.88	37.80
30	District of Aix-la-Chapelle	45.12	33.60	39.36
31	District of Treves	45.68	32.40	39.14
32	District of Coblenz	34.80	29.28	32.04
	Average	42.72	33.12	37.92
33	Province of Hesse-Nassau	38.64	30.72	34.68
34	Principality of Waldeck	31.20	24	27.60
35	Principality of Lippe-Deimold	36	24	30
36	Hanseatic city Bremen	66.24	48	55.52
37	Grand-duchy of Oldenburg	50.40	36	43.20
38	Hanseatic city Lübeck	33.60	28.80	31.20
39	Duchy of Lauenburg	38.88	25.68	32.28
40	Grand-duchy of Mecklenburg	35.52	32.40	33.96
41	Duchy of Brunswick	37.20	31.68	34.44
42	Duchy of Anhalt	30	26.16	28.08
43	Grand-duchy of Saxe-Weimar	33.12	23.52	28.32
44	Duchy of Saxe-Coburg-Gotha	31.80	26.88	29.34
45	Duchy of Saxe-Altenburg	35.52	26.88	31.20
46	Duchy of Saxe-Meiningen	27.36	22.08	24.72
Kingdom of Saxony:				
47	District of Leipzig	46.08	38.32	42.20
48	District of Dresden	43.68	36.20	39.94
49	District of Zwickau	38.81	28.36	33.58
50	District of Bautzen	31.20	28.08	29.64
	Average	38.45	28.80	33.62
Kingdom of Bavaria:				
51	District of Palatinat	39.84	32.64	36.24
52	District of Lower Franconia	34.84	24.24	29.54
53	District of Middle Franconia	36.72	23.52	30.12
54	District of Upper Franconia	31.80	21.36	26.58
55	Arch-bishopric of Upper Palatinat and Regensburg	28.32	23.04	25.68
56	District of Lower Bavaria	37.68	30.24	33.96

—Continued.

Statement showing the daily wages in summer and winter, &c.—Continued.

Districts.	Places.	In summer.	In winter.	Average.
57	District of Upper Bavaria	\$0 44 88	\$0 33 36	\$0 39 12
58	District of Suabia and Newburg	47 56	34 08	40 82
	Average	37 23	27 81	32 52
	Kingdom of Württemberg.			
59	District of Neckar	49 02	38 64	44 33
60	District of Jaxt	40 32	29 56	35 04
61	District of Ludw.	41 64	34 08	37 86
62	District of Black Forest with Hohenzollern	43 44	29 56	36 60
	Average	41 58	33 06	38 82
	Grand-duchy of Baden:			
63	Valley of the Lower Rhine	43 20	35 28	39 24
64	Valley of the Upper Rhine	46 80	37 20	42 00
65	Lower Mountains	37 20	29 52	33 36
66	Upper Mountains	49 20	38 16	43 68
67	Surroundings of Lake Constance	44 40	36 24	40 32
	Average	41 46	35 28	38 37
	Grand-duchy of Hesse-Darmstadt:			
68	Province of Starkenburg	38 64	30 24	34 44
69	Province of Rhenish Hessa	30 96	30 96	30 96
70	Province of Upper Hessa	35 44	26 88	31 16
	Average	35 68	29 36	32 52
	Alsace-Lorraine:			
71	District of Lower Alsace	36 80	39 60	43 20
72	District of Upper Alsace	41 92	41 56	45 88
73	District of Lorraine	52 08	36 96	44 52
	Average	43 60	39 44	41 52

PRICES OF BREADSTUFFS IN WÜRTTEMBERG.

Statement showing the average prices of breadstuffs in Württemberg in the years from 1833 to 1873.

The lowest prices occurred in the years—

	1836.	1841.
Wheat	83 78	.....
Spelt	1 62	.....
Rye	2 58	.....
Barley .....	.....	82 24
Oats .....	.....	1 12

The highest prices occurred in the years—

	1847.	1854.	1873.
Wheat	\$0 97	\$10 23	88 00
Spelt	4 27	3 90	3 00
Rye	7 11	8 12	6 34
Barley	6 08	6 24	6 29
Oats	2 80	3 02	2 93

* One scheffel — 5.648 bushels.

The high prices in 1873 are the result of the small harvest in 1872, and a decidedly poor harvest in 1873, together with a sinking price of gold during the last years.

Average prices of other provisions.

	1872.	1873.
Pence.....	\$3 52	\$3 74
Lentils.....	3 59	3 82
Beans.....	3 31	3 38
Potatoes.....	77	87
Hay.....	58	57
Straw.....	45	42
MEATS,		
Beef, (fat).....	14	15.3
Beef.....	12.6	13.3
Cow.....	12	12.6
Pork.....	14	15.3

II.—COST OF LIVING IN GERMANY.

The rates of wages in manufacturing establishments in various parts of Germany, also of mechanics and farm-laborers, which obtained in 1872, when a personal investigation was made, as well as in previous and subsequent years, are presented in the preceding pages in such variety and to such extent as to indicate not only the absolute cost of labor in that country, but the relative rates as compared with those of other portions of continental and insular Europe, and with those of the United States. A just comparison with the latter country cannot, however, be made unless the purchasing power of the wages be ascertained; for, if a machinist in Berlin earn ten thalers (\$7.20 gold) per week, and another of equal skill in Philadelphia receives \$12 in gold, it would be manifestly incorrect to say that the American earned 66 per cent. more than the German workman, unless \$7.20 in Philadelphia would purchase as much food, clothing, house-rent, and other necessities, as ten thalers in Berlin, which is not the case. To aid in forming a correct estimate of the purchasing power of wages in Germany, tables showing the prices of provisions and other necessities of life are presented in the succeeding pages. To guard against erroneous conclusions, however, it must be stated here, as it has been heretofore done in relation to Great Britain, that the prices given in the tables referred to do not indicate with entire accuracy the cost of the necessities of life in Germany as compared with those in the United States. For example, the average market-price of superfine flour is as great in the former as in the latter country, but as it is not commonly used by the German workman, its price is comparatively of little importance as an element in the computation. If, however, a skilled laborer from the United States should obtain employment in Germany and subsist largely upon wheaten bread and animal food as he has been accustomed to at home, instead of in chief part upon rye-bread and beer,* the value of the following tables for purposes of comparison would be greatly enhanced.

* In the city of Prague, during the year 1873, the consumption of beer was on an average 72 gallons for every man, woman, and child in the city.

harvest in 1872,
sinking price of

	1872.	1873.
..	\$3 52	\$3 74
..	3 59	3 82
..	3 31	3 38
..	77	87
..	58	57
..	45	42
..	14	15.3
..	12.6	13.3
..	12	12.6
..	14	15.3

Y.

in various parts
which obtained in
s in previous and
s in such variety
cost of labor in
h those of other
ose of the United
not, however, be
certained; for, if
o per week, and
gold, it would be
66 per cent. more
a would purchase
es, as ten thalers
correct estimate of
ving the prices of
n the succeeding
ever, it must be
o Great Britain,
licate with entire
as compared with
e market-price of
country, but as it
is comparatively
n. If, however, a
employment in
d animal food as
f part upon rye-
purposes of com-

of beer was on an

Although great care has been taken in the computation, yet it is be-
lieved that in some cases the "pound" as expressed in the tables is
really the German "pfund," which is equivalent to $1\frac{1}{4}$ English pounds.

It will be observed that the blank forms to which the prices of pro-
visions in the following tables are attached, are the same as those used
in the United States, and do not in all respects conform to the German
classifications; as, for instance, in the different designations of sugar
and domestic dry goods.

It is also believed that, in many cases, the figures given in the tables
represent the prices of better qualities of the articles specified than are
generally consumed by the working classes.

Statement showing the prices of provisions, groceries, and other leading articles of consumption, with house-rent and board, in the towns of Dresden, Chemnitz, and Leipzig, Saxony, in 1872, 1873, and 1874.

[The thaler computed at 72 cents.]

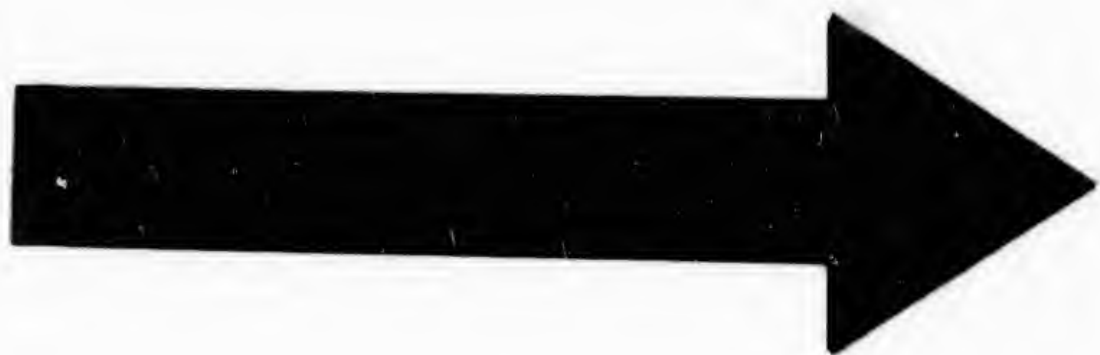
Articles.	Dresden.		Chemnitz.	Lepsic.	Average in Saxony.
	1872.	1873.	1872.	1873.	
PROVISIONS.					
Flour:					
Wheat, superfine..... per barrel.			\$5 88	\$8 83	£7 35
Wheat, extra family..... do.....			8 91	10 27	9 60
Rye..... do.....	\$7 46		8 88 to 7 06	8 35	7 11
Corn-meal..... do.....			5 88 to 7 06		6 47
Beef:					
Fresh, roasting-places..... per pound..	13	\$0 19	15	15	16
Fresh, soup-pieces..... do.....	12	17	13	12	14
Fresh, rump-steaks..... do.....	17	21	16	15	14
Canned..... do.....	17	11			14
Veal:					
Fore-quarters..... do.....	11			12	12
Hind-quarters..... do.....	11		10	11	12
Cutlets..... do.....		21	12	15	17
Mutton:					
Fore-quarters..... do.....	13		12	11	12
Leg..... do.....	12	19	13		13
Chops..... do.....	12	19	11	15	16
Pork:					
Fresh..... do.....	14	16	15	15	15
Canned or salted..... do.....	15	17	17	17	16
Bacon..... do.....	18	21	20	21	21
Hams, smoked..... do.....	18	21		21	21
Shoulders..... do.....	18		14		18
Sausages..... do.....	13	12	13		14
Lard..... do.....	11	19	21	21	20
Codfish, dry..... do.....		10			10
Butter..... do.....	\$0 30 to 29	38		34	34
Cheese..... do.....	12 to 21	12		22	16
Potatoes..... per bushel..	80	86	48	51	60
Rice..... per pound..	67	67	67	67	67
Beans..... per quart..	65	11	61	11	68
Milk..... do.....	65		65	61	67
Eggs..... per dozen..	14	20	14	21	17
GROCERIES, ETC.					
Tea—Oolong, or other good black..... per pound..	51	72	60		61
Coffee:					
Rio, green..... do.....	21	29	23		25
Rio, roasted..... do.....	29	36	50		32
Sugar:					
Good brown..... do.....	08 to 10	11	12	12	11
Yellow C..... do.....	08 to 10		13		11
Coffee B..... do.....		11	11	15	14
Sirup..... per gallon..	38 to 61	75	(per lb.) 63		72
Soap, common..... per pound..	07 to 10	10	08	11	09
Starch..... do.....	07	08	07	10	08
Fuel:					
Wood, hard..... per cord..	6 48	7 29	5 00	9 60	7 67
Wood, pine..... do.....	4 86	5 52	3 60	8 80	5 50
Oil, coal..... per gallon..		37		39	38
DRY GOODS, ETC.					
Shirtings:					
Brown, 4-4, standard quality..... per yard..	09			15	12
Bleached, 4-4, standard quality..... do.....	11			15	13
Sheetings:					
Brown, 9-8, standard quality..... do.....				38	38
Bleached, 9-8, standard quality..... do.....				38	38
Cotton-flannel, medium quality..... do.....			18	24	20
Tickings, good quality..... do.....			29	19	20
Prints..... do.....	10	11		19	13
Monselme de laines..... do.....	60			36	48
Satines, medium quality..... do.....	21				21
Boots, men's heavy..... per pair..	26 11 to 288	3 21	3 24		3 08
HOUSE-RENT.					
Four-roomed tenements..... per month..	5 64		2 40		3 72
Six-roomed tenements..... do.....	7 20				7 20
BOARD.					
For men, (mechanics or other workmen)..... per week..	2 16 to 2 52				2 34
For women employed in factories..... do.....	1 08 to 1 25				1 17

1872.	1874.	Average in 1874.
85 78	88 83	87 35
8 94	10 27	9 10
107 06	8 35	7 43
107 06		6 45
15	15	16
14	14	14
10	14	12
12	15	13
12	14	13
13	15	14
14	15	15
13	24	18
21	21	21
01	21	11
65	01	07
14	21	17
60		63
23		25
30		32
12	12	11
13		11
14	15	14
00	11	09
08	11	09
07	10	08
5 00	9 60	7 07
3 60	2 80	3 20
	39	35
	15	12
	15	13
	34	35
	34	35
	24	23
	30	30
	19	13
	36	44
3 24		3 05
	3 21	
2 40		2 32
	3 32	
	1 24	
	1 17	

Statement showing the prices of provisions, groceries, and other leading articles of consumption, with house-rent and board, in the undenominated towns of Prussia, in 1872 and 1874.

[The thaler computed at 72 cents.]

Articles.	1872.		1874.		1872.		1874.		1872.		1874.		1872.		1874.		1872.		1874.											
	Alex. & Cla- pelle.	Cologne.	Düsseldorf.	Elberfeld.	Berlin.	Dantzig.	Average in Prussia.	Flour:	Wheat, superfine, per barrel.	Wheat, extra family do.	Rye do.	Corn do.	Barley do.	Fresh, meringues, per pound.	Fresh, soups, pieces do.	Fresh, rumpsteaks, do.	Veal, do.	Pork, do.	Mutton, do.	Lard, do.	Butter, do.	Cheese, do.	Poultry, do.	Rice, do.	Beans, do.	Milk, do.	Eggs, do.	Tobacco, do.	Tea—Oolong or other good black do.	
	\$10 01 10 48 5 62	\$10 44 12 21 7 20	\$8 60 11 11 5 92	\$11 76 11 11 9 11	\$11 10 11 11 6 28	\$10 24 10 25 11 21 12 02 6 05 5 46	\$10 24 10 25 11 21 12 02 6 05 5 46																							
Flour:																														
Wheat, superfine, per barrel.																														
Wheat, extra family do.																														
Rye do.																														
Corn do.																														
Barley do.																														
Fresh, meringues, per pound.																														
Fresh, soups, pieces do.																														
Fresh, rumpsteaks, do.																														
Veal, do.																														
Pork, do.																														
Mutton, do.																														
Lard, do.																														
Butter, do.																														
Cheese, do.																														
Poultry, do.																														
Rice, do.																														
Beans, do.																														
Milk, do.																														
Eggs, do.																														
Tobacco, do.																														
Tea—Oolong or other good black do.																														



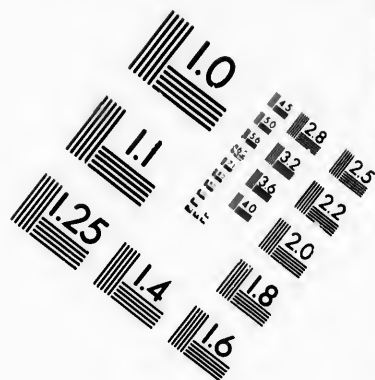
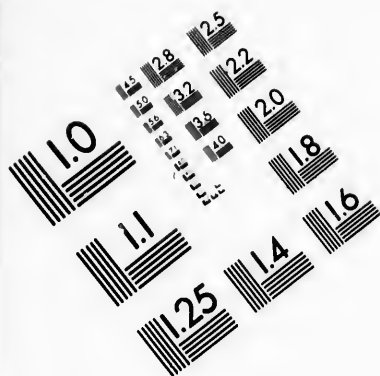
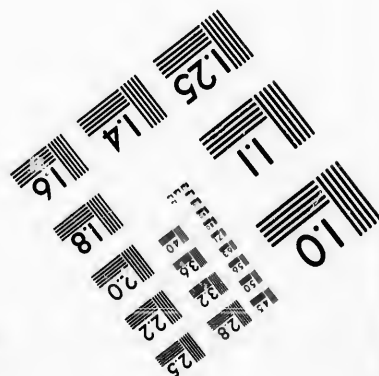
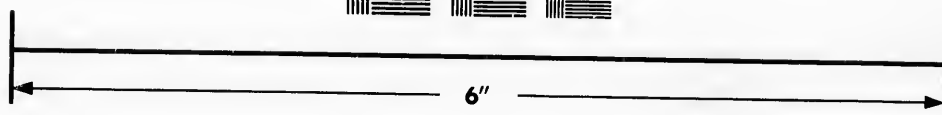
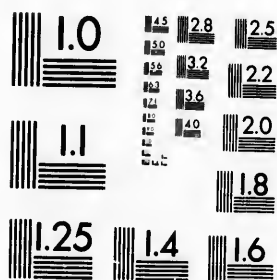


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Statement showing the prices of provisions, groceries, and other leading articles of consumption, with house-rent and board, &c.—Continued.
[The thaler computed at 72 cents.]

Articles.	1872.		1874.	1872.		Average in Prussia.
	Aix-la-Chapelle.	Cologne.	Düsseldorf.	Barmer and Eberfeld.	Berlin.		Danzig.
GROCERIES, ETC.						
Coffee: Green	\$0 27	\$0 22 to \$0 24	\$0 36	\$0 29	\$0 24	\$0 27
Do., roasted	32	47		35	26	39
Sugar:						
Good brown			08	Not used.		11
Yellow C.			12			13
Coffee B.				Per pound, 11	\$0 12 to 13	14
Sugar common	Per pound, 11	05	\$0 05 to 08	06	\$0 09 to 10	74
Starch	11	10 to 11	14	12	10 to 12	12
Fuel:						
Coal, best	5 52	7 68	4 32	4 50	6 72	6 66
Coal, second hand	3 39		3 35	Not used.	5 58	4 83
Wood, hard	3 45		38	34		56
Wood, pine	50	45				50
Oil, coal						
DRY GOODS, ETC.						
Shirtings:						
Brown, 4-4, standard quality	10	08	11	11	10	10
Bleached, 4-4, standard quality	14	08	14	14	14	13
Sheetings:						
Brown, 8-8, standard quality	14	14		Not used.	15	15
Bleached, 8-8, standard quality	15	16		Not used.	16	16
Cotton dammed, medium quality	15		19	18	15 to 42	28
Do., good quality	26		16	24	24 to 30	34
Do., low quality	14	13	16	17	11 to 12	14
Woolens, de la lince			14	24		17
Sail nets, medium quality	41					41
Sail nets, heavy	2 00	2 58 to 4 08	1 50 to 3 00	\$1 50 to 2 83	2 16 to 3 96	2 72
HOUSE-RENT.						
Four-roomed tenements	2 rooms, 1 95	7 20		1 room, 1 41	5 61 to 10 08	5 58
Size-roomed tenements		10 80		1 50 to 2 52	for 2 rooms.	8 50
Board:				2 58 to 3 00	for 3 rooms.	
For men, (mechanics or other workmen)	2 76	1 68 to 2 52	2 40	2 40	1 40	1 80
For women employed in factories		1 41	1 68	1 68	1 41	1 42

[The thaler computed at 72 cents; the florin at 40 cents.]

* General average of this statement and of the two on preceding pages.

Prices of the following articles in Frankfurt-on-Main and Offenbach.

Articles.	Frankfort.	Offenbach.
Lamp-oil.....per liter..	\$0 19	.....
Petroleum.....do.....	08	.....
Olive-oil.....do.....	26	.....
Railroad.....do.....	24	.....
Linen for shirts, bleached, (width, 6-4 meter).....per meter..	\$0 20 to	25
Linen for shirts, unbleached, (width, 6-4 meter).....do.....	16 to	25
Linen for sheets, bleached, (width, 6-4 meter).....do.....	40 to	60
Linen for sheets, unbleached, (width, 6-4 meter).....do.....	30 to	40
Cotton.....do.....	18 to	32
Cotton, for bed-ticks,.....do.....	18 to	24
Boots, for men.....per pair..	2 50 to 4 00	\$2 00 to \$5 00
Boots of best make.....do.....	5 00 to 7 00	4 00 to 6 50
Shoes for women.....do.....	1 50 to 2 50	1 20 to 2 00
Shoes of best make.....do.....	5 00 to 7 00	4 00 to 6 00
Shoes, for children.....do.....	50 to 1 50	32 to 40
HOUSE RENT.		
One room, for a single man.....per month..	2 00 to 3 50	1 00
Two rooms and kitchen.....per year..	50 00 to 100 00	28 00 to 60 00
Three rooms and kitchen.....do.....	60 00 to 125 00	36 00 to 64 00
Three, four, five, or more workmen occupying one room, each, per month..	1 20	.....

In reference to the above, Mr. Consul-General Webster writes under date of October 14, 1874 :

I send herewith a list of the prices of the necessities of life in the cities of Frankfort and of Offenbach. The latter is almost wholly a manufacturing city where leather goods, machinery, carriages, &c., are made.

In the cost of the necessities of life there cannot be much difference between the two places. The articles sold in a place like Offenbach are of an inferior quality to those sold generally in Frankfort. But there is not a corresponding difference in the prices. The same quality sold in the lowest-class places in Frankfort would be about the same prices, perhaps a little lower.

In a letter dated a few months previously, Mr. Webster thus wrote in regard to the high prices of the necessities of life in Germany :

If, as is probable, the demand for labor will not continue to be so great as now is, wages must still increase, in consequence of the advancing prices of labor and cost of living. Rents have generally doubled within the last three years. Within my own knowledge, tenements, which rented in 1869 at from 800 to 1,200 florins, now rent from 2,000 to 3,000 florins. Common laborers occupy but very few rooms, and they pay often 12 to 20 florins for two small rooms per month. For a tenement, 300 to 500 florins. Congress may well raise compensation of its consuls, when they pay \$1,000 per year rent, and bring their bread from California.

The prevailing idea is that the cost of living is very much less in Europe than in the United States. I think that the experience of most persons and families now living in the cities of Europe satisfies them that there is but little difference between American and European cities, if we except our very largest cities. There is not much difference in rents, furniture, and provisions. There is a difference in clothing, house-help, and carriage-hire. Fuel is dearer, and gas is dearer here than in the United States. Of course, in the country and small towns rents are very different from the cities. In other things there is not much difference. Of course a person will live differently in the country from what he will live in a city, therefore he will live cheaper. If an American lives in a European city in the style and manner that he has lived at home, his expenses will not be materially less. People go abroad to live cheaper than at home. In order to accomplish it they live in smaller quarters, and in a meaner style. Travelers have often remarked to me that their bills at hotels are larger here than when in New York City. Also, that traveling by railroad with baggage is also dearer than in the United States. The general charge is 2½ to 3½ cents per mile, and baggage extra. Two hundred pounds of baggage costs about as much as a passenger.

n Europe than in the families now living here is not much difference in clothing, houses than in the United States different from the way a person will live in Europe will live cheaper. That he has lived in Europe to live cheaper than in the United States, and in a meaner hotel are larger here with baggage is also a cent per mile, and much as a passenger.

n Europe than in the families now living here is not much difference in clothing, houses than in the United States different from the way a person will live in Europe will live cheaper. That he has lived in Europe to live cheaper than in the United States, and in a meaner hotel are larger here with baggage is also a cent per mile, and much as a passenger.

from January to October, inclusive, in the year 1874.

Months.	Wheat, 50 kilograms.			Rye, 50 kilograms.			Barley, 50 kilograms.			Oats, 50 kilograms.			Hay, per cwt.		
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
January.....	\$2 24	\$3 02 40		\$2 58	\$2 46	\$2 52 40	\$2 40	\$2 46	\$2 43 40	\$2 52	\$2 46	\$2 49	\$2 96	\$2 54	\$2 82 40
February.....	3 34	3 06 40		3 53	3 41 40		3 46	3 52		3 96	3 54		4 06	3 51	3 83 30
March.....	3 24	3 08 40		3 53	3 49 40		3 45	3 53 40		3 96	3 53		4 06	3 51	3 83 30
April.....	3 16 20	3 16 20		3 52	3 47 40		3 39	3 50 40		3 96	3 53		4 06	3 51	3 83 30
May.....				3 52	3 47 40		3 41 40			3 96	3 53		4 06	3 51	3 83 30
June.....				3 52	3 47 40		3 41 40			3 96	3 53		4 06	3 51	3 83 30
July.....				3 52	3 47 40		3 41 40			3 96	3 53		4 06	3 51	3 83 30
August.....	3 02 40	2 50 30	2 80	3 52	3 47 40	3 53 40	3 39 40	3 45 40	3 43 40	3 96	3 53	3 83 30	4 06	3 51	3 83 30
September.....	3 20 20	2 50 30	2 80	3 52	3 47 40	3 53 40	3 39 40	3 45 40	3 43 40	3 96	3 53	3 83 30	4 06	3 51	3 83 30
October.....				3 52	3 47 40		3 41 40			3 96	3 53		4 06	3 51	3 83 30
November.....				3 52	3 47 40		3 41 40			3 96	3 53		4 06	3 51	3 83 30
December.....				3 52	3 47 40		3 41 40			3 96	3 53		4 06	3 51	3 83 30
Total.....	18 30 40	16 30 20	16 35 60	25 02 40	23 43 40	23 53 20	22 52 40	23 52 40	23 52 40	25 02 40	23 43 40	23 53 20	26 02 40	24 46 40	24 50 40
Average.....	1 63 04	1 03 92	1 03 76	2 50 26	2 54 36	2 53 32	2 52 31	2 52 31	2 52 31	2 56 36	2 54 36	2 55 32	2 62 02	2 50 01	2 51 11

Weight, about 15 pounds; 50 kilograms; 110.2 pounds.

Statement showing the prices of provisions in the Berlin market, &c.—Continued.

Months.	RECEIVED BY LAND.											
	Straw, 60 bundles.			Pease, 5 liters.*			Lentils, 5 liters.			Beans, 5 liters.		
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
January.....	\$10 08	\$7 92	\$8 83.50	\$5 36	\$3 24	\$4 25.50	\$0 43	\$0 30	\$0 35	\$0 42	\$0 30	\$0 35.60
February.....	9 72	7 92	8 92.50	36	24	28.60	42	30	35.40	42	30	36.80
March.....	10 08	7 92	8 92.50	36	24	28.60	42	30	35.40	42	30	36.80
April.....	10 08	7 92	8 92.50	36	24	28.60	42	30	35.40	42	30	36.80
May.....	10 08	7 92	8 92.50	36	24	28.60	42	30	35.40	42	30	36.80
June.....	9 72	7 92	8 92.50	36	24	28.60	42	30	35.40	42	30	36.80
July.....	10 08	7 92	8 92.50	36	24	28.60	42	30	35.40	42	30	36.80
August.....	9 72	7 92	8 92.50	36	24	28.60	42	30	35.40	42	30	36.80
September.....	9 72	7 92	8 92.50	36	24	28.60	42	30	35.40	42	30	36.80
October.....	10 08	7 92	8 92.50	36	24	28.60	42	30	35.40	42	30	36.80
Total.....	98 38	79 92	89 31.60	3 75	2 30.40	2 91.30	4 44	2 92.50	3 54.30	4 32	2 57.60	3 63.20
Average.....	9 82.80	7 99.20	8 93.16	37.50	25.04	29.13	44.40	29.25	33.42	43.30	28.76	36.52
												5.91
												7.71

Months.	FLOUR.											
	Wheat-flour, per pound.			Coarse wheat-flour, per pound.			Fine rye-flour, per pound.			Coarse rye-flour, per pound.		
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
January.....	\$0 72	\$0 48	\$0 60.50	\$0 08.40	\$0 06	\$0 07.50	\$0 04.50	\$0 06	\$0 03.45	\$0 04.50	\$0 03	\$0 03.60
February.....	72	48	50.40	08.40	06	07.50	04.50	06	03.45	04.50	03	03.60
March.....	72	48	50.40	08.40	06	07.50	04.50	06	03.45	04.50	03	03.60
April.....	66	48	50.40	08.40	06	07.50	04.50	06	03.45	04.50	03	03.60
May.....	66	48	50.40	08.40	06	07.50	04.50	06	03.45	04.50	03	03.60
June.....	66	48	50.40	08.40	06	07.50	04.50	06	03.45	04.50	03	03.60
July.....	1 46	60	1 06.20	07.20	06	06.80	04.80	06	03.60	04.80	03	03.60
August.....	1 44	60	1 06.20	07.20	06	06.80	04.80	06	03.60	04.80	03	03.60
September.....	1 56	48	1 06.20	07.20	06	06.80	04.80	06	03.60	04.80	03	03.60
October.....	78	48	62.60	08.40	06	07.50	04.50	06	03.45	04.50	03	03.60
Total.....	8 68	5 16	7 30.60	34	60	68.40	63.20	48	53.20	64.20	30	33.40
Average.....	88.60	51.60	72.60	63.40	60	66.74	61.92	48	55.52	61.74	30	33.38

* 1 liter = 0.908 United States quart; 5 liters = 4.51 United States quarts, or about 11 gallons.

Statement showing the prices of provisions in the Berlin market, &c.—Continued.

* 1 liter = 0.269 United States quart; 5 liters = 4.51 United States quarts, or about 11 gallons.

Months.	FAIRNA.										PEARL BARLEY.										GRITS.									
	Of wheat, per pound.					Of buckwheat, per pound.					Fine, per pound.					Middling, per pound.					Of wheat, per pound.									
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
January.....	\$0 09.40	\$0 07.20	\$0 08.50	\$0 09.60	\$0 06	\$0 07.20	\$0 09.40	\$0 07.20	\$0 08.50	\$0 08.40	\$0 07.20	\$0 07.20	\$0 08.40	\$0 06	\$0 07.20	\$0 08.40	\$0 06	\$0 07.20	\$0 08.40	\$0 06	\$0 06.00	\$0 08.40	\$0 06	\$0 06.00	\$0 08.40	\$0 06	\$0 06.00	\$0 08.40	\$0 06	\$0 06.00
February.....	08.40	07.20	08.50	09.60	06	07.20	09.40	07.20	08.50	08.40	07.20	07.20	08.40	06	07.20	08.40	06	07.20	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50
March.....	09.40	07.20	08.50	09.60	06	07.20	09.40	07.20	08.50	08.40	07.20	07.20	08.40	06	07.20	08.40	06	07.20	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50
April.....	09.40	07.20	08.50	09.60	06	07.20	09.40	07.20	08.50	08.40	07.20	07.20	08.40	06	07.20	08.40	06	07.20	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50
May.....	09.40	07.20	08.50	09.60	06	07.20	09.40	07.20	08.50	08.40	07.20	07.20	08.40	06	07.20	08.40	06	07.20	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50
June.....	09.40	07.20	08.50	09.60	06	07.20	09.40	07.20	08.50	08.40	07.20	07.20	08.40	06	07.20	08.40	06	07.20	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50
July.....	09.40	07.20	08.50	09.60	06	07.20	09.40	07.20	08.50	08.40	07.20	07.20	08.40	06	07.20	08.40	06	07.20	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50
August.....	09.40	07.20	08.50	09.60	06	07.20	09.40	07.20	08.50	08.40	07.20	07.20	08.40	06	07.20	08.40	06	07.20	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50
September.....	09.40	07.20	08.50	09.60	06	07.20	09.40	07.20	08.50	08.40	07.20	07.20	08.40	06	07.20	08.40	06	07.20	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50
October.....	09.40	07.20	08.50	09.60	06	07.20	09.40	07.20	08.50	08.40	07.20	07.20	08.40	06	07.20	08.40	06	07.20	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50	08.40	06	06.50
Total.....	96	72	86.80	83.40	60	69.60	96.00	78.60	87	84	78.40	87	84	78.40	87	84	78.40	87	84	78.40	87	84	78.40	87	84	78.40	87	84	78.40	87
Average.....	09.10	07.20	08.50	08.34	06	06.96	09.00	07.80	08.70	08.40	05.85	07.16	07.04	06	06.80	08.40	06	07.16	07.04	06	06.80	08.40	06	06.80	08.40	06	06.80	08.40	06	06.80

Months.	GRITS.										MEAT.										PORK, per pound.									
	Of cuts, per pound.					Beef, per pound.					Pork, per pound.					Mutton, per pound.					Veal, per pound.									
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
January.....	\$0 08.40	\$0 06.60	\$0 07	\$0 08.40	\$0 06	\$0 07	\$0 10.20	\$0 08.40	\$0 09.60	\$0 10.20	\$0 08.40	\$0 09.60	\$0 10.20	\$0 08.40	\$0 09.60	\$0 10.20	\$0 08.40	\$0 09.60	\$0 10.20	\$0 08.40	\$0 09.60	\$0 10.20	\$0 08.40	\$0 09.60	\$0 10.20	\$0 08.40	\$0 09.60	\$0 10.20	\$0 08.40	\$0 09.60
February.....	08.40	06.60	07	08.40	06	07	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60
March.....	08.40	06.60	07	08.40	06	07	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60
April.....	08.40	06.60	07	08.40	06	07	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60
May.....	08.40	06.60	07	08.40	06	07	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60
June.....	08.40	06.60	07	08.40	06	07	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60
July.....	08.40	06.60	07	08.40	06	07	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60
August.....	08.40	06.60	07	08.40	06	07	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60
September.....	08.40	06.60	07	08.40	06	07	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60
October.....	08.40	06.60	07	08.40	06	07	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60	10.20	08.40	09.60
Total.....	85.30	63	70.40	1 80.20	1 18.80	1 57.00	1 87.20	1 64.40	1 64.40	1 87.20	1 64.40	1 64.40	1 87.20	1 64.40	1 64.40	1 87.20	1 64.40	1 64.40	1 87.20	1 64.40	1 64.40	1 87.20	1 64.40	1 64.40	1 87.20	1 64.40	1 64.40	1 87.20	1 64.40	1 64.40
Average.....	08.52	06.30	07.04	12.02	11.88	13.76	18.72	13.32	16.44	17.16	12	15.22	15.64	11.16	14.00	12	15.22	15.64	11.16	14.00	12	15.22	15.64	11.16	14.00	12	15.22	15.64	11.16	14.00

Statement showing the prices of provisions in the Berlin market, &c.—Continued.

Months.	Eggs.			Bacon.			Butter.		
	Per 15.			Smoked, per pound.			Per pound.		
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
January.....	\$0 24	\$0 19.20	\$0 22.20	\$0 33.60	\$0 21.60	\$0 24.40	\$0 37.60	\$0 24.40	\$0 33.40
February.....	24	19.20	22.20	33.60	21.60	24.40	37.60	24.40	33.40
March.....	24	19.20	22.20	33.60	21.60	24.40	37.60	24.40	33.40
April.....	24	19.20	22.20	33.60	21.60	24.40	37.60	24.40	33.40
May.....	24	19.20	22.20	33.60	21.60	24.40	37.60	24.40	33.40
June.....	24	19.20	22.20	33.60	21.60	24.40	37.60	24.40	33.40
July.....	24	19.20	22.20	33.60	21.60	24.40	37.60	24.40	33.40
August.....	24	19.20	22.20	33.60	21.60	24.40	37.60	24.40	33.40
September.....	24	19.20	22.20	33.60	21.60	24.40	37.60	24.40	33.40
October.....	24	19.20	22.20	33.60	21.60	24.40	37.60	24.40	33.40
Total.....	24	19.20	22.20	33.60	21.60	24.40	37.60	24.40	33.40
Average.....	24	19.20	22.20	33.60	21.60	24.40	37.60	24.40	33.40

VENISON AND GAME.

Months.	Eggs.			Red-deer, saddle, per piece.			Red-deer, leg, per piece.			Fallow-deer, leg.		
	Per 15.			Highest.			Highest.			Highest.		
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
January.....	\$0 30	\$0 24	\$0 25.40	\$4 68	\$4 04	\$4 51.20	\$4 32	\$2 00	\$4 12.40	\$7 24	\$2 32	\$2 00.40
February.....	30	24	25.40	68	04	51.20	32	00	12.40	24	32	00.40
March.....	30	24	25.40	68	04	51.20	32	00	12.40	24	32	00.40
April.....	30	24	25.40	68	04	51.20	32	00	12.40	24	32	00.40
May.....	30	24	25.40	68	04	51.20	32	00	12.40	24	32	00.40
June.....	30	24	25.40	68	04	51.20	32	00	12.40	24	32	00.40
July.....	30	24	25.40	68	04	51.20	32	00	12.40	24	32	00.40
August.....	30	24	25.40	68	04	51.20	32	00	12.40	24	32	00.40
September.....	30	24	25.40	68	04	51.20	32	00	12.40	24	32	00.40
October.....	30	24	25.40	68	04	51.20	32	00	12.40	24	32	00.40
Total.....	29	1 06.20	1 06.20	34 56	22 92	28 33.90	35 84	21 16	26 18.41	29 05	16 50	16 15.40
Average.....	29	1 06.20	1 06.20	34 56	22 92	28 33.90	35 84	21 16	26 18.41	29 05	16 50	16 15.40

Statement showing the prices of provisions in the Berlin market, &c.—Continued.

Statement showing the prices of provisions in the Berlin market, &c.—Continued.

Months.	VENISON AND GAME.				POULTRY.				
	Hares, each.		Partridges, each.		Turkeys, each.		Capons, each.		
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
January.....	\$0 54	\$0 60	20	.....	.....	.....	.....	.....	.....
February.....	50	60	74.20	.....	.....	.....	.....	.....	.....
March.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
April.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
May.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
June.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
July.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
August.....	1 20	72	1 52	.....	.....	.....	.....	.....	.....
September.....	1 41	1 32	1 62.20	.....	.....	.....	.....	.....	.....
October.....	1 20	60	57	.....	.....	.....	.....	.....	.....
Total.....	5 58	3 54	4 28.80	1 32	44.20	55.40	21.01	11.32	22 54.50
Average.....	1 11.00	76.80	55.76	41	11.40	28.54	3 06.50	1 06.50	2 47.13

Months.	Spring chickens, each.				Ducks, each.		FOWLS.					
	Spring chickens, each.		Ducks, each.		Geese, each.		Pigeons per pair.		Apples 5 lbs.			
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
January.....	\$0 42	\$0 28.20	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
February.....	42	18	60	.....	.....	.....	.....	.....	.....	.....	.....	.....
March.....	42	18	60	.....	.....	.....	.....	.....	.....	.....	.....	.....
April.....	42	18	60	.....	.....	.....	.....	.....	.....	.....	.....	.....
May.....	42	18	60	.....	.....	.....	.....	.....	.....	.....	.....	.....
June.....	42	18	60	.....	.....	.....	.....	.....	.....	.....	.....	.....
July.....	42	18	60	.....	.....	.....	.....	.....	.....	.....	.....	.....
August.....	42	18	60	.....	.....	.....	.....	.....	.....	.....	.....	.....
September.....	42	18	60	.....	.....	.....	.....	.....	.....	.....	.....	.....
October.....	42	18	60	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total.....	4 26	1 31.20	2 56.70	8 57	5 72	18 01	9 15	11 45.20	3 54	1 13.00	1 62.00	8 01
Average.....	42.10	15.12	25.88	55.50	36	55.40	91.50	1 31.22	35.40	15.26	26.25	56.40

Statement showing the prices of provisions in the Berlin market, &c.—Continued.

Months.	DRIED FRUIT.											
	Pears, 5 liters.			Prunes, 5 liters.			Millet, per pound.			Oatmeal, per pound.		
	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.	Highest.	Lowest.	Average.
January.....	\$0 72	\$0 36	\$0 50	\$0 96	\$0 48	\$0 50, 50	\$0 02, 40	\$0 06	\$0 07	\$0 08, 40	\$0 05, 20	\$0 07, 40
February.....	72	36	53, 50	96	48	54	02, 40	06	07	08, 40	05, 20	07, 40
March.....	72	42	53	96	54	67, 30	02, 40	06	07	08, 40	05, 20	07, 40
April.....	72	36	49, 50	1 02	48	67, 30	02, 40	06	07	08, 40	05, 20	07, 40
May.....	72	36	49, 50	1 02	48	67, 30	02, 40	06	07	08, 40	05, 20	07, 40
June.....	72	36	49, 50	1 02	48	67, 30	02, 40	06	07	08, 40	05, 20	07, 40
July.....	72	42	54	96	48	70, 40	02, 40	06	07	08, 40	05, 20	07, 40
August.....	72	42	54	96	48	70, 40	02, 40	06	07	08, 40	05, 20	07, 40
September.....	72	42	54	96	48	70, 40	02, 40	06	07	08, 40	05, 20	07, 40
October.....	72	36	53, 50	96	48	70, 40	02, 40	06	07	08, 40	05, 20	07, 40
Total.....	7 20	3 90	5 55, 40	9 24	5 34	6 53, 60	8 05, 80	6 04, 80	7 03, 20	8 05, 80	0 71, 40	0 72, 80
Average.....	72	39	55, 54	92, 40	53, 40	68, 36	08, 06	06, 06	07, 04	08, 06	07, 14	07, 28

* It will be observed that the figures in these columns and in similar columns in the tables on the five pages immediately preceding, do not express the arithmetical mean between the highest and lowest prices. They denote, however, the true "average" as obtained by computation of the quantities sold at different prices in the Berlin market.

EXPENDITURES OF WORKMEN'S FAMILIES.

Having, in the pages immediately preceding, given the prices of provisions and other articles of domestic consumption, it may be desirable in this connection to show the expenditures of the families of workmen in different localities and under different circumstances, to furnish a basis of comparison between the actual expenditures of workmen for the respective elements of subsistence, clothing, and shelter, and those of other countries in Europe and America.

Before presenting data relating to the years 1872 and 1873, information somewhat similar relating to the expenditures of families in previous years are given, which will serve to show not only the low prices which formerly prevailed in comparison with those of the present time, but the moderate rate of expenditure for living which obtained among the agricultural laborers of Germany.

under adverse circumstances, to shelter, and those of other countries in Europe and America.

Before presenting data relating to the years 1872 and 1873, information somewhat similar relating to the expenditures of families in previous years are given, which will serve to show not only the low prices which formerly prevailed in comparison with those of the present time, but the moderate rate of expenditure for living which obtained among the agricultural laborers of Germany.

COST OF SUBSISTENCE IN PRUSSIA.
Statement showing the annual sum required to support a workman and his family in the following provinces and districts of Prussia.
 [Condensed from official returns published in 1891.]

Provinces, districts, &c.	No. In Family.	Subsistence.	Lodging.	Fuel.	Clothing.	Articles of household use and tools.	School-money and taxes.	Total.
Province of Prussia:								
District of Gumbinnen—towns.....	4 to 5	\$73 60	\$4 76	\$4 76	\$14 60	\$4 38	\$2 19	\$111 60
District and town of Königsberg.....		121 40	21 00	5 84	10 92	2 92	1 46	173 30
District of Marienwerder—towns.....		\$49 80 to 52 56	8 76	5 84	\$10 22 to 10 92	.....	\$9 19 to 2 92	\$70 81 to 81 63
Province of Posen:								
District of Posen—rural districts and small towns.....	5	29 20 to 50 29	\$3 65 to 10 95	\$2 92 to 14 60	5 84 to 21 90	20 73 to 9 49	97 to 3 65	43 31 to 140 88
Town of Gartz.....								
District of Breslau—(small towns.....	4 to 5	71 00 to 91 75	23 36 to 25 55	3 65 to 10 95	13 14 to 15 33	9 09	4 38	116 40 to 129 83
Province of Pomerania:—(manufacturing districts.....	4	36 20 to 84 75	10 22 to 14 60	4 38 to 6 57	5 84 to 29 20	73 to 18 25	71 60 to 4 38	47 00 to 167 90
District of Köslin—rural districts and small towns.....	5 to 6	25 40 to 50 29	10 22 to 14 60	4 38 to 6 57	14 60 to 29 20	2 19 to 14 60	1 46 to 2 92	91 25 to 148 18
Province of Brandenburg:								
District of Potsdam—rural district.....	5 to 6	36 20 to 71 00	8 76 to 12 41	5 84 to 8 76	7 30 to 14 60	73 to 4 38	2 19 to 2 92	61 32 to 116 07
District of Frankfurt—rural districts and small towns.....	5 to 6	58 40 to 87 60	2 19 to 8 76	2 19 to 7 30	7 30 to 26 50	2 19 to 3 65	2 92 to 4 38	75 19 to 148 19
Province of Saxony:								
Town of Magdeburg.....	4 to 5	51 10 to 102 20	7 30 to 10 97	2 92 to 11 68	10 97 to 14 60	3 65 to 7 30	2 92	78 86 to 149 67
Province of Westphalia:								
District and town of Münster.....	5	57 60	8 25 to 21 90	7 30	21 90	3 65	3 65	132 25 to 146 00
District of Minden—rural districts and towns.....	5 to 6	62 05 to 65 80	14 60 to 18 25	3 65	10 95 to 14 60	3 65	3 65	98 55 to 109 49
Rhenish provinces:								
(Circle of Essen, north- western part.....	5	51 10 to 65 80	7 30 to 8 76	3 65 to 8 76	10 95 to 14 60	2 19 to 5 11	2 19 to 3 65	77 38 to 106 57
Manufacturing districts.....								
Town of Reuss, mechan- ics.....	5	127 75	18 95	8 76	21 90	3 65	3 65	184 60
District of Düsseldorf:								
Town of Düsseldorf.....	4	91 25	14 60	14 60	18 25	3 65	3 65	146 00
Town of Ditz.....	4	65 60 to 73 00	14 60 to 18 25	5 84 to 7 30	29 20 to 37 96	2 19 to 2 92	5 84 to 7 30	123 36 to 154 76
Town of Elberfeld.....	5	131 40	21 90	8 76	14 60	18 25	2 19	175 30
Town of Trier.....	5	102 20	21 90	14 60	18 25	2 19	2 19	146 00
Collieries, rural districts and small towns.....	5 to 6	60 20	20 34	14 60	29 20	5 84	2 92	153 29
	5 to 6	87 60 to 91 80	10 95	8 76 to 18 95	11 68 to 21 90	3 65 to 5 11	5 84 to 7 30	128 48 to 159 13

COST OF LIVING IN RURAL DISTRICTS.

Statement showing the annual cost of living of a rural laborer's family, consisting of husband, wife, and three children, from the result of an official inquiry in 1819.

[The thaler computed at 73 cents, United States gold.]

Governmental districts of Prussia.	Rent.	Fuel.	Provisions.	Clothing.	Feed for cattle.	Repair of tools.	Salt and spicers.	Church and school.	Total.
Königsberg	\$5 76	\$2 88	\$11 29	\$11 40	\$5 70	\$2 88	\$2 88	\$1 11	\$79 30
Gumbinnen	2 88	3 00	35 30	7 30	6 45	1 41	2 88	1 41	51 12
Danzig	5 01	4 32	39 60	10 08	7 12	1 41	2 16	2 16	72 52
Marionwerder	5 76	5 76	31 56	12 96	9 36	2 16	3 60	1 41	75 60
Posen	5 41	5 76	21 40	16 92	6 30	3 60	3 21	1 56	72 21
Potsdam	5 76	5 76	57 60	21 76	7 30	2 16	1 41	2 88	100 56
Frankfurt-on-Oder	5 76	5 76	46 56	11 11	11 54	4 32	1 68	3 60	91 60
Stettin	6 45	2 28	48 00	58 60	11 52	2 88	1 80	2 88	100 80
Carolin	7 92	5 04	36 00	11 40	11 52	1 41	2 88	2 16	81 36
Stralsund	6 45	7 20	53 76	14 40	7 20	2 16	2 16	2 88	102 24
Breslau	3 60	4 68	38 16	11 52	5 01	1 80	2 16	2 16	69 12
Lappin	3 00	5 76	36 00	12 24	5 76	2 16	2 16	1 41	69 12
Leipzig	3 60	6 45	41 76	12 96	5 40	2 52	1 41	2 88	77 04
Magdeburg	5 76	7 92	45 36	8 64	2 52	1 80	1 41	2 88	56 32
Merseburg	6 45	5 04	41 11	10 80	3 00	2 16	1 41	2 88	77 04
Erfurt	7 20	7 92	41 76	7 92	4 32	2 16	1 80	5 01	78 12
Münster	5 04	7 20	50 40	11 52	7 20	2 88	1 80	2 88	88 92
Amberg	7 92	7 92	39 60	10 80	5 76	2 16	2 16	2 16	78 48
Cologne	10 80	10 80	50 40	25 20	7 20	3 00	2 16	5 76	115 92
Düsseldorf	10 80	6 96	26 24	8 64	.....	1 08	.....	7 20	51 44
Coblenz	9 36	11 52	93 00	25 20	.....	2 88	1 80	2 88	145 21
Treves	9 60	9 00	21 60	11 40	10 80	5 76	4 32	3 60	78 18
Aix-la-Chapelle	5 76	7 92	41 20	12 96	2 88	1 41	1 41	1 41	77 01
Average	6 35	6 67	41 20	11 88	6 92	2 47	2 32	2 51	84 58
Percentage of each to the whole	7.60	7.98	51.67	16.61	7.56	2.96	2.51	3.08	100.00

Table showing the earnings of rural laborers who possess no real estate, but work for land-proprietors.

KÖNIGSBERG.

Emoluments.

Free domicile, value.....	\$5 76 to \$7 20
Land for garden and potatoes, value.....	5 76 to 7 20
Pasture for 1 cow, value.....	5 76 to 7 20
Fuel	7 20 to 8 61
10 scheffel rye, at 1½ thaler, value.....	8 40
6 scheffel barley.....	3 24
2 scheffel pease, at 1½ thaler, value.....	1 68
2 scheffel oats.....	0 82
Cash.....	7 20 to 9 36

Total..... 51 74

GUMBINNEN.

Ordinary emoluments.

Free domicile, value.....	\$2 88
Fuel.....	0 72
12 scheffel rye, at 1½ thaler.....	11 52
Feed for cattle, value.....	10 80
Potatoes and vegetables, value.....	5 76
Cash.....	7 20
The above is for 24 weeks' work, (of son).....	8 64
Extra for threshing 20 scheffel grain at 1 thaler.....	14 40

A.
ETS.
by, consisting of husband,
ury in 1819.
dd.]

	Salt and spices.	Church and school.	Total.
8	\$2.88	81.11	\$79.30
11	2.88	1.41	51.12
14	2.16	2.16	72.72
6	3.60	1.41	55.60
10	3.24	1.56	72.21
10	1.41	2.88	101.56
14	1.68	3.60	91.00
8	1.89	2.88	100.80
11	2.88	2.16	81.36
16	2.16	2.88	102.24
10	2.16	2.16	69.12
16	2.16	1.41	69.12
12	1.41	2.88	77.01
0	1.41	2.88	56.32
16	1.44	2.88	77.04
18	1.80	5.51	78.12
18	1.80	2.88	88.92
16	2.16	2.16	78.48
0	2.16	5.56	115.92
8	.....	72	51.48
88	1.80	2.88	147.24
76	4.32	3.60	78.18
41	1.44	1.41	77.01
47	2.22	2.51	81.28
06	2.54	3.48	100.00

state, but work for land-

.....	\$5.76 to	\$7.20
.....	5.76 to	7.20
.....	5.76 to	7.20
.....	7.20 to	8.61
.....	.....	8.40
.....	.....	3.21
.....	.....	1.68
.....	.....	0.82
.....	7.20 to	9.36
.....	.....	51.74

.....	\$2.88
.....	0.72
.....	11.52
.....	10.80
.....	5.76
.....	7.20
.....	8.64
.....	14.40

LABOR IN GERMANY.

567

Extra emoluments.

Butter, 1 stone, value.....	3.60
1 scheffel linseed, value.....	2.16
2 lambs, value.....	2.88
Eggs, poultry, &c., value.....	0.81
1 calf, value.....	0.72
1 pig, value.....	5.76
1 fat pig.....	8.64
4 pounds wool at $\frac{1}{8}$ thaler.....	0.48
Total.....	87.00

PANTZIG.

Emoluments.

Free domicile, value.....	.....
Fuel.....	\$5.04
120 square rods land for potatoes and garden, value.....	4.32
30 square rods land for linseed, value.....	5.76
Products of cow, less cost of feed.....	1.44
Sale of 5 scheffel rye at 1 thaler.....	5.28
Sale of wool, less feed of sheep.....	3.60
Wages, 140 days at $\frac{1}{5}$ thaler, 168 days at $\frac{1}{10}$, and 30 days at $\frac{1}{15}$	1.08
Wages, for threshing through the winter.....	26.98
Total.....	75.34

MARENWEPFER.

Emoluments.

Free domicile, value.....	.....
Land for garden, value.....	\$5.76
Land for farming.....	4.80
Pasture, meadows, and hay.....	5.76
Fuel and light.....	7.20
Total.....	8.64
From this sum are subtracted for rent of house and garden, 2 thalers.....	32.86
Rent of land.....	.....
Pasturage for 1 cow, 3 swine.....	2 thalers } 4.32
.....	2 thalers }

The emoluments over.....	27.84
Wages, in summer, husband per day, $\frac{1}{5}$ thaler.....	0.10
..... in summer, wife, per day, $\frac{1}{10}$ thaler.....	0.7
..... in winter, husband, per day, $\frac{1}{15}$ thaler.....	0.7
..... in winter, wife, per day, $\frac{1}{15}$ thaler.....	0.5

POSEN.

Field-laborers receive a free dwelling with 1 morgen* land for garden, 1 morgen for potato field, free pasture for a few swine and for 1 cow, also winter feed for the latter, and wood for fuel. For these emoluments the husband renders 52, the wife 30 days' service. Daily wages, husband, 12 cents, woman, 6 to 9 cents, children, 7 cents. Threshing in winter, which lasts 5 months, yields to the laborer about 25 scheffel rye.

POTS DAM.

The compensation of married field-laborers consists of a free dwelling and fuel, 90 square rods of field and 30 square rods of garden land, 3 morgen land for potatoes, pasture and feed for 1 cow and 1 pig, fattening at own expense; moreover, about 28 bushels rye, 4 $\frac{1}{2}$ scheffel peas, 4 scheffel barley, 20 scheffel oats, and about 1 bushel salt. For these emoluments and a cash pay of 30 thalers (\$21.60) the husband is bound to give every day's service, while the woman, when required, receives $\frac{1}{15}$ thaler (9 $\frac{1}{2}$ cents) per day. Thus their cash income amounts to—

Man's cash pay.....	\$21.60
Woman's wages.....	14.40
Sale of potatoes, swine, &c.....	18.00
Total.....	54.00

* 1 morgen = 0.631 United States acre.

Unmarried laborers receive board and lodging, 30 thalers (\$21.60) per year, of wages, a load of wood; and if they are in charge of a horse and wagon, about 10 to 12 thalers (\$7.20 to \$8.64) annually, for bringing products to market.

FRANKFORT.

Married field-hands are furnished by the owners of estates with a free dwelling, $\frac{1}{2}$ morgen of land, pasture for 1 cow, and fuel. For dwelling and garden the laborer's wife renders one day's service each week; for rent of land the husband renders labor worth $2\frac{1}{2}$ thalers (\$1.80.) For wages, the laborer receives $\frac{1}{2}$ thaler, (12 cents,) the wife $\frac{1}{4}$ thaler (11 cents) per day. Contract work pays the man $\frac{1}{2}$ thaler (24 cents) a day, and during the harvest he earns $\frac{1}{2}$ thaler (18 cents) and the wife $\frac{1}{4}$ thaler (9 cents) a day.

For threshing he gives one-fiftieth or one-fourteenth part of the grain threshed.

The whole earnings are thus computed—

26 weeks at $\frac{1}{2}$ thaler, (18 cents)	\$28 68
Threshing 6 months, at 6 scheffel	7 20
Woman, 104 days, at $\frac{1}{4}$ thaler	7 40
Woman, 104 days, at	6 24
Extra earnings during harvest	3 60
Total	52 52

Day-laborers' work on an average—

In summer, 13 hours for $\frac{1}{2}$ thaler, (18 cents;) in winter, 9 hours for $\frac{1}{2}$ thaler, (11 cents.) Under contract, 11 hours for $\frac{1}{2}$ thaler (18 cents) in summer; 9 hours for $\frac{1}{2}$ thaler (14 cents) in winter.

STETTIN.

Emoluments.

50 square rods land for garden, 40 square rods land for linseed, 40 square rods land for potatoes, 50 square rods land for rye, pasture for 1 cow, 1 load of hay, 6,000 pieces of turf for fuel, for which the family render—wife 52 days at $\frac{1}{4}$ thaler, (7 cents,) rent for potatoes, linseed land, 5 thalers, (\$3.60,) turf, $1\frac{1}{2}$ thaler, (\$1.01.)

For the work the man receives $1\frac{1}{2}$ thalers (90 cents) per week; the wife works 290 days at $\frac{1}{4}$ thaler, 29 thalers, \$20.88.

For threshing the men receive one-seventeenth of the grain; accordingly the earnings amount for the year to—

Days' wages to husband	32 thalers..	\$23 04
Days' wages to wife	30 thalers..	21 60
For threshing	32 thalers..	23 04
Increase for contract work	5 thalers..	3 60
Cleaning flax	12 thalers..	8 64
Attending cattle	10 thalers..	7 20
Woman, by spinning	4 thalers..	2 88
Yields from potato land	21 thalers..	17 28
Total	149 thalers..	107 28

The expenses for house rent	6 $\frac{1}{2}$ thalers..	\$4 68
fuel	9 $\frac{1}{2}$ thalers..	6 96
food	63 $\frac{1}{2}$ thalers..	45 60
clothing	41 $\frac{1}{2}$ thalers..	29 71
furniture	5 thalers..	3 60
salt	31 $\frac{1}{2}$ thalers..	2 69
taxes, church and school	4 $\frac{1}{2}$ thalers..	3 54
linen	8 $\frac{1}{2}$ thalers..	5 88
Total	142$\frac{1}{2}$ thalers..	102 66

COESLIN.

Day-laborer on estate receives as emoluments—

Dwelling and garden, value	10 thalers..	\$7 20
Fuel, value	6 thalers..	4 32
1 morgen rye, 5,10 scheffel, value	6 $\frac{1}{2}$ thalers..	4 80
1 morgen oats, 8 scheffel, value	5 $\frac{1}{2}$ thalers..	3 81
1 morgen potatoes, 60 scheffel, value	15 thalers..	10 80
Pease and linseed	2 thalers..	1 44

LABOR IN GERMANY.

569

0) per year, of wages,
about 10 to 12 thalers

with a free dwelling. In
the garden the laborer's
husband renders labor
(12 cents,) the wife
renders (24 cents) a day,
the thaler (9 cents) a
the grain threshed.

.....\$28 68
..... 7 20
..... 7 40
..... 6 24
..... 3 60
..... 52 52

for $\frac{1}{2}$ thaler, (14 cents.)
hours for $\frac{1}{2}$ thaler (14

40 square rods land
d of hay, 6,000 pi-ces
thaler, (7 cents,) rent
)
; the wife works 290

ordingly the earnings

... 32 thalers..\$23 04
... 30 thalers.. 21 60
... 32 thalers.. 23 04
... 5 thalers.. 3 60
... 12 thalers.. 8 64
... 10 thalers.. 7 20
... 4 thalers.. 2 88
... 21 thalers.. 17 28
... 149 thalers..107 28

64 thalers.. \$1 68
94 thalers.. 6 96
634 thalers.. 45 60
414 thalers.. 29 71
5 thalers.. 3 60
314 thalers.. 2 60
44 thalers.. 3 54
84 thalers.. 5 88

1424 thalers..102 66

...10 thalers.. \$7 20
... 6 thalers.. 4 32
... 64 thalers.. 4 80
... 54 thalers.. 3 84
...15 thalers..10 80
... 2 thalers.. 1 44

Feed for 1 cow, value.....	10	thalers..	\$7 20
4 sheep, value.....	4	thalers..	2 88
Share in pigs, value.....	9	thalers..	6 48
Poultry, value.....	1	thalers..	72

Total.....69 thalers.. 49 68

The laboring man received in summer, per day, $\frac{1}{2}$ thaler, (9 cents,) and in winter, $\frac{1}{2}$ thaler, (6 cents,) which for 140 and 84 days respectively; and his wife, per day, at $\frac{1}{2}$ thaler (6 cents) in summer, and $\frac{1}{2}$ thaler (5 cents) in winter, for 120 and 60 days respectively, makes.....394 thalers.. 28 56

Total earnings.....1084 thalers.. 78 24

The condition of labor is similar in other districts of the state, and the total earnings and cost of subsistence vary but slightly.

COST OF LIVING IN 1872-73.

Average weekly expenditures of two families, consisting, respectively, of two adults and two children and two adults and four children, in the town of Barmen, Prussia.

Articles.	Four persons, 1872.	Six persons, 1873.	Articles.	Four persons, 1872.	Six persons, 1873.
Flour and bread.....	\$0 72	\$0 86	Fuel.....	\$0 19	\$0 23
Fresh, corned, salted, and smoked meats.....	60	96	Oil or other light.....	10	07
Lard.....	30	24	Spirits, beer, and tobacco, (if any).....	48	12
Butter.....	13	36	House-rent.....	48	48
Cheese.....	16	12	For educational, religious, and benevolent objects.....	38	12
Sugar and molasses.....	10	12	Total weekly expenses.....	5 76	5 51
Molasses or sirup.....	18	34	Clothing per year.....	14 10	64 80
Milk.....	14	38	Taxes per year.....	2 16	1 44
Coffee.....	32	19	Weekly earnings of husband and wife, (the wife earning three thalers in each case).....	6 48	7 20
Fish, fresh and salt.....	10	84			
Soap, starch, salt, pepper, vinegar, &c.....	14	19			
Eggs.....	14	19			
Potatoes and other vegetables.....	1 34	84			

Average weekly expenditures of two families, each consisting of two adults and three children, in the town of Essen, Prussia.

Articles.	1872.	1873.	Articles.	1872.	1873.
Flour and bread.....	\$0 79.2	\$0 86	Fruit, green and dried.....	\$9 68.6	\$0 694
Fresh, corned, salted, and smoked meats.....	84	84	Fuel.....	19.2	29
Lard.....	19.2	34	Oil or other light.....	16.8	17
Butter.....	41.2	48	Other articles.....	21.6	214
Cheese.....	07.2	07	House-rent.....	50.4	60
Sugar and molasses.....	07.2	07	For educational, religious, and benevolent objects.....	08.6	094
Molasses or sirup.....	07.2	07	Total weekly expenses.....	5 20	5 88
Milk.....	14.4	24	Clothing per year.....	50 40	50 40
Coffee.....	12	24	Taxes per year.....	5 76	5 88
Fish, fresh and salt.....	02.4	05	Weekly earnings.....	6 60	7 32
Soap, starch, salt, pepper, vinegar, &c.....	16.8	17			
Eggs.....	08.6	07			
Potatoes and other vegetables.....	60	60			

Average weekly expenditures of two families consisting, respectively, of two adults and three children, residing in the town of Aix-la-Chapelle; and two adults and two children in the town of Düsseldorf, Prussia.

Articles.	Four persons, Düsseldorf, 1873.	Five persons, Aix-la-Chapelle, 1872.	Articles.	Four persons, Düsseldorf, 1873.	Five persons, Aix-la-Chapelle, 1872.
Flour and bread	\$0 72	\$1 10	Spirits, beer, and tobacco (if any)	\$0 36	\$0 60
Fresh, corned, salted, and smoked meats	67	92	House rent	84	94
Butter	36	45	For educational, religious, and benevolent objects	10	.....
Cheese	18	20	One child at school .....	.....	.....
Sugar and molasses	18	.....	Total weekly expenses	4 41	5 03
Milk	18	61	Clothing per year	10 50	20 70
Coffee	18	16	Tax per year	4 10	.....
Fish, fresh and salt	5	.....	Weekly earnings of father and son .....	.....	9 66
Soap, starch, salt, pepper, vinegar, &c.	14	9	Weekly earnings of father, working for himself	5 04	.....
Eggs .....	.....	14			
Potatoes and other vegetables	40	35			
Fuel	17	23			
Oil or other light	9	11			

Average weekly expenditures of two families, each consisting of two adults and three children, respectively, of the town of Chemnitz, Saxony, and the city of Berlin, Prussia.

Articles.	1872.		Articles.	1872.	
	Chemnitz.	Berlin.		Chemnitz.	Berlin.
Flour and bread	\$0 62	\$0 78	Potatoes and other vegetables	\$0 36	\$0 39
Fresh, corned, salted, and smoked meats	47	1 13	Fruits, green and dried	12	10
Lard	08	21	Fuel	24	42
Butter	58	36	Oil or other light	03	12
Cheese	05	10	Other articles	07	07
Sugar and molasses	03	12	Spirits, beer, and tobacco (if any)	15	55
Molasses or sirup	02	02	House rent	36	1 03
Milk	15	12	For educational, religious, and benevolent objects	11	.....
Coffee	15	14	Total weekly expenses	3 87	6 07
Tea .....	.....	.....	Clothing per year	21 96	28 80
Fish, fresh and salt	05	.....	Taxes per year	2 40	7 30
Soap, starch, salt, pepper, vinegar, &c.	17	13	Weekly earnings	4 68	6 48
Eggs	06	14			

Average weekly expenditures of two families, consisting, respectively, of two adults and four children, in 1873, and two adults and three children, in 1872, in the city of Dresden, Saxony.

Articles.	1873.		Articles.	1873.	
	Six persons, 1873.	Five persons, 1872.		Six persons, 1873.	Five persons, 1872.
Flour and bread	\$0 72	\$1 15	Fruits, green and dried .....	.....	\$0 62
Fresh, corned, salted, and smoked meats	48	60	Fuel	20 24	35
Lard .....	.....	08	Oil or other light .....	.....	04
Butter .....	.....	80	Other articles .....	.....	25
Cheese .....	.....	05	Spirits, beer, and tobacco (if any)	21	35
Sugar and molasses .....	.....	03	House rent	42	38
Molasses and sirup	48	02	For educational, religious, and benevolent objects	15	22
Milk .....	.....	25	Total weekly expenses	3 29	5 50
Coffee .....	.....	15	Clothing per year	28 80	40 00
Tea .....	.....	.....	Taxes per year	48	2 29
Fish, fresh and salt .....	.....	08	Weekly earnings of father and daughter	7 20	(*)
Soap, starch, salt, pepper, vinegar, &c.	02	09			
Eggs .....	.....	08			
Potatoes and other vegetables .....	.....	64			

* Unknown.

LABOR IN GERMANY.

571

of two adults and three children in the

Average weekly expenditures of two families, consisting, respectively, of two adults and two children, in the town of Stuttgart, Württemberg, in 1873; and two adults and five children, in the city of Munich, Bavaria, in 1872.

	Four persons, Düsseldorf, 1872.	Five persons, Aix-la-Chapelle, 1872.
to (if any)	\$0 36	\$0 60
ous, and	10	94
ases.	4 44	5 93
	10 70	20 70
	4 10	
ther and		9 66
er, work-	5 04	

Articles.	Four persons, Stuttgart, 1873.	Seven persons, Munich, 1872.	Articles.	Four persons, Stuttgart, 1873.	Seven persons, Munich, 1872.
Flour and bread	\$1 06	\$0 48	Fruits, green and dried	\$0 08	
Fresh, corned, salted, and smoked meats	75	80	Fuel	46	\$0 56
Lard	26	20	Oil or other light	1	20
Butter	15	20	Other articles	66	40
Cheese	20	28	Spirits, beer, and tobacco (if any)	1 25	1 20
Sugar and molasses	21		House rent	40	
Molasses or sirup	40	76	For educational, religious, and benevolent objects		
Milk	14	30	Total weekly expenses	6 94	6 70
Coffee	20	20	Clothing per year	35 01	16 00
Soap, starch, salt, pepper, vinegar, &c.	18	12	Taxes per year	1 60	
Eggs	22	60	Weekly earnings	8 60	8 00
Potatoes and other vegetables					

Average weekly expenditures of a family consisting of two adults and two children, in Frankfurt-on-the-Main in 1873.

	1872.	Berlin.
etables...	\$0 36	\$0 39
	12	10
	24	42
	63	12
	07	07
to (if any)	15	55
ous, and	36	1 68
	11	
ases	3 87	6 01
	24 06	28 80
	2 60	7 30
	4 68	6 48

Articles.	Cost or value.	Articles.	Cost or value.
Flour and bread	Fl. kr. 1 48	Potatoes and other vegetables	Fl. kr. 1 48
Fresh, corned, salted, and smoked meats	\$0 76	Fruits, green and dried	\$0 32
Lard	2 0	Fuel	1 12
Butter	80	Oil or other light	08
Cheese	48	Other articles	12
Sugar	12	Beer and tobacco (if any)	08
Molasses or sirup	08	House rent	18
Milk	40	For educational, religious, and benevolent objects	2 12
Coffee	48	Total weekly expenses	19 22
Tea	32	Clothing per year	10 22
Fish, fresh and salt		Taxes per year	50 10
Soap and starch	06	Weekly earnings	1 45
Salt, pepper, vinegar, &c.	06		30
Eggs	12		5 60

Statement showing the annual earnings and expenditures of the thirteen German families whose weekly expenditures are given in the foregoing tables.

	Six persons, 1872.	Five persons, 1872.
...	\$0 02	
...	35	
...	04	
...	25	
to (if any)	21	25
...	42	38
ous, and	15	22
ases	3 29	5 70
	28 80	40 00
	48	2 20
ther and	7 20	(*)

Number of weekly list.	Earnings.	Expenditures.			
		Provisions, house-rent, &c.	Clothing.	Taxes, &c.	Total.
1	\$336 96	\$299 52	\$14 40	\$2 16	\$316 08
2	374 40	280 64	64 80	1 44	355 88
3	343 20	270 40	50 10	5 16	326 56
4	380 64	305 76	50 10	5 88	362 04
5	262 08	230 88	10 70	1 10	242 68
6	502 32	368 36	(*)	(*)	368 36
7	215 36	315 64	28 80	7 30	282 80
8	336 96	291 21	21 96	2 60	308 36
9	374 40	315 64	28 80	7 30	324 80
10	374 40	174 08	40 00	4 8	258 60
11	1371 40	216 41	22 96	2 20	240 36
12	416 00	369 26	35 00	1 60	364 40
13	416 00	318 40	16 00	30	364 40
Average	294 20	262 08	20 00	30	282 38
	357 84	294 52	32 02	2 79	313 44

* Not stated.

† Estimated.

III.—CONDITION OF LABOR IN GERMANY.

Having in the preceding pages presented, first, the rates of wages which obtained at different periods in the various industries of the principal towns of the great German Empire; second, the prices of provisions and other articles of necessary consumption as well as the weekly expenditures of the working people, the third and not least important division of the subject will now be considered, viz: *The material and moral condition of the workmen and their families.*

Before presenting original data, personally obtained in the year 1872, and through the instrumentality of others in subsequent years, it may be well in further illustration of this branch of the subject to give some statements from trustworthy sources in reference to the condition of labor in previous years. The following information, chiefly obtained in 1870-71, is condensed from British consular reports:

CONDITION OF LABOR IN PRUSSIA IN 1870.

Before the revolution of 1848 the improvement of the condition of the working classes in Prussia was looked upon as a question which concerned the philanthropist more than the statesman. That revolution, with its confused aims and utopian legislation, effected nothing permanent toward the accomplishment of such a result.

In the year 1861 a strong attempt was made by the workmen's unions to bring about a combined action and a closer cohesion between them for the purpose of promoting their common interests. The attempt failed in its immediate object, but it had one important result; it established the conviction among the working classes that it was only by intimate union and co-operation that improvements in the social and economical condition of the working classes could possibly be effected. These unions still continue to hold annual meetings, but less attention seems to be paid to them than formerly.

The socialist agitation in this country is a purely negative one. It signalizes itself by hostility to every practical reform, utter indifference to popular education, and a feeble interest in political progress of any kind. One exception to the negative policy of the socialist party of late has been the encouragement and organization of strikes. In many instances these strikes have ended by the workmen obtaining an increase of wages, and the confidence of the socialist party in their power has been increased in consequence; but the fact is that in most cases where the strikes have been successful public opinion had already declared itself in favor of the workmen.

The practice of traveling, or "wandering" as it is termed, for the purpose of completing his technical education, is still regarded by the German journeyman as an indispensable portion of his training. The young lad, released from his apprenticeship, leaves the house of his master and travels abroad wherever the German language is spoken. He usually, however, visits those towns which have a special reputation for excelling in his own particular branch of trade, and taking up his residence there endeavors not merely to obtain a livelihood but also, and more especially, to complete his technical education and to become a skillful workman.

Some journeymen who have got the means of doing so and have a talent for acquiring foreign languages, widen their experience by traveling beyond the limits of the fatherland. Numbers of enterprising journeymen leave every year to visit the watch-making establishments of the Jura, the machine manufactories and lockmaking-works of England, the arms and gun factories of Liege, and the industrial establishments of Lyons, Brussels, and, above all, Paris. Many of them remain some years or permanently settle in these places, and, true to their German habits of thrift and industry, generally thrive. They are as a rule, however, the *élite* and most intelligent of the class of journeymen, and their success therefore is less to be wondered at.

Among the large towns which have a special reputation for excelling in particular branches of industry may be mentioned Munich, renowned for its brewers and saddlers; Dresden for its tailors, (the Tailors' Academy at Dresden is much frequented by foreigners;) Cologne and Munich for their stone-cutters; Barmen (Elberfeld) for its fringe-makers; Berlin and Vienna for their locksmiths; Isenlohn for its bronzes, &c. Leipzig also is considered the best school for teaching the polygraphic art in all its branches.

MINING.

Among the working classes in Prussia the miners and iron-workers hold an exceptional position, inasmuch as their welfare and interests are attended to by the Government officials who are appointed to superintend all the mines, iron-works, and salt-works in the kingdom. This class of the laboring population is animated by an honorable *esprit de corps* dating from the earliest times, and forming a singular exception to the egotistical tendencies prevalent among the working classes of the present day. The great importance naturally attached to the conservation of so able and staunch a race of workmen as these miners and iron-workers has induced both the State and the private owners of the larger works to provide suitable dwellings for them, and to make such general provision for their comfort and well-being as to make their lot an enviable one in comparison with many of their fellow-laborers. They seldom, however, succeed in amassing any considerable savings, and some of them emigrate from time to time to other countries where the mining industry is on a smaller scale than here.

HOURS OF LABOR.

Throughout nearly the whole of Prussia, artisans, journeymen, and apprentices work regularly in summer from 5 a. m. to 12, and from 1 p. m. to 7, and even later; and in winter, from daybreak, sometimes from 6 a. m. to 8 or 9 in the evening. The hand-loom weaver frequently sits at his loom, employed in monotonous labor, for 16 hours in the day; and agricultural laborers have to work hard for 12 hours a day out of harvest-time, and during harvest-time for 14 hours. The same rule applies to farm servants.

The extreme length of the hours of daily labor is indeed one of the dark features of the condition of the working classes in Prussia, and generally throughout Germany. Night-work is especially injurious to young persons of both sexes, and indeed to females of all ages.

FOREMEN.

Foremen of works in factories, managers of printing-offices, foremen of mines, and other such like head-men and overseers employed in industrial establishments, are considered more in the light of employés than of workmen, and in disputes between the masters and the men they generally side with the former. This intermediate class is certainly one of importance and influence in the social and economical questions which are constantly arising between the representatives of capital and labor, and yet it is by no means treated with the consideration which it deserves. The reason is that there is always an abundance of educated men in this country who are only too glad to be able to obtain employment of this kind. The salaries paid to persons of this class are just sufficient to provide them with the means of living in tolerable comfort, but they are considerably lower than what are paid to a similar class in every other country.

PORTERS AND OTHER LABORERS.

Porters, loaders, packers, and such like laborers who are employed to do heavy work of all kinds, whether for commercial and industrial establishments, or in sea ports and inland towns, or in connection with any branch of public traffic and transport, generally earn good and even high wages in this country, as the great physical strength required for this sort of labor is rare enough to prevent the labor-market from being overstocked. These people soon save a sufficient sum of money to enable them to set up an independent business as carriers, small shop-keepers, &c. Examples of this kind are numberless, but at the same time, drunkenness is the bane and ruin of many of them.

Day-laborers in the towns, men who work first for one person and then for another, are generally well off if they are known to a tolerably large circle of employers, as the wages paid this class of laborers in towns are high. If the laborer is known only to a few employers, he is very often left without work and falls into pauperism. They are employed both in town and country in cleaning the streets, in making roads and railways, felling timber, sawing wood, &c.

WORKWOMEN.

Workwomen in the towns, including all those not employed in coarse manual labor, such as seamstresses, milliners, embroiderers, and the like, are divided into two classes differing from each other very much both as regards their material and social condition. Those who, from not being able to obtain private employment, are obliged to work for the large shops, clothing establishments, fringe-makers, &c., are miserably paid, owing to the demand for this species of employment being so much in excess of what is required to meet the wants of the public, in spite of the constant changes in the fashions. The bulk of workwomen of this class, unless they are very clever at work and have some means of their own wherewith to buy a sewing-machine, take to

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DWELLINGS OF THE WORKING CLASSES.

It is almost impossible to describe in general terms the character of the houses occupied by the working classes in Prussia, varying so widely as they do in different localities. What may be true of the houses in one place is altogether inapplicable to those of another, and even of others in the same locality or in the neighborhood. The subjoined account, although necessarily imperfect, will serve to give an idea of the general class of habitations in which the laboring population lives.

In the large towns the artisan classes live almost exclusively in lodgings, and it is rarely that the independent artisan or small tradesman lives in a house of his own, whereas in the country and in the small towns the latter is more frequently the rule than the exception. The houses inhabited by the rural artisans, laborers, hand-loom weavers, &c., both as regards their structure and living arrangements, are generally of the poorest kind, especially in the eastern provinces. Laborers, factory operatives, miners, &c., are frequently obliged, even in the country, to live in lodgings or else in buildings expressly constructed for workmen by the large landed proprietors in the eastern provinces, and by the mill-owners and proprietors of mines and iron-works, and companies in the western provinces. In many districts in the west joint-stock building companies and co-operative building societies have been established with the object of supplying the want of proper dwellings in particular localities; they purchase land with the subscribed capital and erect dwellings suitable for workmen and their families, and then let them at a moderate rent, frequently with the option of purchase by the payment of a certain annual sum for interest and sinking-fund in addition to the rent.

CONDITION OF LABOR IN SILESIA.

In relation to the working classes in Lower Silesia, it is stated by a competent authority, that "the condition of the artisan population is, on the whole, a satisfactory one. Journeymen and factory operatives can earn competent wages without their strength being overtaxed by the hours of labor. The workmen employed in the industrial establishments situated in the plains are in peculiarly favorable circumstances. A great many of them are settled on little properties of their own, and nearly all employ themselves out of working-hours in cultivating the ground. They raise the greater part of the vegetables and potatoes for their own consumption. The working population is more and more disposed toward frugal household management, in order by careful economy to save money, without too far stinting themselves in respect to their bodily wants. One obvious consequence of this is that, owing to the moderation and sobriety of their mode of living, the workmen enjoy bodily health, at the same time that their moral condition is raised."

It is to be feared, however, that this rose-colored description applies to but a limited portion of the country.

Of the more important groups which constitute the working classes of Prussia, the hand-loom weavers of Middle Silesia, numbering about 30,000, are undoubtedly the poorest, the worst fed, and from their weak physical constitutions, which does not prevent them, however, from having large families, the least capable of raising themselves unassisted above their present condition. Some change for the better has been effected of late by the erection of large spinning and weaving factories, fitted with first-rate machinery, on the skirts of the mountains, attracted there no doubt by the cheapness and abundance of labor.

With respect to the employment of female labor in manufactories, owing to the rapid increase of population and the great development of industry, women are employed now to a much larger extent than formerly in the factories.

More than a fifth of the whole number of factory operatives are females, and considering that the greater portion of them are members of families, and that they receive comparatively good wages, they are decidedly well off in an economical point of view. Their moral condition, owing to the male and female operatives working indiscriminately together at the mills, is from all accounts much less favorable. The reports from the various provinces describe them as inordinately fond of pleasure and given to dissipation, adding that large numbers of them live a dissolute life, and have to bring up illegitimate children. Many of the mill-owners take particular care to keep the work-rooms of the sexes separate; but in some branches of manufacture this precautionary measure is impossible. The proprietors of the smaller class of manufactories show little inclination to incur expense by introducing the changes in the working of their establishments which the adoption of such a measure would render necessary.

The wages paid are for the most part sufficient to support single persons in comfort,

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and if they are at all thrifty, they can save money and frequently do so, but they are insufficient to support a wife and children independently of what the latter earn themselves. The manufacturing population is pre-eminently deficient in the resolution, which distinguishes other industrial classes in this country, to strive to work their way up, even in spite of adverse circumstances, to comparative independence. The monotony of their daily labor seems to produce in them an morbid longing for enjoyment, in the gratification of which they spend a considerable portion of their earnings and weaken their physical powers by dissipation.

The miners and iron-workers of Upper Silesia are almost exclusively Poles. They contrast unfavorably with the German workmen in their addiction to debauchery and dissipation, so much so that in many of the works where they are employed measures have been adopted for paying the weekly wages due them to their wives, to prevent them from squandering their earnings, instead of supporting their families.

CONDITION OF LABOR IN PRUSSIA IN 1872.

REPORT OF MR. LEWIS, CONSULAR AGENT AT DÜSSELDORF.

AGRICULTURAL LABOR.

Agricultural laborers in this district usually rent or buy a small cottage and small plat of ground, which they cultivate, usually keeping a goat or cow. If the latter, it is employed in plowing and hauling the little two-wheeled cart of the owner.

There are thousands of such small proprietors here, owning from a quarter of an acre to three acres, from which, with the aid of occasional work done for others, they manage to live. Their scale of living is very low compared to ours, and it is wonderful how they keep up their health and strength on such diet as they have. This is mostly vegetables, with occasionally a bit of pork or sausage, which is boiled with the soup or sort of stew which constitutes their main support. Coffee is universally used, but without milk or sugar, and made very weak, but it is drunk three or four times a day. When working for any one their wages vary, according to the time of year and the kind of work they have to do, from twenty to twenty-nine cents per day. Most of the women of the family make or spin a piece of linen cloth each year sufficient for the needs of the family, and if they have sufficient black bread and potatoes for the needs of the well-off. The children are all educated so far as they can read and write; and all the male population between the ages of twenty and twenty-six are liable to three years' military service. During this period they are probably better fed and clothed than in any other part of their lives; and, although they only get five cents per day as pay from the government, they learn habits of discipline, cleanliness, and order that stand them in good need after this service is ended. I find that drunkenness is rare among the rural population. They all drink either beer or schnapps, or both, but not to the excess we find in agricultural populations of other countries, and it is seldom they lose a day's work through this cause. They are orderly, civil, and very obliging in their manner, especially to strangers, and brawls or fights are of rare occurrence. In their way they are nearly all punctual in their religious duties; the Roman Catholic portion going to early church, and then amusing themselves the balance of the day in their restaurants or beer-gardens, or in making visits from one village to another. Between them and their pastor there is always great respect or regard, and he is in reality the father of his flock, and has to settle many grievances other than of a religious nature. The proportion of Catholics to Protestants in this part of Prussia is four to one. So far as I can learn their morals are good, and it is rare to find a man or woman thirty years old unmarried. Most of the men marry as soon as their military service is finished.

WORKING CLASSES IN TOWNS.

The condition of the working classes in towns is not so good in a moral and religious point of view as that of the rural population, although their earnings are double as great. There are more temptations to spend money in towns, and it is mostly spent uselessly and foolishly. The dwellings are poor and dear, and the great rise in the last few years in the price of all house property has caused the rents of the poor to rise proportionally. None, or very few new houses, are built for the poor, and they are crowded in the old and inconvenient houses, where cleanliness and comfort are impossible. The price paid for two rooms varies of course according to their size and location, and also to the stage or story on which they are situated. The lowest price would be \$2.88 per month, or ten cents per day, and from this to \$5.00 or \$5.76 per month. They live mostly on potatoes, black bread, and vegetables, but use more fresh meat than the country population.

The state of morals is lower than in the country, and may be accounted for by the state of overcrowding in lodging-houses, and the indiscriminate mixture of the sexes in

factories. On the whole, however, I consider their moral state better than would be found among the same class in most European communities.

The town populations are not so temperate as in the country, and among some trades *blue Monday* is the rule rather than the exception, and I consider that drinking to excess is on the increase, although nothing to compare with what the same habit is carried in England, Scotland, and Ireland. I spoke with the proprietor of a large rolling-mill who employs 250 hands, on this subject, and he told me that he had not had a case of drunkenness in his establishment for six months, and that not a single man had remained out on Monday for upward of three months. He accounted for the fact by saying that most of his hands were married men with families, and that they worked in *gangs* of six or eight, and that when one remained out it disarranged the work of those who worked with him. So also with a large wool-spinning factory that employs 200 hands. The proprietor told me that very few of his people were addicted to drinking, and it was rare that any were absent on Monday from work. The work-people do not, as a rule, look so strong and healthy as those in the country, as they do not get the same amount of fresh air and healthy exercise, although as a rule they live better. Compared to our working classes in the United States their state is far below them, both as regards living and wages; nevertheless I believe statistics would show that they are, on the whole, longer-lived.

Those trades most addicted to drinking are masons, tailors, and shoemakers, with some of the workers in iron. I omitted to mention that unmarried journeymen mechanics usually rent only a *bed* in a room with others, near where their work may happen to be, and for this they will pay from 5 to 6½ cents per night. When at work they do not generally board in the sense of our work-people, but buy a piece of bread, and sometimes a piece of smoked ham or sausage, and ground coffee to the value of, say, 2 cents. Each has his stone jug and cup, and then this is sent to the nearest shop, where they buy their provisions, with the ground coffee, and is filled by them with boiling water, and they sit about the work they may be doing in groups and take their breakfast. For dinner they generally take a glass of beer with their bread and meat or sausage, but never anything hot in the way of meat or soup. At 4 o'clock coffee is again taken with a slice of bread, and supper when the work is finished, same as dinner. I found that the three meals cost on an average 24 cents per day, and that each man generally expended 5 to 7½ cents a day for his spirits or schnaps. This schnaps can be bought from 14 to 20 cents the quart, and when good and taken in moderation, doctors have told me that it is not only not hurtful, but beneficial to the workman who lives on such a low diet and gets so little animal food that some stimulant is necessary. The married man has his dinner sent or brought to him by his wife or one of his children, but makes his own coffee as the unmarried ones do. To sit down to a regular and comfortable meal as we understand it, is not known among these people. In conclusion I should say that the condition of the working classes here, as to morals, temperance, and religion, would compare favorably with the same class in any part of Europe.

BARMEN, PRUSSIA.

Mr. Consul Hoechster, under date of September 13, 1872, writes as follows:

The condition of the work-people in my consular district is now tolerably good, as they have had plenty of work for several years. Their morals are quite satisfactory, but their comfort at home is very poor, in consequence of the unhealthy and small rooms in which they live. They have seldom houses of their own, and as rents are very high they are obliged to live in one or two small rooms.

I have found the family of a skilled mechanic, consisting of two adults and three children, living in two small rooms, for which they pay 40 thalers rent per year. To make a somehow comfortable living, the whole family—husband, wife, and children—have to work. They can earn about 10 to 12 thalers per week, but very seldom make any savings. They live from hand to mouth, and in times when business is dull and work scarce they depend mostly on the charitable institutions, which are very good in Elberfeld and Barmen.

DANTZIC, PRUSSIA.

Extract from a letter on the condition of the workingmen, received from Mr. Collas, consular agent, under date of Dantzic, September 7, 1872:

Workingmen in this part of the country mostly live very poorly and enjoy none of the luxuries of life, their limited earnings not permitting it. The best class of workmen, such as masons, carpenters, and other mechanics, are paid at the rate of \$4 per

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week in the summer and somewhat less in the winter. The second class earns about 36 cents less, and the third class 72 cents less. There is another class of laborers, such as porters who carry the wheat into and out of the granaries, and others employed in the transport of timber, who earn at times double this sum; but on the whole they are not better off, as winter puts a stop, in a great measure, to this sort of business. Comfort is not known or attended to among these people, and a family—man, wife, and children—live in one room, which, with a sort of kitchen, is rented at about \$30 a year. Women are sometimes employed in different places, and earn about \$1.50 a week. Children are seldom employed before the age of fourteen, when they are either apprenticed and get their board and lodging, or if employed otherwise \$1 to \$1.32, according to their deserts and the nature of the employment. Education, although compulsory, is not much attended to among the lower classes, and morals are at a very low ebb.

There are several iron-foundries here, Portland-cement manufactories, breweries, &c. At Dirschau and Elbing there are also establishments of this description. Wages there are not quite so high as at Dantzic, but living is from 20 to 25 per cent. cheaper.

FRANKFORT-ON-THE-MAIN.

Letter from Mr. Consul-General Webster on the condition of the labor-
ing classes:

CONSULATE-GENERAL OF THE UNITED STATES,
Frankfort-on-the Main, October 19, 1874.

SIR: * * * * * The laborers in Offenbach, near Frankfort, where an inferior class of work is produced, are of a lower order in the moral scale, idle, dissipated, and troublesome. In a place like this, where there is a large fixed population of workmen, what is called here social democracy, not unlike communism in Paris, has fixed its fatal grasp, which, while it promises to improve and elevate, actually impoverishes and degrades. The laborer is induced to believe that association will bring to him the prosperity which his own industry and temperate habits can alone secure.

When wages were lower and the laborer received less pay, although provisions were also somewhat lower, still the absolute necessities of life required the most, if not all that the laborer received, and there was less chance for intemperance. The increase, has not been all used in providing better food and clothing. The beer-house receives more than its proportion of the increase. This is illustrated by the greater irregularity of the workmen, the increase of the number of beer-houses, and the later and noisier carousals which often occur in the streets.

The German laborer lives very differently from the American laborer. If he is married he generally has a home in some of the small villages of Germany, from which issue every morning crowds of men and boys to the cities, and of women to the fields and farm-houses. If he is able to hire rooms in the cities, it is rare that the lower classes more than sleep at their homes. Like the villager, who lives too far to go and come every day, and like single men, they have only their sleeping-places, generally several in one room. They eat and drink where they happen to be. Wherever their bread and cheap meat, generally sausages, and cook the same and make their meals in a primitive style. They rarely go to the beer-house or restaurant for breakfast or dinner. The evening is generally spent at the beer-house until it is time to go to their beds in the villages or their sleeping-places in the cities. They have no boarding-places where, as according to our custom, the laborer takes his meals, sleeps, and passes his leisure time. In small manufacturing villages, where there is a fixed, permanent supply of labor, with little or no surplus, the operatives, having permanent employment, receive less pay and are steadier, as they are more dependent upon their employers. The German is not a hard-working man; that is, he does not produce much unless he is a farmer working upon his own land. The fact that women are compelled to work in the fields, doing every kind of work that ever the servile classes of the South were formerly compelled to do, shows great destitution or gross indolence on the part of the men. It is true that the condition of the laboring class has been very low throughout Europe. In Germany it has not changed much. With better wages, their ability to live better must be clear; still it is not plain to be seen where the increase is expended. It must be so well distributed that the gain is not apparent. The only class of Germans who seem to make great progress are the Jews. They, however, are rarely laborers or mechanics. They take to trade or business.

All children must attend school until they are 14 years of age. They are then put to labor until they are 13 or 20 years of age. Then they are c into the active arm-serve but one year. The exercise and training of every muscle of the body they then receive, and the forced habits of temperance they there undergo, make them strong.

and healthy men, better fitted for toil and a long life than they could otherwise be, but habits of industry are not acquired. Relieved from restraint they are more jubilant. The attractions of dissipation make them unsteady. Still it cannot be doubted that the condition of every class of laborers is improving.

I am, sir, your obedient servant,

WM. P. WEBSTER,
United States Consul-General.

In reference to the unsteady habits of the laboring classes, Mr. Webster, under date of September 22, 1873, writes as follows:

Labor has of late become so irregular and unsteady, that nearly every laborer now works by the piece or square. Contractors will reluctantly make a contract for a specific time or amount. A man, who employs 1,200 laborers, states that they scarcely labor four days per week, allowing for bad weather as well as absence from work from other causes.

CHEMNITZ, SAXONY.

The following reports on the condition of the laboring classes in Germany, and particularly in the consular district of Chemnitz, possessing, as they do, great interest, are presented in full. The one was prepared by Mr. Saville, chief clerk of the Treasury Department, who was then in Europe; the other by Mr. Cropsey, United States consul at Chemnitz.

REPORT OF MR. SAVILLE.

JUNE 18, 1874.

SIR: Referring to Department letter of November 4, 1873, in which I am instructed to procure for the Chief of the Bureau of Statistics, certain information in relation to the condition of labor in Germany, and particularly in Chemnitz, I have the honor to submit the following

REPORT:

The town of Chemnitz, which in 1871 contained about seventy thousand inhabitants, is situated in the midst of the most flourishing and extensive manufacturing district of Germany. More than two-thirds of the population of the town, and fully three-fourths that of the district, may be classed as laboring people. The principal industries of the section are the manufacture of cotton hosiery, machinery of all kinds, linen goods, toys, &c. Most of the hosiery goes to the American market. The agricultural laborers form but a small part of the population, and those whom I saw seemed to be less prosperous than the mill-hands and mechanics. Mr. Cropsey, our consul at Chemnitz, is of the opinion that, as a class, they are more so.

The laboring classes are generally industrious. The cost of maintaining an average family in the ordinary frugal manner of the country, exceeds the amount which a man with steady employment and average pay can earn, so that even though the natural tendency of the laborer was to be idle, his imperative wants would compel him to industry. I think, however, as a mass, the working classes of Germany are naturally industrious.

Intemperance, in the sense of drunkenness, is rarely met with in Europe, where an intoxicated man is a very unusual sight. The common liquor of Germany is beer, which is used to great excess. Ordinarily it does not produce intoxication. The annual amount of beer consumed is enormous, but very little time is lost from its effects. The most serious result of the excessive use of this liquor is the cost. I merely repeat the opinion of the best informed and most reliable authorities in Germany when I say that, taking the whole country together, the average amount spent by the lower and middle classes for beer is quite one-fourth of their earnings. The necessary consequence of this is that the comforts of the family, represented by the character of their houses and the quantity and quality of their food and clothing, are either very seriously abridged or are provided for by the labor of the women and children. And even this latter does not supply the waste, since the gross earnings of the head of the family, as I said before, do not meet the common wants of an ordinary frugal household, and the labor of the wife and children is necessary to make up the deficit.

As a general rule, the laborer is housed in poor, mean, and crowded quarters. Many families are found herded together in a single house, and but very few of them have more than one or two rooms. I was informed by a gentleman in Dresden that one of the large manufacturers of machinery in the district of Chemnitz had undertaken,

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J. P. WEBSTER,
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some years ago, to provide decent small houses for his mechanics and laborers, to be rented to them at an annual rate of 4 per cent, on their cost. The experiment was a failure, because the rent was nearly double what they paid for the miserable one or two rooms they had been wont to occupy, and to have made the improvement in this feature of their condition, economy in beer would have been necessary. These houses, built with a view of comfortably accommodating a single average family, are now occupied by two and sometimes by three and four families.

One of the most noticeable features of the homes of the laboring classes, not only in Germany but throughout these parts of Continental Europe which I have visited, is their squalor and wretchedness. Most of those I looked into were in badly furnished, even shoddy, and the poorest household. Their common condition was dirty, dingy, and comfortable to the last degree.

The food of the laborer and his family usually consists of a substitute for coffee made from chicory, and coarse black bread in the morning and evening, and a cheap soup made from vegetables, with black bread, at noon. Occasionally they will have a piece of meat, but, generally, this would not happen more than once a week. Recently there has been established in Chemnitz a market for the sale of horse-meat, which, being comparatively cheap, gives them more for their money or enables them to get it oftener than formerly.

The advance in wages which occurred between 1870 and 1872 was accompanied by an equal, if not greater advance in the price of all the actual necessities of life, so that the result has not been to the benefit of the workmen and their families. Recently wages have fallen 20 to 25 per cent, without a corresponding fall in the price of food, and the consequence has been widespread suffering and want. I do not think an increase of wages, even when not accompanied by an increase in the price of food, would result in any improvement in the comforts of the workmen or their families. They are accustomed from childhood to coarse and meager food, and do not ordinarily care for more or better. When wages go up, therefore, the extra money earned goes to beer-shop to pay for what they consider the one great luxury of life, plenty of beer.

Perhaps the hardest condition of the laborer of Germany, and in fact of all Europe, grows out of the enforced military service from all persons capable of bearing arms. It means the absolute loss of not less than three years out of the productive period of every able-bodied man's life, during which the pay is scarcely enough to supply the beer consumed by the soldier. As a consequence, the family is deprived of all support from this source; and when the soldier is the head of a family, as he not infrequently is, they struggle through a period of wretchedness and poverty beyond description.

The foregoing covers all the points of inquiry in Department letter, and, I believe, is a fair statement of facts as far as I had time to investigate the subject. I inclose a letter from the consul at Chemnitz, in which he has, at my request, answered the several questions asked in the memorandum of the Bureau of Statistics.

Very respectfully,

Hon. B. H. BRISTOW,
Secretary of the Treasury.

J. H. SAVILLE.

REPORT OF MR. CONSUL CROSFY.

UNITED STATES CONSULATE,
Chemnitz, Saxony, May 11, 1874.

Sir: In complying with your request to furnish information concerning the condition of the working people in this consular district, I wish to say Chemnitz is situated in the midst of an exclusive manufacturing district. Of the 85,000 inhabitants in this city more than 50,000 belong to the working class, and are operatives in the numerous factories and machine-shops, one alone employing over 4,000 men. Therefore, the answers to questions asked will have more particular reference to this class of the community.

The peasantry are the farmers; however, farming in this country partakes very much of gardening, the women always sharing the labors of the field. These people are lived in a cluster of shanties that are dignified with the name of village—each supporting a beer-saloon and a church. The lands belong to wealthy families, and are rented out in patches to the peasants. They are generally a more prosperous people than those engaged in the manufactories.

Question first. *Are the working classes industrious?*

Poverty necessitates industry to a limited extent. They do not and cannot lay up anything for the future, and the loss of a day's labor thrusts them on the verge of

Industry. The instances are indeed rare where a workman has secured a competency sufficient for the support of himself and family, and has risen above the common herd.

Question second. Are they intemperate, and, if so, do they lose much time in consequence?
Intemperance prevails to a certain degree. Beer is the popular beverage, and everybody indulges. Alcoholic drinks are above the reach of the poor, or drunkenness would be more common. The system becomes accustomed to the beer, and judging from the quantity one man (a native) can consume, I apprehend that one will stagger quicker from the weight than the strength of the potion.

Third. Are the comforts of their families seriously abridged by the amount spent by the men in drink?

In many instances they are. The military law, rigidly enforced, requiring three years' active service from every able-bodied man on the completion of his nineteenth year, frequently works a hardship where there is but a single son in the family.

Fourth. What is the condition of the rooms they occupy?

They are deplorable. Families are stowed away together in dirty, dingy, vermin-breeding alleys, attics, and cellars.

Fifth. Do many families live in one or two rooms only?

A vast majority of the whole do.

Sixth. Has the recent advance in wages resulted to the advantage of the families of the workmen?

The price of living, the simple necessities of life, has advanced in equal ratio with wages. At present there is a decline in the price of labor, attributable to the falling off of foreign trade, and as a natural consequence actual suffering is wide-spread.

The chief meal of the average artisan consists of a few potatoes and unbolted rye-bread, washed down with cheap beer, with the occasional addition of a few ounces of horse-meat.

A stupid nature, and dull ambition, with the inborn idea that they will labor all their lives as their fathers did before them, makes the working class of some portions of Germany perpetual slaves to poverty, and the day is far off when they shall be emancipated from this thralldom.

I forward you a report of the Chemnitz Chamber of Commerce for 1871, and a similar report issued by the city of Plauen for the year 1873, which will give you further information.

With great respect, I am, sir, yours, &c.,

LOUIS E. CROPSEY,
United States Consul.

HON. EDWARD YOUNG,
Chief of Bureau of Statistics, Washington, D. C.

LEIPSIQ, SAXONY.

Mr. Consul Steuart writes as follows, in reference to the habits of industry and temperance among the working class:

"From observation of the laboring class in Leipzig, I should say that they are obliged to be industrious in order to live; that beer is their principal beverage, and intoxication is not often seen on the streets."

PAUPERISM IN SAXONY.

The following statements in regard to pauperism, and to the food and lodging of the working class in Saxony, are condensed from the British consular reports:

The number of paupers in Saxon poor-houses on a given day in three different years was as follows:

Year.	Poor-houses.	Male paupers.	Female paupers.	Total paupers.
December 3, 1858.....	2,540	10,817	13,019	23,836
December 3, 1861.....	2,555	10,047	12,256	22,303
December 3, 1864.....	2,555	7,967	9,617	17,584

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LOUIS E. CROPSEY,
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CONDITION OF LABOR IN GERMANY.

581

It has been calculated for 1861 and 1861 that out of 100 of each of the following classes of workmen in towns, the following were paupers:

Class.	1861.	1861.
Master mechanics	Per cent.	Per cent.
Master journeymen	15.88	13.41
Sedentary workmen	19.63	12.46
Factory operatives	16.81	23.76
Daily laborers	2.57	2.71
	32.12	31.88

The chief causes of pauperism are ascertained to be idleness, evil habits, and drink-
omness.

FOOD AND LODGING.

The diet of the Saxon is simple, and not unhealthy. It consists chiefly of rye-bread, butter, bacon fat, pork, sausage, beef and veal, potatoes, cabbage in great variety, dumplings, and soups. The meat most in use is pork, being as cheap as beef and more substantial. Beer is smaller than in England, but good and healthy. Of that any amount may be drank; not so of ardent spirits, in the use of which caution is greatly to be recommended.

The rooms in which workmen live are usually healthy, being chiefly in the upper stories, and seldom under filthy yards in area. In lodging-houses, however, the healthiness of the rooms is in exact proportion to the number of beds, whether two or four or more, that are introduced into them. The Saxon bed is short and narrow, and its furniture is an Indian grass mattress, a wedge pillow with straw stuffing, and a leather bed.

LABOR AND OTHER ASSOCIATIONS IN CHEMNITZ.

In connection with the two foregoing reports in reference to the condition of the laboring class of this seat of industrial activity, it may be well to present the following translation of a statement in relation to the large number of associations which have been established by the working people for mutual benefit and protection, and for their advancement in technical and general knowledge:

The commercial and industrial district of Chemnitz, in Saxony, to an area of 770,045 German acres has a population of 789,183 inhabitants, a large majority of whom are working in or for the numerous establishments engaged in the various trades and industries represented in that district.

This large number of people, living upon their daily earnings without being able to accumulate a sufficient amount to last them longer than a month or two when misfortune of any kind overtakes them, have been induced for this reason at first, (and also instigated and associations as there are trades; these are called the trades-unions and labor associations.

These associations are based on so many different plans and made to serve so many various purposes, that every want and need is provided for, and since they are mutual associations, are productive of decided benefits to the individual as well as to the community.

The membership of these associations, whose special object is the organization and support of industrial schools, both for the young and the aged, and the establishment of mutual savings and sickness-funds, is constantly on the increase; nor do they restrict themselves to their first object, but they continue to develop and enlarge their respective fields of action, and already several among them have instituted branches of so-called "associations for protection against malicious debtors."

The principal associations in the district of Chemnitz are those limited to making advances of money to members after a certain period of membership, or on personal security, a period of from one to six months at 1 to 2 percent interest. These were sixty in number, with an aggregate membership in 1870 of 20,075, and a deposit and interest-fund of \$2,512,335, and outstanding advances to the amount of \$8,071,401. Next in order are the mutual savings associations, fifty-one in number, with 129,531 depositors in 1870; amount of deposits \$8,733,919; the smallest deposit being from six to ten cents, paying from 3 to 4 per cent. interest.

Consumption associations number twenty-one, with a membership of 5,191 and a clear profit of \$12,525 in 1870.

Industrial associations and associations to promote mental culture number thirty-five, and have libraries aggregating nearly 10,000 volumes, pamphlets and periodicals, and about 10,000 members with lecture courses on scientific, industrial, commercial and other subjects and annual contribution fee ranging from 21 cents to 90 cents.

DRESDEN, SAXONY.

The following report of Mr. Consul Breutano, on the condition of the working-classes in Saxony, with the accompanying tables showing the consumption of bread and beer during the six years from 1868 to 1873, inclusive, will be read with interest :

UNITED STATES CONSULATE,
Dresden, October 9, 1874.

In regard to the information you request, I desire first to state that Dresden cannot be classed among the manufacturing or industrial cities. Being the capital of the kingdom of Saxony, and the residence of the reigning dynasty, the erection of manufacturing or other industrial establishments in the city, or its immediate neighborhood, was, till of late, in no way encouraged.

Devoted to the culture of the fine arts, of science, music, and literature, Dresden has, through its fine collection of paintings, works of sculpture, and public gardens, acquired a world-wide reputation, and attracted strangers from all parts of the globe. Wealthy people of different nationalities have taken up their residence here either permanently or temporarily, to enjoy the amenities of culture and refinement. Under such circumstances it is not to be wondered at that the smoke-stack of industrial establishments and the noise of the steam-hammer were no very desirable accessories to the state capital. But the steamships on the river Elbe, which divides the city in two parts, the old and the new city, (Altstadt and Neustadt,) and which is navigable from a point a little above Prague, in Bohemia, to Hamburg, on the German Sea, and the iron-horse on the land, were irresistible in opening even the city of Dresden, euphemistically called "Elbe Athens," to the inroads of an industrial era.

Although in the last few years quite a number of new industrial establishments were founded, or such establishments already existing were enlarged, and although there are in the city, or its immediate neighborhood, establishments for the manufacture of tobacco and cigars, for mechanical purposes, for machineries, for chemical manufactures, steam brick-yards, cotton-spinneries, dyeing establishments, breweries, printing-houses, in which establishments several thousand laborers find employment, yet these men who work in such establishments are only a small portion of the laboring class of this city.

In consequence of the establishment of the German Empire and a German citizenship giving every German the right to settle anywhere in the "Fatherland," there was, in late years, quite an influx of population into the larger cities, and especially into Dresden, the population of which has now nearly reached the second hundred thousand. This necessitated the erection of many new buildings, thereby attracting operatives in the building-line, as masons, stonecutters, bricklayers, joiners and carpenters, locksmiths, tilers and slaters, plasterers, painters, whitewashers, &c. To these may be added other workmen of skilled labor, tanners, shoemakers, hatters, cabinet-makers, and piano-makers. For the production of fine and elegant furniture, especially carved and inlaid furniture of excellent workmanship, and for the manufacture of highly finished pianos, the city of Dresden enjoys an excellent fame.

The wages of the laborers had reached their highest scale in the period of 1871-1873 but have, in consequence of the crisis which commenced in the autumn of 1873 and which has continued more or less up to the present time, somewhat declined. If the consequences of that crisis have had a less detrimental effect upon the laboring classes of Dresden, the causes may be found in the fact that Dresden is not a manufacturing or industrial city in the common sense of the word, as above shown; and, therefore, not so much affected by a general crisis as places having a preponderance of factory population.

In addition to these causes it may be observed that during the last year, when there was some relaxation in private building enterprises, as compared with the two previous years, a great many public buildings were being erected. I mention here the erection of extended military buildings, barracks for the quartering of several regiments of soldiers, an extensive polytechnic school, a new royal opera-house in the Altstadt, on the site of the one burned in 1869, a royal theater in the Neustadt, extensive docks along the Elbe, and large water-works. The latter necessitated the laying of water-pipes all over the city, as up to the present time the water supply of Dresden was of a very primitive nature. As another cause, I may mention that the high state of agri-

culture around Dresden, and the many improvements in this important branch of the national resources, gave employment to all laborers who could not find such in the city proper, and the high prices of the farm-products enabled the farmers to pay good wages. A new railroad, in progress of building from Dresden to Berlin, also gives employment to a great many skilled and common laborers.

As regards the industry of the laboring-classes, it is known that the Germans generally are a laborious and saving people, and the same may be said of the laborers of Dresden and the surrounding country. In 1871 the average rise in the price of labor was about 50 per cent.; in some branches even more; and the effect of it may be shown by the fact that since that time the consumption of bread, meat, and beer has increased considerably.

I am indebted to Dr. Janasch, the director of the newly-established bureau of statistics of the city of Dresden, for some very interesting statistics in regard to the consumption of the above-named articles. As the city of Dresden levies a small import duty (octroi) on all eatables and drinkables at the barriers, it can be easily ascertained how much is consumed in the city. The following table gives the number of inhabitants during 1868-1873, inclusive, the percentage of the increase of the population, the consumption of meat in the city, the consumption per capita, and the percentage of the increase of consumption:

Year.	Number of inhabitants.	Percent. of increase of population.	Consumption of meat.		Per cent. of the increase, per consumption of meat.
			By the whole population.	Per capita.	
1868	151,508	.....	Pounds, 17,880,101	Pounds, 115.86	.....
1869	159,732	3.42	19,536,952	122.57	9.3
1870	161,456	3.18	20,632,211	125.45	5.6
1871	169,539	3.68	22,731,161	133.97	11
1872	171,664	3.99	24,550,036	140.72	2.1
1873	173,678	3.69	26,340,750	146.60	7.3

The table annexed, marked A, shows the import and export of wheat and rye flour, and of bread, and the consumption of these articles by the whole population and per capita. While the increase in the consumption of the cereals kept step with the increase of population, the consumption of meat increased in a higher ratio, which shows that the circumstances of some people have greatly improved, and it may be conjectured that it was the laboring classes who, by the higher wages which they earned, were enabled to live in a better and more substantial manner.

In regard to the habitations, the mode of living of German laborers compares very unfavorably with the condition of American workingmen. While a great many of the American laborers, especially the skilled class, reside in neat, comfortable cottages of their own, the workingmen here, as a general rule, live in tenement houses in the suburbs of the city. I speak here of the permanent resident class. The fluctuating laboring population which comes in from the country remains in the city during the week, and returns to their families on Saturday, put up at sleeping-places, (schlafstellen,) where often quite a number occupy one and the same apartment.

As a whole, the German laborers here are temperate. An exception to this rule may be found under that class of workingmen which I have just described, who have no home here, and who consequently resort to beer and liquor saloons. The consumption of beer has of late considerably increased, (as is shown by the annexed statistical table marked B,) and there is no doubt that the laboring classes figure to a great extent among the consumers of this Teutonic beverage. But it would be a serious mistake to conclude, from this increase in the consumption of beer, that among the laboring classes intemperance was on the increase. On the contrary, beer is considered by the German as a nourishment, and in the same ratio as the consumption of beer increases, the use of that most pernicious beverage, distilled liquor, must necessarily decrease. My experience is (and many Americans, some of whom were strictly abstinence men, who made observations on this subject, entirely agree with me) that a more quiet Sunday cannot be found than here, although beer-saloons and beer-gardens are on that day crowded by the laboring classes and the small business men and their families. An exception to this rule will be found among those laborers who are single men, or who are here without their families, occupying such sleeping-places as I have above described.

As regards the education of the laboring classes, I desire to state that popular education in the Kingdom of Saxony, as in the other states composing the German Empire, is a compulsory one. Quite inconsistently with this system of compulsory education is the fact that they have here no system of free schools. The idea of the only true statesmanship, that it is the duty of the whole community to educate the rising population, has not yet penetrated into the German states. Only the two model republics, the United States of America and the Swiss Confederacy, have a system of free schools. In Saxony the parents are compelled to send their children to school till they have reached a certain age, generally fourteen years, and they are, at the same time, obliged to pay a tuition fee, and for the school-books and writing-material. That this is very frequently a great hardship for poor people is self-evident. The common schools here are certainly not superior to the public schools in the cities of the United States, as, for instance, Boston, New York, Philadelphia, Chicago, Cincinnati, Saint Louis, Milwaukee, &c. On the contrary, I find that the studies in our schools have a wider and more liberal range. I will only observe here that the children of the Catholics are educated in different schools from those of the Protestants and Jews, because not only the moral teachings of religion, but also the dogmas of the different recognized denominations, form a part of the lessons in the public schools. In some parts of Germany they have recently commenced to establish non-denominational, or mixed schools, in which all the children, regardless of their denominational character, congregate and are taught the doctrines of Protestant or Catholic Christianity, or Judaism, by the respective professors of those creeds; but in Saxony the distinction of the different denominational schools was sanctioned by a law which was promulgated the present year.

I give it as my opinion that the advance of wages during the past few years has resulted in benefit to the laborers and their families.

I am, sir, your obedient servant,

LORENZO BRENTANO,
United States Consul.

Hon. EDWARD YOUNG,
Chief of Bureau of Statistics, Washington, D. C.

ZO BRENTANO,
United States Consul.

Tables showing the quantity of wheat and rye flour and bread imported, exported, and consumed, and also the quantity of beer produced, imported, exported, and consumed, in Dresden in the years from 1868 to 1873, inclusive.

Articles.		1862.	1870.	1871.	1872.	1873.
Population.	Quantity.	Percentage of Increase or decrease.	Quantity.	Percentage of Increase or decrease from 1859.	Quantity.	Percentage of Increase or decrease from 1871.
A.—FOUR AND BREAD.						
Wheat flour:	154,308		153,382	164,456	169,530	174,004
Imported:						
cwt.	125,968.43		190,677.32	203,948.73	204,821.66	200,808.04
do.	11,636.67		11,636.67	23,506.39	10,434.71	10,434.71
do.	146,605.10		179,640.65	180,412.34	195,787.66	190,382.33
do.	35.01		112.71	111.06	105,878.66	105.36
Rye consumption per capita., pounds.	35.01		112.71	111.06	105,878.66	105.36
Imported:						
cwt.	104,533.84		101,135.39	120,029.18	113,091.76	103,792.37
do.	67.63		67.63	114,624.39	67.63	67.63
do.	164,435.68		100,645.42	118,370.11	112,601.50	96,319.52
do.	67.63		67.63	118,370.11	112,601.50	96,319.52
Bread:						
Imported:						
cwt.	129,066.7		136,898.26	139,831	159,628.15	177,460.33
do.	127,614.7		136,898.26	139,831	155,506.15	177,460.33
do.	82.70		82.70	84.48	89.11	95.63
Consumption per capita., pounds.	82.70		82.70	84.48	89.11	95.63
B.—BEER.						
Population.	130,884		166,548	170,570	181,679	186,664
Produced:						
Lager beer	131,090.77		125,184.90	137,671.71	152,400.09	169,477.02
City-brewed beer consumed:	105,121.77		112,636.57	111,530.21	120,733.14	130,012.20
Strong beer	120,733.72		121,012.34	129,131.77	144,545.32	161,941.59
Lager and strong beer consumed:	81.14		81.14	75.08	81.14	81.14
Lager consumption per capita., pints.	63,476.99		67,946.91	72,857.29	82,621.63	90,440.59
Lager and strong beer consumed:	38.70		40.80	42.15	46.81	54,837.21
Lager consumption per capita., pints.	32,505.28		32,505.28	32,505.28	32,505.28	32,505.28
Lager and strong beer consumed:	32.51		32.51	32.51	32,505.28	32,505.28
Lager consumption per capita., pints.	47,690.55		47,690.55	47,690.55	47,690.55	47,690.55
Lager and strong beer consumed:	47.69		47.69	47.69	47,690.55	47,690.55
Lager consumption per capita., pints.	29.53		29.53	29.53	29.53	29.53
Lager and strong beer consumed:	29.53		29.53	29.53	29.53	29.53
Lager consumption per capita., pints.	3,906.05		3,906.05	3,906.05	3,906.05	3,906.05
Lager and strong beer consumed:	41,630.78		41,630.78	41,630.78	41,630.78	41,630.78
Lager consumption per capita., pints.	41,630.78		41,630.78	41,630.78	41,630.78	41,630.78
Lager and strong beer consumed:	41,630.78		41,630.78	41,630.78	41,630.78	41,630.78
Lager consumption per capita., pints.	41,630.78		41,630.78	41,630.78	41,630.78	41,630.78
Lager and strong beer consumed:	41,630.78		41,630.78	41,630.78	41,630.78	41,630.78
Lager consumption per capita., pints.	41,630.78		41,630.78	41,630.78	41,630.78	41,630.78
Lager and strong beer consumed:	41,630.78		41,630.78	41,630.78	41,630.78	41,630.78
Lager consumption per capita., pints.	41,630.78		41,630.78	41,630.78	41,630.78	41,630.78
Lager and strong beer consumed:	41,630.78		41,630.78	41,630.78	41,630.78	41,630.78
Lager consumption per capita., pints.	41,630.78		41,630.78	41,630.78	41,630.78	41,630.78
Lager and strong beer consumed:	41,630.78		41,630.78			

CELEBRATED INDUSTRIAL ESTABLISHMENTS.

The iron-works and the locomotive-shops of Mr. Borsig, at Berlin, and of the Saxon Machine Company, at Chemnitz, have already been referred to in the preceding pages. Both produce engines, machines, and a variety of other works, which although destitute of the beauty of finish of similar articles made in the United States, yet possess the desirable quality of durability, and have attained a reputation which is no doubt deserved. The tools and appointments of at least one of the establishments are unquestionably inferior to those of first class shops in Philadelphia, Paterson, Providence, Taunton, and other cities of the United States. No inducement therefore exists for presenting an extended notice of industrial works, which, however deserving of credit, possess in no degree features which can be profitably imitated by similar works in the United States.

But among the metallurgic industries of Germany, there is one which, whether in regard to its history, its extent, the excellence of its workmanship, the liberality of its administration, or its general prosperity, is so far in advance of others—being perfectly unique—that it demands a foremost place among the noteworthy industrial establishments, not only of Germany, but of the world. Reference is made to the

STEEL WORKS OF FRIED. KRUPP, IN ESSEN, PRUSSIA.

In pursuance of the author's determination to examine the principal manufacturing establishments of Europe, a visit was made to Essen, in Rhenish Prussia, where the celebrated steel-works of Fried. Krupp are situated. While waiting in the office, a notice, in the English, German, and French languages, was observed on the walls, requesting visitors not to ask for admission into the works, because of the interruption and annoyance it would occasion to the workmen, and not thereby impose upon the proprietor the pain of a refusal.

Although, in obedience to this intimation, a request for the coveted "open sesame" was not made to Mr. Krupp, yet a cordial invitation was extended to the author to call, on his return from Saint Petersburg, and thoroughly examine the works. The following extracts from his note-book, in regard to the capacity and capabilities of this gigantic establishment, are here presented:

ESSEN, September 20, 1872.

Left Düsseldorf by first train to visit the celebrated steel-works of Fried. Krupp, having been invited to do so on my previous visit here.

The town of Essen is utterly unattractive in itself, and possesses no interest apart from this remarkable establishment. The population (51,768 in 1871) consists of those engaged in the works, or in supplying those who are so engaged with food and other necessities of life, and are wholly dependent upon the works for their means of subsistence.

I was politely conducted through every part of the works by Mr. Hagermann, who, with great patience and courtesy, pointed out every object of interest and answered my numerous questions.

MEN EMPLOYED.

The total number of men employed is as follows:

In the works at Essen.....	12,000
In coal-mining, ore-mining, &c.....	5,000

Total.....17,000

AMOUNT AND VALUE OF PRODUCTION.

Cast steel produced last year, 125,000 tons.
 Whole value of steel, steel guns, shafts, tires, rails, wheels, axles, &c., produced in 1871, 12,000,000 thalers. -- in United States gold, \$3,610,000.
 Iron and iron-ore used, 200,000,000 pounds.
 Coal used per day, 30,000 centners, or nearly 500,000 tons per annum.
 Coal now costs 21 thalers per 100 centner, = 5 tons, or nearly 2,100,000 thalers, = \$1,728,000 per annum.
 Number of crucibles used per day, 5,000.
 Total coal per annum, 250,000 thalers, = \$180,000.
 Total cost of labor, 5,000,000 thalers, = \$3,600,000.

RATES OF WAGES.

Owing to the mode in which the men are paid it is difficult to ascertain the rates of wages, but the earnings average about $1\frac{1}{3}$ thalers (96 cents) per day.

Men in each branch of work are allowed certain minimum wages, but men of skill and industry are either paid by the piece or receive extra allowances at the end of the year. For instance, the wages of skilled forgers is 60 cents per day, but the most industrious and skillful earn as high as 24 thalers (\$1.80) for 11 hours' work. The rate of the next class is 20 groschen, (48 cents,) while they earn $1\frac{1}{3}$ thalers, (96 cents.) The third class are allowed 18 groschen, but earn 1 thaler per day. Men in the forging and finishing shops receive the highest pay.

Puddlers in iron-rolling mills earn about 24 thalers (\$1.80) per day. Apprentices are allowed 6 groschen per day, the best from 7 to 8, but only one-half is regularly paid to them, the balance remaining until the end of the apprenticeship, when each has a considerable sum to enable him to enter upon the customary "wandering."

Unskilled laborers receive but 4 thalers (\$2.88) per week. My inquiry as to how these lived on so small a sum was referred to the foreman, who shrugged his shoulders, as if to say it was a question in economy beyond his comprehension.

EXTRA EARNINGS.

The men work, ordinarily, 11 hours per day, but as the works are open and in operation at night and even on Sundays, many men work extra hours, and thus increase their earnings. The mode of payment of the workmen, at least of those most skilled, is substantially by piece-work, or in proportion to their respective industry and skill. In the casting of large shafts, cylinders, guns, &c., the highest skill is required, as, in case of failure, great loss to the proprietor would ensue. When all is ready, men of long experience and great skill are called from their regular work, assist for but twenty minutes, perhaps, and are paid for this extra service at high rates in addition to their regular earnings.

At the end of the year Mr. Krupp distributes a very large amount* to his workmen in the shape of gratuities, (*gratifications*), proportioned to the skill and success shown by results. For instance, the men who have been the most regular at work, who have had few or no "blue Mondays," who have done their work well, spoiled no work, made no mistakes, and caused no defective castings, receive the largest gratuities.

* The sum distributed in the preceding year, 1871, was given in confidence, with a request that it should not be published.

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BENEFACCTIONS.

Workmen when sick get half wages, and are cared for in hospital without cost. The men pay toward the expenses of the hospital one groschen out of each thaler earned, the firm contributing one-half as much as the aggregate contributions of the men.

A workman of good skill will receive, in scrip, 160 thalers, payable to his family after his death. In case of sickness or inability to labor he can obtain an advance, not exceeding 50 thalers, on it, which is to be repaid on his return to work.

Mr. Krupp is building houses for 1,800 families, which will be rented to workmen very low, each family occupying two or three rooms. He will continue to build every year. Unmarried men to the number of about 1,000 are lodged and boarded at low rates. They are furnished with abundance of meat and vegetables for dinner, which, with one-half pound of butter and one-quarter pound of coffee per week, and lodging, are furnished at 7 groschen per day, \$1.18 per week. Bread is an extra charge, furnished at cost. I visited the bakery, where nearly 10,000 pounds of rye bread and from 4,000 to 5,000 pounds of wheaten bread are made daily, of excellent quality, as I found by tasting both kinds. Not only the single men who are supplied with food, except bread, but the families of all the workmen obtain their bread here at cost, viz, a loaf of rye bread, weighing 6 pounds, for $4\frac{1}{2}$ groschen, (10 cents,) and a loaf of white bread, weighing nearly 3 pounds, for $4\frac{1}{2}$ groschen, being, respectively, about $2\frac{1}{2}$ and $3\frac{1}{2}$ cents per pound. The meat and vegetables for the boarders are of good quality and well cooked, everything being clean and nice. Although the dining-rooms and dormitories resemble barracks, they are very clean, and are kept in good order.

There are stores to supply boots and shoes, clothing, dry goods, &c., to workmen at cost; also a manufactory of seltzer water, which is sold to them at the low price of $\frac{1}{2}$ groschen ($1\frac{1}{2}$ cents) per bottle.

Mr. Krupp has established schools and reading-rooms, will build a theater, and is doing everything he can for the comfort, the instruction, and the amusement of his employes and their families.

CRUCIBLES.

All the crucibles for re-smelting the puddled steel, of which 5,000 are used daily, are made on the premises. They cost but 5 groschen (12 cents) each. I did not ask the kind of clay used, but from the appearance and cheapness I think it is the ordinary fire-clay and common plum bago. They are used but once, then broken, remolded, burnt, and again used. If used several times without breaking, as in England, the clay is unfit for remolding. They consider it cheaper to use the crucibles but once and remold the clay, and recommend the steel-makers in the United States to make their crucibles, which is cheaper than to purchase them.

QUALITY OF STEEL AND SECRET OF SUCCESS.

With regard to the soundness and good quality of the steel castings made in this establishment, they appear to be entirely faultless. I saw immense guns, nearly completed, intended for exhibition at Vienna next year; an immense shaft for a steamship of one of the German lines to New York, which seemed the very perfection of workmanship, and for which 1 thaler per pound was to be paid; and great numbers of other manufactures of steel, either completed or in progress, all of which ap-

appeared to possess great excellence. In regard to tools, machinery, and appointments these works do not, in my opinion, surpass in excellence those of the steel-works of Messrs. Firth & Sons, of Sheffield. But as the products have obtained a higher reputation than those of any other manufacturer, how is this admitted excellence obtained? No doubt it is in part due to the analyses of the various ores from his mines in Germany and Spain, and from Great Britain and other countries, and from experiments made by the experienced and celebrated analytical chemists in his employ. But, in my opinion—the opinion of an inexperienced metallurgist and mechanical engineering—this firm has no secrets in regard to the admixture of various kinds of iron which, if known, would enable other manufacturers to produce as good steel. The superiority is, I believe, owing to the following causes: Most of his workmen have been a long time in his employ, and have great experience and skill; his foremen thoroughly understand their business, possess technical training, and the highest practical knowledge. These are all attached to the proprietor by his practice of giving extra pay for skilled work, by his annual gratuities, by his generosity exhibited toward the men in every possible way, and his sympathy with them. His workmen are thus warmly attached to him, and strive to promote his interest by performing their several duties thoroughly and well. In the reputation of the establishment for excellence of workmanship they are, therefore, interested.

ORIGIN OF THE WORKS.

The works were established in 1810, by Mr. Fried. Krupp, who died when his son, the present proprietor, Mr. Alfred Krupp, was but a little over fourteen years of age. Having had some experience he left school and, in company with one of the skilled workmen, continued the business on a very small scale at first; but he soon obtained a high reputation for the excellent quality of steel produced, and gradually increased the extent and product of the works. A pamphlet, giving a full and detailed account of the history, present condition, and product of the works, is in course of preparation for the Vienna Exposition, a copy of which will be sent to me.

The small house in which Mr. Alfred Krupp was born is still standing among the large shops, and is kept in good repair. The name of the firm continues, as at first, "Fried. Krupp," and will probably so continue to future generations.

CAST-STEEL MANUFACTORY OF FRIED. KRUPP.

The following information in regard to the extent and capacity of these works is condensed from the pamphlet prepared for the Vienna Exposition, which is alluded to in the above notes:

The cast-steel manufactory near Essen was established in the year 1810. It was conducted by Alfred Krupp from the year 1826, and taken by him on his own account in 1838.

The works have been gradually developed, and at this time they cover a continuous area of more than 4784,000 square yards, of which about 900,000 square yards are covered in, and employ more than 12,000 workmen, independently of about 2,000 who are supplied by building-contractors.

In the mines and smelting-works belonging to the firm, there are employed a further number of about 5,000 workmen. Therefore, the total number would amount to about 17,000 men.

The number of officers and fixed employes is at present 739.

The quantity of cast-steel produced in the year 1872 exceeded 125,000 tons.

The articles manufactured from this cast-steel were, axles, tires, wheels, and crossings

for railways, rails and springs for railways and mines, shafts for steamers, different pieces of machinery, boiler-plates, rolls, spring-steel, tool-steel, guns, gun-carriages, shot, &c.

There are now in operation 250 smelting-furnaces, 330 annealing-furnaces, 161 heating-furnaces, 145 welding and puddling furnaces, 11 cupola and reverberatory furnaces, 160 furnaces of other kinds; 275 coke-ovens, 261 smiths' forges, and 210 steam-boilers, besides 70 more in course of construction.

Seventy-one steam-hammers in all, of which 66 weigh from 2 hundred weight to 110 hundred-weight each, and one each of 110, 150, 200, 400, and 1,000 each; 2-6 steam-engines, representing altogether 10,000 horse-power, among which there is one of 1,400, 3 of 800, 5 of 150, and one each of 500, 200, and 120 horse-power.

One thousand and fifty-six machine-tools, viz: Three hundred and sixty-two turning-lathes, 82 shaping-machines, 195 boring-machines, 107 planing-machines, 12 punching and grooving machines, 32 pressing-machines, 64 grinding-machines, 31 planing and polishing machines, 142 machines of different kinds.

In the year 1872 there were consumed, coals, 500,000 tons; coke, 125,000 tons; water, 112,000,000 cubic feet, supplied from several water-works; gas, 155,000,000 cubic feet, supplied by the gas-works of the establishment, for 16,500 burners.

To facilitate the traffic on the works, there are about 24 miles of railways of usual gauge, with 180 sidings and 39 turn-tables, on which run 12 tank-locomotives of about 16 inches cylinder diameter, and 530 cars, also about 10 miles of small-gauge railways, of 30-inch gauge, with 147 sidings and 65 turn-tables. The traffic on these railways is carried on by means of horses and of 3 locomotives of 6 inch cylinder diameter, and 270 cars.

The carriage department comprises, besides, 272 wagons, and altogether 191 horses, of which 60 wagons and 80 horses are supplied by contractors.

To facilitate the communication between the several workshops, there are thirty telegraph stations.

A permanent fire-brigade, consisting of seventy men, has also been instituted, who perform at the same time police duty. There are one hundred and sixty-six watchmen besides.

The general supply stores, under control of the firm, supply those belonging to the works for ready cash, provisions, clothing, dry goods, boots, &c., at cost prices. The receipts at the different stores amount at present to £11,000 (nearly \$55,000) monthly, and are continually increasing.

There are also three beer-houses, one hotel, one seltzer-water manufactory, one flour-mill, and one bakery, with two steam-engines, producing at an average eighty-five tons of bread monthly.

Of the dwellings for the officers and workmen, there are for the former two hundred and six; for the latter, two thousand nine hundred and forty-eight, either inhabited or in course of construction. There are living now in these houses more than eight thousand individuals, and the number is being rapidly increased. The existing boarding-houses offer board and lodging to two thousand five hundred unmarried workmen, and other houses of the same description are now being built for the accommodation of one thousand six hundred more.

The arrangements for the accommodation of the sick consist of one hospital containing one hundred beds, and one epidemic hospital with one hundred and twenty beds, all under the supervision of physicians especially engaged for the purpose.

A sick, burial, and pension fund has also been instituted for the workmen. The firm contributes to this fund half the amount of the contributions paid in by the members, being, in addition, at the expense of providing pensions and support for those who have been rendered unfit for work in their service, and for the widows of their workmen. The total receipts in the year 1872 amounted to £16,000, the expenditure to £12,500, and the capital in hand at the beginning of the present year (1873) to £13,348.

From another fund members receive for their families free medical treatment against an annual payment of seventy-two cents.

Finally, the firm has organized a chemical laboratory, a photographic and lithographic atelier, as well as printing and book-binding establishment. In the printing-office there are two steam and four hand presses in operation.

Besides the cast-steel works near Essen, the firm possesses considerable mining and smelting works, which secure to it a regular and uniform supply of the best raw material. These comprise coal-pits in Prussia, iron-ore mines to the number of four hundred and fourteen, with an area of more than 232,200,000 square yards.

The firm possesses important concessions of excellent iron-ore beds in North Spain, whence it is intended to import annually up to 300,000 tons of ore for the production of cast-steel. To facilitate the importation, a railway in Spain nearly eight miles long, as well as several steamers, are already in course of construction.

The Sayner and Oberhammer smelting-works contain two blast-furnaces, which produce daily about twenty tons of "spiegeleisen" and "charcoal spiegeleisen;" the

for steamers, different
guns, gun-carriages,
furnaces, 161 heating-
laboratory furnaces, 160
and 210 steam-boilers,
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and sixty-two furn-
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Mühlhofer smelting-works on the Rhine, containing four blast-furnaces, each of which produces daily about forty-five tons of spiegel, Bessemer, and fine iron; and the Herrmanns smelting-works on the Rhine, near Neuwied, with three blast-furnaces.

Also, the Brendel smelting-works; the Johannes smelting-works near Duisburg, on the Rhine, producing daily in four blast-furnaces from about one hundred and forty to one hundred and sixty tons. The construction of six more furnaces has been commenced, and the works are in connection with the Rhenish and the Bergisch-Märkisch Railway.

These works have also one hundred and forty coke-ovens in operation, and one hundred and twenty more in course of construction.

Krupp's smelting-works produce, accordingly, at the present time, with eleven blast-furnaces, nearly ten thousand tons of pig-iron per month.

DESCRIPTION OF SOME ARTICLES MADE FOR THE EXHIBITION.

One crucible cast-steel block, (1,800 crucibles, each containing about sixty pounds,) 54 inches octagonal, weighing fifty-two and one-half tons.

This casting, originally cylindrical, has been reduced to the octagonal form by forging under a fifty-ton hammer, to illustrate the malleability of the material. Cuts were made in four different places, while in a red-hot state, to show, when broken off later, the density and soundness of the cast steel. This block of gun-metal quality is intended for the body of a gun of 11-inch caliber, and receives the required form by further forging.

One locomotive straight axle, of crucible cast steel, in the forged state.

One forged tender-axle, of crucible cast steel. The body of this axle is forged complete under the hammer, and requires no further workmanship.

Six carriage-axes, of crucible cast steel, forged according to the dimensions approved by the German railways.

Two unrolled rings of crucible cast steel, forged from solid blocks by making a cut in the middle and driving them out under a hammer.

One locomotive-eccentric crank and one driving-wheel crank, both of crucible cast steel, in the finished state. These pieces of machinery are supplied by the works in the rough, turned, or finished state.

Two carriage-axes, of crucible cast steel, body forged, ready fitted with tires of same material, and spoke-wheels, nave included, of wrought iron.

Two carriage-axes, of crucible cast steel, ready fitted with disk-wheels cast in molds, of same material.

A collection of cast-steel springs for locomotives, tenders, and carriages.

Bessemer steel rails, the manufacture being illustrated by a Bessemer casting, from which octagonal blocks are forged as shown by the exhibited sample.

Rolls and rolling-machines illustrating the most usual forms and dimensions used in this branch of manufacture, one of the oldest of the establishment.

Artillery material.—The guns are manufactured from crucible cast steel of a quality especially adapted for the purpose, and are, these of the smallest calibers excepted, constructed according to the built-up system. All guns have Krupp's round wedge.

The naval and coast gun-carriages are generally manufactured from wrought iron; only particular parts, such as the axles, axle-trees, cylinders, and piston-rods of the hydraulic buffer and the slide rollers of the coast-gun carriages being made of cast steel. Cast iron is only used for small track-wheels.

Heavy guns on carriages for coast defenses, ship-guns on battery-carriages with upper-deck carriages, and on slide and on wheel carriages, for siege purposes, as also field-pieces and one light mountain-gun on carriage, were among the articles exhibited at Vienna.

CONDITION OF THE WORKING-CLASSES.

From information obtained from Germany, in relation to the working-classes, since the foregoing went to press, the following is presented:

The condition of the working-classes in Bavaria during the year 1873 is described as prosperous, even in comparison with the previous year. The former high wages were generally maintained, though, it is added, few of the recipients appear to have taken advantage of the improvement in their material condition to lay by anything for future contingencies. With the exception of the journeymen-printers' strike, no organized strike occurred in any trade during the year, but the relations between employers and workmen are described in the report of the Stüttgardt chamber of commerce as anything but satisfactory.

The following is extracted from that report:

The sound sense of the working-classes is becoming more and more obscured by the systematic efforts made to mislead them into hostility toward capital, under the pretext of oppression and great injustice. Worked upon for party purposes, a feeling of distrust has gradually sprung up and developed to an extent which gives just ground for fearing that not only production will suffer from the growing complications, but that social order in general may be placed in peril.

FARM-LABOR.

From the report of a commission appointed by the German agriculturists to inquire into the condition of the rural laborers in the German Empire, it appears that the wages paid are higher in districts having large landed proprietors, and also when the productiveness and consequent rentability of the soil is greater:

The proportion of wages for contract work to the per diem paid shows that the former exceed the daily summer wages by 49 per cent., the average contract-wages showing 59 cents, the average daily wages being 40 cents in summer and 35 cents in winter.

Generally, one-third of the rural laborers in Southern and Western and one-fourth in Eastern and Northern Germany work under contract.

The average yearly earnings of agricultural laborers approximate the following sums:

1. Free laborers owning land.....	\$173 09
2. Laborers hired under contract.....	165 60
3. Free laborers not owning land.....	146 16

The number of their working-days averages 300 in the year. It is remarked that in exclusively Catholic districts the number of work-days is smaller than in districts inhabited principally by protestants.

The wages paid show an increase of from 50 to 100 per cent. during the last twenty to twenty-five years.

The wives of rural laborers generally contribute to the support of the family, either by working for wages or by tilling their own family-farm, or by both.

Children generally work at agricultural labor where other industrial interests do not predominate, otherwise they seek employment in factories.

Our information shows that nearly everywhere the earnings of the father are insufficient alone to meet the necessities of a family.

Agricultural employers generally claim for their laborers a higher moral standard than that accorded to other laborers, while many acknowledge their average intellectual inferiority. The data received will not warrant a comparison of their relative material condition. As to the general condition of the rural laborers, compared with that of ten or twenty years ago, the reports received, although somewhat contradictory, indicate a general improvement in morality. The decrease of crimes against property is universally acknowledged; while sobriety has improved in Northern but decreased in Southern Germany.

While a general improvement in their material condition is freely acknowledged, it is remarked that, as a class, the laborers have not become more provident.

While the prices of rye and beef, during the past twenty to thirty years, have advanced 25 and 53 per cent., respectively, wages, during the same period, have increased from 50 to 100 per cent.

Emigration to foreign countries is greater in Northern Germany, and less from Central and Southern Germany.

The inducements to emigration are stated generally to be "to improve their condition;" "to acquire a homestead;" "induced by agents or relatives in America;" "to evade military service."

In Prussia the current of emigration seems to have run from west to east, as indicated by the fact that, of each one thousand inhabitants, there emigrated from—

	1844-'59.	1860-'67.	1868-'71.
Rhenish Prussia	1.6	1.2	1.0
Westphalia	1.7	1.7	1.4
Pomerania	1.1	3.1	5.1
Posen	0.3	1.6	2.0
Prussia, provinces of	0.2	0.4	1.4

But, while 64,505 persons emigrated from the Kingdom of Prussia in 1872, only 47,809 followed in 1873. Although without exact tables, the information for 1874 indicates a continued decrease in the number of emigrants. It may therefore be assumed that emigration from Northern (especially Northeastern) Germany has passed its climax, and will continue to decrease in the same ratio as previously in Southern and Western Germany.

The migration of laborers, especially of single men and women, (the latter most numerous,) from the country to towns and cities is noticeable.

LABOR IN AUSTRIA.

Manufacturing industry is of comparatively modern growth in Austria, which has not long ceased to be a purely agricultural country. The industrial population is not, therefore, to any considerable extent engaged in manufactures which come into competition with the productions of the United States. By reference to the following table, it will be noticed that glass-ware, manufactures of leather, including gloves, buttons, and fancy goods, constitute the principal articles of Austrian manufacture which find a market in the United States. Silk goods, musical instruments, china-ware, jewelry, and some other articles of luxury serve to swell the amount of our imports; but, it will be observed, the articles of chief value which we receive from that country are fruits and wool:

Statement showing the value of exports, direct and indirect, from Austria to the United States during the fiscal year ended June 30, 1874.

Direct trade.		Indirect trade.	
Articles.	Value.	Articles.	Value.
Chemicals	\$9,291	Buttons	\$460,970
Cordage	1,659	Chemicals, &c	27,150
Fancy goods	12,045	Cotton, and manufactures of	33,225
Fruits of all kinds	298,477	China-ware, &c	41,300
Glass	690	Fancy goods	163,463
Old and scrap iron	26,912	Flax, manufactures of	6,819
Jute, raw	1,161	Fruits	416,221
Gloves of kid, &c.	1,155	Furs	25,221
Metals, &c.	420	Glass and glass-ware	412,411
Musical instruments	1,201	Iron and steel, and manufactures of	19,112
Paints	2,545	Jewelry	39,652
Sulphur	365	Leather, and manufactures of	319,121
Wine, spirits, and cordials	320	Musical instruments	58,221
Wool	9,751	Silk, and manufactures of	75,821
Unenumerated	8,711	Wine, spirits, and cordials	15,394
Free of duty	113,962	Wool, &c.	509,607
Total	488,642	Unenumerated	136,125
		Free of duty	39,809
		Total	2,830,910

IMMIGRATION INTO THE UNITED STATES FROM AUSTRIA.

The large Teutonic element of our population has already been referred to, but it is worthy of remark, the immigration from the Austro-Hungarian Empire was not extensive. The last census exhibited the fact that there were in the United States on the 1st of June, 1870, only 30,508 natives of Austria proper, 40,289 of Bohemia, and 3,737 of Hungary. And although during the last semi-decade there has been an increase in the number of immigrants from that country, yet the aggregate is by no means large, as will be seen by reference to the following statement:

Number of immigrants who arrived in the United States from Austria during the five calendar years from 1870 to 1874, inclusive.

1870	5,283
1871	4,770
1872	5,100
1873	6,913
1874	6,891
Total	28,957

Vienna is one of the ancient and famous capitals of Europe, but, until the late exposition, was less known to Americans than almost any other. Its population in 1872 was 980,000. It is the most important manufacturing city in the empire. The principal products consist of silk and other stuffs, gold-lace, silver-lace, ribbons, hardware, and ornamental goods, philosophical instruments, carriages, and paper. There are several porcelain works, one of which employs 150 painters and about 1,500 work-people. There are also manufactured steel ornaments, jewels, watches, musical instruments, and chemical preparations. There are locomotive and engineering works, a gun-factory, and a manufactory of small arms, belonging to the government. Tobacco is manufactured under a government monopoly. The manufacture of silk-stuffs is an important branch of industry, and 4,000 persons are employed in the weaving of shawls; but the most flourishing trade is the manufacture of meerschaum-pipes, in which much skill and artistic taste are displayed. Glove-making is also carried on to much perfection, and the trades and manufactures common in large capitals are prosecuted here.

Notwithstanding its disadvantages of climate and situation, few places possess such ample resources, such large means of enjoyment, both intellectual and physical, as the imperial city. The streets are crowded with a lively, active, bustling population. The Exposition of the industry of all nations, held in 1873, which transcended in magnitude every effort of a similar character previously attempted in any country, has doubtless been productive of vast benefit to that city, as well as to the whole empire, by reason of the disbursement thereof of the immense sums of money that were necessarily expended in carrying out the objects of the enterprise, and also on account of the improvements in arts and sciences that have been introduced, and the quickening that has been given to all the industrial processes of civilization. The permanent benefits accruing to trade and commerce, and the prestige that has resulted from the concourse of the representatives of all nations, are, it is believed, sufficient returns for the cost and labor bestowed upon the undertaking.

THE KID-GLOVE MANUFACTURE.

The Vienna manufacturers were fully represented at the Exhibition by a collection remarkable for elegance. Several kinds of gloves were found in this selection as they are exported to all parts of the world. By means of important improvements introduced in glove-cutting, regulating, and sewing by machinery, the Austrian article has acquired a good repute, and consequently extensive markets. The principal seats of this manufacture in Austria are Vienna and Prague. For several years past the demand in England and America has been very considerable, and the export to those countries, as well as to Switzerland, Holland, the Danubian Principalities, Russia, and the East has steadily increased, as will be seen from the following figures. The value of gloves exported from Austria amounted in 1863 to \$3,300,000; 1864, to \$4,590,000; 1865, to \$6,840,000; 1866, to \$9,420,000; 1867, to \$12,195,000; 1868, to \$11,070,000; 1869, to \$15,795,000; 1870, to \$16,545,000; 1871, to \$21,090,000; and 1872, to \$22,545,000.

WAGES IN WOOLEN-MILLS.

The following table, exhibiting the wages paid to the work-people employed in the manufacture of woollen goods in several parts of Austria, has been translated from the original statements, which were obtained and transmitted to the author of this report in 1872:

Statement showing the rate of wages paid to work-people employed in woollen-factories in the undermentioned places in the year 1872.

Occupation.	Yaegendorf.		Büden.	
	Hours.	Weekly wages.	Hours.	Weekly wages.
Workmen in warehouse.	6 a. m. to 7 p. m.	\$2 18	6 a. m. to 7 p. m.	\$1 27 to \$2 03
Wool-sorters.	...	...	...	...
Dyers.	6 a. m. to 7 p. m.	2 04	6 a. m. to 6 p. m.	1 45 to 1 51
Wolliers*.	5 a. m. to 8 p. m.	1 91	Accord'g to need.	2 18 to 2 06
Finishers.	...	...	...	...
Combers, (girls).	5 a. m. to 8 p. m.	1 21	...	2 91 to 3 15
Spinners, (boys).	...	...	...	2 91
Drossers.	5 a. m. to 8 p. m.	\$2 91 to 1 21	6 a. m. to 6 p. m.	1 40 to 1 59
Master drossers.	...	...	Accord'g to need.	(a)
Master spinners.	...	2 18	...	(a)
Yarn-reelers, (girls).	...	...	6 a. m. to 6 p. m.	2 91 to 3 40
Twisters.	5 p. m. to 8 p. m.	3 82 to 8 73	...	3 30 to 10 37
Yarn-spindlers, (girls).	6 a. m. to 7 p. m.	1 21 to 1 70	Accord'g to need.	(b)
Warp-sheeters.	...	...	...	(b)
Scots.	...	1 45	...	(c)
Hand weavers.	10 hours at most.	2 42 to 3 88	...	3 88 to 4 37
Spoolers.	...	...	...	2 91 to 3 40
Course builders.	6 a. m. to 7 p. m.	1 21	...	1 37 to 5 82
Needle women.	...	1 16	...	(c)
Fine builders.	...	1 16	6 a. m. to 7 p. m.	1 31 to 1 45
Washers.	...	1 16	...	1 89 to 2 03
Fullers hands.	5 a. m. to 7 p. m.	1 91	...	1 45 to 1 69
Master fullers.	...	...	...	1 97 to 2 33
Nappers.	...	3 88	...	1 97 to 2 33
Master nappers.	...	2 18	6 a. m. to 7 p. m.	5 82
Card-cleaners.	5 a. m. to 7 p. m.	1 21	...	1 60 to 1 75
Dyers.	...	...	6 a. m. to 7 p. m.	7 27 to 12 12
Shearers.	6 a. m. to 7 p. m.	1 21 to 1 45	...	1 29 to 2 01
Shearers, (boys).	...	...	...	1 89
Brushers.	...	...	...	1 00 to 1 81
Master shearers.	...	...	...	99 to 1 16
Pressmen.	...	4 85 to 7 27	...	1 55 to 1 89
Master pressmen.	...	...	6 a. m. to 7 p. m.	4 85 to 7 27
Stokers.	5 a. m. to 8 p. m.	3 40 to 4 37	...	1 55 to 1 89
Engine-tenders.	6 a. m. to 7 p. m.	2 18 to 2 91	...	2 91 to 3 40
Factory blacksmiths.	...	...	...	2 91 to 3 40
Factory carpenters.	...	2 18 to 2 91	...	4 85 to 5 82
				3 40 to 4 85

*Wolliers in the original; the English equivalent unknown.

Europe, but, until almost any other. Important manufactures consist of silk and wool, and ornamental. There are seven-enters and about ornaments, jew-erations. There and a manufactory is manufactured of silk-stuffs is employed in the the manufacture ste are displayed. and the trades and here.

and situation, few ns of enjoyment, The streets are he Exposition of ended in magni-attempted in any nt to that city, as ment there of the ed in carrying out the improvements e quickening that zation. The per-the prestige that res of all nations, or bestowed upon

the Exhibition by s of gloves were arts of the world. in glove-cutting, n article has ne-arkets. The prin-mua and Prague. America has been as well as to Swit-and the East has gures. The value \$1 to \$3,300,000; 4,20,000; 1867, to 95,000; 1870, to 445,000.

Occupation.	Troppau.		Bielitz.	
	Hours.	Weekly wages.	Hours.	Weekly wages.
Workmen in warehouse.....			5 a. m. to 7 p. m.	\$2 42
Wool-sorters.....	6 a. m. to 7 p. m.	\$1 02	do	1 13
Dyers.....	do	1 55	6 a. m. to 6 p. m.	1 52
Walters.....	6 a. m. to 6 p. m.	1 31	5 a. m. to 7 p. m.	2 18
Finishers.....	do	1 31	do	1 13
Combers, (girls).....	do	1 11	do	
Spinners, (girls).....	Variable	33 39 to 3 88	do	\$2 91 to 3 88
Spinners, (boys).....	6 a. m. to 6 p. m.	do	do	1 02
Dressers.....	do	1 91 to 2 42	do	2 18
Masters-dressers.....	do	7 56	do	
Masters-spinners.....	do	do	do	6 59
Yarn-reelers, (girls).....	Variable	1 45 to 1 94	do	1 21
Twisters.....	6 a. m. to 6 p. m.	(c)	do	1 16
Yarn-spoolers, (girls).....	do	1 45 to 1 94	do	2 42
Warp-sheeters.....	do	2 18	do	1 45
Siebers.....	6 a. m. to 7 p. m.	2 91 to 3 39	do	
Hand weavers.....	Variable	(c)	do	1 16
Spoolers.....	6 a. m. to 7 p. m.	1 45	do	1 16
Coarse burlers.....	do	1 69	do	1 45
Needlewomen.....	do	1 69	do	1 16
Fine burlers.....	6 a. m. to 6 p. m.	2 18	do	1 69
Washers.....	do	3 18	do	1 94
Fullers' hands.....	do	3 39 to 3 88	do	5 82
Master-fullers.....	do	1 45	do	1 45
Nappers.....	6 a. m. to 7 p. m.	do	do	
Master-nappers.....	do	1 16	do	95
Card-cleaners.....	do	1 45	do	
Dryers.....	do	1 16	do	1 45
Sheeters.....	do	do	do	1 16
Sheeters, (boys).....	do	do	do	1 45
Brushers.....	do	do	do	7 56
Master-sheeters.....	do	do	do	
Feizgers.....	do	do	do	2 18
Pressmen.....	do	do	do	3 88
Master-pressmen.....	do	2 62	do	2 66
Stokers.....	6 a. m. to 6 p. m.	2 62	do	3 45
Engine-tenders.....	do	5 12	do	4 85
Factory blacksmiths.....	Variable	do	do	3 85
Factory carpenters.....	6 a. m. to 6 p. m.	3 20	do	

* Some of these occupations have not been translated, others probably not correctly rendered, owing to a want of technical knowledge on the part of the translator.

a Per 100 "straehne" warp and wool, according to fineness, 24 to 33 cents; strong yarn, 49 to 57 cents. A "straehne" is 1760 Vienna elts, or 1,508 English yards.

b Per 100 strachne 9.7 to 14.5 cents, according to the fineness of the yarn.

c Per 100 strachne 48 cents.

d Per 100 strachne 10.7 cents.

e Per 100 strachne 30 cents.

PRAGUE, BOHEMIA.

This ancient city, the capital of Bohemia, possesses many industrial establishments of considerable importance; and it is to be regretted that a statement of the rates of wages in each branch of manufacture was not obtained.

MARKET-PRICES IN PRAGUE.

Statement showing the average market-prices of grain and other commodities in the city of Prague, during the year 1873.

Articles.	Value in United States gold.	Articles.	Value in United States gold.
Wheat.....per bushel..	\$2 06	Hay.....per cwt..	\$1 39
Rye.....do.....	1 44	Straw.....do.....	86
Barley.....do.....	1 18	B. of.....per pound..	1 45
Oats.....do.....	65	Wine.....do.....	\$1 63 to 1 45
Peas.....do.....	1 47	Beer.....do.....	15 to 20
Beans.....do.....	2 27	Wood.....per cord..	6 21 to 9 00
Millet.....do.....	2 28	Wool.....per cwt..	55 29 to 86 24
Buckwheat.....do.....	1 37	Laborers' wages, with out board.....per day..	37 to 69
Indian corn.....do.....	1 51		
Potatoes.....do.....	46		

LABOR IN AUSTRIA.

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PRICES OF HOUSE-RENT IN PRAGUE.

Weekly wages.	
7 p.m.	\$2 42
1 43	
6 p.m.	1 82
2 18	
7 p.m.	1 43
82 91 to 3 88	
1 62	
2 18	
6 79	
1 21	
1 16	
2 49	
1 45	
1 16	
1 16	
1 45	
1 16	
1 49	
1 94	
5 82	
1 45	
97	
1 45	
1 16	
1 45	
7 56	

Percentage of the whole.	Percentage of the whole.
Up to \$16.20.	36.9
From \$16.20 to \$22.40.	25.2
From \$22.40 to \$34.60.	13.7
From \$34.60 to \$48.80.	6.2
From \$48.80 to \$241.	4.1
Total	100.9

Average wages of a laborer in 1873, from 39 to 72 cents.

The following statement, translated from a report of the Chamber of Commerce of Lintz, on trade of Upper Austria, shows the rates of wages then paid to work-people employed in the various factories and industrial establishments in that year:

Daily wages in Upper Austria in 1870.

[The Austrian florin, subdivided into 100 kreutzer, is about equal to 48 cents, United States gold.]

Occupied in—	In Austrian currency.	In United States gold.
Cotton-spinneries	40 kreutzer to 2 florins	19.2 to 96 cents.
Cotton-factories	40 kreutzer to 13 florins	19.2 to 72 cents.
Wool-spinneries	39 kreutzer to 1.2 florins	14.4 to 58 cents.
Woolen-factories	35 kreutzer to 1 florin	16.3 to 48 cents.
Flax-yarn spinneries	60 kreutzer to 1 florin	28.8 to 48 cents.
Adult males	35 to 60 kreutzer	16.3 to 28.8 cents.
Adult females	25 to 35 kreutzer	12 to 16.3 cents.
Children	45 to 50 kreutzer	21.6 to 24 cents.
Linen-factories	30 kreutzer to 3 florins	14.4 cents to \$1.44.
Knitting-factories	40 kreutzer to 4 florins	19.2 to 72 cents.
Knitting and hosiery	65 to 80 kreutzer	31.2 to 38.4 cents.
Chemical and dye-stuff factories	35 kreutzer to 1 florin	16.3 to 48 cents.
Flour-mills	40 kreutzer to 13 florins	19.2 to 72 cents.
Ship-wharf in Lintz	80 kreutzer to 2 florins	38.8 to 96 cents.
Shoe-blackening factories	50 to 90 kreutzer	24 to 43.2 cents.
Porcelain-factories	70 kreutzer to 1 florin	33.6 to 48 cents.
Knitted-frame factories	25 kreutzer to 1 florin	12 to 48 cents.
Tanneries	85 kreutzer to 1 florin	40.8 to 48 cents.
Soup-factories	76 to 9 florins	\$3.88 to \$1.32.

* Monthly wages, including board and lodging.

Average annual wages in Upper Austria in 1876.

Occupations.	In Austrian currency.	In United States gold.	Occupations.	In Austrian currency.	In United States gold.
Awl-makers	100	\$48.00	Cut-steel-file cutters	200	\$96.00
Armors-makers	117	56.31	Hammer-smiths	100	48.00
Tinsmiths	221	106.08	Chain-forgers	101	49.92
Gun-makers	100	48.00	Sword-smiths	111	52.80
Cannonsmiths	118	56.64	Copper-hammerers	131	62.40
Steel-track makers	120	62.40	Coppersmiths	100	48.00
Wire-drawers	251	119.00	Machinists	300	144.00
Workers in iron cooking-utensils	130	62.20	Machine nail-makers	120	57.60
Workers in iron and steel articles	200	96.00	Knife-makers	102	49.12
Reapers	200	96.00	Needle-makers	101	49.92
Tile-cutters	100	48.00	Locksmiths	100	48.00
Brass-founders	104	49.92	Backsmiths	90	39.20
Ball-founders	251	119.24	Scythe-makers	153	73.68

The first part of the foregoing statement shows that the daily wages paid for factory labor were sufficiently moderate, but the yearly wages of mechanics and other skilled workmen exhibit such low figures, even

for the year 1870, before the general rise in the price of labor, that some explanation is required. Either the sums named must have been paid in addition to board, or the men worked but a portion of the year.

From the following table, furnished to the author by the United States vice-consul at Trieste, it will be observed that the rates of wages in that sea-port, in 1873, were in excess of those in most other continental cities:

Rate of wages paid for mechanical labor in Trieste, Austria, in the year 1873.

Occupation.	Daily wages.	Occupation.	Daily wages.
Blacksmiths	\$1 20	Plasterers	\$1 00
Brick-layers or masons	1 00	Shoemakers	1 40
Cabinet-makers	*1 00	Stone-cutters	1 00
Carpenters	1 20	Tailors	*1 50
Coopers	1 00	Tanners	1 20
Machinists	*2 00	Tinsmiths	1 20
Painters	1 50	Wheelwrights	1 00

* And upward.

Although the above wages appear high, as compared with the rates paid in other European cities, yet the purchasing power of the earnings of work-people is by no means great, as will appear from the prices of provisions and other necessary articles in Trieste, given in the following table:

PRICES OF PROVISIONS, GROCERIES, ETC.

Prices of provisions, groceries, and other leading articles of consumption, and also of house-rent, in the town of Trieste.

(Furnished by Mr. Visich, United States vice-consul.)

Articles.	Retail-prices in 1872.	Articles.	Retail-prices in 1872.
PROVISIONS.		GROCERIES, ETC.—Cont'd.	
Flour:		Coffee, Rio:	
Wheat, superfine	\$11.80 per barrel.	Green	30 to 40 cents per pound.
Wheat, extra family ..	\$12.80 per barrel.	Roasted	40 cents per pound.
Rye	\$6 per barrel.	Sugar, good brown.....	12 cents per pound.
Corn-meal	\$8.40 per barrel.	Sirup	50 to 60 cents per gallon.
Beef, fresh:		Soap, common	9 cents per pound.
Roasting-pieces	28 cents per pound.	Starch	10 cents per pound.
Soup-pieces	22 cents per pound.	Fuel:	
Rump-steaks	24 to 25 cents per pound.	Coal	\$12 to \$15 per ton.
Veal:		Wood, hard	\$3 to \$1.50 per cord.
Fore-quarters	25 cents per pound.	Wood, pine	\$2 to \$3 per cord.
Hind-quarters	31 cents per pound.		
Cutlets	34 cents per pound.	DOMESTIC DRY-GOODS, ETC.	
Mutton:		Shirts:	
Fore-quarters	12 cents per pound.	Brown, 4-4, standard	
Leg	14 cents per pound.	quality	10 to 15 cents per yard.
Chops	14 cents per pound.	Bleached, 4-4, stand-	
Pork:		ard quality	12 to 16 cents per yard.
Fresh	20 cents per pound.	Sheetings:	
Bacon	22 cents per pound.	Brown, 9-8, standard	
Hams, smoked	50 cents per pound.	quality	10 to 12 cents per yard.
Shoulders	40 cents per pound.	Bleached, 9-8, stand-	
Sausages	30 to 50 cents per pound.	ard quality	11 to 13 cents per yard.
Lard	24 cents per pound.	Tickings, good quality..	20 to 40 cents per yard.
Butter	30 to 46 cents per pound.	Mousseline de laines ..	20 to 40 cents per yard.
Cheese	35 to 50 cents per pound.	Scrims, medium qual-	
Potatoes	\$1 per bushel.	ity	60 to 90 cents per yard.
Rice	6 to 9 cents per pound.	Boots, men's heavy.....	\$4 to \$8 per pair.
Beans	5 to 7 cents per quart.		
Milk	6 to 10 cents per quart.		
Eggs	12 to 15 cents per dozen.		
GROCERIES, ETC.		HOUSE-RENT.	
Tea, Oolong, or other		Four-roomed tenements	\$1 to \$1.50 per month.
good black	80 cents per pound.	Six-roomed tenements..	\$1.80 to \$2 per month.

In the following statement, translated from an official publication of Austria, published at Vienna in 1872, the measures and values are expressed in the respective standards of the United States:

Statement showing the price of provisions and fuel, and the daily wages of ordinary labor, in various parts of the Austro-Hungarian monarchy, in the month of March, 1872.

of labor, that some have been paid in the year. the United States of wages in that continental cities:

in the year 1873.

	Daily wages.
.....	\$1 00
.....	1 00
.....	1 00
.....	*1 50
.....	1 20
.....	1 20
.....	1 00

red with the rates per of the earnings from the prices of en in the following

ETC.

tion, and also of house-

Retail-prices in 1872.
30 to 40 cents per pound.
40 cents per pound.
12 cents per pound.
50 to 60 cents per gallon.
9 cents per pound.
10 cents per pound.
\$12 to \$15 per ton.
\$3 to \$1.50 per cord.
\$2 to \$4 per cord.
10 to 15 cents per yard.
12 to 16 cents per yard.
10 to 12 cents per yard.
11 to 13 cents per yard.
26 to 40 cents per yard.
20 to 40 cents per yard.
60 to 90 cents per yard.
\$4 to \$8 per pair.
\$1 to \$1.50 per month.
\$1.80 to \$2 per month.

cial publication of es and values are States:

Governmental districts and cities.	Baif.	Veal.	Pork.	Mutton.
<i>Galicia:</i>	<i>Cents per lb.</i>	<i>Cents per lb.</i>	<i>Cents per lb.</i>	<i>Cents per lb.</i>
Lemberg.....	11.8	11.8 to 16.6	15.4 to 17.7	.....
Tarnopol.....	9.5	11.8	14.2	.....
<i>Military Border:</i>				
Oloca.....	11.3	11.8	13.01	8.3
New Gradisca.....	10.6	11.3	13.01	8.3
Weisskirchen.....	14.2	15.4	17.8	.....
<i>Moravia:</i>				
Brünn.....	16.6 to 21.3	16.6 to 20.1	18.9 to 20.1	14.2 to 17.8
Kremsier.....	16.6 to 17.8	14.2 to 15.4	16.6 to 17.8	13 to 14.2
Neutitschin.....	17.8	17.4	18.90	.....
Nikolsburg.....	17.8	17.8	18.90	.....
Olmutz.....	17.8 to 19.5	15.4 to 16.6	18.90	15.4
Teltsch.....	16.6 to 17.8	11.9 to 11.2	17.8 to 19.1	13 to 14.2
<i>Silesia:</i>				
Zauernig.....	13 to 14.2	9.5 to 10.7	18.96	11.9 to 13
<i>Bohemia:</i>				
Tabor.....	16.6 to 17.8	15.4 to 16.6	16.6 to 18.90	.....
<i>Lower Austria:</i>				
Treismaner.....	17.8	17.8	17.8	.....
Vienna.....	10.5	20.7	25.5	20.7
Vienna-Neustadt.....	18.9 to 20.1	22.5 to 21.5	20.1 to 21.3	14.2 to 15.4
<i>Stiermark:</i>				
Graz.....	17.2	27.5	23.7	13 to 15.4
<i>Kärnten:</i>				
Feldkirchen.....	14.2 to 11.8	15.4 to 16	17.8 to 18.90	10.7 to 11.8
Kappel.....	13.4	13.4	30.7	.....
Klagenfurt.....	14.2 to 16.6	16.6 to 17.8	20.1	11.8 to 13
Villach.....	14.2 to 15.4	15.4 to 16.6	17.8 to 18.90	.....
Völkermarkt.....	14.8 to 16	15.4 to 16.6	.....	.....
<i>Krain:</i>				
Lailbach.....	9.5 to 10.6	15.4 to 17.2	14.8 to 16	10.7 to 11.8
<i>Upper Austria:</i>				
Urfahr.....	16.6 to 20.1	15.4 to 17.8	17.8 to 20.1	.....
<i>Tyrol:</i>				
Bozen.....	14.8 to 17.2	14.8 to 16	18.96 to 20.1	11.8 to 13
Meran.....	14.2 to 17.2	14.2 to 17.8	.....	.....

Governmental districts and cities.	Lard.	Bread.	Wood.	
			Hard.	Soft.
<i>Galicia:</i>	<i>Cents per lb.</i>	<i>Cents per lb.</i>	<i>Per cord.</i>	<i>Per cord.</i>
Lemberg.....	2.7 to 10.8	.....	\$6 12 to \$7 99	\$5 10 to \$6 37
Tarnopol.....	2.2 to 10.8	.....	6 37	5 10
<i>Military Border:</i>				
Oloca.....	35.5	9.5 to 10.7	3 06 to 3 06	2 01
New Gradisca.....	29.6	3.6 to 5.9	3 06 to 4 04	2 04
Weisskirchen.....	26.7	.....	8 16 to 9 17	4 08 to 6 12
<i>Moravia:</i>				
Brünn.....	28.4	4.1 to 5.3	7 90 to 8 46	6 12 to 6 37
Kremsier.....	30.8 to 33.2	3.6 to 10.7	7 65 to 8 61	4 58 to 5 61
Neutitschin.....	27.5	3.3 to 13.6	0 12	4 31
Nikolsburg.....	27.5	4.7 to 8.3	7 15	5 06
Olmutz.....	29.6	5.9 to 10.7	7 39 to 7 45	4 59 to 5 61
Teltsch.....	27.5	3 to 8.3	5 00	3 61
<i>Silesia:</i>				
Zauernig.....	30.8	3 to 10.7	5 00	4 08 to 4 18
<i>Bohemia:</i>				
Tabor.....	22.8 to 24	5.3 to 20.1	.....	3 31 to 3 57
<i>Lower Austria:</i>				
Treismaner.....	27.5	4.4 to 10.7	7 65	5 10
Vienna.....	24.3	.....	12 10 to 12 23	8 66
Vienna-Neustadt.....	24.7 to 26	7.8 to 8.9	8 66	5 61
<i>Stiermark:</i>				
Graz.....	23.7	4.1 to 7.7	7 15 to 8 16	5 61 to 6 63
<i>Kärnten:</i>				
Feldkirchen.....	27.5	3.6 to 8.3	4 08 to 5 00	2 55 to 3 46
Kappel.....	26.7 to 29.6	5.9 to 13	2 80 to 3 06	2 14 to 2 23
Klagenfurt.....	26	3.6 to 9.5	2 29 to 2 50	1 84 to 1 99
Villach.....	27.5 to 29.6	4.1 to 9.5	4 11	2 80
Völkermarkt.....	27.5	4.1 to 11.8	3 06 to 4 08	2 29 to 3 06
<i>Krain:</i>				
Lailbach.....	26 to 27.5	4.1 to 5.9	3 26 to 3 36	2 45 to 2 55
<i>Upper Austria:</i>				
Urfahr.....	27.5	4.1 to 8.2	8 00 to 9 17	6 37
<i>Tyrol:</i>				
Bozen.....	24.9 to 26	4.1 to 7.1	8 92	6 63
Meran.....	29.6 to 33.2	4.1 to 7.7	7 15 to 8 16	4 81 to 5 06

Price of provisions and fuel, and the daily wages of ordinary labor, &c.—Continued.

Governmental districts and cities.	Coal.	Brown coal, (pent.)	Charcoal.	Average daily wages.*
	<i>Per ton.†</i>	<i>Per ton.†</i>	<i>Per ton.†</i>	<i>Cents per day.</i>
Gallcia:	\$8 25 to \$8 64	\$1 42 to \$1 20	\$3 24 to \$1 72	22.8 to 31.6
Lemberg			6 72	32.4
Tarnopol				
Military Border:		1 92 to 2 40		32.4
Obocze		7 68 to 8 61	9 66 to 11 52	28.8 to 57.6
Wiskirchen	8 64 to 9 60			
Moravia:		5 76 to 7 20	6 72 to 8 61	21 to 48
Brünn	9 60		17 28 to 18 21	25.8 to 33.6
Kremsier	7 65 to 8 61		11 32	33.6
Neutitschein	9 22		31 56	22.8
Nikolsburg	8 61	8 06	7 68 to 9 60	22.8
Olmutz	8 61	13 44	11 52	19.2 to 24
Teltsch	13 44			
Silesia:				
Zaunersg	9 31	2 59 to 4 99	16 80	19.2 to 24
Bohemia:				
Labor	6 73 to 7 20		4 32 to 4 60	19.2 to 28.8
Lower Austria:				
Treismaner				28.8 to 38.4
Vienna-Neustadt	11 52 to 12 48	8 64 to 9 60	5 76 to 9 60	28.8 to 48
Steiernmark:				
Ginz		3 65 to 3 84	4 80	28.8 to 48
Kärnten:				
Feldkirchen	5 18		9 60 to 12 48	33.6 to 38.4
Kappel	17 98 to 19 20		11 52 to 12 48	48
Klagenfurt	6 53	3 17	2 70 to 3 40	33.6 to 38.4
Villach	5 95		14 40 to 17 28	33.6 to 38.4
Völkermarkt			17 28 to 18 21	31.2 to 38.4
Crain:				
Lailbach	4 32		4 35 to 4 20	28.8 to 33.6
Upper Austria:				
Urfahr		4 42		33.6 to 38.4
Tyrol:				
Bozen			33 60 to 38 40	33.6 to 43.2
Meran			10 56 to 12 48	38.8 to 48

* For ordinary labor.

† Per metric ton of 1,000 kilograms.

COST AND CONDITION OF LABOR IN AUSTRIA.

As the author was unable, from want of time, to visit Austria and make a personal investigation in regard to the cost and condition of labor in that empire, and as his efforts to obtain from consular and other original sources the necessary information were not attended with satisfactory results, he is under the necessity of drawing largely from the reports of the secretaries of legation and consuls of the British government. It is to be regretted that this information was not gathered by them at a later period than 1870, as in the following pages the rates of wages are given previous to the general advance in 1871 and 1872.

In the villages about Vienna there is a considerable number of weavers, who are also agricultural laborers; and in the mountainous woodlands of the Waldviertel, from Krems, on the Danube, northward to the Bohemian, and westward to the Upper Austrian frontier, the agricultural laborer, when field-work is slack, earns from 15 to 19 cents a day by weaving. These weavers are able to compete with the power-looms, in consequence of their extremely low wages and the coarse quality of the ware they produce, which cannot be made by machine-work. Considerable quantities of cloth-stuffs thus manufactured, and of very inferior quality, are not only consumed in Austria, but also exported at low prices to the Danubian Principalities and other parts of Turkey.

WAGES OF AGRICULTURAL LABOR.

In 1867 the average rate of wages of agricultural laborers in Austria was from 30 to 40 florins a year, (from \$14.40 to \$19.20,) of women, from 10 to 30 orins, (\$4.80 to \$14.40,) exclusive, however, of board and lodging, which is provided by the employer. But owing, probably, in part to the construction of railways, and in part to the general rise in prices, the rate of wages for agricultural labor has risen considerably throughout Austria during the last three years, and is still rising.

or, &c.—Continued.

Marcoal.	Average daily wages.*
For ton.	Cents per day.
to 8 1/2	28.8 to 31.6
6 1/2	31.4
to 11 1/2	28.8 to 31.6
to 8 1/2	21 to 48
to 18 1/2	28.8 to 31.6
11 1/2	31.6
34 1/2	28.8
to 9 1/2	28.8
11 1/2	19.2 to 24
16 1/2	19.2 to 21
to 4 1/2	19.2 to 28.8
to 9 1/2	28.8 to 38.4
to 9 1/2	28.8 to 48
4 1/2	28.8 to 48
to 12 1/2	33.6 to 38.4
to 12 1/2	38.4
to 3 1/2	33.6 to 38.4
to 17 1/2	33.6 to 38.4
to 18 1/2	31.2 to 38.4
to 4 1/2	28.8 to 33.6
to 3 1/2	33.6 to 38.4
to 38 1/2	33.6 to 43.2
to 12 1/2	38.8 to 48

kilograms.

AUSTRIA.

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Austria was from 30 to 30 orins, (\$1.80 to 2.00) divided by the employer, and in part to the general a considerably through-

PAYMENT OF WAGES IN MINES.

Every mine-contractor is bound by law to settle with his workmen, at least, quarterly. Whenever a workman is discharged he must be paid at once. No outstanding claim on the part of masters against men can legally invalidate or qualify the above-men- tioned obligation.

The stoppage of a workman's wages by his employer for payment of debt contracted by the workman to a third person is illegal.

WORKING-HOURS.

In the steel-casting factories wages are paid by hundred-weight produced. In the iron and lead refineries wages are also paid by weight, and the average length of labor at the blast-furnaces is twelve hours per diem. At puddling the men only work six hours at a time, with long intervals of repose between the different loadings of the furnace. At the end of every six hours one set of workmen is relieved by another. A rest every twelve hours is allowed in welding and rolling. For engine-waiters, and workmen employed in the refining forges, the work is from eight to eight and a half hours for every four "loupes" or blooms, with a quarter of an hour's rest between each bloom. The day's work in this department is reckoned at ten and a half or eleven hours on the average. Wire-drawers and benders, pin-makers, rollers and water-drawers, work for twelve hours, stopping for breakfast and dinner. Coal-workers get their breakfast and dinner free when they work for twelve hours, but not when they only work for eight hours. The average length of the working-day, therefore, does not exceed ten and a half or eleven hours.

THE HOURS OF WORK, WAGES, AND INCREASE IN THE PRODUCTION OF WOVEN GOODS.

Work in the Austrian weaving establishments goes on throughout the whole year with the exception of Sundays, the church festivals, and certain national or local festi- vals.

The number of working-days, therefore, in most manufactories is about 300. The daily hours of work amount to twelve here and there, more especially in summer, to thirteen in other places, and in winter to ten or eleven.

The rate of wages varies according to the fluctuation of the average market price and the price of provisions in different districts. It adjusts itself further according to the description and sex of the laborer. In the year 1870 the daily wages of a laborer employed in the manufacture of textile fabrics, at their highest average, were as fol- lows:

Districts.	Kreutzers.	U. S. cents.
Lower and Upper Austria		
Vorarlberg	80 to 1 florin.	38 to 48
Tyrol	65	31
Bohemia, (flat or low country)	60	29
Gallia	50	24
Other districts	40 to 45	19 1/2 to 22
	55	26

Since then there has been everywhere an increase in wages, which amounts to and even exceeds 20 per cent.

With reference to the question of the increase of the produce of the loom in Austrian manufactories, no sufficient information can be given, because it is only lately that statistical data have been collected on the advancement of industrial products. As far as can be gathered from them, the production of textile articles in Austrian establish- ments during the year 1870 are:

Articles.	Values—	
	In florins, (Aus- trian currency.)	In U. S. gold.
Cotton fabrics		
Woolen fabrics	35,000,000	\$16,800,000
Silk	60,000,000	28,800,000
Ribbon, (shawl-work and manufacture of borders)	7,000,000	3,360,000
Linen manufactures: The portion produced in factories is small and amounts to	10,000,000	4,800,000
	5,000,000	2,400,000

The cotton manufactures in the years 1870 and 1871 show a remarkable increase, which is principally to be attributed to the cheaper price of raw materials, and to the interruption of French and German competition on account of the war.

Woolen manufactures have also considerably increased since 1866, on account of the requirements of the army, and the increased consumption of such goods in the interior.

Since, however, the foreign, and especially the English, competition (favored by the lowering of the agio and the duties on imported woolen manufactures) has made itself felt to the most wonderful extent, the condition of this branch of industry has become less favorable.

Latterly, indeed, these (being principally concentrated in and about Vienna) have been injuriously affected by the great increase of wages, and some branches of the business have been affected to such an extent as not to make any return. * * *

The number of flax-yarn factories at work in 1870 amounted to 62, with 370,730 spindles.

The manufacture of linen, especially in Bohemia, Silesia, and Moravia, is carried on principally by means of hand-looms. Spinning by machinery is being very slowly established. The number of machine-looms in use amounts to 336, of which 204 are in Silesia, 30 in Moravia, and 22 in Tyrol.

In Hungary there were in 1873 but four manufactories of textile fabrics, the highest average wages of male hands (at Losenz) being 38 cents, and the lowest, (at Kúsmark,) 19 cents; of women, from 15 to 24 cents, and of children, from 9 to 15 cents, per day. Further quotations are made from the British consular reports, as follows:

FACTORY HANDS AND TRADE-WORKMEN.

Under this head there is a great deficiency of trustworthy official statistics. The following statements are based upon information collected from the Chambers of Commerce and Industry; and as they only refer to the larger establishments, they must not be regarded as a complete record of the condition of the working-classes employed. If the scanty statistics which are, as yet, the only ones accessible even to official inquiry, may be trusted, there are in Austria about 6,310,000 workmen. Of this number 17.2 per cent. (or 1,083,343) are provided with lodging by 433 employers. The mode of the provision made for their lodging is various; 1,348 workmen are lodged with their employers; 245 establishments provide free lodging only for 24,810 workmen; 4 establishments provide free lodging only for married men; 37 establishments furnish comfortable lodgings for married men at a low rent; 15 establishments, employing 2,220, provide beds at a small weekly charge for 1,053 workmen, and beds free of all charge for unmarried workmen; 87 factories, employing 8,512 hands, provide lodging and beds, rent free, for unmarried men, partly in workmen's barracks, partly in separate cottages; 18 establishments give lodging to 60,000 workmen. Lodgings, rent free, for superintendents, are provided by 28 factories, employing 2,607 hands. Allowance for rent is given by two establishments, employing 60 workmen.

Some few establishments undertake the construction of houses, of which, by the annual payment of a small rent, the workman can gradually purchase the ownership. Most of the Austrian railway companies, it may here be mentioned, allow a discount on the price of railway-tickets for workmen. The Sudbahn, for instance, is very liberal in this respect.

Board is wholly or partially provided by 379 establishments for 46,739 workmen, or about 13.7 per cent. of the whole working-class as above estimated. Many workmen are boarded entirely by their employers; others receive, for the cultivation of garden produce, &c., pieces of land rent free, or at a very trifling rent. In some factories food is distributed at wholesale prices to the hands; and in others, co-operative stores have been established by the workmen themselves. The capital for starting these stores is in many cases raised from loans advanced by the employers, or by the sick-relief fund, and they are generally supplied with store-room, and office buildings, free, on the premises of the factory. In some factories married men are supplied with food, and single men receive an allowance for board. In others, eating-houses are established, where a good dinner of soup, meat, and vegetables can be got at a very moderate price. For the kitchens of these eating-houses, the factories with which they are connected generally furnish the fuel, and sometimes the cooks. Many factories have their own baking-ovens, and some supply free rations of rice and potatoes to their hands.

Sick relief and compensations, &c.—Seven hundred and twenty-three establishments, employing altogether 141,761 hands, (about 40 per cent. of the whole working-class,) afford support, of one sort or other, to their hands in case of sickness, and compensation in case of accident or death. By 135 establishments (23,493 hands) the hospital fees for sick workmen are paid entirely. In five factories, 211 workmen, the expenses

a remarkable increase, raw materials, and to the war.

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for the care and cure of the sick are defrayed by the joint contribution of masters and men. In 436 factories (109,390 hands) relief societies and pension funds are established, to which the employers contribute a fixed sum, varying in amount from 12 florins to 420 florins per annum, in addition to a contribution of from 20 to 30 per cent. on the contributions of the workmen. The contributions of the workmen are graduated in proportion to their age and health, (on the life-insurance principle) and vary from 1 to 7 per cent. of their wages. The majority of workmen pay only 1 or 2 per cent. Out of 64,000 hands, for instance, 16,000 are returned as paying 1 per cent., and 31,000 as paying 2 per cent. Those who pay only 1 per cent. receive, in case of sickness, medicine and medical attendance free; a small contribution to the burial expenses is also received by their families in case of death. Those who pay 2 per cent. receive, in addition to the above, support to the amount of half their wages, when they are on the sick-list. The average length of time for which this support is continued is eight weeks. More extended relief and other advantages can only be secured by contribu- tions at the rate of 3 or 4 per cent. to the relief-fund. Those factories in which the workman's contribution to this fund is fixed at 5 or 6 per cent., afford pensions and small annuities to widows, orphans, and permanent invalids. The relief-fund itself, however, is rarely if ever able to bear these expensive claims upon it; and the system is only maintained by extensive assistance on the part of employers.

In the government factory at Zeltwig, for instance, this annual assistance amounts to the thousandth part of the gross profits. And by the Südbahn engine-factory 1.60 per cent. of the annual wages is paid to the same account. In the chemical-factories, where labor is especially exposed to accident and loss of health, the rate is generally 7 per cent.

In the trades the care and cure of the sick is provided for by their respective "genossenschaften." Educational establishments for the working-classes have hitherto been insufficient in number and defective in quality. Seven factories support drawing-schools; fifteen support music-schools; thirty-nine afford gratuitous instruction in their own schools; thirty-one pay for schooling at the communal-schools; three factories pay only a certain annual sum to the communal-schools toward the education of the children connected with them. Sewing-schools for girls and nurseries for workmen's infants are numerous. They enable, wherever they are established, every respectable working-woman to place her infant where the greatest care is taken of it, without charge, during the time she is at work. Such an institution would be a god-send to many honest and hard-working English mothers.

As regards the education of the working-classes in Austria, there can be no reasonable doubt that an immense and beneficent stimulus will have been given to it by the recent school-bill already described.

Working-hours.—The statistics on this head are very incomplete. The average working day seems to be about twelve hours.

It must be remembered, in connection therewith, that the working-classes in Austria at present enjoy no less than seventy-six whole holidays in the course of the year; and in some of the provinces the number of holidays is greater.

SURVEY OF THE PRINCIPAL TRADES FROM A WORKING-CLASS POINT OF VIEW.

The great deficiency of official statistics on the subject here especially considered has obliged me to confine the following short survey of the principal trades established in Austria to the representation of those trades at Vienna.

Turners.—One of the most important trades here represented is that of the turners. Its principal articles of manufacture are pipes and walking-sticks, &c.

The shoemakers number about 10,000 at Vienna. This trade, a very flourishing one, not only supplies all the Austrian and Hungarian markets, but also exports annually to the value of from 5,000,000 to 6,000,000 florins. One Vienna house alone exported in the course of last year the value of 400,000 francs. A good journeyman should earn as much as 2 florins (96 cents) a day. Piece-work is general in this trade.

Joiners.—There are about 8,000 of them in Vienna, and the supply of labor in this trade is considerably under the present demand, which within the last two or three years has been rapidly rising, in consequence of the great number of houses now building and furnishing at Vienna, and the large export of furniture to the principalities. The average rate of wages in this trade is from 2 florins 60 kreutzers to 3 florins (about \$1.20 to \$1.44) a day for good workmen.

Tailors.—This trade is perhaps the most prosperous of all. During the civil war in the United States a great part of the Union army was supplied with clothing from Prague and Vienna. A little later a single Vienna firm provided clothing for the whole of the Egyptian army. Yet, in spite of these facts, the complaint is general that the Austrian army, in 1866, was very insufficiently clothed, although, at the same time, the Saxon army was provided with good and sufficient clothing by the Austrian tailors. The circumstance complained of must be entirely attributed to the jobbing of contractors. In this trade, also, the supply of labor is below the demand. Several master

tailors of Pesth, and other towns, recently endeavored to engage at Vienna 2,000 journeymen workmen, but in despite of high offers they were unable to obtain half that number. The rate of wages in this trade is from two to three florins (26 cents to \$1.41) a day. A system of piece-work carried on in this trade is very generally complained of by all the most respectable workmen in it.

There are about 2,000 master tailors at Vienna, employing about 6,000 workmen and apprentices. They have good markets in the principalities and along the Lower Danube. The capital of the Vienna tailors is about 400,000 florins, (\$192,000.)

Weavers.—There are about 10,000 silk, wool, cotton, shawl, ribbon, and lace weavers in the capital, residing chiefly in its western suburbs. Their average wages are low, and rarely exceed five florins (\$2.40) a week. Lately, however, the trade has improved, and the present wages of the Vienna ribbon-weavers average at about eight florins, (\$3.84.)

Painters and lamp-makers.—With a considerable export market; average rate of wages twenty florins (\$9.60) per week.

Smiths and iron-workers.—Supply of labor below demand; wages from two to three florins (26 cents to \$1.41) a day. The engine-factories of Messrs. Seigel, at Vienna and Wiesel-Neustadt, (which last year exported fifty locomotives to Russia,) employ upward of 2,000 hands.

Carriage-builders.—Business brisk; good home-markets in Austria and Hungary. Considerable export to the principalities and Russia. Wages high.

Tanners.—Work heavy and wages low. A strike of the tanners for higher wages in 1865 was summarily settled by wholesale imprisonment, and many of the men engaged. But within the last year the rate of wages has been somewhat pushed up by the determined resistance of all the men to the old rates.

Saw-grinders.—Men and masters together, this trade numbers about 1,200 representatives at Vienna. This year the men struck for higher wages, " " " which has had the effect of raising the rate of wages in the trade from four to five florins up to seven and eight florins (\$3.36 to \$3.84) a week.

Builders.—The rapidity with which houses are now being constructed at Vienna, to meet the wants of an enormously-increased population, has given an immense impetus to this trade. Although one establishment alone produces a million of bricks per diem, the supply of material is very inadequate to the demand, and the price of bricks is twenty-three florins (\$11.01) per thousand. The average rate of wages in this trade is, for a head workman, 62 cents a day; (the day's work being from 6 a. m. to 7 p. m.) for an assistant workman, 48 cents, and for a woman 40 cents.

Brass, bronze, and German-silversmiths.—There are at Vienna about 900 workers in bronze; \$1.80 of them are married men. About 30 women are also employed in this trade. Of these 900, from \$2.85 to \$3.36 a week is earned by 200, from \$3.36 to \$4.32 a week by 500, and from \$1.32 to \$5.32 a week by 100. About 100 others earn by piece-work from \$3.36 to \$4.80 a week.

The German-silversmiths number 300 at Vienna. About 200 of them earn from \$2.85 to \$3.36 a week, and the rest from \$3.36 to \$4.80 a week. The working-hours in this trade are from 6 a. m. to 6 p. m., with only one hour's rest for the day's men. Many of the men work extra hours, at the rate of from 6 to 10 cents per hour. During the months from January to August, however, this trade is slack, and the masters then discharge the majority of their workmen. An unmarried workman cannot support himself at Vienna under 40 cents a day for board, at the rate of \$72 a year for lodging and clothing.

Printers, setters, and type-founders, number at Vienna about 2,000 workmen, and from 700 to 800 apprentices. The apprentices, after two years' service, earn from 95 cents to \$1.92 a week, but cannot become workmen until after four years' apprenticeship.

The workmen and apprentices have their own sick relief-fund, to which the monthly subscription is 24 cents.

The working-hours at the Vienna printing-offices are ten per diem, with extra wages for extra work. The men are now agitating for a reduction to nine hours. The average wages of a type-setter are from \$1.41 upward per diem. The number now employed at Vienna is 1,100.

Bakers.—Inferior workmen only earn about 72 cents a week, and head workmen about \$1.65 a week in this trade.

RAGUSA.

The following is condensed from a report made by Mr. Paton, British consul at Ragusa, under date of February 12, 1872:

The chief cause of the miserable state of the agricultural laborer, and also of the embarrassed state of the proprietor, is the inequality of the olive-crop—one year most abundant, and then for two or three years not covering the expense of culture. In the good years, occasional olive-plantation labor is, relatively speaking, not ill paid, the

laborer receiving from 24 to 30 cents a day, without food; but when permanently employed not more than 10 or 12 cents a day, with food.

The following are the present rates of wages of the town-operative class in Ragusa: Workmen employed in the manufacture of the thick woolen long-pile blanket receive about 24 cents a day, without food. Hatters receive a little more; lace-makers, about 22 cents.

The pay of a tinsmith, a plain house-painter, or a plumber is 32 cents; shoemakers earn from 24 to 28 cents; women who sew on the elastic part with the machine receive 16 cents; barbers, tailors, and smiths, mostly natives, earn 30 cents per day.

Among the more highly-paid work-people are boatmen, who, if they own a boat, make 40 to 45 cents per day. Masons and carpenters are also paid about 45 cents a day. Skilled apothecaries earn about 84 cents per day; street-porters about 20 cents. The worst-remunerated condition is that of the seamstresses, who do not make more than 12 cents per day; but a female dressmaker earns 21 cents. The best-paid artisans are jewelers, who receive from 60 to 72 cents per day.

CONDITION OF AUSTRIAN INDUSTRY.

Since this page was first put in type the following information has been furnished by Hon. Philip Sidney Post, consul general of the United States at Vienna:

During the years between 1867 and 1873, Austria enjoyed a high degree of industrial prosperity, but the year 1872 was characterized by extraordinary speculations, consequent upon the acquisition of most of the industrial establishments of the country by banks and joint-stock companies. In 1873 came a monetary crisis which deranged the entire industry of the country. In some branches of production there is still (August, 1875) the greatest distress. At Brunn the weavers, a particularly ill-paid class, whose condition has recently been rendered worse by the introduction of new machinery and an increase in the cost of living, have been on strike for several months, and a large body of military has been required to preserve the peace. The iron-industry of Vienna is now generally paralyzed. The railways are economizing and few orders are given. In the great works of the Staatsbahn, where in 1872 good workmen received from \$3.38 to \$4.80 per day, none are now paid more than \$1.44, and it is feared that the establishment will close entirely.

The workmen, attracted in good times to the manufacturing centers, are sent back in times of distress to the districts in which they were born or had acquired a residence, these districts being chargeable for their support.

HABITS AND CONDITION OF WORK-PEOPLE IN AUSTRIA.

The improvidence of the Austrian workmen is illustrated in the result of an effort to increase the production of pearl buttons, the demand for which in Austria has long exceeded the supply. An increase of wages produced an effect directly contrary to the one anticipated, for the men finding it possible to live by three days' work per week, instead of the five to which they had been accustomed, devoted the other two days to recreation. The people are industrious, but fond of amusement, and few of them work as energetically as do persons of their class in England or America, though when not interrupted by the numerous holidays observed here, they are usually steady and methodical in their labor. They all drink beer or wine, but there is no such thing as intemperance in the American sense, and cases of drunkenness, if they occur, must be rare indeed.

In the large cities house-rent is high, and the houses of the workmen are far from comfortable. In Vienna the state and municipal tax on rent approaches 50 per cent. of the rent paid. It was a fraction over 42 per cent. last year. The enhancement of prices consequent upon an excessive paper currency has not been attended with a proportional increase of wages, and the laboring classes are now in a suffering condition even when employed, while the unemployed are dependent upon public assistance in the districts to which they belong.

Extract from the Baltimore American of June 29, 1873:

All the most menial work in Vienna is done by women, such as cleaning and sweeping the streets, gathering up garbage, carrying water, and pumping it from the cisterns to the reservoirs in the upper stories, sawing wood, spading the ground, the making and carrying mortar in buckets, and handling the brick used in building. There are, no doubt, many thousands of them to-day doing this species of laboring-work in Vienna. They are of all ages, young, middle-aged, and old; but all seem to be strong and healthy. The wages are one florin (48 cents) per day.

LABOR IN SWITZERLAND.

The various industries of this little state, which, in its mountain home, has for nearly six centuries preserved its independence, are of deep interest to the citizens of a newer but more widely extended republic. It is to be regretted that the labor of so worthy and industrious a people should have received so inadequate a reward, for in few parts of Europe have the earnings of the working-people been so poorly paid. These low rates of wages have induced a comparatively large emigration, chiefly to the United States,* where the rewards of industry were more abundant.

EXPORTS TO THE UNITED STATES.

The manufactures of Switzerland, which to any considerable extent find a market in the United States, are chiefly confined to two, viz, silk goods and watches.

The following table, which gives the value of the principal articles of Swiss production which were exported into the United States in the decade from 1864 to 1873, is translated from a statement published by the Statistical Bureau of Switzerland:

Statement showing the exports from Switzerland to the United States in the ten years from 1864 to 1873, inclusive

[*Cost computed at 10½ cents.*]

Articles.	1864.	1865.	1866.	1867.	1868.
Silk, and manufactures of.....	\$1,963,126	\$3,741,240	\$6,194,491	\$3,669,521	\$1,133,531
Tissues of cotton and wool.....	321,230	832,436	1,008,793	397,471	242,367
Embroideries.....	68,694	220,785	1,047	615,047	594,715
Braiding straw and horse-hair.....	157,307	236,631	0,000	474,319	409,987
Watches and parts of.....	1,653,652	2,304,881	2,553,215	2,020,672	2,611,567
Music-boxes.....	14,133	21,138	58,501	51,713	67,667
Cheese.....	47,107	95,525	148,535	161,391	206,290
Leather.....	4,314		21,623	30,563	42,508
Sundries.....	36,081	94,771	214,216	235,058	316,342
Total.....	7,265,045	9,509,410	11,440,471	7,655,761	8,054,974

Articles.	1869.	1870.	1871.	1872.	1873.
Silk, and manufactures of.....	\$5,567,819	\$6,989,733	\$8,370,963	\$7,948,384	\$5,276,881
Tissues of cotton and wool.....	439,361	232,996	385,047	516,414	572,292
Embroideries.....	739,877	1,357,069	2,067,288	2,230,449	2,116,397
Braiding straw and horse-hair.....	546,539	737,392	605,805	255,236	430,879
Watches and parts of.....	2,597,903	3,219,872	3,335,622	3,570,940	2,545,529
Music-boxes.....	50,454	66,524	68,374	66,161	84,547
Cheese.....	247,341	304,280	329,223	434,697	404,261
Leather.....	8,698	113,525	136,168	87,141	83,169
Sundries.....	298,664	451,108	492,687	366,501	263,428
Total.....	10,516,629	13,493,099	15,731,757	15,498,816	11,776,404

* The number of immigrants into the United States from Switzerland during the last fifty-four years is as follows:

Decade 1821-1830.....	3,257
1831-1840.....	4,821
1841-1850.....	4,644
1851-1860.....	25,011
1861-1870.....	23,830
Year 1871.....	2,824
1872.....	4,031
1873.....	3,223
1874.....	2,436
Total.....	74,086

The following statement, compiled from the records of the United States Bureau of Statistics, shows the values of the principal articles which were imported from Switzerland during the fiscal year 1874, and the countries through whose ports the various commodities reached the United States:

Statement of Imports (indirect) from Switzerland into the United States during the fiscal year ended June 30, 1874.

Commodities,	Quantities,	Values,
FREE OF DUTY.		
Bolting-cloths.....		\$133,735
Books, &c.....		1,344
Chemicals, dyes, &c.....		4,064
Horse-hair used for weaving.....	pounds.. 1,110	1,486
Silk, raw.....	do. 2,658	24,415
All other articles not elsewhere specified.....		2,652
Total.....		146,665
DUTABLE.		
Books, &c.....		32,254
Brass and manufactures of.....		11,571
Buttons of all kinds.....		1,379
Chemicals.....		6,586
Clothing.....		945
Cotton manufactures.....		2,652,663
Flax manufactures.....		2,366
Glass-ware.....		28,414
Hair manufactures.....		5,024
Iron and steel manufactures.....		68,442
Jewelry.....		44,300
Leather of all kinds.....		27,569
Manufactures of.....	pounds.. 110,800	80,419
Musical instruments.....		2,112
Paintings, &c.....		52,671
Precious stones.....		3,945
Provisions.....		50,007
Silk manufactures.....		296,767
Straw manufactures.....		4,504,174
Watches.....		252,229
Wine and spirits.....		2,666,013
Wood manufactures.....		6,186
Wool manufactures.....		11,884
All other articles not elsewhere specified.....		13,301
Total dutiable.....		1,797
Total free of duty.....		10,131,131
Total imports.....		106,665
		10,390,796

The above imports into the United States from Switzerland were made through the ports of—

Belgium.....	\$12,545
France.....	5,285,833
Germany.....	3,736,114
England.....	1,488,452
Scotland.....	972
Netherlands.....	6,880
Total.....	10,590,795

WATCH-MAKING.

Although the exports of silk manufactures exceed in value those of watches, yet the latter industry is more widely extended, and of more advantage to the country, in consequence of the employment which it affords to the people, especially to women and children. Geneva and Locle are celebrated for the extent of the products of watches, but the

its mountain home, hence, are of deep extended republic. industrious a people in few parts of even so poorly paid. ively large emigrants of industry were

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principal articles of ited States in the emment published by

tes in the ten years from

	1867.	1868.
01	\$3,669,524	\$4,133,531
03	397,474	242,367
07	615,047	594,715
09	473,319	469,987
15	2,020,672	2,044,527
01	51,713	67,667
25	161,391	206,000
23	30,563	42,564
16	235,058	316,342
71	7,655,761	8,054,974

	1872.	1873.
63	\$7,948,384	\$5,276,881
27	516,414	572,292
28	2,230,340	2,116,397
05	275,936	430,877
22	3,570,940	2,515,559
74	86,161	84,547
23	434,697	403,301
68	87,141	83,169
87	366,501	263,428
57	15,498,816	11,776,404

Switzerland during the last

	3,257
	4,221
	4,644
	25,011
	23,839
	2,824
	4,031
	3,223
	2,436
	74,086

principal seat of the industry is at Chaux de Fond, which is the largest settlement where watch-making is carried on. In the valleys of the canton of Neuchâtel (in which this town is situated) you will hardly pass a farm-house without seeing one or more windows designed to let light fall upon a workman's bench.

The statement above presented gives the value of watches and watch-materials which were exported to the United States during a decade; but the value of the whole annual production of Switzerland is stated to be \$17,600,000. It must be borne in mind that this is but the original cost of manufacture, without the addition of profit or duty. Indeed, the exports consist largely of watch-movements, and, therefore, afford but an inadequate idea of the value of Swiss watches to the wearers, after gold and silver cases have been supplied, and the various dealers and the government have imposed their respective tariffs. The following is the estimated production of watches:

Estimated comparative production of watches in the principal manufacturing countries.

Countries.	Number of watches.	Value.
Switzerland.....	1,600,000	\$17,600,000
France.....	300,000	3,300,000
England.....	200,000	2,200,000
United States.....	100,000	1,500,000
Total.....	2,200,000	25,600,000

From the general census of Switzerland of December 1, 1870, and the report of Dr. Hirsch on the industry of watches at the Vienna Exposition, the following information is obtained:

Number of laborers in the manufacture of watches in Switzerland, by cantons and sex.

Cantons.	Males.	Females.	Total.
Neuchâtel.....	11,081	5,383	16,464
Berne.....	9,362	4,713	14,075
Vaud.....	2,439	1,313	3,752
Geneva.....	2,310	1,288	3,598
Total.....	25,212	12,707	37,919

Dependent on these 27,969 persons are about 47,000, making (in a round total) 75,000 persons living from the industry of watches in Switzerland.

RATES OF WAGES.

As the author was unable to visit the manufacturing towns of Switzerland, and make personal inquiries in regard to the cost and condition of labor therein, he is able only to present such limited data in that regard as has been recently furnished by the consuls of the United States. For less recent but more full information he has drawn largely from the British consular reports.

Owing to the varied sources of information, it is impossible to make the same classification as has been made in the case of Germany and other countries.

MECHANICAL AND FARM LABOR.

The figures in the following tables were furnished by the United States consuls of the districts indicated, in November, 1873.

Rate of wages paid for mechanical labor in Chaux de Fond, Zurich, and Basle, Switzerland, in the year 1873.

Occupation.	Chaux de Fond.	Zurich.	Basle.
SKILLED WORKMEN, BY THE DAY ONLY.			
Watchmakers	\$1 50		\$0 60
Blacksmiths	75	\$1 00	70
Bricklayers or masons	75	90	70
Cabinet-makers	1 00	90	60
Carpenters	1 00	90	1 00
Coppers	75	80	60
Mechanists	1 20	\$1 00 to 1 25	1 20
Painters	1 00	90	70
Plasterers	1 00	1 00	80
Shoemakers	75	70	70
Stone-cutters	1 00	1 20	90
Tailors	80	80	60
Tin-smiths	80	60	70
Wheelwrights	75	80	70
PRICE OF BOARD.			
For workmen, per week, October, 1871	2 50	2 00 to 3 00	
For workwomen, per week, October, 1873	1 75	1 50 to 2 00	

Rate of wages paid for farm-labor in Basle, Zurich, and Chaux de Fond, Switzerland, in the year 1873.

Occupation.	Daily wages in Basle, with board.	Daily wages in Chaux de Fond, with board.	Daily wages in Zurich, without board.	Yearly wages in Zurich, with board.
FARM-LABORERS.				
Experienced hands in summer	\$0 40	\$0 45	\$0 75	\$120 to \$160
Experienced hands in winter	21			
Ordinary hands in summer	32			100 to 120
Ordinary hands in winter	20			
Common laborers at other than farm-work	40		\$0 50 to 65	
Female servants	16			50 to 60

WAGES IN A SILK-RIBBON FACTORY.

Mr. Consul Erni forwards the following statement of the rates of wages paid in 1873 by Messrs. Fichter & Sons, manufacturers of ribbons at Basle:

Various inferior work done by girls from fourteen to fifteen years	Per week.
Ribbon finishers or cleaners, girls from fourteen to twenty years	\$1 40 to \$2 00
Work by the piece:	1 80 to 2 40
Silk-winding, women and girls	2 00 to 2 40
Women preparing the warp	3 20 to 5 00
Weavers, both men and women	4 00 to 7 20

WAGES AND COST OF SUBSISTENCE.

The following letter from Mr. Consul Byers, dated Zurich, March 29, 1873, accompanying a statement of wages in 1873, and the prices of

articles of subsistence at different periods since 1800, affords some indication of the condition of the laboring classes:

Sw: In accordance with your request, I have made out a schedule of prices for the leading articles of subsistence at this city during the different decades of the last seventy years. I also include present wages paid workmen here. The wages paid now are proportionately larger than the prices paid for provisions seventy years ago. The workmen's houses are good, built of stone usually, but are poorly ventilated, and often crowded with many families in a house. The distinction made here between common laborers, mechanics, &c., and the upper or non-laboring classes, is one not easily realized by an American. A gulf extends between the consumer and the producer. The simple truth of the matter is, the workingman lives very poorly here, as in Germany. He works ten hours a day, with one hour's rest at noon, and has, until since the labor "strikes," been very poorly paid. The prices shown in the table, as well as the wages mentioned, are those of to-day in Zurich, and not of yesterday.

Poor pay and poor living, as a rule, have not tended to make the best or the most rapid workmen. The dress of the working-classes is tolerably good. Many holidays are allowed, and this is a relief, of course, to the usual hum-drum life led by a common workman. Much wine and beer is used by all classes, especially the lower, who make up in quantity what is lacking (and there is a good deal) in quality. Drunkenness does not, I think, prevail among the working-classes as much here as in America or in England, but tipsiness is not always the exception. Since the great battle between capital and labor has commenced, the condition of the workman of Switzerland has been visibly, and I trust permanently, improved. One of the greatest influences at work here in behalf of the poorer classes, is placing authentic information in the hands of the people in regard to the opportunities that await industry and honest labor in the New World, and I hold it to be a religious, as well as an official, duty of our consuls and diplomatic officials abroad, to scatter the truth regarding our country to the people here in Europe whenever opportunity is to be had. The accompanying table will give an idea of the workman's living earnings in Zurich, all of which are rapidly increasing.

Daily wages of mechanics.

	Cents.		Cents.
Machinists.....	60 to 80	Stonemasons.....	90 to 100
Turners	60	Bricklayers.....	90
Founders.....	80 to 100	Saddlers.....	60
Carpenters.....	80 to 90	Shoemakers.....	60 to 80
Cabinet-makers	80 to 90		

First-class engravers and good jewelers earn much higher wages, reaching sometimes from \$1.20 to \$2.40 and even \$3 per day. Common laborers earn from 40 cents to 60 cents a day. In silk establishments and cotton-spinning mills, &c., a large number of women are employed who earn daily from 30 cents to 40 cents. Number of working-hours, ten a day, with one hour's rest at noon. Rent for one floor of four to five rooms for working-people from \$80 to \$120 per year.

Statement of prices of articles of subsistence in Switzerland from the year 1800 to the present time.

[The franc computed in U. S. coin at 20 cents.]

Year.	Two pounds of bread.	One pound of beef.	One pound of butter.	One quart of milk.	One pound of potatoes.
1800	1½ cents.....	7 cents.....	13 cents.....	.....	.....
1825	5 3/5 cents.....	5 1/5 cents.....	13 cents.....	.....	.....
1850	6 3/5 cents.....	5 4/5 cents.....	14 cents.....	1 4/5 cents.....	3 3/5 cents.....
1873	10 2/5 cents.....	17 cents.....	24 4/5 cents.....	4 4/5 cents.....	1 2/5 cents.....

Flour, 6 cents a pound; sugar, 11 cents a pound; cheese, 18 cents a pound; beer, 3 cents a glass; pork, 17 cents a pound; ham, 24 cents a pound; veal, 20 cents a pound; wine, 10 cents a bottle.

INCREASE IN EXPENSES OF LIVING.

The following is an extract from a pamphlet by Mr. A. Chatelant of the statistical bureau at Berne:

The increase of expenses of living in Switzerland was a constantly progressive one from the year 1840 up to the year 1850, and not an irregular augmentation. The total difference now amounts to from 75 to 100 per cent., as will be proved by the following statement, showing the percentage of rise in the price of each single article:

	Percentage of increase.
Brown bread.....per pound..	66.6
White bread.....do.....	21
Middling white bread.....do.....	31.2
Veal.....do.....	91.1
Mutton.....do.....	81.8
Beef.....do.....	89.6
Bacon.....do.....	49.2
Pork, (live hogs).....do.....	54.5
Butter.....do.....	61.6
Butter in bulk.....do.....	64.2
Lard.....do.....	30.6
Potatoes, (white).....do.....	40
Potatoes, (red).....per 15 liters..	46.3
Cabbage.....do.....	77.9
Eggs.....per 25.....	55.5
Sweet apples.....per piece.....	50
Sour apples.....per 15 liters..	70.8
Pears.....do.....	50
Sliced dried apples.....do.....	27.9
Sliced dried pears.....do.....	86.7
Pease.....do.....	88.3
Beans.....do.....	86.8
Oatmeal.....do.....	56.5
Cheese.....do.....	80 to 90
Milk.....the measure of 4 pounds (Swiss "mass")..	166.6

The price of foreign provisions increased in nearly the same or even at a higher ratio than those of home production, as appears from the statistical price-lists of Ham-
burg:

	Percentage of increase.
Wine.....	120.2
Coffee.....	71.9
Sugar.....	14.7
Tobacco.....	54.3
Rye-flour.....	139.3
Beechen fire-wood.....	101.6
Fire-wood of pine.....	90.7
Coal.....	50

And there was also a great augmentation in the prices of clothing, shoes, house-
rent, light, washing, taxes, and medicine.

In the period from 1861 to 1872, the general increase in the expenses of living was from 35 to 45 per cent., and of provisions from 30 to 40 per cent. Mr. Chatelant arrives at the conclusion that in the cities of Berne and Basle, (expenses at Zurich and Geneva are fully as high,) an income of from 3,500 to 4,000 francs (\$500 to \$600) barely furnishes a tolerable existence without any aspirations as to comfort or any savings for time of need.

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ule of prices for the decades of the last e. The wages paid s seventy years ago. orly ventilated, and made here between g classes, is one not usumer and the pro- very poorly here, as noon, and has, until own in the table, as ot of yesterday.

the best or the most ood. Many holidays life led by a common ally the lower, who a quality. Drunken- here as in America nce the great battle orkingman of Switz- One of the greatest g authentic informa- t await industry and s well as an official, truth regarding our be had. The accom- ngs in Zurich, all of

Cents.

..... 90 to 100
..... 90
..... 60
..... 60 to 80

ch higher wages, per day. Common lk establishments men are employed of working-hours, ne floor of four to ear.

year 1800 to the present

part of	One pound of potatoes.
.....
ts.....	3 3-5 cents.....
ts.....	1 2-5 cents.....

cents a pound; beer, 3
veal, 20 cents a pound;

PRICES OF PROVISIONS, GROCERIES, ETC.

Prices of provisions, groceries, and other trading articles of consumption, also of house-rent and board, in the manufacturing towns of Basle, Zurich, and Chaux de Fond.

Articles.	Basle.		Zurich.		Chaux de Fond.		General average.
	Retail prices in—		Retail prices in—		Retail prices in—		
	1872.	1873.	1872.	1873.	1872.	1873.	
PROVISIONS.							
Flour, wheat, super... per bbl	\$9 00	\$8 00			\$20 07	\$20 05	\$20 05
Flour, wheat, ex. family. do..	10 00	6 40	\$20 00		03	05	05
Flour, rye..... do..	6 00	5 00	00		05	01	01
Corn meal..... do..	6 10		05		01		01
Beef, fresh, roast... per pound.	15	18	16		18	18	\$0 17
Beef, fresh, rump pieces... do..	12		16				14
Beef, fresh, rump steaks... do..	17	18	16				18
Beef, corned..... do..			10		18	19	20
Beef, corned..... do..			19		21	17	20
Veal, fore-quarters..... do..	16	20	19		21	17	20
Veal, hind-quarters..... do..	18	22	19		21	17	20
Veal cutlets..... do..	14	17	13		14	18	20
Mutton, fore-quarters... do..	15		13		14	18	20
Mutton, leg..... do..	15		13		11	18	20
Mutton chops..... do..	13		11		17	22	25
Pork, fresh..... do..	14	18	13		25	25	25
Pork, corned or salted... do..	21		13		25	25	25
Pork, bacon..... do..		18			25	25	25
Pork, ham, smoked..... do..	26	28	18		25	25	25
Pork, shoulders..... do..	14	25			25	25	25
Pork, sausage..... do..	13	24	19		16	25	25
Lard..... do..	04				10	25	25
Codfish, dry..... do..	25	26	26		24	20	18
Butter..... do..	13 to 18	24	16		20	20	18
Cheese..... do..	25	*013	1 10		*01	50	50
Potatoes..... per bushel	05 to 06	06	06		06	06	06
Rice..... per pound	04 to 05	06	04		05	08	09
Beans..... do..	031	06	05		03	05	06
Milk..... per quart	36	20	18		20	18	20
Eggs..... per dozen							22
GROCERIES, ETC.							
Tea, Oolong, or other good black..... per pound	1 20		1 41		1 00	1 00	1 16
Coffee, Rio, green..... do..	18 to 20	24	25		24 to 28	20	25
Coffee, Rio, roasted..... do..		30	29		32	24	24
Sugar, good brown..... do..	13	13			14	12	12
Sugar, yellow..... do..	13	09			14	10	12
Sugar, coffee..... do..		104	12		10	10	11
Molasses..... do..			16			09	06
Sirup..... do..			16			08	10
Soap, common..... do..	08 to 09	08	08		07	10	08
Starch..... do..	08 to 09	08	10		08	10	18
Fuel, coal..... per ton	8 50	8 50			9 00	10 00	11 00
Fuel, wood, hard..... per cord	8 00	8 00			5 60	7 00	8 00
Fuel, wood, pine..... do..							
Oil, coal..... per gallon	96	96					
DOMESTIC DRY GOODS, ETC.							
Shirting, brown, 4-4, standard quality..... per yard	21 to 24	21 to 21	23		24	20	20
Shirting, bleached, 4-4, standard quality..... per yard	39	39	31		24	24	31.4
Sheeting, brown, 9-8, standard quality..... per yard	30	30	38		21	28	28
Sheeting, bleached, 9-8 standard quality..... per yard	37 to 40	37 to 40					384
Cotton flannel, medium quality..... per yard	76	76	67				73
Tickings, good quality..... do..	19 to 22	19 to 22	23		24	20	20
Prints..... do..	15 to 15	15 to 15	23				24
Mousseline de laines..... do..	43	43	29		50	50	43.8
Sailbuck, medium quality..... do..			5 00		5 00	5 00	5 00
Boots, men's, heavy..... do..							

* Per pound.

n, also of house-rent
 loyers de fond.

Peux de l'ond.

	Chanx de Fond.	General average.
	Retail prices in—	
	1872. 1873.	

37	20	06	30	03	
04	05	08	08		
05	07	01	04		
18	18			20	17
				14	
28	18	20		14	
28	18	20	16		
28	17	20	18		
28	17	20	18		
28	18	20	18		
14	18	25	17		
17	22	25	17		
	25	25	21		
	25	25	22		
28	25	28	23		
	25	28	19		
16			07		
30	28	30	19		
30	20	18	19		
01	50	50	74		
06	04	06	06		
05	08	05	04		
08	06	06	03		
			22		

00	1 00	1 00	1 16
28	2 0	2 5	2 5
32	2 4	2 4	2 4
14	12	12	12 8
10	10	10	10 6
	09	09	11
	08	10	11 2
07	10	08	10 8
00	10	18	10 10
00	10 00	10	8 50
60	7 00	8 00	9 20
			6 87
24	20	20	22
	24	24	31 4
21	28	28	22 1
			30 1
			73
	50	50	34
224	20	20	31 5
	50	50	29 2
	50	50	41 8
	5 00	5 00	5 00

Articles.	Basle.		Zurich.		Chaux de Fond.		General average.
	Retail prices in—		Retail prices in—		Retail prices in—		
	1872.	1873.	1872.	1873.	1872.	1873.	
HOUSE-RENTS.							
Four-roomed tenements, per month.....	\$6 00	\$13 30	\$4 27	\$3 00 to \$1 00	\$2 50	\$14 00	\$3 36
Six-roomed tenements, per month.....	\$10 00 to 12 00	20 00	9 50	4 00 to 10 00	10 00	16 50	12 23
BOARD.							
For men, (mechanics or other workmen)..... per week	1 70 to 1 80	1 89	\$1 90 to 2 23	2 00 to 3 00	3 00	2 50	2 30
For women employed in factories..... per week	1 20	1 50	1 33 to 1 52	1 40 to 2 00	2 50	1 75	1 06

Table showing the incomes and expenditures of the families of five workmen in Basle, Switzerland, in the year 1872.

[Furnished by Professor H. Klinkelin, of Basel.]

	FAMILY—				
	I. Ribbon-weaver, wife, and four chil- dren.	II. Silk-ribbon weaver, wife, three children, and one female ser- vant.	III. Mechanic, wife, and two children.	IV. Founder in me- chanical shop, wife, and three children.	V. Carpenter in me- chanical shop, wife, and two children.
Weekly earnings:					
Man	\$5 82	\$5 60	\$5 70	\$7 32	\$6 60
Wife	2 28	5 20	2 40	40	
Children					1 80
Total	8 76	10 80	8 10	7 72	8 40
Total, say 52 weeks	455 52	561 60	421 20	401 44	436 80
Weekly expenditures:					
Flour and bread	1 30	1 48	80	1 11	1 12
Butter	60	48	1 09	1 12	56
Cheese	40	30	40	25	22
Sugar	10	11	20		
Milk	1 10	1 26	11	11	13
Coffee, and substitutes	20	21	24	20	48
Soap, starch	12	12	10	69	22
Salt, pepper, vinegar, olive-oil	20	08	10	06	08
Potatoes, vegetables	54	60	50	52	40
Oil or petroleum	11	12	24	13	20
Wine, beer, tobacco	40	25	1 40	84	34
Other articles		20	40		16
Total	5 00	5 56	6 28	4 99	5 93
Total for 52 weeks	260 00	299 12	320 56	259 48	319 36
Annual expenditures:					
Coal and wood	20 01	24 00	11 60	18 00	20 00
Rent of house	60 00	88 00	52 00	60 00	52 00
School and church	10 00	6 00		1 80	3 00
Clothing and shoes	58 00	52 00	50 00	60 00	30 00
Taxes	1 80	40	2 14	4 05	1 65
Total	401 80	459 72	411 70	407 33	311 01

REMARKS BY PROFESSOR KINKELIN.

Family I. The weekly earning of the husband, as workman in the factory, is only \$2.80. He makes about \$140 during the year, by extra work. The mother earns her money by cleaning two school-houses. To the expenses must be counted \$10 for insurance of the family in a society for relief during sickness, &c.

Family II. The mother works also as ribbon-weaver. Husband and wife work in the same factory.

Family III. The mother works as ribbon-weaver; the husband as mechanic. It is believed that the expenses are given very high, and the earnings too small. The husband has given his earnings as \$1.20, but his employer gives it positively as \$5.70.

Family IV. It is not known at what the wife works.

Family V. One child works in the ribbon-factory. Boots, &c., worth about \$20, are not included.

In families III, IV, and V, the weekly earning of the husband is given by the employers, calculated from the months of June, July, and August, 1872.

The expenses as well as the earnings are not at all times the same as given, but sufficiently accurate for comparative statements.

Concerning the expenses of the five families, I wish to state that the first estimate was given to me by the husband of the family in question; the second one was made by a competent and experienced man; the same as to the three others.

I regard the same as good as can be made. An account of expenses is seldom kept by workmen. (An exception seems to be family IV.) They use the money as long as they have any. With little money they use little; with more money they live better.

Mr. Consul Byers, under date of Zurich, October 16, 1873, in transmitting a statement giving the cost of provisions and other articles of subsistence, and another of the expenses of a family of five persons, makes the following remarks:

In the list of the weekly expenses of a teacher's family of five persons, the average is about the same as for workmen, and shows plainly that the income is less than the expenses. There are cases authentically reported showing that an industrious workman cannot, even with the help of his wife's hands, earn nearly the amount required for the common necessities of life, not to mention such a thing as luxuries. The figures were exactly these: Earnings of man and wife, 1,700 francs; expenses of the family, 2,212 francs. These figures tell the simple tale for Switzerland, and no amount of fine-spun theories and loose assertions can alter them; they are there, and the workman knows them to be sober and fearful facts.

The rates of wages now paid in Switzerland to all kinds of workmen are very much higher than they ever were before. I might add that house-rent is continually on the increase, and the tenements that are rented at the prices stated, 15 to 20 francs (\$3 to \$4) per month, are by no means over-comfortable or pleasantly and healthfully situated.

RATES OF WAGES AND COST OF SUBSISTENCE.

Average rates of daily wages in the cotton, flax, wool and silk factories of the canton of St. Gall, Switzerland.

[Condensed from the British consular reports.]

	Men.	Women.	Children.
COTTON.			
Wadding factory.....	<i>Cents.</i> 34 to 60	<i>Cents.</i> 20 to 34	<i>Cents.</i> 14 to 20
Cotton, thread, and knitting-yarn factory.....	30 to 60	22 to 30	15 to 20
Spinning-mills.....	20 to 30	.....	.....
Mechanical spooling and twisting mills.....	13 to 50	12 to 30	4 to 16
Ordinary hand-weaving mills:	18 to 50	12 to 36	4 to 20
1. Plain stuffs.....	37 to —	24 to —	7 to —
2. Checked-weaving mills.....	22 to 60	15 to 40	15 to 16
3. Figured-weaving mills.....	24 to 80	24 to 36	16 to 25
Jaquard-loom weaving mills.....	40 to 50	30 to 40	14 to 20
Power-loom weaving mills:	40 to 60	18 to 24	.....
1. Plain stuffs.....	10 to 25	10 to 25	4 to 10
2. Checked-stuffs.....	38 to 80	20 to 40	12 to 25
Stocking and hosiery weaving mills.....	20 to 30	.....	.....
Hand embroidery.....	.....	.....	.....
Mechanical embroidery.....	.....	.....	.....
Linon manufactories ("slugarten").....	.....	.....	.....

RATES OF WAGES AND COST OF SUBSISTENCE—Continued.

	Men.	Women.	Children.
LINEN.			
Spinning-mills	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
Weaving-mills, (hand-weaving)	54 to 51	37 to —	20 to —
	16 to 40	10 to 40	10 to 30
WOOL AND HALF WOOL.			
Spinning-mills	24 to —	20 to —	10 to 14
Hand-weaving	20 to 30	20 to —	10 to 14
Mechanical weaving	30 to —	20 to —	10 to 14
SILK.			
Spinning and throwing mills	24 to —	20 to 21	10 to 14
Weaving mills:			
<i>a</i> Stuffs	30 to 50	16 to 30	6 to 20
<i>b</i> Ribbons	50		
<i>c</i> Pocket handkerchiefs	60		
<i>d</i> Half-silks	21		
SINGING, BLEACHING, DYEING, AND PRINTING.			
Singing	26 to 55	23 to 26	
Natural bleaching	40 to 60	30 to —	
Artificial bleaching	30 to 60	20 to 32	
Turkey-red dyeing	36 to 52	28 to 36	24
Checkered dyeing:			
<i>a</i> Dyeing stuff in the piece	36 to 50		
<i>b</i> Dyeing yarn	35 to 51	30 to —	
Printing	40 to 50	21 to 26	12 to 22
Cutting off the superfluous parts of the figure-welt on the wrong side of broché goods:			
By hand	10 to 32		
By machine	40 to 55	12 to 36	

NOTE.—The franc computed at 20 cents United States coin.

Average daily rates of wages in various industrial establishments in the canton of St. Gall.

Extraction of metals and manufacture of hardware—			<i>Cents.</i>
Copper and lead mines			40
Iron mines			40
Forges and smelting-furnaces			40
Iron-works			40
Foundries—gray pig-iron, men		44 to 80	
children		41 to 60	
soft pig-iron		20	
metal casting		52	
Engine factories, men		56 to 60	
children		56 to 60	
Machine-shops, men		30	
Arms factories		40 to 50	
Cooking-utensils and stove-factories		40 to 50	
Grinding and filing down		40 to 44	
Wire, tack, and nail factories		35 to 60	
Wire-mills		34 to 60	
			40
Preparation of minerals and other substances for scientific, industrial, and military purposes—			
Lime-kilns, men		40 to 60	
children		12 to 20	
Brick-kiln, potteries, and drain-pipe factories, men		30 to 50	
children		20 to 22	
Powder-mills, men		100	
Glass-manufactories		60	
Gas-works		48	
Color-factories		40	
Lucifer-match factories		30 to 60	
Chemical laboratories			

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	Women.	Children.
<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
50	20 to 31	14 to 20
60	22 to 30	15 to 20
70	24 to —	7 to —
80	12 to 30	4 to 16
90	14 to 36	4 to 20
100	15 to 40	15 to 16
110	24 to 36	16 to 25
120	30 to 40	14 to 20
130	15 to 24	4 to 10
140	10 to 29	4 to 10
150	20 to 40	12 to 25

Factories of surgical and optical instruments.....	50 to 70
Water-color factories.....	
Tool-factories.....	60
Scythe-factories.....	40
Threshing-machine factories.....	36 to 40
Furniture-factories.....	72

Preparation of vegetable and animal substances for industrial purposes—

Oil-mills.....	40 to 60
Tan-mills.....	40 to 60
Saw-mills.....	40 to 60
Hemp-crushing mills.....	24
Frame-saw mills and parqueterie factories.....	40 to 70
Reed-makers, men.....	40 to 60
women.....	24 to 30
Bone-mills, men.....	40 to 50
Tanneries.....	30 to 60
Candle and soap factories.....	40 to 60
Brush-factories.....	34
Starch.....	40 to 44
Dyed and varnished leather factories.....	40
Oil-cloth and waxed paper factories.....	40
Waxed goods factories.....	40
Straw-hat factories.....	30

Printing-establishments, &c.—

Printers, men.....	44 to 80
women.....	20
children.....	20
Lithographers, men.....	50 to 80
children.....	20
Photographers, men.....	40 to 80

Paper, wooden, and hardware manufactories—

Paper-mills, paper and pasteboard factories, men.....	50 to 60
women.....	16 to 30
Maize straw-paper factories, men.....	40
women.....	20
Carpet and stained paper factories, men.....	40
Playing-card factories.....	40
Window-blind factories.....	50
Bone-turning mills.....	40 to 60
Wood-carving factories.....	50
Gold-band factories.....	50

Articles of consumption—

In corn-mills.....	40 to 60
In manufactories of Italian pastes, men.....	30 to 50
women.....	20 to 40
children.....	20
Chicory-factories, men.....	34
women.....	18
children.....	14
Mustard-factories, men.....	40
Breweries.....	36 to 80
Distilleries.....	40 to 60
Tobacco and cigar factories, men.....	35 to 80
women.....	18 to 40
children.....	15

Amount of daily wages in the canton of Valais.

Vine-dressers, men.....	40 to 60
women.....	30 to 35

LABOR IN SWITZERLAND.

617

50 to 70
60
40
36 to 40
72

purposes—

40 to 60
40 to 60
40 to 60
24
40 to 70
40 to 60
24 to 30
40 to 50
30 to 60
40 to 60
34
40 to 44
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44 to 80
20
20
50 to 80
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40 to 80

50 to 60
16 to 20
40
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40
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50
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40 to 60
30 to 50
20 to 40
20
34
18
14
40
36 to 80
40 to 60
35 to 80
18 to 40
18

lais.

40 to 60
30 to 36

Agricultural laborers, men.....	
Day-laborers.....	24 to 40
Men engaged in breaking up ground.....	20 to 40
Mowers.....	40 to 50
Wagoners (with yoke of oxen).....	60 to 70
Printers.....	80 to 100
Bookbinders.....	46 to 60
Watchmakers.....	40 to 50
Mechanics.....	20 to 36
Tailors.....	20 to 40
Shoemakers.....	40 to 50
Saddlers.....	30 to 56
Locksmiths.....	20 to 60
Smiths.....	40 to 70
Joiners.....	28 to 50
Tanners.....	40 to 60
Gardeners.....	20 to 36
Bakers.....	36 to 60
Millers.....	22 to 28
Cartwrights.....	40 to 60
Tinkers.....	30 to 42
Gunsmiths.....	36 to 60
Cooks, men, engaged by the year.....	80 to 120
women, for 250 days.....	20
Seamstresses.....	8
Milliners.....	20 to 22
Masons.....	20 to 36
Washerwomen.....	20 to 56
Head waiters engaged by the year.....	36
Waiters.....	20
Chambermaids.....	20
Parlor-maids.....	20
Hostlers.....	20
Maid-servants.....	20
Carpenters.....	8 to 10
Stone-cutters.....	40 to 56
	50 to 60

CANTON OF GENEVA.

Occupation.	Average wages per week.	Honse-rent per week.	Living per week.
Working jewelers, (men).....	\$6 60	\$0 69	\$2 60
Working jewelers, (women).....	4 20	69	2 00
Tinkers.....	3 00	69	2 25
Potters.....	2 76	69	1 68
Saddlers.....	3 12	69	2 25
Coopers.....	3 24	69	2 25
Bakers.....	*2 50	69	1 68
Butchers.....	3 60	69	2 25
Joiners.....	2 64	69	2 25
Wood-cutters.....	3 96	69	2 25
Journeyman tailors.....	3 60	69	2 25
Hair-dressers and barbers.....	2 40	69	1 68
Locksmiths.....	2 28	69	1 68
Gilders.....	4 56	69	2 25
Watchmakers, (men).....	5 40	69	2 25
Watchmakers, (women).....	3 00	69	1 61
Bookbinders.....	3 60	69	2 25
Cabinet-makers.....	3 60	69	2 25
Upholsterers.....	4 32	69	2 25
House-decorators.....	3 36	69	2 25
Lithographers.....	3 0	69	2 25
Blacksmiths.....	3 24	69	2 25

* Employed seven days per week.

CANTON OF APPENZELL.

Occupation.	Average wages per week.	House-rent per week.	Living per per week.
Saddlers.....	\$2 52	\$0 32	\$1 40
Coopers.....	2 25	32	1 40
Bakers.....	2 16	32	1 40
Butchers.....	2 40	32	1 40
Joiners.....	2 40	32	1 40
Tailors.....	2 40	32	1 40
Tinkers.....	2 56	32	1 40
Silk-factories, (men).....	3 84	32	1 40
Silk-factories, (women).....	1 92	21	1 12
Ribbon-factories, (men).....	3 56	32	1 40
Ribbon-factories, (women).....	1 92	21	1 12
Yarn-factories, (men).....	3 84	32	1 40
Yarn-factories, (women).....	1 92	21	1 12
Wool-factories, (men).....	3 60	32	1 40
Wool-factories, (women).....	1 68	32	1 12

* Employed seven days per week.

CANTON OF BERNE.

Average rate of wages of the working-classes, with and without board.

Occupation.	Average wages per week.	Occupation.	Average wages per week.
WITH BOARD AND LODGING.			
Working watchmakers.....	*\$1 30	Cabinet-makers.....	\$3 06
Coopers.....	1 19	Glaziers.....	3 03
Brewers.....	4 00	Plasterers.....	2 42
Shoemakers.....	1 40	House-decorators.....	3 42
Gardeners.....	11 85	Smiths.....	3 30
Barbers.....	11 67	Locksmiths.....	3 50
Turners.....	1 00	Toolsmiths.....	3 30
Porters.....	2 40	Mechanics.....	4 20
Office-porters.....	2 52	Brass-founders.....	3 42
Bakers.....	1 19	Founders.....	5 05
Butchers.....	1 49	Turners.....	3 60
Farm-servants.....	2 0	Engravers.....	4 80
Women servants.....	\$3 30	Lithographers.....	4 50
WITHOUT BOARD AND LODGING.		Lithographers.....	3 72
Masons.....	3 00	Compositors.....	3 00
Foremen.....	\$4 50 to 4 80	Printers.....	3 00
Stone-cutters.....	3 00	Bookbinders.....	3 10
Foremen.....	Up to 4 80	Brush-makers.....	4 20
Carpenters.....	3 30	Tailors.....	3 20
Foremen.....	Up to 4 80	Saddlers.....	4 20
Joiners.....	3 00	Potters.....	4 20
		Cartwrights.....	3 00
		Photographers, operators.....	8 74
		Photographers, assistants.....	3 12

* Provide their own tools.

† Work on Sundays.

‡ Engaged by the month.

§ Per month.

NOTE.—The above artisans often earn more by piecework.

Table showing the average prices of provisions and fuel in the canton of Berne.

	Cents.
Bread, rye mixed with wheat.....per Swiss pound = 1.103..	\$0 04
Beef, first quality.....do.....do.....	13
Beef, second quality.....do.....do.....	12
Veal.....do.....do.....	13
Pork.....do.....do.....	19
Potatoes.....do.....do.....	6
Butter.....do.....do.....	20
Suet.....do.....do.....	18
Lard.....do.....do.....	18
Pine-wood.....do.....do.....per klafter..	5 80
Beech.....do.....do.....do.....	9 20
Turf.....do.....do.....do.....per wagon load..	5 00

Table showing the quality, quantity, and average prices of provisions consumed per week by an ordinary day laborer's family at Berne, consisting of 8 persons—2 adults and 6 children.

	House-rent per week.	Living per per week.
2	\$0 32	\$1 40
8	32	1 40
6	32	1 40
0	32	1 40
0	32	1 40
6	32	1 40
4	32	1 40
2	32	1 12
0	32	1 40
2	32	1 12
4	32	1 40
2	32	1 12
0	32	1 40
8	32	1 12

Bread, 8 3/4 pounds English per day, at 4 cents per pound.....	\$2 24
Milk, 4 1/2 imperial pints per day.....	67
Coffee, 1.103 pounds English per week.....	20
Coffee made of chicory, ("sparkallee") a small packet per week.....	2
Coffee, essence of.....	3
Flour, 1 pound per week, at 5 cents per pound.....	5
Meat,* 1 pound Swiss, (about once a month,) of lean bacon, at 18 cents.....	4
Potatoes, 10 1/2 imperial quarters per month.....	22
Cabbage, made into sauer-kraut.....	4
Lard.....	20
Salt 3 cents; fruits and vegetables, 10 cents.....	13
Total.....	4 04

Amount disbursed by the same family for house rent, fuel, taxes, and various other necessary household expenses during the year.

thout board.

	Average wages per week.
.....	\$3 06
.....	3 09
.....	3 42
.....	3 42
.....	3 33
.....	3 30
.....	3 35
.....	4 29
.....	3 42
.....	3 51
.....	3 60
.....	4 39
.....	4 53
.....	3 72
.....	3 00
.....	3 10
.....	3 10
.....	4 20
.....	3 11
.....	3 30
.....	4 20
.....	4 20
.....	3 00
.....	8 71
.....	3 13

Fuel for one large room for the whole family, and part use of a kitchen.....	\$30 00
Fuel to warm the room in winter—one large cart-load of turf.....	18 25
Lighting, during the winter months, a pint of oil per week, at 10 cents.....	5 00
Municipal gas rates.....	2 60
Blacking, one small box, per month, at 4 cents; soap and matches, 3 cents.....	40
School-books and slates for children attending school, per annum.....	84
Breakage, thread, needles, &c., per annum.....	4 00
Soap, washing done at home, (1 Swiss pound,) 9 cents per week.....	3 00
Pig's grease for boots and shoes, 1 Swiss pound, 20 cents per month.....	4 68
Total.....	2 40
Total.....	71 17

Table showing the annual average expenditure for clothing of an ordinary workman.

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	Cents
ponnd=1.103..	\$0 04
.....do..	13
.....do..	12
.....do..	13
.....do..	19
.....do..	6
.....do..	20
.....do..	18
.....do..	18
.....per klafter..	5 80
.....do..	9 20
er wagon load..	5 00

Coat, price \$6, usually lasts three years.....	\$2 00
Waistcoat, price \$1.40, usually lasts one year.....	1 40
Trowsers, price \$2.80 to \$3.....	2 30
Shirt, price 85 cents; two required every year.....	1 70
Stockings, cotton, price 40 cents, usually last one year.....	40
Stockings, woolen, price \$1, usually last one year.....	1 00
Boots, price \$2.50, usually last one year, require being twice resoled, extra expense \$1.40.....	3 40
Shoes, price 60 cents, usually last one year, resoled four times, extra, 68 cents.....	1 48
Neck-ties, price 30 cents, usually last one year.....	3 0
Felt hat, price \$1.60, usually lasts three years.....	53
Braces, price 30 cents, usually last one year.....	30
Trowsers, summer, price \$1.40, usually last one year.....	1 40
Under-waist coat, price 69 cents, usually lasts two years.....	34
Pocket-Landkerchief, price 16 cents, two required every year.....	32
Jackel, price \$1.80, usually lasts two years.....	90
Total.....	18 57

The lowest computation of the annual cost of clothing for a workman in this canton is \$14.32 provided he does not wear second-hand clothes.

Table showing the average annual expenditure for clothing of a woman of the working class.

Dress, price \$3, usually worn three years.....	\$2 66
Petticoat, price \$2.20, usually worn two years.....	1 10
Apron, price \$1, two required every year.....	2 00
Stays, price \$1.40, two required every year.....	2 80
Shift, price 61 cents, two required every year.....	1 22
Stockings, cotton, price 16 cents, two required every year.....	32

* 1 pound Swiss = 1.103 pounds English.

Stockings, woolen, price 50 cents, two required every year.....	1 00
Underclothing, price 42 cents, usually worn one year.....	42
Jacket, price \$1.60, usually worn two years.....	80
Neckkerchief, price 60 cents, usually worn one year.....	60
Bonnet, price \$1, usually worn four years.....	25
Gloves, price 30 cents, usually worn two years.....	15
Shawl, price 40 cents, usually worn ten years.....	4
Comb, price 11 cents, usually worn one year.....	11
Shoes, price \$1.80, usually worn one year, but require being twice resoled; extra expense \$1.12.....	2 92
Shoes, price 60 cents, usually last one year, but require being resoled six times, extra expense, 92 cents.....	1 52
Pocket-handkerchief, price 12 cents, two required per year.....	24
Under-waistcoat, usually wears one year.....	42
Hood, price 60 cents, usually worn two years.....	30
Total.....	18 90

Table showing the average annual cost of clothing for a boy under 14, belonging to the working-class.

Coat, cotton-warp linen, price, including lining, 90 cents, make, and accessories, 50 cents, one required per annum.....	\$1 40
Waistcoat of the same material, one usually lasts a year.....	70
Trowsers, of the same material, \$1.10 each, three pairs per annum.....	3 30
Shirt, cotton, 50 cents each, two per annum.....	1 00
Stockings, cotton, at 20 cents, two pairs per annum.....	40
Stockings, woolen, at 50 cents per pair, two pairs per annum.....	1 00
Shoes, at \$1 to \$1.40 per pair, resoling them twice a year, 41 cents each time.....	2 28
Neck-tie.....	20
Cap, woolen.....	32
Pocket-handkerchief, 8 cents each, two per annum.....	16
Braces, 12 cents per pair, one per annum.....	12
Total.....	10 88

CONDITION OF THE WORKING-CLASSES.

There is no establishment in Switzerland where workmen can obtain cheap clothing, at least at all commensurate with the small price of other necessities. This is, no doubt, a singular omission in a country pre-eminently distinguished for its associations organized with a view of ameliorating the condition of the working-classes, and dispensing charity generally. On the other hand, there are to be found in nearly every town and village public fountains and washing apparatus, protected by roofing, where linen can be washed with ease, and at little or no cost.

If it be a matter of importance to the workman to obtain food at moderate rates, it is of no less consequence to him to find cheap lodging, for the necessity of paying rent is one of the severest, if not the heaviest load by which his finances are oppressed.

A society for erecting improved dwellings for the industrial classes was founded at Lausanne in 1860, with a capital of \$40,000. Another more recently, with a capital of \$60,000, at Geneva, where the charge for a single room and kitchen amounts to \$30 a year, and the rent of a kitchen, which can be let separately, is as low as \$2 a month. Again, at Nenchâtel, another society has erected a considerable number of lodging-houses, and proposes to build others for the working-classes. The apartments are grouped in fours, with a common entrance, two apartments being on the ground-floor, and two on the first floor. Each lodger has his own garden, and the rent paid is very moderate.

As in other manufacturing countries, certain occupations are more prejudicial than others to the industrial classes. Domestic labor, too, so prevalent throughout the confederation, and which at first sight would appear to have a favorable effect in a sanitary sense on the operative, has not all the advantages it is generally held to possess. It produces the evil effects of too sedentary a life, and also entails constant application to work subjected to no direct control. The manufacture of watches, both in this respect, and as regards the strain on the eyesight, is considered to be one of the most injurious occupations, although the authorities have everywhere taken the best precautionary measures, both to protect the workman, as far as possible, from its attendant evils, and to prevent children from being employed in this trade at too early an age.

more prejudicial than valent throughout the a favorable effect in a generally held to post-entails constant appli- watches, both in this to be one of the most re taken the best pre- sible, from its attend- de at too early an are.

The International Workingmen's Association is particularly active at Lausanne, and has accomplished important practical results, such as finding labor, organizing clubs, banks, &c., for its members. Omission must not be made of the society of "Grüthli."

which, though of a more political character than the foregoing, is exclusively Swiss, and while constantly discussing the problem of "capital *vs.* labor," (for the reason that a large majority of its members are laboring men,) and whose political character is closely allied to the question of labor, exercises, by its principles and popularity, a wholesome influence over the laboring classes.

This association has founded many important institutions, such as societies of mutual aid, art, savings-banks, cheap eating-houses, &c., and erected various resorts for instruction and amusement.

There are also other societies, purely religious, both Protestant and Roman Catholic, exercising special supervision over the education and well-being of the operative class. Similar results have been experienced in other countries, and led to the creation of the International Congresses of Brussels, Frankfurt, and London. The Genevese "Society of Public Utility" early recognized the importance of the suggestions proposed at these congresses, and with a view to avert the evils of localization, and for the general dissemination of knowledge, have founded a library of 24,000 volumes on social questions, comprising many books not found in other collections. All these various philanthropic efforts to ameliorate the condition of the Swiss population at large, and of the operative in particular, meet with valuable aid from the native employers. A purely democratic spirit prevails, in this regard, among employers and employed. The employer would not be considered by his subordinates, or even by himself, as entirely capable to conduct the affairs of his establishment, had he not in his younger days ascended, step by step, the ladder which brought him up from a room-sweeper to the level of the most skilled in the trade. In Glarus, which may be considered a model canton as regards the relations between proprietor and employé, and where a third of the population consists of operatives, the communes encourage every new enterprise, superintend the schools and local libraries, and, in critical periods, find labor, provide soup kitchens, and buy provisions for the purpose of reselling them at cost price to their distressed workmen. At Olten, in the canton of Solothurn, where the company of the Great Central Railway gives employment to 700 workmen, we find perhaps the most striking example of the prosperous condition of the operative in Switzerland. While the rate of wages is higher in the company's works than in the factories situated in other cantons, the hours of labor are limited to from ten and a half to eleven hours. In case of sickness the operative is always certain of being kindly cared for; or if high prices prevail, prompt measures are taken to relieve his distress. Cases of ill behavior have never been known to occur at Olten. The operatives are much attached to each other, and look upon the director of the works in the light of a father rather than a master.

The laws of Switzerland oblige every Swiss to attend the "primary" schools for a certain number of years; and it may be said here, the government has now under consideration, also, a law regulating the hours of labor.

So wide-spread, however, is education in Switzerland that every commune has its schools, and absence from these institutions is exceedingly rare. Generally speaking, the laws oblige them to commence attendance at the age of six or seven, and they are bound not to leave the primary school until they are fifteen or sixteen. The law which requires that children should attend the primary schools virtually imposes an obligation on the state, or, more correctly, on the communes, of endowing numerous schools throughout the country. These institutions are of a first-rate character, both as regards system and management. It is generally allowed that the primary schools offer a solid basis to the education of the people. The industrial classes, as elsewhere are better educated than the agricultural population; but on this score few countries can boast of so general a diffusion of knowledge throughout the masses as is met with in Switzerland. What are called "industrial" schools are also very considerable in number. There the subjects of study include drawing, modeling, calculation, (especially in its application to industry and commerce,) German, French, the elements of geometry, chemistry, and physics. There are many such institutions in the cantons of Geneva, Vaud, Neuchâtel, Berne, Lucerne, Zurich, Tessin, St. Gall, &c. At Lugano gratuitous instruction is given in the application of chemistry to art and industry. Various other institutions of a like nature are found in different parts of Switzerland, testifying to the general interest taken in the education of the artisan and industrial classes. Lectures on scientific, historical, and social subjects are given in the different cantons with beneficial results. The Swiss operative undergoes his apprenticeship either under parental supervision at home or more frequently under the eye of his employer. Whenever any new branch of industry is introduced a number of apprentice schools are immediately instituted. Among other numerous examples, we find in the canton of Tessin a school where silk-weaving is taught. At Fribourg and Geneva there are institutions where apprentices receive instruction in plaiting straw, &c. But clock and watch making, demanding prolonged and difficult studies, is perhaps the branch of trade, above all others, in which the practical education of the apprentice is carried to the highest pitch of perfection. Schools have been founded for this purpose at Geneva, Chaux-de-Fond, and Leode, the establishments at the two former places being municipal institutions, and the latter exclusively for the poor. The watch and clock

Institutions at Chaux-de-Fond was founded as recently as 1861. Instruction is given to pupils either devoting themselves exclusively to watch and clock making or to workmen desiring to receive finishing lessons in any particular branch. They are, however, obliged to satisfy the examiners that their previous studies in other schools have been sufficiently complete. Prizes are given and certificates of general capacity on leaving the establishment.

The following from another source affords information of an interesting character in regard to the condition of the working-people of Switzerland:

Perhaps the Swiss artisan is the most fortunately situated of all the continental workmen. This is the result of various causes. "In most countries," observes Mr. A. G. G. Bonar, "the laboring classes are, as a rule, wholly dependent for their means of existence upon that one department of labor in which circumstances have individually placed them, and are, therefore, exposed to the disastrous results of whatever fluctuations may affect it. In Switzerland, this is happily so far from being the case that it may almost be said to constitute the exception. The peasant, when not actively engaged in agricultural pursuits, finds useful and profitable occupation in a hundred complicated and delicate works of watches. The artisan, likewise, in his leisure moments, or when unable to find work, cultivates the small plots of ground which he or less directly to the support of the family." The Swiss is never ashamed of work, and if it be not obtainable in his own country he will seek it in others. Combined with this love of labor is to be found an habitual thriftiness which enables the Swiss workman, although in receipt of lower wages than are to be obtained in many other countries, to save money, and even enjoy a state of comparative ease. Were the English artisans, with their high rates of wages and abundant means of employment, to display anything like the economical propensities of their Swiss brethren, the whole social condition of the industrial classes in England would become completely revolutionized. That low wages necessarily mean poverty and suffering is rebuted by the example of the Swiss. With wages frequently lower than those of a Dorsetshire peasant, he contrives, by the smallness of his wants, his indomitable thrift, and his best-communicated workmen.

In the history of the Swiss working-classes we have a significant view of the value of education, if not carried too far. There are comparatively few Swiss who cannot read or write, and not infrequently we find the artisan rising to the post of manager, and from thence to that of partner or employer, by reason of the educational advantages possessed by him. From his earliest childhood principles of the strictest economy are instilled in his mind, and the habit of saving encouraged by every possible means. He understands the industrial value of education, and, consequently, never omits an opportunity of extending his knowledge. While our artisans are wasting their time and money at a public house, the Swiss workman is busy with hand or brain preparing for the contingencies of the future. Compared with the wages obtainable in England the average earnings of the Swiss workmen must appear very low. In the canton of Zurich, for instance, they range from 17 cents to 96 cents per day. In the canton of Zurich, for instance, they range from 12 to 14. In the various cotton and silk factories the rate of wages is far below those obtainable in Lancashire and Warwickshire, although the quality of the labor is scarcely a whit inferior. In the canton of Basle-unskilled hands in the silk-trade obtain about \$1.56 per week, while first-class dyers average \$1.84. Like the Germans, the Swiss have successfully adopted the principles of co-operation, extending their application to productive purposes, but the liberality with which most employers treat their workmen—a circumstance which renders strikes almost unknown in Switzerland—tends to retard any extensive development of the latter class of co-operative associations.

Owing to the excellent system of education among the Swiss, and their frugal and industrious habits, the workman has many advantages over his fellow-competitors in other lands. To provide the Swiss workman with the means of spending his leisure hours pleasantly, and perhaps usefully, is the self-imposed task of numerous societies, not a few of which are founded by workmen themselves. Under their auspices local circulating-libraries have been formed in many parts of the country, even in some of the most secluded rural communes, the works of which they are composed being carefully selected in order that they may suit the taste and position of those for whom they are more particularly intended. In 1866 the canton of Geneva already possessed forty-three of these libraries, with 22,000 volumes, and that of Lucerne forty-one. The number in the remaining cantons has not yet been ascertained. There are also numerous other public libraries, containing works of a much higher class, as well as museums in all the principal towns. Almanacs, reviews, and

newspapers are likewise published for the special use of the working classes, and many of the daily papers give out on Sundays an extra sheet with the object of affording them additional reading matter. Lectures on the social and political questions of the day and other attractive subjects are frequently given, not only in the great centers of population, but also in the remote communes, where, in the absence of regular lecturers, the village clergyman or schoolmaster, and sometimes even ordinary workmen, undertake this task. There are innumerable workmen's associations which have some regular place of meeting, where books, periodicals, games, and refreshments are provided for the members, whose time is chiefly engaged in debating, getting up dramatic performances, and acquiring a knowledge of modern languages, book-keeping, drawing, arithmetic, history, &c. Much attention is also devoted to music, both vocal and instrumental, as a means of innocent recreation, singing being taught in all the primary schools. There is hardly a village which does not possess one or more choral societies, and in many cases a brass band. The rural districts of the canton of Lucerne may be cited as an example of the general taste for music, the beneficial effects of which cannot be too highly appreciated. In this little strip of territory there are no less than sixteen principal choral societies, seventeen musical societies, thirteen theatrical societies, and twenty-five brass bands. Lenzburg, a town of 2,000 inhabitants, could some years back, boast of possessing two hundred pianos. In obscure villages dramatic performances are sometimes given by the peasants themselves. In some parts of Switzerland pageants are periodically got up at considerable expense to commemorate some event of extraordinary interest in the local annals. Rifle matches and athletic sports are common throughout the country. All classes without distinction take part in these pastimes.

The following is an extract from a letter to the Boston Daily Advertiser, dated at Zurich:

THE SWISS WOMEN.

There is sad enough need of the elevation of women even in Switzerland. One hundred women climb each day to the splendid buildings which overlook the city of Zurich, the first fountain of learning in the republic; one thousand women toil from sunrise till late evening in the narrow lanes below, dragging heavy hand-carts, staggering under large burdens balanced upon their heads, sawing wood, or gathering the refuse from the streets with basket and shovel; in short, performing the most menial service that the lowest class of male laborers are condemned to do in America. I have often seen two slender women sawing oak and ash wood in the street while a stout fellow stood by leisurely splitting the same sticks. One poor old creature the other day sat upon the curb-stone holding her saw reversed between her knees, and in utter weakness was rubbing the stick of wood upon it to saw it in two.

LABOR IN ITALY.

In this ancient and renowned country there are few if any manufactures which enter into competition with similar branches in the United States. The following statement shows the kind and value of the products of that kingdom which found a market in the United States in the year indicated:

Statement showing the quantities and values of imports into the United States from Italy during the fiscal year ended June 30, 1874.

Articles.	Direct.		Indirect.	
	Quantity.	Value.	Quantity.	Value.
FREE OF DUTY.				
Argols.....pounds..	742,412	\$132,356	217,584	\$35,264
Chemicals, dyes, &c.....		16,173		1,162
Gums.....pounds..	42,193	5,498		
Hides and skins.....		58,557		
Oils:				
Fixed.....gallons..	9,650	5,170		
Volatile or essential.....do..	35,355	101,573	6,091	32,230
Paintings, &c., of American artists.....		111,344		11,461
Rags of cotton, &c.....pounds..	30,324,421	1,473,267		
Seeds.....		21,280		
Silk, raw.....pounds..			2,524	21,223
Sulphur, crude.....	40,897	1,241,740		
Other articles, (principally tropical fruits, including olives).....		2,373,461		211,186
Total free of duty.....		5,637,409		315,538
DUTABLE.				
Books, &c.....		3,693		3,290
Breadstuffs, peas, &c.....bushels..	1,482	2,065	559	7,541
Chemicals, drugs, &c.....		580,377		45,855
Fancy goods.....		10,319		14,231
Fruits of all kinds.....		847,990		114,420
Hair, human.....		1,600		18,598
Hemp, raw.....tons..	214	50,450		40,410
Jewelry.....		1,137		26,990
Leather of all kinds.....pounds..	4,940	3,293		
Gloves.....dozen pairs..			57,838	197,754
Marble and manufactures of.....		538,088		
Oils:				
Olive, salad.....gallons..	21,637	38,943	4,356	5,066
Olive, not salad.....do..	99,260	20,982	490	407
Volatile or essential.....do..	68,570	213,000	13,327	42,965
Paintings.....		150,679		23,895
Provisions.....		11,275		4,550
Salt.....pounds..	53,541,474	42,613		
Straw, manufactures of.....		178,857		383,197
Wine:				
In casks.....gallons..	66,556	23,445	5,978	4,702
In bottles.....dozen..	3,651	7,375	38	119
Wood, manufactures of.....		22,319		7,359
Wool, raw.....pounds..	46,691	5,847	52,472	11,856
All other articles.....		107,691		42,824
Total dutiable.....		2,861,885		1,150,834
Total free of duty.....		5,637,409		315,538
Total import.....		8,499,294		1,506,372
The indirect imports came through the ports of—				
Belgium.....				3,309
France.....				593,214
Germany.....				14,502
England.....				837,536
Scotland.....				67,483
Ireland.....				22
Quebec.....				306
Total.....				1,506,372

EMIGRATION FROM ITALY.

The people of Italy, like those of the other Latin nations, are, as a rule, disinclined to emigrate. The following shows the total immigration into the United States from Italy during the past fifty-four years, aggregating but 47,409 in more than half a century. Nor were these all immigrants, as the figures in the table for the years previous to 1870 denote *alien passengers*, many of whom afterward returned to their native land.

Emigration from Italy by decades, from 1820 to 1870, and by years since 1870.

Years.	Number.	Years.	Number.
1820 to 1830	389	1872	7,330
1831 to 1840	2,211	1873	7,473
1841 to 1850	1,500	1874	5,787
1851 to 1860	7,012		
1861 to 1870	12,781	Total in 54 years	47,409
1871	2,927		

RATE OF WAGES.

The following statements, in regard to the cost of labor in Italy previous to 1872, are taken from an official report on the state of the leading branches of industry, which was made in the year 1865:

Iron-mines.—Number of mines worked, 44; number of persons employed, 2,212; adults, 1,888; children, 324.

Average daily wages in iron-mines.

Location.	Adults.	Children.
	<i>l.</i> <i>s.</i> <i>d.</i>	<i>l.</i> <i>s.</i> <i>d.</i>
Piedmont	1 50	85
Lombardy	1 33	70
Tuscany, (adults and children)	1 61	85
Calabria	1 25	85

Copper-mines.—Number of mines worked, 34; number of persons employed, 2,112.

Daily wages.

Location.	Adults.	Children.
	<i>l.</i> <i>s.</i> <i>d.</i>	<i>l.</i> <i>s.</i> <i>d.</i>
Piedmont	1 73	85
Liguria	1 40	80
Lombardy	1 56	85
Venetia	1 2	73
Emilia	1 70	85
Tuscany, (adults and children)	1 76	85

Galena-mines.—Number of mines worked, 13; number of persons employed, 4,105; adults, 3,417; children, 426.

Daily wages.

Location.	Adults.	Children.
	<i>l.</i> <i>s.</i> <i>d.</i>	<i>l.</i> <i>s.</i> <i>d.</i>
Piedmont	1 67	85
Lombardy	1 40	85
Venetia	1 39	85
Tuscany, (adults and children together)	1 32	85
Sardinia	2 9	85

ions, are, as a rule,
1 immigration into
years, aggregating
ese all immigrants,
1870 denote *alien*
native land.

years since 1870.

	Number.
.....	7,939
.....	7,473
.....	5,747
.....	47,469

labor in Italy pre-
state of the lead-
r 1865:

employed, 2,212; adults,

	Adults.	Child- ren.
<i>f.</i>	<i>c.</i>	<i>c.</i>
.....	1 50	.....
.....	1 33	70
.....	1 61	.....
.....	1 25	85

ns employed, 2,112.

	Adults.	Child- ren.
<i>f.</i>	<i>c.</i>	<i>c.</i>
.....	1 73	55
.....	1 40	29
.....	1 56	.....
.....	1 2	73
.....	1 10	.....
.....	1 76	.....

rsions employed, 4,105;

	Adults.	Child- ren.
<i>f.</i>	<i>c.</i>	<i>c.</i>
.....	1 67	85
.....	1 46	.....
.....	1 39	.....
.....	1 32	.....
.....	2 9	.....

Zinc.—Number of mines worked, 1 in Venetia; number of persons employed, 23 adults. Average daily wages, 1 franc 30 centimes.

Gold.—Number of mines worked, 14, in Piedmont; number of persons employed, 635 adults and 7 children. Daily wages, (average,) adults, 1 franc 20 centimes; children, 91 centimes.

Quicksilver.—Number of mines worked, 2; number of persons employed, 228; adults, 274; children, 10. Average daily wages: adults, Venetia, 1 franc; Tuscany, adults and children, 1 franc 80 centimes.

Nickel.—Number of mines, 2, in Piedmont; number of persons employed, 24, adults. Average daily wages, 1 franc 70 centimes.

Iron pyrites.—Number of mines, 2, in Piedmont; number of persons employed, 36 adults. Average daily wages, 1 franc 76 centimes.

Manganese.—Number of mines, 4; number of persons employed, 213; adults, 188; children, 25. Average daily wages, Piedmont, adults, 1 franc 90 centimes; Liguria, adults, 1 franc 43 centimes; children, 94 centimes.

Anthracite.—Number of mines, 2; number of persons employed, 4 adults. Average daily wages, 1 franc 38 centimes.

Lignite.—Number of mines, 20; number of persons employed, 750; adults, 579, and children, 3, (sic.) Average daily wages: Piedmont, adults, 2 francs. Liguria, 1 franc 79 centimes; children, 1 franc 15 centimes. Lombardy, adults, 1 franc 37 centimes. Venetia, adults, 1 franc 32 centimes; children, 75 centimes. Emilia and Marches, adults, 1 franc 50 centimes. Tuscany and Umbria, adults and children, 1 franc 76 centimes.

Sulphur.—Number of mines, 379; number of persons employed, 22,035; adults, 13,678; children, 9,257. Average daily wages: Emilia, adults, 2 francs 61 centimes; children, 80 centimes. Marches, adults, 2 francs 48 centimes; children, 1 franc 40 centimes. Sicily, adults and children, 1 franc 74 centimes.

Gas-works.—Number of persons employed, 1,117. Average rate of wages, 2 francs 17 centimes.

Petroleum-works.—Twenty-one men. Wages from 1 franc 25 centimes to 2 francs.

Asphalt-works.—Sixty-three men and boys. Wages from 1 franc 57 centimes to 3 francs 20 centimes.

Chemical-works.—Four hundred and twenty-six persons. Wages varying from 41 centimes to 4 francs.

Coke-burners.—Thirty-eight; their highest rates of wages being from 50 centimes to 5 francs.

Bell-founders.—Seventeen. Average wages from 1 franc 26 centimes to 2 francs 35 centimes.

Porcelain and earthenware.—Number of persons employed, 1,493. Average rates of wages for skilled workmen, 2 francs 15 centimes; for adult laborers, 1 franc 70 centimes; for children, 58 centimes.

Salt-works.—Average wages from 1 franc 3 centimes to 2 francs 75 centimes.

Some useful data are contained in an interesting account of the progress and present state of the woolen manufacture in Italy, which was published in 1868, by Mr. Alexander Rossi, a senator of the kingdom and the owner of extensive mills at Schio, in the province of Vicenza. The total number of persons employed was estimated at about 25,000, and the average rates of wages which they received were as follows:

For men and children, from 14 cents to 25 cents per day.
Foremen: Spinners, from 40 to 70 cents; weavers, from 45 to 60 cents; others from 24 to 45 cents.

These rates are said to be from 20 to 25 per cent. lower than in France, Belgium, or England.

From a tabular statement, giving in detail the rates of wages paid for different kinds of work in the woolen manufacture in Italy in 1865, the following are selected:

Occupation.	Per day.	Occupation.	Per day.
Sotters, (women).....	\$9 17	Finishers, (women).....	\$9 17
Risers.....	34	Pressers.....	36
Carders.....	45	Scamstresses.....	25
Spinners.....	63	Molders, (women).....	20
Soumers.....	50	Carpenters.....	40
Warpers, (women).....	29	Smiths.....	50
Barbers, (women).....	18	Stretchers and shearers.....	30
Weavers.....	52	Laborers.....	24
Fullers.....	40		

The lower price of labor is a set-off in favor of the Italian manufacturer against the higher price which he has to pay for machinery. At the same time Mr. Rossi contends that, in spite of the difference of wages, Italian operatives are really not in a worse condition than those of Belgium. House-rent in manufacturing districts is 50 per cent. lower in Italy than in Belgium, and food is also cheaper.

The frugal habits of the Italian operative, and the mildness of the climate in which he lives, tend to diminish his wants.

Two-thirds of the persons employed in manufactures are taken from the agricultural class. They live in houses, of which they are sometimes the owners, in the country, frequently upon the mountains, and their habits are those of agriculturists. They either leave their homes for the mill in the morning, and return in the evening, or, if the distance is too great, they go on Monday and return on Saturday. The amount of their house-rent cannot be calculated; but at any rate it is not a heavy burden. The rest of the operatives, who live in towns, are crowded together in small and often unhealthy habitations, for which they pay a correspondingly low rent, varying from \$10 to \$21 a year for two or three persons, and more in proportion for a larger number.

The food of the poorer classes is said to be exceedingly bad. By the exertions of benevolent persons, however, economical kitchens have lately been established for supplying wholesome and well-cooked food at moderate charges.

The general condition of the habitations of working people is described by those who have examined them, as being most deplorable; wet, filthy, full of vermin, and confined. A company has been formed for the construction or purchase of substantial houses to be let out to workmen at moderate rents. Two large houses for that purpose had been built in August, 1863.

NAPLES.

The following statistics of the working population of Naples were published by the municipal administration of that city in 1863:

Farmers, 222 males; daily wages from 26 to 80 cents.
 Employed on railways, 231 males; wages from 30 to 93 cents.
 Workmen in iron-foundries, 2,140; wages from 32 cents to \$1.
 Workmen employed in soap-manufacture, 43; wages from 17 to 55 cents.
 Pipe-makers, 30 men; wages from 17 to 25 cents.
 Potters, 313 men; wages from 24 to 54 cents.
 Shoe-makers, 241 men and 55 women; men's wages from 31 to 60 cents, women's wages from 10 to 20 cents.
 Dyers, 117 men; wages from 20 to 50 cents.
 Goldsmiths, 168 men; wages from 40 cents to \$1.20.
 Iron-bedstead and spring-mattress makers, 67 men; wages from 20 to 50 cents.
 Hatters, 100 men and 28 women; wages for men 30 cents to \$1; for women, from 10 to 20 cents.
 Coppersmiths, 46 men; wages from 20 to 40 cents.
 Carpenters, ordinary, 38 men; wages from 17 to 42 cents.
 Carpenters employed in coach-building, 66 men; wages from 26 to 52 cents.
 Carpenters employed in furniture-making, 387 men; wages from 26 to 70 cents.
 Men employed in breweries, 31; wages from 30 to 80 cents.
 Glovers, 80 men and 313 women; men's wages from 25 to 50 cents.
 Lace-makers, 34 men and 55 women; men's wages from 37 to 60 cents.
 Tailors, 243 men and 27 women; men's wages from 40 to 72 cents.
 Saddlers, 17 men; wages from 30 to 80 cents.
 Lard-oil makers, 41 men; wages from 20 to 40 cents.
 Men employed in the preparation of white lead, 9; wages from 20 to 40 cents.
 Men employed in glass-works, 28.
 Men employed in stearine manufactories, 10; wages from 17 to 40 cents.
 Persons working in wax-manufactories, 54 men and 6 women.
 Printers, 341 men and 18 women; men's wages from 40 to 80 cents; women's wages from 10 to 20 cents.
 Pianoforte-makers, 66 men; wages from 34 to 80 cents.
 Gilders, 53 men; wages from 40 cents to \$1.
 Type-founders, 8 men; wages from 30 to 60 cents.
 Gas-fitters, 5 men; wages from 30 cents to \$1.
 Coral-workers, 195 men; wages from 34 cents to \$1.60.
 Employed in the tobacco-manufactory, 587 men and 1,239 women; men's wages from 68 to 93 cents; women's wages from 14 to 50 cents.
 Chocolate-makers, 5 men; wages from 24 to 66 cents.
 Paste-makers, 24 men; wages from 24 to 40 cents.
 Lucifer-match makers, 8 men and 10 women; men's wages from 17 to 34 cents; women's wages from 7 to 17 cents.

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Men employed in tallow-works, 5; wages from 17 to 40 cents.
Men employed in lime-works, 12; wages from 20 to 60 cents.
Employed in the manufacture of chemical products, 18 men and 6 women.
Workers in tortoise-shell, 5 men.

Seven thousand eight hundred and sixty-nine artisans that are enumerated—6,075 males and 1,771 females—out of a total estimated population of about 600,000. These statistics, however, cannot be considered as complete.

RATES OF WAGES IN 1872.

Statement of wages paid at Milan, Italy, in 1872.

(Furnished by H. W. Trimble, esq., United States consular agent.)

Occupations.	Hours per day.	Average wages per week of 6 days, first-class workmen.	Average wages per week of 6 days, inferior workmen.	Boys.
Blacksmiths	11	\$3 42		\$0 01
Carpenters	10	2 75		1 42
Masons	10	2 75	\$2 18	1 42
Painters	11	3 42		31
Plasterers	11	3 42		34
Shoemakers	11	2 85		
Tanners	11	5 13	3 42	
Stone-cutters	11	3 70		1 71
Tailors	11	3 42		
Glove-makers, cutters	11	5 70		
Factory operatives	10	3 42	2 12	
WOMEN.				
Shoe-binders	11	1 71		
Glove-makers, sewers	11	1 14		
Factory operatives	10	1 71	1 14	
Silk-workers	11	1 91		
House-servants	11	2 85		

* Per month.

MECHANICAL AND FARM LABOR.

The following statements showing the rates of wages paid in the consular districts indicated, for mechanical and farm labor in the year 1873, were furnished by the consuls of the respective districts.

Statement of the rates of daily wages paid for mechanical labor in the following-named cities of Italy in the year 1873.

Skilled workmen.	Venice, without board.	Genoa, without board.	Brindisi, without board.	Messina, without board.	Palermo, with board.
Blacksmiths	\$0 80	\$0 75	\$0 68	\$0 80	\$0 40
Bricklayers or masons	80	60	31	00	40
Cabinet-makers	\$0 80 to 1 00	70	30	30	70
Carpenters	80	60	85	1 00	50
Coppers	80	70	85	80	60
Masons	40 to 60	60	54	70	40
Machineists	80 to 1 00	80	1 02	1 20	60
Painters	60	75	51	1 00	60
Plasterers	50 to 60	60	54	90	60
Shoemakers	40 to 60	60	50	95	50
Stone-cutters	40 to 60	60	34	65	40
Tailors	40 to 60	60	50	1 20	60
Tanners	40 to 60	60	68	70	40
Tinsmiths	40 to 60	60	68	60	60
Wheelwrights	40 to 60	60	68	60	60
Price of board—					
For workmen, per week, October, 1873	2 60 to 3 50	1 80		2 10	
For workwomen, per week, October, 1873	2 15 to 2 50	1 10		1 60	

Rules of wages paid for farm-labor in the following-named places in Italy in the year 1873.

Occupation.	Venice.		Genoa.			Brindisi.		Messina.			Palermo.
	Daily wages, with- out board.	Monthly wages, with board.	Daily wages, with board.	Daily wages, with- out board.	Monthly wages, with board.	Daily wages, with- out board.	Monthly wages, with board.	Daily wages, with board.	Daily wages, with- out board.	Monthly wages, with board.	
FARM LABORERS.											
Experienced hands—											
In summer.....	\$0 60		\$0 40	\$0 50	\$0 60	\$0 42½		\$0 20	\$0 50	\$0 60	\$0 40
In winter.....	50		20	30	5 00	20		50	50	15 00	
Ordinary hands—											
In summer.....	40		32	43	6 40	42½		20	30	6 00	
In winter.....	30		20	30	4 00	25½		15	46	7 50	
Contract laborers at other than farm- work.....	40							15	38	4 50	32
Female servants.....		\$1 to \$2	10	18	2 40	51	\$1 70 to \$3 40	15	30	4 50	20

* Board is never given except during vintage, when they are allowed wine *ad libitum*.

PRICES OF PROVISIONS, GROCERIES, ETC.

The following statements, showing the prices of provisions and other necessities of life, were furnished by the consuls of the United States at the several places indicated:

Prices of provisions, groceries, and other leading articles of consumption, also of house-rent and board, in the following-named cities of Italy, in the year 1873.

Articles.	Milan.	Genoa.	Brindisi.	Venice.	Palermo.	Messina.
PROVISIONS.						
Flour, wheat:						
Superfine.....per pound.	\$0 05	\$0 06	\$0 05½	\$11 25	\$0 10	\$10 00
Extra family.....do.	07	05½	06	{ 12 50 10 } (14 50	12	*12 50
Beef:						
Fresh, roasting-pieces.....do.	12	15	21	18½	30	27
Fresh, soup-pieces.....do.	12	15	20	17	25	14
Fresh, rump or sirloin steaks.....do.	25	15	21	19	30	27
Canned.....do.			20	10		
Veal:						
Fore-quarters.....do.	17	28	25	20		27
Hind-quarters.....do.	17	24	25	22		27
Cutlets.....do.	25	22	25	22		27
Mutton:						
Fore-quarters.....do.	10	15	10	13½	20	11
Leg.....do.	12	17	10	15	20	11
Chops.....do.	17	17	10	13½	20	13
Pork:						
Fresh.....do.	17	18	10	15	20	12
Canned or salted.....do.	25	35				
Bacon.....do.	25	35	17	13		24
Hams, smoked.....do.	34	45	25	30	35	30
Shoulders.....do.	34		25	14	25	20
Sausages.....do.	{ 0 25 0 34 }	35	34	36		15
Lard.....do.	22	22	25	18		22
Cod-fish, dry.....do.	10	10	08			00
Butter.....do.	25	40	34	{ 0 17 0 10 }		30
Cheese.....do.	22	30	{ 0 17 0 10 0 34 }	{ 0 17 0 10 0 35 }	28	22

* Per barrel.

† Without bone.

Italy in the year 1873.

Prices of provisions, &c., in the following-named cities of Italy in 1873—Continued.

Messina.			Palermo.
Daily wages, with board.	Daily wages, without board.	Monthly wages, with board.	Daily wages, without board.
\$0 30	\$0 50	\$0 00	\$0 40
50	70	15 00	
20	30	6 00	
25	40	7 50	
15	30	4 50	32
15	30	4 50	30

and wine ad libitum.

ETC.

provisions and other
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Venice.	Palermo.	Messina.
\$11 25	\$0 10	\$10 00
\$12 50		\$12 30
to	12	
13 50		
18	30	27
17	25	14
19	30	27
10		
20		27
22		27
22		27
13	20	11
15	20	14
19	20	13
15	20	12
13		24
36	35	30
14	25	20
36		15
18		23
	9	00
		30
0		
6		
6 35	25	22

one.

Articles.	Milan.	Genoa.	Brindisi.	Venice.	Palermo.	Messina.
Potatoes.....do.....	\$0 02	\$0 03		\$0 02	\$0 01	
Beans.....do.....	03	06	\$0 05	04	10	\$0 07
Milk.....per quart..	04	05		03	20	17
Eggs.....per dozen..	14	22	17	20	36	20
GROCERIES, ETC.						
Tea, Oolong or other good black.....per pound..	1 42	1 60		1 00	1 50	1 20
Coffee, Rio:				3 00		
Green.....do.....	22	40	34	30	34	
Roasted.....do.....	37		42	30	45	
Sugar:				0 61		
Good brown.....do.....	10	12	10	15	12	
Yellow C.....do.....	12	14	12	18		
Coffee B.....do.....	11	14	11	12	11	
Soap, common.....do.....	12	14	10	12	11	
Starch.....do.....	10	25	75	07	13	
Fuel:						
Coal.....per ton.....		10 00	13 60	11 00	10 00	
Wood, hard.....per 230 pounds..	78			12 00		
Charcoal.....per bushel.....	20				11 20	
Oil, coal.....per gallon.....	48	65	57		75	
DOMESTIC DRY-GOODS, ETC.						
Shirts:						
Brown, 4-4, standard quality.....per yard..	\$17	20	20	12	14	
Bleached, 4-4, standard quality.....do.....	\$20	25	22	13	16	
Shirts:						
Brown, 8-8, standard quality.....do.....	(*)	28	21	11		
Bleached, 8-8, standard quality.....do.....	(*)	22	25	15		
Cotton flannel, medium quality.....do.....	(*)				21	
Ticking, good quality.....do.....	(*)				30	
Prints, Merino.....do.....	(*)	34	31	15	16	
Mousseline de laine.....do.....	(*)	35	29	30	20	
Satinets, medium quality.....do.....	(*)				21	
Boots and shoes:						
Boots, men's heavy.....per pair..	2 40	2 50	3 40	3 60	3 20	
Shoes.....do.....					1 60	
HOUSE-RENT.						
Four-roomed tenements.....per year..	100 00	81 01	**8 50	**6 60	50 00	**5 15
Six-roomed tenements.....do.....	150 00	120 00	**11 30	**10 00	75 00	**6 70
BOARD.						
For men, (mechanics or other workmen).....per week..	(H)	2 00	3 40	2 60	(H)	
For women employed in factories.....do.....	(H)	1 50	3 40	2 15	(H)	

* White.

§ Soft.

|| Olive.

* These articles are mostly home-made, very coarse, cheap but of poor quality.

** Per month.

† The American system of boarding is not practiced; everybody keeps house.

EXPENDITURES OF WORKINGMEN'S FAMILIES.

Average weekly expenditures of families living in Milan, Venice, Messina, Brindisi, and Sarnepiedara, Italy, in 1873.

Articles,	Milan.	Venice.	Messina.	Brindisi.	Sarnepiedara.
	2 adults and 3 children.			2 adults and 5 children.	2 adults and 2 children.
Flour and bread.....		\$0 70	\$1 70	\$1 28	\$0 90
Flour, bread, and rice.....	\$1 53				
Meats.....	97	1 10	1 00	1 43	10
Lard.....		08	15	09	12
Butter.....		30		69	
Butter, cheese, and pork.....	51				
Cheese.....		15	10	25	06
Sugar.....		15	18	17	09
Macaroni.....			40		
Milk.....		28		17	18
Coffee.....		16		09	12
Coffee and milk.....			30		
Fish and legumes.....			70		
Fish.....		14		43	12
Soap, starch, salt, pepper, vinegar, &c.....		20	25	12	10
Eggs.....		10	10	25	08
Potatoes and other vegetables.....		14	15	60	25
Fruits, (green and dried).....			30	17	
Fuel.....	42	29		43	28
Oil or other light.....	25	12	60	34	12
Other articles.....	17	15	20	51	14
Spirits, wine, beer, and tobacco.....		60	60	1 19	76
House-rent.....	87	1 10	1 50	2 72	36
For educational, religious, and benevolent objects.....		60	40	1 70	
Total weekly expenses.....	4 72	6 55	8 63	12 00	3 35
Total for 52 weeks.....	245 41	340 60	448 76	624 00	174 20
Clothing per year.....		40 00	32 00	51 00	35 00
Taxes per year.....				2 75	
Total annual expenses.....	245 41	380 60	480 76	677 75	209 20
Total weekly earnings.....	5 10	7 50	8 85		4 00
Total for 52 weeks.....	265 20	390 00	460 20		208 00

COST AND CONDITION OF LABOR IN ITALY.

MILAN.

The following report on the cost and condition of labor in Milan was prepared by Mr. Trimble, United States consular agent, and transmitted to the author September 24, 1872:

Since 1860 wages have increased on the whole about 30 per cent.; the general strikes in August last will probably result in an additional increase of 10 per cent.

Silk forms the principal item in the business transactions of Milan. During the year ending June 30, 1872, the amount of raw silk, tram, and organzine, seasoned, was 34,913 bales. Of this about 75 bales—involved value \$110,000—were sent to the United States.

The manufacture of gloves (kid and lamb skin) has, within the last few years, attained a great importance, and Milan now furnishes from 800 to 1,000 dozen per day—exporting to France, Germany, England, and the United States. Large quantities of buttons are manufactured. Carriages to a considerable extent are exported to South America, Egypt, and Switzerland.

Conclusions as to the condition and well-being of the working-classes must, to a certain extent, be modified by considerations of climate, and of hereditary habits and tastes. Accustomed to and delighting in the open air, inured to greater exposure than ourselves, and at the same time possessing a climate less rigorous, they are comparatively indifferent to the price of fuel, which to us is one of the necessities of life.

ILIES.

ina, Brindisi, and Sarn-

Brindisi.	Sarni-dani.
adults and 2 children.	2 adults and 2 children.
£1 25	\$0 90
1 31	10
03	12
09	
25	06
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43	12
12	10
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43	28
34	12
51	14
1 19	26
2 72	36
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12 00	3 35
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ITALY.

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So meat, which in our severer and more exhausting climate is a necessary, in theirs becomes a luxury, not being required to sustain life, the place of which is, to a certain extent, supplied by a greater abundance of natural products. Bread, wine, fruit, and vegetables, thus come naturally to constitute the main articles of food. The working-man takes for his breakfast a piece of bread, a few slices of sausage, or a handful of fruit; for his dinner, soup made from pork and vegetables, or a dish of rice and a bottle of wine. And this, which to us would seem poor and meager fare, climate and habit render natural and satisfactory.

On the whole, the working-classes here may be said to possess, in comparison with those of the United States, infinitely fewer moral and social advantages, and at the same time a lower average of physical comfort, with less extreme suffering.

CARRARA.

*Report "on the cost and condition of labor in the Carrara consular district,"
by Mr. Consul Torrey.*

CARRARA, July 30, 1872.

The price of daily labor in this consular district averages as follows: Marble-sculptors, from 77 to 95 cents; marble-cutters, from 39 to 58 cents; marble-polishers, from 35 to 48 cents; marble-quarrymen, from 29 to 48 cents; blacksmiths, carpenters, masons, painters, and shoemakers average about 39 cents per day; the common laborer earns from 29 to 39 cents. All mechanics work from sunrise till dark the year round, taking three hours a day for their meals in the summer months, and two hours a day during the short days of the autumn and winter. Boys and women earn from 16 to 19 cents per day in the quarries.

The principal article produced is marble, which gives employment to nearly the whole population of this district. The silver and lead mines of Seravezza are very valuable, but not extensive. House-rent and living-expenses for the mechanics and laborers are very low, quite in proportion to their earnings, but the average rent of a good house, containing ten rooms, is \$2-9.35 per annum.

The mechanics and laborers are very poor; they know not what comfort is. They usually have large families, and live in one or two rooms of a house, where they cook, eat, and sleep.

I have known many instances where families of from five to eight persons—men, women, and children—lived and slept in one room. Under these circumstances, their education and morals may be imagined.

Few mechanics and laborers over thirty years of age can read and write; the better class of marble-cutters only excepted.

Since the revolution of 1839 common public schools have existed, and nearly all children learn to read and write.

The value of marble, wrought and unwrought, exported to the United States direct during the year 1871 was \$626,541. A large portion of the most valuable sculpture and architectural work is sent to Florence, Rome, Leghorn, Genoa, and Marseilles, and from thence to the United States as productions of those places.

There is also a large amount of olive-oil produced in this district, and exported to the United States via Leghorn.

VENICE.

Extract from a letter to the author from John Harris, Esq., United States consul at Venice, under date of December 12, 1873: On the condition of the working-classes in the Venetian provinces:

As regards the moral state of the workmen, particularly of artisans and machinists, in the Venetian provinces, it may be said that they are generally moral, sober, and provident. They take pride in their work, but they study but little, and are unacquainted with drawing or chemistry, and are somewhat prejudiced in favor of the technical processes of ancient usage. Now, however, they frequent schools for drawing and chemistry which have been introduced in the towns and villages contiguous to the manufactories and workshops. In general they execute varied, different, and new works with good will; they are of various and multifarious genius, and it must be noticed that the system of division of labor as practiced in England and elsewhere is not here in general use. Here the same workman does many things, and passes from one work or operation to another when he has an affinity with it. His habits of living being economical, he is contented with moderate wages. Although a company has been formed in Venice for the purpose of building good and suitable dwellings for workmen, these buildings are, as yet, but few in number, and the laboring-classes in this city live generally in poor, unwholesome habitations, damp and with bad odors. As the company continue their labors, this inconvenience will decrease. On the con-

trary, in the great manufacturing districts of the provinces the workmen inhabit wholesome dwellings, contiguous to the manufactories. The best are in the province of Venice: Nadare's paper-mills at Lugo, and Rossi's spinning and cloth manufactory at Scipio. These are clean, dry, light, and convenient residences. The workman pays the rent, and may eventually become a householder.

It may be said that, as regards health, the workmen live badly in the city and well in the country, but the principal industrial establishments are in the country.

BRINDISI.

Extract from a letter to the author from the United States vice-consul, dated Brindisi, November 30, 1873:

As regards the health, morality, and education of mechanics and workmen, I beg to state that we have here a very sober and laborious class of people, of good principles and health, but not far advanced in instruction.

GENOA.

Mr. Consul Spencer, in apologizing for not furnishing the information desired, adds:

I find, however, that any report that I could have made, based upon your circulars, would have been very unsatisfactory, as the conditions of life here are so different from what they are in the United States; the working-classes here rarely indulging in any greater luxuries than *polenta*, (or mush,) soup, or *minestrone*, wine, and chestnut-bread; meat, butter, and other delicacies mentioned in your list of provisions being entirely out of the question.

MESSINA.

Mr. Consul Behn, under date of September 5, 1872, thus writes in regard to labor in Messina:

There is but very little industry in this consular district; no manufacturing establishment except one small cotton-factory, two or three tanneries of no great importance, one flour-mill, and two silk-spinneries, the produce of which is sent to England, France, and Italy. The price of labor for workmen of all classes averages from 50 cents to \$1 per day of twelve hours, and seldom overruns the latter price.

In a more recent letter, dated October 16, 1873, Mr. Behn adds:

In consequence of a rise in the prices of the principal articles of subsistence, workmen's wages have been raised from 10 to 20 cents over those of last year, and they now vary from 50 cents to \$1.20 per day, not including board as it is not the custom in this island to board workmen. The education and morals of workmen is yearly improving, as they and their sons visit the day and night schools, and it is to be hoped that before long this class of people will occupy the same rank as the workmen of all other countries.

[From the British Almanac for 1874.]

In Southern Europe the general rate of wages is on a low scale, although in some parts of Italy the remuneration obtained by several kinds of art-workmen is very good. In the ship-building, iron-founding, and other handicrafts, requiring a combination of manual strength and skill, the workmen can obtain from \$4.35 to \$7.30 per week. There are also numerous trades peculiar to Italy, in which skilled workmen can obtain from \$3.00 to \$5.31 per week; but all descriptions of unskilled labor are very cheap. Strikes are infrequent, disputes between employers and employed rarely proceeding beyond the preliminary stages. Like the Swiss workman, the Italian artisan is patient, steady, and thrifty in his habits. He contrives to live on a small sum, and to save money on wages which would scarcely keep an English workman from the work-house. If he were equally industrious with the Englishman, he would take rank among the élite of the European laboring-classes. But the influence of climate is too productive of indolence, although in some of the Italian sea-coast towns the workers display an amount of energy which does them credit. The principles of co-operation are much practiced in Italy, the working of the various associations being not unlike those in England and Germany, and care being taken to keep them free from those dangerous utopian ideas which have in Spain and France found practical development in the form of communism. The quality of Italian work is generally very good, but the principal difficulty of the workman is to gain decent lodging-accommodation at a moderate price and to avoid paying

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too much for provisions. These two drawbacks form serious obstacles, against which he is almost powerless to contend, save by living outside the town in which his place of employment is situated, lodgings being cheaper in the outlying villages, where also food can be obtained at lower rates, not having to pay the obnoxious "octroi" demanded at the gates of the town.

From additional information in regard to labor in Italy, recently received, the following facts are selected:

PROVINCE OF PANAMA.

Linens.—The principal establishment for the manufacture of this fabric employs from 90 to 100 women; reellers receiving from 7 to 8 cents, and weavers from 13 to 23 cents per diem. The highest prices are paid for piecework.

Glass and earthen-ware.—The total number of hands employed is 67, of whom 24 (19 men and 4 women) are in the pottery department, and 44 (all men) in glass making. The wages of the potters are from 23 to 28 cents per diem, and for the women, 10 cents. The glass-makers rise from a minimum of 19 cents to a maximum of \$1.15 per diem. They have work for only three months in the year.

Nails.—The nail-makers of the city of Parima only supply local wants; wages about 32 to 48 cents for foundries per diem, 24 to 48 cents for blacksmiths, 12 to 16 cents for copersmiths. Foremen in foundries, &c., received from 62 to 72 cents, and apprentices from 10 to 15 cents.

Soap and candles.—Men receive 28 cents, and women 19 cents per diem.

Paper.—The wages vary for men from 15 to 25 cents; for women, from 10 to 17 cents; for children, from 8 to 13 cents.

Printing-offices.—The wages of compositors are from 19 to 38 cents; of apprentices, from 6 to 12 cents; of painters, 33 cents per diem. Piecework is paid as follows: Compositors, from 3 to 4 cents; apprentices, from 1 to 1½ cents, and printers 4 cents per hour.

Liquors, ice, and aerated waters.—The wages given in all these industries are as follows: Foremen, 38 cents and upward per diem; ordinary workmen, 28 cents; women, maximum wages 19 cents per diem.

VENICE.

The Xerile foundery.—This foundery employs upward of 300 hands, and turns out machinery of every magnitude, description, and quality. In spite of high duty on coals and iron, this factory is highly flourishing; the workmen are equal to the best in England, and so well conducted that no strike has occurred since its establishment, and the men are satisfied with their wages and condition.

Bronze-foundery.—The bronze-foundery of Micheli & Co. deserves notice, and is an establishment where not only the fine bronze works of Italy peculiar to the fourteenth, fifteenth, and sixteenth centuries are perfectly reproduced in all sizes, but even works of modern art are cast at the option of the sculptor, after the manner and the time of Michel Angelo and Benvenuto Cellini.

Glass-works of Venice and Murano.—For many centuries past these works have been celebrated for the fineness of their products. In A. D. 674 St. Benedict engaged Venetian artists to furnish the windows of Weremouth Abbey, and from that time, or even anterior to it, the same manufactory—probably the oldest in the world—has had a continuous existence. The manufacture of glass is still an important Venetian industry, the export of this fabric in 1874 having amounted to £313,200, or about \$1,524,000 in gold. In 1867 the exports of glass were more than twice the usual average, owing to the introduction of glass beads in the fashions of the day.

Burano lace.—The manufacture of this fabric, which receives its name from a small island formerly celebrated for its lace-work, has recently been revived under the auspices of the Princess Giovanelli and the Countess Marcello, who found an aged woman, the last of her craft, who still remembered the method of making this lace, and engaged her to instruct a number of girls in this almost-forgotten art. The immediate demand for the first specimens produced was extraordinary. The cost of the fabric (about 100 francs per meter, of the width of 12 centimeters) is considered to be under its value. It takes 150 days of five working-hours per diem for one workwoman to produce a single meter, the woman's pay being one-half franc per diem.

The "*gros point de Venise*" is also to be revived at Burano. The distinguished engineer Dr. Fambri (six years a deputy in the Italian Parliament) has published the following estimate of the labor involved in the manufacture of one meter of this lace of a quality never surpassed in ancient times:

- I. Three months' wages of one hand for the net-work.
- II. One month's wages of one hand for the flowers.
- III. An extra month's wages for the ornamental border.

Dr. Fambri suggests that "this industry should be developed, were it only to save the secret of the art, as no kind of manufacture exists more capable of giving sustenance to thousands with a merely nominal capital."

LABOR IN MODERN GREECE.

In one of the introductory chapters of this work, under the above caption, the condition of labor in Greece in ancient times, (labor then being of a servile character,) was presented. Modern Greece, retaining little else than its classic renown, presents but few points of interest to the inquirer after manufacturing and mechanical industries.

EXPORTS.

The exports to the United States are of small amount, and consist chiefly of fruit and wool. In the fiscal year 1874 the value of the total imports, direct and indirect, into the United States from Greece, reached but \$561,875, of which fruit amounted to \$423,992, and wool to \$105,325. Hon. John M. Francis, recently United States minister resident at Athens, thus wrote in regard to the principal exports:

Greece exports annually from \$5,000,000 to \$8,000,000 worth of Zante currants. The larger proportion is shipped to England, but the demand for the fruit in the United States is yearly increasing. Her exports of olive-oil amount to nearly \$1,000,000 annually; and of cotton and cotton yarns, silk, and products of silk, coarse wool, wines, &c., the value is quite large. The exportation of lead and other minerals is increasing. The production of cotton is also becoming an important interest in Greece. Previous to our late civil war but little was raised; now the average crop amounts to about 5,500,000 pounds. Formerly the cotton was all exported; now a large proportion of it is manufactured into cotton yarn, no less than 16 factories having been established for this purpose, employing 25,460 spindles, the yearly manufacture of which amounts to 2,200,000 pounds of yarn. Greek yarn is largely displacing the English article in many of the Levant markets. There are eight silk manufacturing in the kingdom. The exports of these manufactures last year were upward of \$750,000.

Fish P. Brewer, esq., United States consul at Piræus, under date of June 29, 1872, writes as follows in regard to cotton and other exports:

Six-sevenths of the cotton-crop is raised in the district of Lebadeia, where it is pressed and baled, and then hauled sixty or seventy miles on a macadamized road to Piræus. A part of the cotton is bought by the Piræus twist-factories, of which there are three. One recently began operations; the other two have been making from 32,000 to 35,000 bundles of twist annually. Nearly all of this is used in Greece, but a little is shipped, free of duty, to Turkey.

Various other raw products pay an export duty, as cocoons, acorns, figs, currants, and tobacco.

Some products pay different rates, according to the district where raised, perhaps on account of an assumed difference in quality, as: tobacco from Argos, 2c. per lb.; from elsewhere, free; acorns from Athens or Kea, 5c. per lb.; from Peloponessus, or elsewhere, 15c. Figs pay 4c. per lb., but, if raised on public lands, double rates, apparently as including rent to the state.

Currants pay a little less than 4c. per lb. Cocoons pay 11c. per lb. Emery pays 1c. per lb. On the free list are wool, hides, cummin and sesamé seeds, wine, olives, oil, and silk.

No bounties are paid on any article of export, yet it is noteworthy that articles exported are exempt from local custom-dues in transit to the port, which would have to be paid if the same articles were sold in home markets, for home consumption. These duties are levied to support the local governments, and their amount is very various.

Mr. Francis states that the culture of the vine and the manufacture of wine and spirits are important industries:

The vineyards cover about 500,000 acres of land, or one twenty-eighth of the area of plantations properly so called. About 2,000,000 barrels of wine are produced annually, and of this aggregate, less than 100,000 barrels are exported. The gross value is about \$1,600,000. The cultivation of the olive-tree is also a feature. The latest returns show that there are about 8,000,000 olive-trees in the kingdom, covering an area of 350,000 acres, and producing annually 22,000,000 lbs. of olives. The market reports of the Bulletin almost every day evidence the growth of our Mediterranean trade; and in that growth Greece, as we have said, is a prominent participant.

RATES OF WAGES.

Mr. Consul Brewer, under date July 30, 1872, furnishes the following rates of daily wages of mechanics at Piræus:

Painters, \$1.14; blacksmiths, carpenters, masons, and plasterers, 95 cents each; inferior hands as low as 57 cents; journeymen shoemakers, for each pair of country shoes, 57 cents, and a good workman will make three pairs in two days. Two boatmen, with a sail-boat, will earn \$1.52 for a long day's work. Three dollars and eighty cents per month is fair wages for a servant girl. Most mechanics work from sunrise to sunset, taking, in summer, an hour for breakfast and two hours for nooning, during which they generally take a nap. House rent is \$7.60 per month for a four-roomed tenement, and \$11.40 for six rooms. A workingman can get his meals for 20 cents a day.

MECHANICAL AND FARM LABOR.

Statement showing the rate of wages paid for mechanical and farm labor in Athens, Piræus, and Syra, Greece, without board, in the year 1873.

Occupation.	Athens and Piræus.	Syra.
Skilled workmen:		
Blacksmiths.....per day..	\$0 90 to \$1 20	\$0 80 to \$0 90
Bricklayers or masons.....do...	85 to 1 00	65 to 75
Cabinet-makers.....do...	90 to 1 00	80 to 95
Carpenters.....do...	90 to 1 00	75 to 80
Coopers.....do...	80 to 90	75 to 80
Miners.....do...	90 to 1 30	80 to 85
Machinists.....do...	80 to 1 40	85 to 90
Painters.....do...	80 to 1 00	80 to 85
Plasterers.....do...	75 to 1 00	70 to 75
Shoemakers.....do...	65 to 80	65 to 70
Stone-cutters.....do...	90 to 1 40	45 to 50
Tailors.....do...	70 to 90	40 to 45
Tinsmiths.....do...	60 to 1 00	40 to 45
Wheelwrights.....do...	80 to 1 20	40 to 45
Ship-building:		
Carpenters { First-class.....do...	1 00 to 1 40	.....
{ Second-class.....do...	70 to 90	.....
Joiners.....do...	1 00 to 1 20	.....
Calkers.....do...	1 20 to 1 30	.....
Blacksmiths.....do...	70 to 80	.....
Farm laborers:		
Experienced hands.....do...	60	30 to 40
Ordinary hands.....do...	50	.....
Common laborers at other than farm-work.....do...	65	30 to 40
Female servants.....per month, with board..	2 00 to 5 00	3 00 to 4 00
Price of board:		
For workmen.....per week...	1 50 to 2 00	2 00 to 2 25
For workwomen.....do...	1 25 to 1 33	1 25

PRICES OF PROVISIONS, GROCERIES, ETC.

Statement showing the prices of provisions, groceries, and other leading articles of consumption, with house-rent and board, in the towns of Piræus and Syra, Greece, in the year 1872.

Articles.	Piræus.	Syra.
PROVISIONS.		
Flour:		
Wheat, superfine, of Trieste.....{ per barrel of 163 pounds..	\$3 00 to \$9 00	.....
Wheat, of the Piræus Mills.....do.....per pound..	01 to 01½	\$0 07 to \$0 07½
Rye.....do...	None.	None.
Corn-meal.....do...	None.	None.
Beef:		
Fresh, roasting pieces.....per pound..	11 to 12	12 to 14
Fresh, soup pieces.....do...	10½ to 11	12 to 14
Fresh, tripe steaks.....do...	12 to 13	12 to 14
Corned.....do...	None.	None.
Veal:		
Fore-quarters.....do...	16 to 17	13 to 14
hind-quarters.....do...	15 to 16	13 to 14
Cutlets.....do...	13 to 14	13 to 14

EXPENDITURES OF WORKINGMEN'S FAMILIES.

Statement showing the average weekly expenditure of a family consisting of two adults and two children in Piræus, Greece, in 1872 and 1873.

Articles.	1872.	1873.
Flour and bread	\$9 68	\$9 40
Fresh, corned, salted, and smoked meats	57	50
Cheese, olives, and sundries	19	05
Sugar	17	20
Coffee	13	.....
Fish, fresh and salt	19	15
Soap, starch, salt, pepper, vinegar, &c.	19	10
Potatoes and other vegetables	39	14
Fruits, green and dried	63	05
Fuel for cooking only	19	43
Oil or other light .....	.....	43
Other articles .....	.....	13
Wine	26	19
Tobacco	13	.....
House-rent	65	64
For educational, religious, and benevolent objects	11	10
Total weekly expenses	4 24	2 65
Clothing per year, (partly earned by wife)	41 00	23 00
Taxes per year	None.	None.
Weekly earnings	5 13	.....

The average weekly expenditures of a family of two adults and five children in the town of Syra were found to be \$3.50, and the earnings of the same family from \$3.50 to \$4.50 per week.

CONDITION OF THE WORKING-CLASSES.

Mr. J. J. Bucherer, United States vice-consul at Piræus, under date of November 15, 1873, writes:

The working-class of this town is, generally speaking, laborious, and of a quiet and peaceful character. They are not given to drinking and gambling. They live very economically, and like to send their children to school.

isting of two adults and
873.

	1872.	1873.
.....	\$0 68	\$0 86
.....	57	59
.....	19	05
.....	17	20
.....	13
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LABOR IN BELGIUM.

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LABOR IN BELGIUM.

Belgium, one of the smaller kingdoms of Europe, is a perfect bee-hive of industry, both agricultural and mechanical. A historical sketch of the rise and progress of some of those industries would be extremely interesting, if space admitted of its presentation. Although small in extent of territory, it embraces peoples entirely distinct in language and traditions. The Flemings (Teutonic) and the Walloons, (Celtic,) distinguished by their peculiar dialects, are still conspicuous among the pure Germans, Dutch, and French. Like the French, the Belgians are strongly opposed to emigration;* the parents being unwilling to part with their children, who all contribute the proceeds of their labor to the common stock, and although the wages are extremely low, even after the advance in 1871 and 1872, as compared with those of England, yet the united earnings of a family amount to a considerable sum.† This stay-at-home policy results, of course, in an increase of the population, which, in 1871, was 5,113,680—a larger number per square mile than in any other country in Europe.‡

The government of Belgium is a limited constitutional monarchy, and was established in its present form in 1830. The country had been previously the theater of almost innumerable wars while under the dominion successively of Spain and France, and while forming a constituent part of Holland. Indeed, owing to its geographical position Belgium has been the battle-ground of Europe, more especially in the fierce struggles between the allied powers and the first Napoleon. The possession of Belgian territory had always been regarded by Napoleon as

* The number of emigrants from Belgium during the past fifty-four years was but a little over 29,000, as will be seen by the following statement:

During the decade from 1820 to 1830.....	22
During the decade from 1831 to 1840.....	22
During the decade from 1841 to 1850.....	5,074
During the decade from 1851 to 1860.....	4,738
During the decade from 1861 to 1870.....	7,416
During the year 1871.....	168
During the year 1872.....	964
During the year 1873.....	1,306
During the year 1874.....	795

Total..... 20,421

† The director of the paper-mill at Huy stated to the author that the earnings of one family, consisting of father and several sons and daughters, exceeded 10,000 francs (\$2,000) in the year 1871. At Jumet, the seat of glass-works, many families own the houses in which they live; some workmen being worth 50,000 francs.

‡ The following table shows the population of Belgium by provinces and per square mile on the 31st of December, 1871:

Provinces.	Square kilometers.	Population.	Population per square kilometer.	Population per square mile.
Antwerp.....	2,891.73	497,017	175.52	454.50
Brabant.....	3,282.96	887,905	270.46	700.50
Flanders, West.....	3,234.67	670,833	207.39	537.25
Flanders, East.....	2,999.65	810,512	280.17	725.75
Hainaut.....	3,731.62	910,595	244.72	626.75
Liege.....	2,872.87	538,458	187.48	485.50
Limbourg.....	2,412.31	290,658	120.50	313.50
Luxembourg.....	4,417.76	204,037	46.18	119.50
Namur.....	3,690.25	313,655	85.60	222.00
Total.....	29,475.16	5,113,680	173.60	449.50

of vast importance as an advanced post from which he might proceed to other conquests. Under the rule of France, Belgium suffered severely from the conscription laws, which deprived the country of its active laborers. The benevolent and charitable institutions of Belgium are numerous. To prevent the misery and frequently the crime arising from the want of employment among the working-classes, charity-workshops have been established in Ghent, Liège, and other towns. The able-bodied are paid according to their work, and the aged and infirm according to their necessities. In each commune is a *bureau de bienfaisance* for assisting the poor with money, food, and clothing. Belgium is abundantly rich in various kinds of minerals, as coal, iron, calamine, &c., forming a valuable source of employment to many thousands of its inhabitants. Its iron-mines are extensive. Marble also is abundant in many parts of Belgium.

EXPORTS TO THE UNITED STATES.

The chief industries which enter into competition with similar productions of England and the United States are glass and glass-ware, iron, machinery, and various other manufactures of iron, paper, and woolen cloths. Its chief export to the United States is window-glass, the abundance of raw materials and cheapness of labor enabling them to compete successfully with New Jersey and Western Pennsylvania. In bar-iron and rails, and in some kinds of machinery, Belgium is able to underbid England in European and other markets.

The extent and variety of the exports to the United States are indicated in the following :

Statement showing the imports of merchandise from Belgium into the United States during the fiscal year ended June 30, 1874.

Articles.	Quantities.	Values.
FREE OF DUTY.		
Articles of the United States brought back		\$341,897
Chemicals, dyes, &c.		27,333
Coffee pounds..	1,186,550	245,216
Horse-hair, used for weaving..... do.....	19,691	6,729
Hides and skins.....		58,474
Paper materials..... pounds..	10,515,023	540,642
All other articles.....		59,655
Total free of duty.....		1,148,766
DUTIABLE.		
Beer, ale, &c. gallons..	3,168	1,177
Books, &c.		9,568
Brass and manufactures of.....		6,138
Breadstuffs, barley..... bushels..	92,518	95,533
Buttons, &c.		2,561
Chemicals, &c. pounds..	469,190	33,841
Chicory.....		4,695
Cotton, manufactures of.....		26,151
Earthenware.....		4,085
Fancy goods.....		18,579
Flax and manufactures of.....		29,012
Fruits of all kinds.....		117,611
Glass and glass-ware.....		2,047,546
Iron and steel:		
Pig-iron..... pounds..	9,707,921	292,235
Bar-iron..... do.....	891,828	91,171
Sheet-iron..... do.....	114,645	5,257
Other manufactures of.....		157,942
Leather, manufactures of.....		29,069
Paintings, &c.		47,519
Paper and manufactures of.....		57,712
Silk, manufactures of.....		39,677
Spirits and wines.....		126,191
Wood manufactures.....		40,770

Statement showing the imports of merchandise from Belgium, &c.—Continued.

Articles.	Quantities.	Values.
Wool: Raw.....		
Manufactures of..... pounds..	58,717	\$12,080
Zinc, spelter, &c.....		429,170
All other articles.....		161,196
		796,437
Total dutiable.....		4,578,675
Total free of duty.....		1,148,766
Total imports of merchandise.....		5,727,441
Total imports of merchandise, 1873.....		\$5,711,077
Total imports of merchandise, 1872.....		5,550,461
Total imports of merchandise, 1871.....		4,178,714

BELGIAN HUSBANDRY.

Since 1830 the agricultural condition of the country has been much improved, and while it is not intended to enter at large upon this topic, yet the high state of cultivation, and the attractive appearance of the country presented to the author as he passed through it, in several directions, demands a passing notice. The golden grain was literally ready for the sickle, or the reaping-hook, for, owing to the cheapness of labor, the improvements in agricultural machinery were then used to but a limited extent in Belgium and the countries of Continental Europe.

The following paragraphs from Chambers's Journal afford interesting information on the subject under consideration:

In Eastern Flanders, of a hundred acres of land, seventy-two are sown with cereals and plants used in manufactures; twenty-eight with roots and forage; but to the latter must be added thirty-one acres of after-crop, which gives fifty-nine as affording excellent food for cattle, superior to common meadows, and which shows how poor land can pay a rent of five pounds an acre. The second sowing consists of turnips and spergula, after colza, flax, and early potatoes; and the carrot, which is sold in the spring with the preceding crops, and carefully hoed after they have been taken away. The clovers have occupied the ground during the winter, leaving it clear for April sowing; and the giant cabbage develops during the cold season, making a stem some six feet high, and giving abundant and excellent leaves for milch-cows. Culture thus pushed to the extreme necessarily requires some capital, and it is reckoned that, through a system of rigorous parsimony and saving, double the sum per acre is used in Belgium to that employed in England, and two-thirds more on the best farms. In this way the most dense population in Europe can subsist on a soil so little favored by nature.

Turning to one of the most fertile parts of Belgium, all, as has been said, is charming—every road is bordered with trees; not a rise in the ground is seen; all is calm, uniform, and presents an image of quiet, comfort, and peace. Each house is detached and surrounded with large apple-orchards hedged in by box, holly, or hawthorn, where the cows are brought to feed every morning and evening. It is of one story only and thatched, containing four rooms—the first for meals, the second for the dairy and preparing the food for cattle, and the others for sleeping-rooms. The old-fashioned oak furniture is a model of brightness; tin and copper utensils shine on the walls, which are whitewashed. The garden is gay with wall-flowers, dahlias, and hydrangeas, and the florists' flowers which are to be shown at Ghent.

Outside, everything is in its place; nothing spoils the greensward; the ditch and the manure-heap are banished; the latter is always under the roof of the stable or cowshed. In this stand five or six large cows, the constant care of the farmer's wife, who gives them abundance of green meat in summer, with straw, hay, and a kind of warm soup, mixed with carrots, turnips, or rye, in winter. Thanks to this nourishment, and the constant rest they enjoy, the animals give from fifteen to twenty-five quarts of milk daily. The tools are simple, but of first-class construction: the plow is light, drawn by one horse, and works with ease and regularity. The harrows are of various kinds, triangular, rectangular, and parallelogram; but the special tool with which the Fleming has fertilized lands, dried up marshes, and forced back the sea, is the spade. The proverb on the banks of the Scheldt is: "The spade is a gold mine to the peasant, and different kinds are made for light or heavy soil."

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Quantities.	Values.
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..... 19,691	6,729
.....	58,474
ls., 10,515,023	540,042
.....	29,056
.....	1,148,766
.....	
as., 3,108	1,177
.....	9,568
.....	6,138
ls., 92,518	95,533
.....	3,371
.....	33,301
ls., 108,106	4,606
.....	26,151
.....	4,985
.....	18,539
.....	29,012
.....	117,011
.....	2,145,346
.....	292,93
ls., 9,767,921	21,151
..... 891,328	7,397
..... 114,645	153,912
.....	42,059
.....	47,219
.....	57,712
.....	30,677
.....	124,191
.....	46,700

The fields are mostly square, and rarely contain more than an acre; the ground is curved symmetrically, the center being the highest, so that the water drains down equally in all directions. Round the field, and a foot lower, extends a strip of grass, three or four yards wide; still lower, a hedge is planted, which is cut every seven years; and finally, the plot is surrounded by a ditch bordered with trees of larger growth. Thus each piece furnishes rich grass, firewood every seven years, and timber for building every thirty years. The plow is generally used, but every seven years the subsoil is turned to the top by the spade, and thus it acquires a depth unknown to all but the best gardens; the principal object being to produce flax and butter, not cereals. The best farmers never sell their corn, but allow their cattle to consume it.

Unhappily, the farm-laborer there, as well as elsewhere, does not enjoy much comfort; working harder than most men, he is the worst fed. Rye-bread, potatoes, beans, buttermilk, without meat or bacon, is the usual fare; chicory the constant drink; beer reserved for Sundays and fair-days. His wages vary from ten pence to a shilling, and he could never live upon it did not all the members of his family work without ceasing. When the day's work is ended, often by moonlight, the father cultivates his small field; his wife and daughters take up the poorly-paid lace-work, instead of the old spinning-wheel, which steam has superseded; his sons, when their field-work is done, bring up rabbits for the London market. Their little hands pick up every tuft of herbage on the roadside, and open up a large trade of exportation not to be despised. From Ostend alone there come to us 1,200,000 rabbits every year; these are skinned and cleaned in Belgium, where the skin is used for the making of hats. Yet, although their life is so hard, the towns do not attract the rural population. Habit and family traditions bind them to the plow.

While grain is the chief product, flax is largely cultivated, especially in Flanders. The quality and mode of dressing which is practiced there is considered superior to that of any other country, and no doubt the superior quality of the lace fabricated in Ghent, Bruges, Malines, Mechlin, and Antwerp, as well as in Brussels, is in part due to the excellence of the raw material.

The farmers who raise their own flax generally spin and weave a sufficient quantity for their domestic wear, and sometimes for sale in the home market, while the principal part of the crop is reserved for conversion into fabrics as lace, ticks, checks, and thread for exportation.

WAGES AND SUBSISTENCE

Before presenting information in regard to the cost and condition of labor in Belgium, obtained in 1872, personally and through the assistance of others, the author submits some data of a similar character, but which were collected and published in previous years.

It is to be regretted that the bureaus of statistics of Europe, while they have gathered, collated, and published detailed information on various subjects, in many cases thoroughly classified, which, in this utilitarian age, may be regarded—at least in a country like the United States, whose chief concerns are of a commercial and industrial character—as not of primary importance, have hitherto given but a limited share of attention to the great industrial and commercial interests. All knowledge is valuable, but while we are members of civil communities, the material interests of these communities should not, it is submitted, be regarded as of secondary importance. It is true that commercial information is, to some extent, gathered and imparted by governmental authorities, yet it cannot be denied that nearly the whole of the valuable facts relating to the industrial, and a large part of those relating to the commercial interests, of the various peoples, are procured by individuals or by chambers of commerce and other commercial or industrial associations.

With the exception of Great Britain, which country has made diligent inquiries into the rewards and condition of the working-classes of other

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countries, for the purpose of comparison with those of her own work-people, and of occasional inquiries by other governments into instances of widespread suffering, arising from the depressed condition of some particular industry, no official publications have been found from which to draw such information as was required in the preparation of this report.

A notable exception to the above is here acknowledged with the more pleasure as it affords occasion to refer to that eminent scientist, the "father of modern statistics," the late M. Adolphe Quetelet, director of the royal observatory of Belgium. To him, more than to any one else, is due the origin and successful establishment of the International Statistical Congress, which held its first session at Brussels in September, 1853. The statistics of industry engaged the attention of the congress and some data were submitted, the forms for which had previously been prepared by the central committee of statistics and approved by the minister of the interior. Before submitting the plans to the congress it was deemed wise to subject them to the test of experiment; the blanks were transmitted to the provincial statistical committees with explanations as to the course to be pursued, and many took an interest in the kind of information to be obtained, and zealously set about gathering materials; others recoiled before a task which they did not think could lead to exact satisfactory results. In consequence of delays and hesitations inseparable from a new and difficult work confided to the good will of persons absorbed with their own duties, the time rolled away, and when the congress met the central committee had not received sufficient replies to make their submission to the congress practicable as a test. Later, however, the information was obtained and compiled by M. Duquetiaux, and was published by the central commission of statistics in 1855.* Whether in the value of the information afforded, in its fullness of detail or its arrangement, this admirable work may be justly regarded as a model, and now that the mutations in the cost and condition of labor have destroyed its value for contemporary purposes, it is a subject of deep regret that it has not been periodically followed by publications prepared upon the same plan, in which full and trustworthy information of a similar character might be brought down to the most recent date. As both labor and subsistence have appreciated in the two decades which have intervened since the prices given in the work under consideration were obtained, the author of this report contents himself with the translation and presentation of a few of the tables published by M. Duquetiaux.

* Budget économiques des classes ouvrières en Belgique, substances, salaires, population, par. Ed. Duquetiaux, inspecteur général des prisons, et des établissements de bienfaisance, membre de la commission central de statistique, etc., Bruxelles, 1855.

WAGES IN 1854.

Average daily wages paid in various branches of industry in Belgium.

Industries.	Adult males.	Adult females.	Boys.	Girls.	Industries.	Adult males.	Adult females.	Boys.	Girls.
	Cents.	Cents.	Cents.	Cents.		Cents.	Cents.	Cents.	Cents.
Coke and coal	41.4	24.4	17	14.4	Silk	35	18.8	7.6	11.5
Metallurgy:					Ribbons, fringe, &c.	26	12.2	6.8	6.5
Chief establishments	40.2	21.4	13.4	11.8	Gas-factory	28	15.8	9.2	12.4
Secondary establish'ts	38.6	14.1	9	8.4	Wood:				
Artisans'	35.2	18.2	7.4	7.4	Factory-hands	35.6	11.2	9.2	5
Slate-factories, &c.:					Artisans	24.2	10	7.6	5
Factory-hands	31.4	90	11	12	Leather:				
Artisans	29	14.8	12.4	11	Factory-hands	29	32.4	10	8.4
Glass-factories:					Artisans	19.2	12.2	6.4	8.4
Factory-hands	51.6	13.6	11.8	14	Paper and printing:				
Artisans	22.8	15	8		Factory-hands	28.2	15.4	8.2	8.2
Manufactories of linen, &c.:					Artisans	32.6	13.8	7.6	6
Factory-hands	16	10.8	9	9.8	Chemical products:				
Artisans	16	8.4	7	6	Factory-hands	29.2	17	7.8	5
Wool	32.4	16.2	11.6	11.2	Artisans	29.6	8.8	7.6	10
Cotton:					Various trades	32	15.8	9	5
Factory-hands	31	21.6	9.2	10					
Artisans	35	12.2	5	7.2	General average	29.8	14.2	10.8	7.3

* By "artisans" here is meant persons working by themselves for their own account or that of the manufacturer.

WAGES IN LIÈGE.

Average wages per day paid to male laborers in the following industries.

[The franc computed at 20 cents.]

Cannon foundry:

	Maximum.	Minimum.
Founders	\$1 00	\$0 34
Laborers	35	30
Adjusters	60	32
Smiths	1 00	36
Strikers	40	34
Tarners	50	36
Joiners	45	35
Masons	50	33

Iron-works:

Firemen	85	
Smiths	50	
Puddlers		70
Laborers		29

Zinc factory:

	Hours of labor.	Maximum.	Minimum.
Foreman	12	\$0 69	
Laborers	12	47	
Stone-cutters	12	50	
Machinist	10		\$0 57
Joiner	10		40
Fireman	10		45

GHENT.

Daily wages of factory hands in Ghent.

	Maximum.	Minimum.
Males	\$2 00	\$0 25.4
Females	41	18
Boys, (12 to 16 years)	26	69
Children under 12 years	10	66

Taking the number of working days in a year at 278, (deducting for holidays, absence, accidental interruptions, &c.,) the average earnings per year would be—

For males at an average of 48 cents.....	\$131.14
For females at an average of 23 cents.....	75.81
For boys of 12 to 16 at an average of 17½ cents.....	48.65

The lowest possible weekly expenses of a factory laborer's family with four young children in Ghent are thus given:

Bread, (wheat and rye)	\$0.92
Flour	02
Onions	02
Potatoes	45
Butter	48
Clothing	16
Coffee and chicory	11
Fuel and light	20
Soap and starch	07
Milk	01
Rice	05
Vinegar, pepper, and salt	05½
Total	243½

In cases of sickness aid is given by relief associations instituted among workmen, which pay during sickness to laborers—

First class, per week.....	\$1.50
Second class, per week.....	90
Third class, per week.....	45

INCOME AND EXPENDITURE.

Average annual income of workmen's families in Belgium.

Province of—	Class of family.	Occupation.	Wages or salary of—				From all other sources.	Total.
			Husband.	Wife.	Children.			
Brabant	First.....		\$60.19	\$17.40	\$36.53	\$14.60		\$128.72
	Second.....		95.16	22.25	44.67	21.69		183.57
	Third.....		143.38	31.50	55.00	28.68		258.56
Flanders, East.....	First.....		58.40	11.61	31.13	6.15		107.29
	Second.....		99.18	15.30	31.74	12.88		159.10
	Third.....		165.30	16.39	44.44	18.12		244.25
Flanders, West.....	First.....	Farm-laborer	55.00	15.00	80.00	10.00		160.00
	Second.....	Shoemaker and one journeyman.	33.00	18.00	31.00	41.00		123.00
	Third.....	Journeyman-carpenter	110.00	15.00	20.00	20.00		165.00
Antwerp.....	First.....	Dry-laborer	69.00	10.00	12.00			91.00
	Second.....	Weaver	74.00	20.00	34.00			128.00
	Third.....	Carpenter with son and two journeyman	190.00	12.00	50.00			252.00
Limbourg.....	First.....	Farm-laborer	52.40	27.00	40.00			119.40
	Second.....	Foreman of distillery	109.98		64.00			173.98
	Third.....	Gardener	79.50	19.08	50.88	7.42		156.88
Hainaut.....	First.....		100.16					100.16
	Second.....	Blacksmith	122.50	76.32	111.30			310.12
	Third.....	Printer	125.29	46.99	20.67			192.95
Lige.....	First.....	Workman in warehouse	226.50	10.00		13.10		259.60
	Second.....	Coppersmith	300.00	41.60	80.00			421.60
	Third.....	Joiner	60.00	15.00	20.00	36.00		131.00
Namur.....	First.....	Gardener	62.60	4.92	40.40	31.91		139.83
	Second.....	Coppersmith, family of six persons	135.00			229.40		364.40
	Third.....	Shoemaker	68.00	20.00	10.00	68.00		166.00
Luxembourg.....	First.....	Shoemaker	174.72	62.46	44.68	12.60		294.46
	Second.....	Carpenter	208.40	60.00	41.80	20.00		330.20
	Third.....							

y in Belgium.

Adult males.	Adult females.	Boys.	Girls.
Cents.	Cents.	Cents.	Cents.
37	18.8	7.6	11.8
26	12.2	6.8	11.5
45	15.8	9.2	12.4
35.6	11.2	9.2	5
21.2	10	7.6	5
27	92.4	10	8.4
19.2	12.2	6.4	8.4
22.8	15.4	8.2	8.2
35.6	13.8	7.6	6.2
29.2	17	7.8	5
29.6	18.8	7.6	10
32	15.8	9	5
22.8	14.2	10.8	7.4

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llowing industries.

Maximum.	Minimum.
\$1.00	\$0.34
35	30
60	32
1.00	35
40	34
50	36
45	35
50	33
85	
50	70
	29

Maximum.	Minimum.
\$0.69	
47	
50	\$0.57
	40
	45

Maximum.	Minimum.
\$2.00	\$0.25.4
41	18
26	09
10	06

Average annual expenditure of workingmen's families in Belgium.

Province of—	Class of family.	Occupation.	Articles of a physical or material nature.	Articles of a religious or intellectual nature.	Luxuries.	Total.
Brabant	First..		\$122 60		\$4 00	\$126 60
	Second..		173 01	\$2 47	3 40	178 88
	Third..		237 48	8 14	5 08	250 70
Flanders, East ..	First..		114 63	1 56	1 73	117 92
	Second..		159 80	1 50	2 15	163 45
	Third..		172 94	1 45	1 96	176 35
Flanders, West ..	First..	Farm-laborer	132 20	10 60	8 82	151 62
	Second..	Shoemaker and one journeyman	155 21	2 28		157 49
	Third..	Journeyman-carpenter	192 10	5 00	7 46	204 56
Antwerp	First..	Day-laborer	112 17		3 53	121 70
	Second..	Weaver	122 45	1 09	4 08	127 62
	Third..	Carpenter, with son and two journeymen	216 40	3 20	24 05	243 65
Limbourg	First..	Farm-laborer	170 12		6 00	176 12
	Second..	Foreman of distillery	156 39	4 60	10 67	171 66
	Third..	Gardener	218 17	1 50	4 55	224 22
Hainaut	First..		152 11	1 06	3 71	156 88
	Second..	Fireman	146 02	3 20	10 94	160 16
	Third..	Blacksmith	368 88	11 60	29 68	410 22
Liege	First..	Printer	254 52	3 40	15 13	273 05
	Second..	Workman in warehouse	230 57	6 30	5 40	242 27
	Third..	Coppersmith	346 35	0 40	11 21	358 96
Namur	First..	Joiner	119 20	1 20	9 00	129 40
	Second..	Gardener	133 01	59	4 46	138 06
	Third..	Coppersmith, family of six persons	335 40		12 00	347 40
Luxembourg	First..	Mason	156 50		9 40	165 90
	Second..	Shoemaker	222 68	15 04	15 08	252 80
	Third..	Carpenter	306 52	57 27	23 20	387 59

Detailed statement of income and expenditure of a laborer's family of six persons in the district of Brussels.

[1 hectoliter = 2.84 bushels. 1 kilog. = 2.2046 pounds. 1 franc = 20 cents, in United States equivalents.]

INCOME.

From wages:

Of husband, 270 days, 72 centimes (14.4 cents)	\$38 88
30 days, 2 francs (40 cents)	12 00
Of son of 18 years, 270 days, 72 centimes (14.4 cents)	38 88
30 days, 2 francs (40 cents)	12 00
Of son of 16 years, 100 days, 54 centimes (10.8 cents)	10 80
	<u>\$112 56</u>

From other resources:

75 acres of land rented:	
4 hectoliters wheat, at \$3.60	14 40
4 hectoliters rye, at \$2.20	8 80
500 kilograms potatoes, at \$1.60 per 100 kilograms	8 00
75 kilograms butter, at 40 cents	31 20
	<u>62 40</u>
1 calf, \$5; 1 fat pig, \$25	30 00

Products of garden:

170 kilograms hops, \$22.88; fruits and vegetables, \$9.60; tobacco, \$1.40 ..	33 88
--	-------

Total income..... 238 84

LABOR IN BELGIUM.

649

EXPENDITURE.

Belgium.

Articles of a religious or intellectual nature.	Luxuries.	Total.
\$3 47	\$4 00	\$126 60
8 11	3 40	177 91
1 56	1 73	117 92
1 50	2 15	163 45
1 45	1 06	176 35
10 00	8 82	147 62
2 28	7 46	177 99
5 90	3 53	215 46
1 00	4 08	127 73
3 80	24 95	245 15
0 00	0 00	120 12
4 60	10 67	170 87
1 06	4 55	221 22
3 20	3 71	156 88
11 66	10 94	160 16
3 40	29 68	410 22
6 39	15 13	273 65
0 40	5 49	234 36
0 40	11 24	403 99
1 20	9 00	129 41
59	4 46	138 09
	12 00	337 43
	9 40	165 30
	15 04	252 80
57 87	23 20	387 59

worker's family of six

United States equivalents.]

.....	\$38 88
.....	12 00
.....	38 88
.....	12 00
.....	10 60
.....	\$112 56
.....	14 40
.....	8 80
.....	8 00
.....	31 20
.....	62 40
.....	30 00
.....	33 88
.....	238 84

tobacco, \$1.40 ..

Provisions:

1 hectoliter wheat, at \$3.60	\$3 60
20 hectoliters rye, at \$2.20	44 00
1,000 kilograms potatoes, at \$1.60 per 100 kilograms	16 00
Vegetables	10 00
75 kilograms pork, at 18 cents	13 50
10 kilograms beef, at 20 cents	2 00
25 kilograms butter, at 32 cents	8 00
Milk	3 00
400 eggs, at 80 cents per 100	3 20
Salt, spices, &c.	6 00
25 kilograms coffee, at 40 cents	10 00
10 kilograms chicory, at 10 cents	1 00
150 liters beer, at 13 cents	1 95

Rent:

For dwelling, containing 1 kitchen, 2 bedrooms, 1 pantry and stable, also small garden	\$7 00
75 acres of farming land, and 20 acres garden	20 00

Clothing:

Husband—2 pantaloons, \$2.60; 2 vests, \$1.20; 2 jackets, \$1.10; 2 blouses, \$2.40; 2 cravats, 10 cents; 2 handkerchiefs, 30 cents; 3 linen shirts, \$1.95; 2 drawers, 50 cents; 2 caps, 60 cents; 2 pairs socks, 45 cents; 1 pair shoes, \$1.20; 4 pairs wooden shoes, 50 cents	\$13 20
Son of 18 years, \$13.20; son of 16 years, \$8	21 20
Wife—1 cotton dress, \$1.60; 2 petticoats, \$1.60; 2 linen shirts, \$1.20; 3 neck-handkerchiefs, 60 cents; 2 pocket-handkerchiefs, 20 cents; 2 pairs stockings, 50 cents; 2 jackets, 80 cents; 2 aprons, 40 cents; 3 pairs wooden shoes, 30 cents; 1 pair shoes, 50 cents; 3 hats, 40 cents; pins, &c., 5 cents	34 40
Daughter of 13 years, \$4; daughter of 10 years, \$2.40	8 15
	6 40

Bedding:

1 mattress, \$1; 2 sheets, \$1; 2 covers, (cotton,) 80 cents; bolster, 20 cents; straw for mattress, 20 cents	3 20
Bed and bedding for sons, \$3.20; bed and bedding for daughters, \$2	5 20

Sundries:

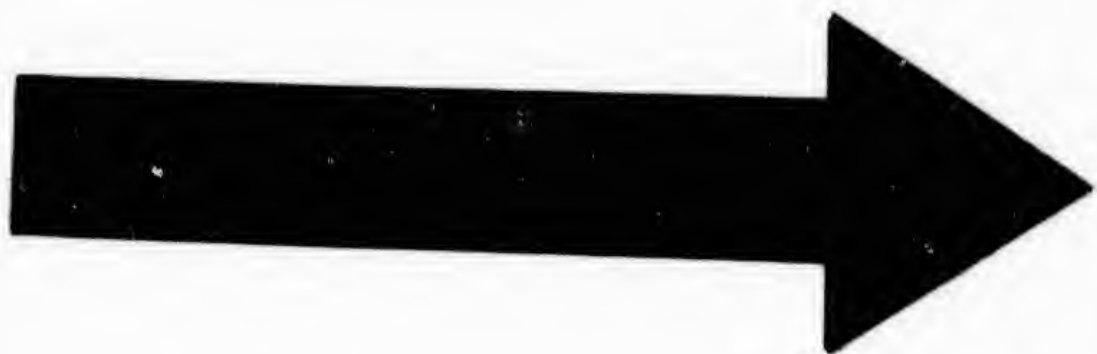
Fuel—3,500 kilograms coal, at \$3.05 per 100 kilograms	10 50
Light—10 liters oil, at 15 cents	1 50
Washing—20 kilograms soap, at 10 cents	2 00
Sewing-thread, needles, &c.	60
Maintenance of dwelling	1 60
Purchase, &c., of furniture	60
Taxes and other contributions	1 93
Tools for farming	1 36
Expense on farm for seeds, &c.	8 00

Church, 30 cents; books, pens, paper, &c., 60 cents; amusement, 60 cents; tobacco, \$1.40	2 90
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Total expenditure

BALANCE.

Income	\$238 84
Expenditure	238 04
Surplus	80



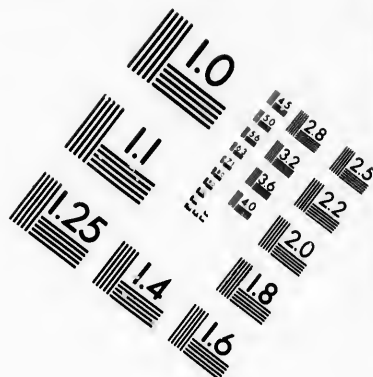
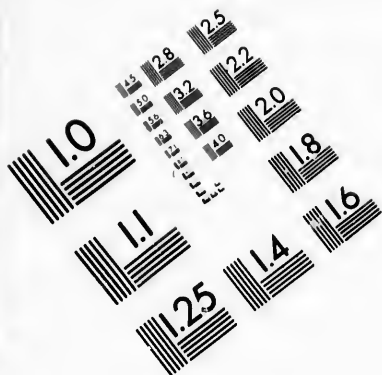
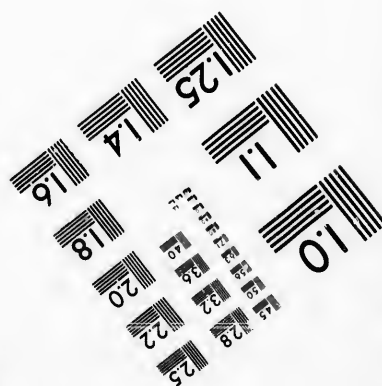
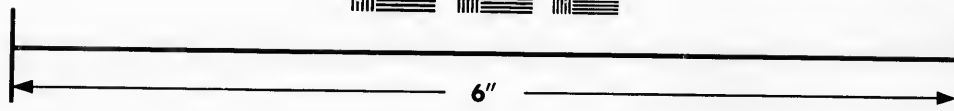
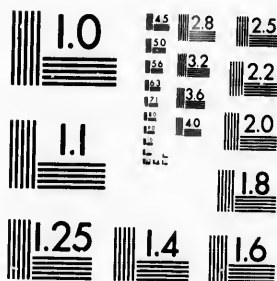


IMAGE EVALUATION TEST TARGET (MT-3)



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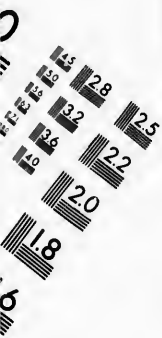


Table showing details of income and expenditure of workmen's families in the province of Brabant, Belgium, in 1854.

(First class includes indigent laborers, partly supported by public charity; second class includes indigent laborers not supported by public charity; third class includes workmen in independent positions.) Amounts expressed in United States gold dollars—the franc computed at 20 cents.

Expenses.	City of Nivelles.			Commune of Bornival.			Commune of Hontain.		
	First class.	Second class.	Third class.	First class.	Second class.	Third class.	First class.	Second class.	Third class.
	Day-laborer.	Weaver.	Slater.	Reaper.	Paper-box maker.	Salt-maker.	Day-laborer.	Mason.	Cabinet-maker.
I.—OF A PHYSICAL OR MATERIAL NATURE.									
Provisions:									
Wheat bread			\$28 02	\$30 00	\$30 00	\$30 00	\$25 50	\$22 80	\$23 80
Rye bread			714 56	16 00	16 00	12 00	332 76	232 76	232 76
Mixed bread			5 20	4 00	8 00	10 00	40	45 20	620 20
Potatoes and vegetables			2 00	2 00	3 00	4 00			4 16
Meat	3 61	4 37	5 20	2 00	2 00	5 00	5 72	4 68	6 97
Milk, eggs, and fish	3 12	28 73	7 48	2 00	4 00	4 00	4 00	2 00	2 03
Butter, oil, and lard	1 60	1 66	1 46	2 00	2 00	2 40	8 74	8 74	10 40
Spices, salt, &c.	3 33	3 64	5 72	2 00	2 40	2 40		2 40	4 80
Tea, coffee, and chicory									
Beer, cider, and wine	12 06	11 96	15 60	12 00	12 00	12 00	29 70	32 00	40 00
Rent	21 50	14 00	21 00	6 00	10 00	10 00			
Clothing	1 60	2 00	3 00	0 00	2 00	2 20			8 32
Bedding	0 24	10 40	11 44	8 00	8 00	8 00	4 60	8 00	2 08
Fuel	3 12	4 37	4 16	1 20	2 00	3 00	1 56	2 05	2 92
Light	4 37	2 60	5 20	2 00	3 00	3 00	2 50	5 02	
Washing	1 04		1 06						
Care of health, bath, &c.			2 00						
Treatment in sickness				50	1 20	1 20			5 00
Repair and maintenance of dwelling		2 00	3 00	40	1 60	2 00	2 60	2 00	2 40
Purchase and repair of furniture				40	1 20	2 40	40	1 60	
Contributions and taxes						60			
Postage and other expenses		1 00	1 00						
For tools, (excluding first purchase)				1 00	2 00	2 40			6 00
Cost of garden or land									
Total	164 14	171 77	126 80	92 40	116 20	137 60	161 58	180 26	230 53
II.—RELIGIOUS AND INTELLECTUAL.									
Church								3 40	4 40
School								60	1 60
Books, &c.									
Subscription, &c., in charity									
Savings-bank								4 00	5 40
Total									
III.—FOR LUXURIES.									
Coffee-houses, saloons	2 00	1 87	2 08	60	1 20	1 60	3 33	6 65	5 82
Tobacco	1 04	1 04	1 40	1 60	2 00	1 60	1 04	1 04	1 04
Ornament in dress					80				
Public festivities, &c.									
Interest on loans		52							
Total	3 04	3 43	3 48	2 20	4 00	5 20	4 37	7 69	6 86
Total expenses	167 18	175 20	130 28	94 60	120 20	142 80	165 97	190 95	237 39
INCOME.									
Father's wages	93 86	104 00	111 60	54 00	76 00	80 00	60 00	117 00	156 00
Mother's earnings	45 00	30 00	54 00	10 00	10 00	12 00	15 00	78 00	63 60
Children's wages	22 53	10 40	22 52	22 00	22 00	24 00	52 20		
From other sources		24 00	4 00	10 00	20 00	23 00	6 00		
Total	161 47	174 40	192 12	96 00	128 00	139 00	134 20	195 10	229 60

a 18 kilos, at .82 cent per week; per pound, U. S., 3.8 cents.
 b 21 kilos, at .60 cent per day; per pound, U. S., 2.7 cents.
 c 21 kilos, at .76 cent per week; per pound, U. S., 3.15 cents.
 d 21 kilos, at .38 cent per week; per pound, U. S., 3.8 cents.
 e 20 kilos, at .82 cent per week; per pound, U. S., 3.14 cents.
 f 24 kilos, at .07 cent per day; per pound, U. S., 3.14 cents.
 g 21 kilos, at .62 cent per week; per pound, U. S., 2 cents.
 h 17 kilos, at .32 cent per week.

i 14 kilos, at .62 cent per day; per pound, U. S., 3 cents.
 j 25 kilos, at .018 cent per day; per pound, U. S., 8 cents.
 k 25 kilos, at .018 cent per day; per pound, U. S., 8 cents.
 l 25 kilos, at .018 cent per day; per pound, U. S., 8 cents.
 m 3 kilos, at .29 cent per day; per pound, U. S., 9 cents.
 n 3 kilos, at .10 cent per day; per pound, U. S., 9 cents.
 o 2 kilos, at .23 cent per day; per pound, U. S., 43 cents.
 p 1 kilo, at .024 cent per day; per pound, U. S., 43 cents.

families in the province of

Commune of Houtain.				Commune of Wauthier Braine.			Commune of Itterbeck.			Commune of Leuw St. Pierre.		
First class.	Second class.	Third class.	Fourth class.	First class.	Second class.	Third class.	First class.	Second class.	Third class.	First class.	Second class.	Third class.
Expenses.												
I.—OF A PHYSICAL OR MATERIAL NATURE.												
Provisions:												
Wheat-bread				\$37 36	\$109 20	\$152 88	\$31 20	\$31 20	\$36 40	\$52 00	\$72 80	\$72 80
Rye-bread				26 00	20 80	22 58	0 80	20 80	30 80	15 60	18 72	18 72
Mixed bread				0 24	16 64	10 48	4 68	10 40	4 99	4 99	10 40	41 60
Potatoes and vegetables				2 08	1 04	4 16	4 68	10 40	4 99	4 99	10 40	41 60
Meat				15 60	15 60	33 69	16 64	0 36	16 64	16 61	31 20	41 60
Butter, eggs, and lard				9 12	3 12	3 33	1 56	1 56	3 12	3 12	8 32	12 48
Spices, salt, &c.				5 20	5 20	11 34	3 12	3 12	3 12	8 32	8 32	12 48
Tea, coffee, and chocolate				5 20	5 20	11 34	3 12	3 12	3 12	8 32	8 32	12 48
Beer, cider, and wine				5 20	5 20	11 34	3 12	3 12	3 12	8 32	8 32	12 48
Rent				5 20	5 20	11 34	3 12	3 12	3 12	8 32	8 32	12 48
Clothing				21 52	20 80	46 80	10 40	10 40	10 40	20 00	4 00	96 00
Bedding				1 04	10 40	7 80	1 20	1 20	1 20	2 00	4 00	8 00
Fuel				5 70	8 73	8 73	4 00	5 20	5 20	8 00	8 00	16 00
Light				4 16	4 37	4 37	2 08	2 08	2 08	1 60	2 40	3 00
Washing				1 04	2 00	2 00	1 25	1 25	1 25	4 00	6 40	8 00
Care of health, bath, &c.												
Treatment in sickness						20 80					6 00	8 00
Repair and maintenance of dwelling				1 04	1 04	5 00				2 00	5 60	7 00
Purchase and repair of furniture				1 04	73	5 00					2 00	8 00
Contributions and taxes				33	63	3 60				1 20	2 60	8 00
Postage and other expenses for books, (excluding first purchase)				8 32		40				80	5 00	8 00
Cost of garden or land					8 32	6 00					40	80
Total				191 78	224 85	376 20	107 33	90 85	112 53	143 19	267 01	371 36
II.—RELIGIOUS AND INTELLECTUAL.												
Church						3 12						
School						5 20		1 88				
Books, &c.						1 04					4 80	6 40
Subscription, &c., in charity											2 00	3 60
Savings-bank												
Total						9 36		1 88			6 80	9 40
III.—FOR LUXURIES.												
Coffee-houses, saloons					1 04	2 50					2 08	41 60
Tobacco						1 25				4 16	5 20	10 40
Ornament in dress												
Public festivities, &c.											2 00	6 00
Interest on loans												
Total					1 04	3 85				4 16	9 28	58 00
Total expense				191 78	225 89	389 41	107 83	92 73	112 53	147 35	283 09	432 36
INCOME.												
Father's wages				72 00	90 00	176 00	45 00	80 00	80 00	45 00	121 60	291 20

Table showing details of income and expenditure of workmen's families, &c.—Continued.

Expenses.	City of Aerschot.			City of Tirlemont.			Command of Lubbeek.		
	First class.	Second class.	Third class.	First class.	Second class.	Third class.	First class.	Second class.	Third class.
	Day-laborer.	Day-laborer.	Day-laborer.	Day-laborer.	Tailor.	Machineist.	Day-laborer.	Day-laborer.	Day-laborer.
I.—OF A PHYSICAL OR MATERIAL NATURE.									
Provisions:						\$31 20		\$7 23	\$10 92
Wheat-bread	\$20 39	\$20 30	\$20 39	\$52 97	\$52 57	11 24	\$57 20	52 00	49 40
Rye-bread									
Mixed bread	20 60	20 60	20 60	10 20	15 28	27 20	9 12	59 12	20 92
Potatoes and vegetables	19 40	18 20				31 30		3 12	21 81
Meat	3 20	5 84				11 00	5 10	10 20	9 00
Milk, eggs, and fish	2 92	3 20				62 40	4 26	10 12	24 96
Butter, oil, and lard	4 00	7 80	11 65	10 40	26 00	4 00	2 91	5 82	
Spices, salt, &c				1 67	1 67			2 91	5 82
Tea, coffee, and chocolate	11 65	11 65	11 65	6 88	20 80	10 40	4 37	9 67	12 80
Beer, cider, and wine					6 24	21 00		8 44	16 64
Rent	10 00	16 00	19 00	14 00	20 00	40 00	18 20	15 00	22 00
Clothing	35 00	35 00	42 60	3 20	20 00	20 00	16 00	29 00	40 00
Bedding	2 00	3 00	2 00				5 00	7 60	10 00
Fuel	6 00	6 00	6 00	1 05	7 00	15 00	8 60	12 00	20 00
Light	1 00	1 20	1 20		2 00	10 40	2 00	3 00	4 00
Washing	3 00	3 40	4 00				3 02	6 63	6 63
Care of health, bath, &c							1 00	1 00	6 63
Treatment in sickness	2 00	2 00	3 20				60	2 00	10 00
Repair and maintenance of dwelling						6 00	1 00	2 00	6 00
Purchase and repair of furniture	2 00	2 00	5 00				2 00	4 00	5 00
Contributions and taxes							80	1 40	6 00
Postage and other expenses							40	1 20	1 20
For tools, (excluding first purchase)								2 40	8 00
Cost of garden or land			9 00				20	6 00	7 00
Total	120 56	142 64	194 93	99 97	192 36		141 18	230 78	334 61
II.—RELIGIOUS AND INTELLECTUAL.									
Church									9 17
School			4 80						1 20
Books, &c									1 20
Subscription, &c., in charity									
Savings-bank									
Total			4 80						11 57
III.—FOR LUXURIES.									
Coffee-houses, saloons	5 20	7 80	15 60		10 40	12 00		1 25	1 25
Tobacco	1 45	1 45	1 45		1 25	3 00	14 15	14 15	14 15
Ornament in dress									
Public festivities, &c									
Interest on loans									
Total	6 65	9 25	17 05		11 65	15 00	14 15	15 40	15 40
Total expenses	127 21	151 69	216 78	99 97	204 01	319 04	155 33	246 18	361 58
INCOME.									
Father's wages	54 00	100 00	150 00	73 00	140 00	219 00	50 00	73 00	124 00
Mother's earnings	18 00	14 28	11 00	14 00	29 20	36 50	10 00	16 00	26 00
Children's wages	36 00	37 60	35 20		36 40	36 50	16 01	24 00	24 00
From other sources	19 21		20 67	12 97		25 03	6 00	18 00	40 00
Total	127 21	151 88	216 87	99 97	211 60	317 03	82 00	131 00	234 00

IRON, GLASS, AND OTHER INDUSTRIES.

The following extracts from the report of the Chamber of Commerce of Charleroi, in May, 1872, furnish valuable information in regard to the most important industries of that part of Belgium:

Statistics of metallurgy.

Commune of Lubbeck.			
First class.	Second class.	Third class.	
Day-laborer.	Day-laborer.	Day-laborer.	
90	\$7 23	\$10 92	
24	\$57 20	52 00	49 40
20	9 12	59 12	30 02
20		3 12	27 24
00	5 10	10 20	9 00
40	2 26	16 12	21 06
40	2 31	2 91	5 22
40	4 37	9 67	12 23
00		8 33	16 54
00	18 20	15 00	22 00
00	16 00	25 00	40 00
00	5 00	7 00	10 00
00	8 00	12 00	20 00
40	2 00	3 00	4 00
	3 02	6 03	6 03
	1 00	1 00	6 00
	60	9 00	10 00
00	1 00	2 00	6 00
	2 00	4 00	5 00
	60	1 40	5 00
	40	1 20	1 20
		2 40	8 50
	20	6 00	7 00
	141 18	230 78	334 61
			9 17
			1 20
			1 20
			11 27
20 00		1 25	1 25
30 00	14 15	14 15	14 15
5 00	14 15	15 40	15 40
9 04	155 33	246 18	361 53
9 00	50 00	73 00	134 00
46 50	10 00	16 00	36 00
36 50	16 00	24 00	54 00
25 03	6 00	18 00	40 00
17 03	22 00	131 00	254 00

Works.	1869.	1870.	1871.
SMELTING-WORKS.			
Workshops. (No. 1).....	13	13	13
Active furnaces. (No. 1).....	35	25	27
Inactive furnaces. (No. 1).....	13	25	14
Number of workmen.....	2,340	2,283	2,312
Manufactured products.....	367,446	337,743	523,130
Molding-iron.....	19,642	39,520	31,520
Refining-iron.....	300,774	297,228	327,600
ROLLING-MILLS.			
Workshops.....	20	20	20
Puddling-furnaces.....	333	365	394
Reheating-furnaces.....	132	140	162
Steam-engines.....	190	209	223
Horse-power of steam-engines.....	5,920	6,318	6,587
Hydraulic wheels.....	3	3	3
Horse-power of hydraulic wheels.....	115	115	115
Workmen employed.....	7,182	7,119	7,139
Products.....	261,938	283,495	236,441
FORGING AND CONDENSING ESTABLISHMENTS.			
Workshops.....	20	20	21
Furnaces with reverberators.....	17	19	23
Open furnaces.....	42	39	41
Steam-engines.....	5	5	5
Horse-power of steam-engines.....	63	63	63
Hydraulic wheels.....	34	34	34
Horse-power of hydraulic wheels.....	249	419	429
Workmen engaged.....	186	203	222
Products.....	2,904	4,023	.....
FOUNDERIES.			
Workshops in action.....	39	43	42
Cupolas.....	79	85	80
Steam-engines.....	39	36	39
Horse-power of steam-engines.....	320	200	313
Workmen engaged.....	829	944	993
Products.....	10,538	18,426	20,337
TOTALS.			
Workmen engaged.....	10,607	10,609	10,679
Cast iron produced.....	336,984	346,234	389,157
Value of cast iron produced.....	25,826,930	27,273,645	30,578,224
Wrought iron produced.....	264,442	287,518	240,792
Value of wrought iron produced.....	44,319,300	50,833,608	44,320,040

CONSTRUCTION WORKS.

The works, or establishments for the construction of machinery, participated in the general favorable movement of the latter part of 1871. The demand for stationary machinery, apparatus, and tools for the coal-mining and for metallurgical workshops, exceeded the ordinary means of producing them, and resulted in the rapid extension of business, which largely benefited our working-classes.

This beneficial effect made itself also felt over the repair-shops of our country.

In our last report we had to call attention to the limited relations our works had with foreign countries. This year we are enabled to make the most satisfactory statements on this point, as orders of importance were transmitted to some of our principal constructors from Russia, Germany, and France, and everything tends to indicate that these relations will continue and increase. A considerable number of pieces of machinery and locomotive-wheels, of wrought iron, were delivered to Prussia, although they were taxed at the rate of 4.35 francs (\$7 cents United States coin) per 100 kilograms on entering the German Zollverein.

NAILS.

The wrought-nail manufacture continues in the state of half existence mentioned in our last report, and threatens to decline more every year to finally be reduced to a few specialities for exportation.

The buyers, foreseeing the rise in the prices of split iron, hastened to secure the stock on hand, thus still more advancing the prices which, together with high labor, rendered difficult the manufacture of this article.

The machine-nail manufacture has maintained itself during the past stormy period in good condition, not having had to contend with French competition. It is expected to continue to prosper, owing to the perfected and economical modes of fabrication acquired by the Belgian manufacturers. There is but the slightly advanced price of raw material, which could in any manner affect the position of the Belgian trade in this article.

GLASS-WORKS.

The disastrous events which have so strongly marked the last months of the year 1870 continued to exercise their depressing influence on the commencement of 1871. Notwithstanding this, the situation of the window-glass industry could be called a relatively good one. Owing to the small exportation to France and Germany prior to the war, our manufacturers suffered less during the same, and survived without much difficulty the terrible days of 1870, and while the fears of a general European conflagration were about being quenched, the furnaces recommenced work. Their number had sunk to 89 during the war, but by the 1st of January, 1871, there were 118, and a short time after 128, in activity. The number of active furnaces before the war was 119.

First-quality glass found ready sales in England and the United States, which are still our best customers.

The statistics of the window-glass exports for 1871 show a large decrease on those of the previous years; the quotations show a constant rising of the prices, both on account of high wages for labor and the upward tendency of the market fluctuation, as well as the defective quality of the raw material. The sulphate of soda, which rose from 9½ to 10, 11, and even 12 francs, and the impossibility the manufacturers are placed in to procure the necessary qualities for the manufacture of a good article—an impossibility arising from the poor means of transportation—are serious obstacles to the prosperity of the window-glass trade.

TOTAL EXPORTS OF WINDOW-GLASS.

	1869.	1870.	1871.
Kilograms	45,898,254	40,847,233	28,487,933

It will be seen that the increase of 1869 over 1871 amounts to 17,410,321 kilograms, and is consequently yet greater than that of 1870 over 1871, the latter being of 12,359,300 kilograms. There was a marked decrease in our most important outlets.

Countries.	1871.	1870.	1869.
	<i>Kilograms.</i>	<i>Kilograms.</i>	<i>Kilograms.</i>
England	12,034,179	18,194,341	19,251,047
United States	3,369,775	8,167,166	9,906,334
Sweden and Norway	17,350	56,587	10,064
Denmark	329,146	796,050	758,942
Hanseatic cities	2,082,571	2,536,118	3,066,218
Italy	148,663	447,145	374,245
Switzerland	83,962	204,034	395,327
Austria	186,691	403,465	498,682
Turkey	962,688	2,481,210	2,164,393
Egypt	204,020	346,555	560,101
British possessions	730,886	1,333,164	1,239,104
Cuba and Porto Rico	392,962	320,538	56,754
Brazil	153,534	336,272	545,400
Rio de la Plata	317,324	582,438	755,450
Chili and Peru	532,680	596,658	451,882
All other countries	163,616	207,024	751,157

The greatest occupation of the manufacturers during the last winter was the difficulty of obtaining the necessary coal for the supply of their establishments. Notwithstanding all the steps taken by the special delegates of commerce and industry to the government, or the repeated reclamations made by all the heads of workshops,

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871, the latter being of
ost important outlets.

	1870.	1869.
tons.	Kilograms.	Kilograms.
179	18,104,241	19,251,047
775	8,167,166	9,906,334
250	56,587	10,694
146	706,650	758,942
571	2,536,118	3,646,218
603	447,145	373,245
262	301,021	293,347
691	403,405	408,682
688	2,481,210	2,164,393
920	346,555	540,114
880	1,333,464	1,229,101
902	320,538	56,573
534	336,272	545,403
324	522,438	535,470
680	596,658	451,882
616	297,024	751,157

the last winter, was the
city establishments. Not-
commerce and industry
the heads of workshops,

the state of affairs at our establishments remained in the same critical condition. The want of the material did not only prevent the shipment of the products to Antwerp at certain stipulated dates, but, and what is worse, caused the forced interruption of work at the shops.

Such was the position the owners of our glass-works were placed in for several months; expecting to be forced to stop their establishments at any moment, and in the mean time continuing to work with coal of improper quality, procured wherever it could be had.

BOTTLE-MANUFACTURE.

The manufacture of bottles has kept pace with the movements of the window-glass industry. Under the influence of the general resumption of business, the last month of 1871 brought with them a more favorable situation. There are in this country fourteen bottle-works, twelve of which were in operation during the year 1871, and each of them produced an average of 900,000 to 1,000,000 bottles per year. Each of these kilns consumes some 200,000 kilograms of coal per month.

JUMET, BELGIUM.

Jumet, the seat of the window-glass manufacture, a village some four miles distant from Charleroi, was visited in September, 1872, by the author, some of whose notes are appended. He regretted his inability to see Mr. André, to whom he bore a letter, but that gentleman subsequently furnished the desired information in regard to the glass industry of Belgium in a letter, extracts from which are here presented:

DEAR SIR: * * * Urgent business prevented me from answering your inquiries before this day.

I inclose herewith, 1, statements of the rates of wages, &c., paid in this country to blowers, gatherers, teasers, flatteners, glass-cutters, packers, pot-makers, laborers, clerks, foremen, managers, &c., in window-glass works; 2, the percentage of the cost of manufacturing 100 feet, &c.; 3, names and number of establishments which are owned and worked by glass-makers.

You are no doubt aware that the Belgian window-glass manufacturers export their produce to all the markets of the world; and they are able to undersell any nation that exports glass. I should think the fact that the Belgian manufacturers can sell their glass cheaper than any foreign manufacturer, is mainly owing to cheap labor and large production for each man. For, (except this year,) coals and sulphate of soda have always been much cheaper in England than they were here; the former 30 per cent. to 50 per cent. lower for coals used in glass-works, the latter 10 to 12 per cent. lower. Now, coals and sulphate of soda are used in very large proportion in glass-making.

The Belgian window-glass manufacture has not been a profitable business for many years during a great number of years. Of thirty-six establishments which have failed or suspended with loss of money since the year 1842, fifteen were owned and worked by men who had previously been employed as glass-makers, foremen, managers, and clerks.

Rates of wages paid to window glass makers in Belgium in 1872, per calendar month.

Occupation.	No. 1.	No. 2.	No. 3.	Occupation.	No. 1.	No. 2.	No. 3.
Blower	\$150	\$120	\$100	Glass-cutter, (supplies his own diamonds.)	\$20	\$20	\$16
Do.	110	100	80	Sorter, (to select the qualities of glass.)	32	30	24
Do.	80	80	70	Packer	20	18	16
Teaser, to melt	35	35	30	Miller, (to grind materials, &c.)	18	18	18
Teaser, to refine	40	40	40	Mixer, (to mix material)	18	18	18
Teaser	32	32	30	Pot-maker	40	30	30
Teaser helper	18	18	18	Pot-maker helper	20	20	16
Flattener	40	30	30	Blacksmith	25	25	25
Do.	36	32	28	Blacksmith helper	20	20	20
Do.	30	30	30	Girls in the yard	18	18	18
Flattener helper	18	16	16	Foreman	40	30	30
Flattener, 5 lads	12	12	12	Manager	170	70	50
Glass-cutter, (supplies his own diamonds.)	30	30	26				
Do.	26	24	22				

Percentage of cost of window-glass.

	In 1860.	In 1872.
	<i>Per cent.</i>	<i>Per cent.</i>
Labor.....	34	35
Materials.....	24	25
Fuel.....	20	10
Packing.....	12	5
Pottery.....	5	5
General expenses.....	7	5
	100	100

REMARKS BY MR. ANDRÉ.

Each blower employs his own gatherer, and pays him his wages out of his own earnings, at the rates of \$10 for the very best; \$35 for good hands; \$30 for second class; and \$26 for third-class gatherers. There are not above ten blowers whose monthly wages average \$180. They blow very large and heavy pieces; which article is in very limited demand. Glass-makers work about forty-eight to forty-nine weeks a year; the three or four weeks remaining are required to repair the furnace.

As a matter of course, managers and clerks earn higher salaries in large glass-works than those employed in small concerns; with regard to the salary of foremen, there is little difference in large or small establishments.

Window-glass blowers, gatherers, flatteners, and teasers work on Sundays and feast days. The Belgian window-glass manufacturers do not lodge their workmen, nor do they supply them with any fuel, as the English manufacturers do.

There are no unions among the Belgian glass-makers; and there has been no strike among them since the year 1826.

Though the Belgian glass-makers are not now so hardworking, so steady, so saving, or so sober as they were twenty or thirty years ago, yet I consider them superior in the above respects to the French and the English glass-makers. When I was manager of glass-works in England I used to employ English, Belgian, and French glass-makers; and it is from the experience I have of them that I give this opinion. I may observe that I am not biased by any national partiality or prejudices, as I am a native of France.

Among the saving Belgian glass-makers, there are several who are now manufacturers. These firms are the following:

Name of firm.	Number of furnaces.	Formerly—
Schmidt, Deville & Co.....	6	Blowers.
Joseph Deville & Co.....	5	Teasars.
L. Mondron.....	5	Blowers.
Schmidt Frères.....	5	Do.
Eastin & Wilhelm.....	5	Managers.
Schmidt, Bratten & Co.....	5	Blowers.
Monoyer Frères.....	5	Glass-cutters.
Monoyer, Defer & Co.....	1	Do.
A. Andris & Co.....	2	Blowers.
Mandelier & Co.....	2	Do.
L. Greff & Co.....	2	Do.
Meyen & Co.....	2	Do.
E. Deweyre & Co.....	2	Glass cutters.
Dellent Frères.....	2	Do.
A. Missone.....	1	Do.
Dentis.....	1	Do.
Goffe & Co.....	1	Blower.
Cequiamont & Co.....	1	Do.
Laurent, Lettimes & Co.....	3	Do.
Total.....	49	

The foregoing information from Mr. André, who has had experience as a manager of glass-works in France and England, as well as in Belgium, and who has a thorough and practical acquaintance with the subject, renders any extended extracts from the notes of the author

unnecessary. A few facts may, however, be presented from the author's note-book:

June, September 24, 1872.—Came from Namur to Charleroi by rail, 36 miles, passing through the southeastern part of Belgium, which is devoted to the manufacture of iron and glass. From Charleroi, came out to this place in a carriage, and visited the large glass-works of Yessis, Benoit & Bivort. They employ nearly 1,400 work-people, some of whom have been with them for twenty years, and have laid by considerable money, some being worth 50,000 francs. Many of them own the houses in which they live, and is a separate entrance to each tenement or suite of rooms. If otherwise, there are as follows: For four or five rooms, 20 francs (\$4) per month; larger houses, 30 francs (\$6). For the very best, only 60 francs, (\$12,) each house having a piece of land for a garden attached.

WAGES.

The earnings of the workmen are as follows: A few blowers of great skill earn as high as 40 francs (\$8) a day, or 1,000 francs (\$200) per month, out of which they pay the gatherer.

The net earnings of blowers average 7½ francs (\$1.50) per day. Those who press the glass average 4 francs, (80 cents.) The great mass of the workmen, including those who cut the cylinders into panes, each from 3 to 4 francs (72 to 96 cents) per day. Unskilled laborers from 2 to 3 francs (40 to 60 cents) per day. Women and girls earn but 1½ francs (30 cents) per day. In the fields near Junet, and in the towns on the railway where they are employed in shoveling coal and in other unpleasant work, women earn almost 1½ francs (30 cents) per day. Here, as elsewhere, there has been a considerable advance from the rates formerly paid. The price of provisions is moderate, though much higher than formerly. Went into a little shop which sold bread and ascertained that the price of a loaf of good white bread (weighing 2½ kilograms) was one franc, (20 cents,) being a little under 4 cents per pound. This firm does a very extensive business, and sells largely to the United States. Although there is no passenger railway to Charleroi, they have built a railway on which they transport their merchandise to the station. The facilities which Junet presents for the manufacture of glass consist in the abundance of raw material—sand, lime, and coal—all being in the vicinity. Coal has doubled in price, costing now from 22 to 25 francs (\$4.40 to \$5) per 1,000 kilograms, (about an English ton,) the price a year or two ago being but from 10 to 12 francs, (\$2 to \$2.40.)

I did not stop, as I intended, at Floreffe, where most of the plate-glass used in the United States is made.

PAPER-MAKING.

The manufacture of paper, although now one of the large industries of Belgium, was not introduced into that country until toward the end of the seventeenth century; its progress was not rapid during the eighteenth, but during the last fifty years it has so much developed that the exports of paper have since that time been very extensive, especially to England. Although the exports to the United States have been greatly curtailed by our high tariff, yet they reach a considerable aggregate.

The extent of the paper industry, and the extremely low rates of wages which prevailed in 1849, are indicated in the following statement:

Number of work-people employed.—Adults: males, 771; females, 789; total, 1,560. Children under 16: boys, 232; girls, 152; total, 384. Aggregate, 1,944.
Daily wages.—Under 50 centimes, (10 cents): 6 men, 24 women, 158 boys, 115 girls; under 1 franc, (20 cents): 121 men, 756 women, 70 boys, 37 girls; from 1 to 1½ francs: 442 men, 33 women, 4 boys; from 1½ to 2 francs: 173 men; above 2 francs, 35 men.
Percentage of adults earning less than 1 franc: men, 15.7; women, 96.
Percentage of adults earning under 1½ francs: men, 7.3; women, 100.
Percentage of adults earning over 1½ francs: men, 27.

It appears, therefore, that all the women, and 73 per cent. of the men, received, in 1849, a daily wage of less than 30 cents, while 96 per cent. of the women earned less than 20 cents per day. The advance in the rates of wages paid in this industry in 1872 over 1849 was nearly, or quite, 100 per cent.

GODIN AND SON'S PAPER-MILLS.

In the exhibition of the World's Industry at London, in 1851, Belgium.

	In 1860.	In 1872.
Per cent.	31	45
.....	22	25
.....	12	10
.....	5	5
.....	7	5
.....	100	100

ages out of his own earnings; \$30 for second class; blowers whose monthly which article is in very many weeks a year; the

ries in large glass-works lary of foremen, there is

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who are now manufac-

Number of furnaces.	Formerly—
6	Blowers.
5	Teasors.
5	Blowers.
5	Do.
2	Managers.
2	Blowers.
3	Glass-cutters.
1	Do.
2	Blowers.
2	Do.
2	Do.
2	Do.
2	Glass cutters.
2	Do.
1	Do.
1	Blower.
1	Do.
3	Do.
49	

no has had experience nd, as well as in Bel- acquaintance with the notes of the author

was only represented by one firm, Messrs. J. L. Godin & Son, of Huy,* and attention was particularly called to the extent and excellence of their collection of paper of every description. A prize medal was awarded to them "for a large variety of printing, writing, and drawing papers, in all of which great perfection was attained." Since that period the products of the mills at Huy have obtained a high reputation in foreign markets, especially in England, to which country large exports are made.

As it was deemed important to ascertain the cost of labor in an industry whose products enter into a spirited competition with similar productions of the United States, the author took occasion to visit Huy for that purpose in September, 1872. The following extracts from his notes are presented:

Huy, Belgium, September 23, 1872.—Came here from Liège and Seraing on Saturday and remained to visit the paper-mills of Messrs. J. L. Godin & Son, which are said to be the largest in the world. I was cordially received by Mr. Dusenburg, the director, who courteously gave me the information asked for, and sent a clerk to show me through the mills which are close to this old town, the other mills being some six or seven miles distant. The senior partners are deceased, and the mills are owned by a company, which retains the name of the firm, which had obtained a high reputation.

The daily production is about 25,000 kilograms, (nearly 25 tons.) I saw the record of three machines which made last year (1871) 3,192,103 kilograms of paper. They are now working to full capacity, running on Sundays, or about 363 days in the year. Limestone abounds in the neighborhood, and the coal is brought from near Seraing. The price of coal, which was formerly 6 francs, is now 18 francs (\$1.60) per ton, of 1,000 kilograms. The water is said to be excellent for the purpose desired. They make white, colored, and blue writing-papers, (the latter chiefly for the English market,) and fine printing-papers, for illustrated journals. Also, straw paper, using 6,000 kilograms (6 tons) of straw per day. They also use esparto grass extensively. Besides the fabrication of writing-papers, they make and sell ruled paper, and are extensively engaged in the manufacture of envelopes.

They export their products to England, Canada, and other countries, but not much to the United States, owing, as the director alleged, to our high tariff.

The machinery was chiefly made in this town, though some of it is of English make. The mills are very clean and sweet, and everything is done to render them healthy for the work-people. They employ in all about four hundred persons, chiefly women and girls. The latter are cleanly, neatly dressed for work, (except the rag-sorters and cutters,) bright, intelligent, and apparently happy.

The price which the company pays for rags was indicated on a card, of which the following is a verbatim copy:

"Cotons brut, 40 fr. p. 100 kilos.

"Toile à voile, 55 " " 100 "

Which, in United States coin, is 3.628 cents per pound for common cotton rags, and about 5 cents (4.99) for old sail-cloth.

EARNINGS.

Nearly all the employes are paid on a basis established by the late Mr. Godin, after years of study and computation, each receiving pay in proportion to the work performed. The daily earnings are as follows:

	Francs.	United States coin.
Women, the most industrious and best skilled	2½	\$0.50
ordinary	2	0.40
inferior, and girls	1½	0.30
rag-sorters and cutters	2	0.40
Men, engine-men and machinists	7 to 8	\$1.40 to \$1.60
assistants	4 to 6	\$0.80 to \$1.20
other workmen	4	0.80
Some laborers and youths as low as, but none less than	3	0.60

The foremen or superintendents of machines receive about 15 francs per day, or by the year, 2,500 francs, (\$500); first assistants, 10 francs, (\$2); other assistants and paper-cutters, 6 francs (\$1.20) per day.

The average earnings of the women are nearly or quite 2 francs per day, the larger part receiving that amount. Wages have greatly increased, of late, in this and other industries.

* Pronounced "We."

in & Son, of Huy,*
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common cotton rags, and

the late Mr. Godin, after
ortion to the work per-

Franks.	United States coin.
2½	\$0.50
2	0.40
1½	0.30
2	0.40
7 to 8	\$1.40 to \$1.60
4 to 6	\$0.80 to \$1.20
4	0.80
3	0.60

15 francs per day, or by
\$2;) other assistants and

francs per day, the larger
of late, in this and other

Mr. Dusenbourg stated that there is but little emigration from this part of Belgium, parents being unwilling to part with their children, although they can do better in the United States. As the cost of living is small and families usually large, the earnings of families amount to large sums in the aggregate. He mentioned the case of one family, of which the father and several sons and daughters worked in the mills, and to whom he paid last year 10,000 francs (\$2,000) as the result of their earnings.

House-rent is low here, four rooms costing from 12 to 15 francs (\$2.40 to \$3) per month, as I learned from some of the work-people who paid these prices. Others paid from 150 to 200 francs per year for three rooms.

The price of provisions here is low, indeed the whole cost of living must be low, as indicated by my bill at L'Aigle Noir, the best hotel in the place, which for an excellent room and good fare was about the same for two days as was charged for one day's accommodations elsewhere.

In the earnings of the employes in the Godin paper-mills, as given above, it must be borne in mind that the figures do not indicate the regular rates of wages, but the respective amounts which were earned by women of skill and industry. However unfavorable a comparison may be made between the industry of the work-people of Belgium and those of England and the United States in some industries or in the paper manufacture elsewhere, it is certain that in no mill or factory which the author has visited on either side of the Atlantic have the activity and industry been more apparent than in the Godin paper-mills.

Small in territory as Belgium is, there are marked differences between the inhabitants of the different provinces. The condition of the working-classes of Antwerp and of many parts of Flanders, as described in succeeding pages, is much worse than in many other portions of the kingdom. The industry and thrift, the neat appearance and good conduct of the employes of the paper-mills at Huy are more apparent when contrasted with those of

THE PAPER-MILLS AT DUFFEL, NEAR ANTWERP.

Being unable to visit this establishment, the author is under obligations to J. Riley Weaver, esq., United States consul at Antwerp, for the following translation of a statement, prepared by the proprietor, Mr. De Kuyff Demeurs, dated 1872:

My manufactory employs about 130 operatives, men, women, and children, producing about 70,000 kilograms of paper per month. These work-people are grouped into more than thirty different classes. They are all paid by the piece, that is to say, they are paid more or less according to the quantity and quality of the work effected at the end of each fourteen days. It would require several tables to explain the regulations, and persons unacquainted with our industry would not readily comprehend them.

Some of our special workmen make from 3 to 10 francs (60 cents to \$2) per day. Ordinary laborers make from 1½ to 2½ francs (30 to 50 cents) per day, and the women earn from 1 to 1.20 francs (20 to 24 cents) per day. The factory goes night and day, the operatives attending every six hours. The workmen observe fête days, Sundays, the great church festivals, and two annual fête days of the commune.

They are in general ignorant, poor, and miserable; but few can read; none have any idea of hygiene, of morals, or of economy. They are all addicted to drink, and carry to the *examinet* (liquor-shop) a large part of their earnings, which they ought to bestow upon the well-being of their families. It is only by the strictest supervision that we can secure the proper execution of the work.

As to the expenditure necessary to sustain one of our workmen's families, I am unable to give you any indication, as that depends upon and varies according to the habits of the family. A good wife is the providence of the workman. Here the wives are not, in general, much superior to the men.

As compared with the mills at Huy, it will be observed that the earnings are much less, the women in the one receiving, on an average, 40 cents, and in the other but 22 cents, while the difference in the wages of the men is equally marked. In the relative condition there is also a wide divergence; in the one place good conduct and thrift, in the other intemperance and poverty.

ANTWERP.

Antwerp is the principal sea port of Belgium, situated on the river Schelde, where magnificent steamers and sailing-vessels from every part of the world are to be seen in its commodious docks. It was formerly one of the most important commercial cities in Europe. In the height of its prosperity it is said to have contained two hundred thousand inhabitants. An old author says that twenty-five hundred vessels were to be seen at one time at its docks, laden with the productions of all quarters of the globe. It is said that Napoleon endeavored to make Antwerp the rival of London in its commerce and the rival of Portsmouth as a naval establishment. He regarded the frontier of the Rhine, with Antwerp, as indispensable to the prosperity of France. Antwerp, though not celebrated for its manufactures, enjoys a high reputation for its encouragement of the arts. It is either the birth-place or the home of Rubens, Van Dyke, Teniers, Jordaens, and Quentin Matsys, whose great works still remain in their native or adopted city. In past centuries there were over thirty silk-factories in existence, employing more than four thousand operatives. In the manufacture of sewing-silk the city is still conspicuous.

COST AND CONDITION OF LABOR IN ANTWERP.

The following letter and its accompanying statements were transmitted, at the date indicated, by Mr. Consul Weaver :

CONSULATE OF THE UNITED STATES,
Antwerp, December 23, 1872.

DEAR SIR: In response to your request I inclose a tabular statement showing the average weekly wages earned by the laborers in the several trades, and also a statement showing the average prices of provisions, groceries, and house-rent for laborers at Antwerp during the year 1872.

Upon a superficial examination of this entire question, I found it utterly impossible to do anything like justice in reference to it, taking into account the difficulty of getting at the facts, and then deducing correct averages; but the question is one of so much importance that I thought it best to let you have what facts I have personally collected, and such suggestions as have occurred to me. I have been aided greatly by the reports for 1871 and 1872 of Mr. Gratian, British consul at Antwerp, with which I have compared and verified my figures. You are aware of the almost distrust that is manifested by the laboring people of this country when you question them as to their wages or mode of living. Even people of the better class have to be approached very judiciously to get anything like the correct prices. Either from fear or shame, they prefer not to disclose their actual condition. To give the various rates in each trade would be extremely interesting, but I have not the means of doing so accurately enough to be valuable. The rate of wages depends entirely upon the ability of the laborer and the time employed. Generally they work twelve hours per day in summer and ten in winter, and are paid by the hour. A record of the time worked each day is kept, and at the close of the week they are paid. Day-laborers are paid daily, but in the regular employments weekly; boys, girls, women, and men are employed, and receive wages as various as the number of hands employed. In but a few employments can the workmen be induced to work by the job; they prefer the hour system. As a general thing they are very deficient in skill, and very slow; one hand in the United States performing easily the work of three in Antwerp, and doing a better job. The manufacture of cigars is quite a specialty at Antwerp. At one of these factories they employ chiefly women and girls, and I am informed that they succeed fully as well as the men. They use machinery in making the filler or "poupon," which, for common cigars, works well and rapidly. I am informed by the proprietor that he employs seventy women and girls, and ten men and boys. Thirty girls make the "poupons," and forty women put on the outer wrappers. The placing of the upper wrappers pays from seven to forty francs per thousand, averaging fifteen francs (\$3.). A good hand makes about three thousand common cigars per week, and the average week's wages is about twenty-five francs (\$5.), but out of this she must pay her "poupetier" (the little boy or girl who makes the center and puts on the inner wrapper,) and this costs on an average five francs per week, leaving for the week's earning twenty francs (\$4) for a good average hand. They pay thirty centimes (6 cents) per thousand for making "poupons" by machinery. One girl can make twenty-five thousand per week, earning seven and a half francs, (\$1.50.)

To those who work by the hour, he pays from 4 to 50 centimes per hour, the work

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It has been computed that a workman in Belgium cannot, on an average, make more than 500 francs (\$100) per year. How he makes both ends meet is a profound mystery. But the wife and each child, as soon as at all able, counts as a producer. They live very poorly, not being able to indulge in even the necessities of life, such as butter and meat. The workmen have meat perhaps about once a day in the shape of soup, but for the other meals they have principally bread of the cheapest quality, or ginger-bread. Clothing costs very little, and nearly all wear the wooden *sabots*,* which cost from 50 centimes to one franc. As for fuel, they never think of the luxury of a wood fire. Even the wealthy could not afford to burn wood, it being employed only by the bakers. In the table I have calculated board per month at from 80 to 120 francs, but this is for the middle class. It is somewhat remarkable that we have no "pensions" (boarding-houses) in Antwerp. Outside of the hotels there are no places where you can engage respectable board and lodging. Work-people are compelled to hire lodgings with breakfast, and go to the restaurant for luncheon and dinners. But the workman cannot afford this. He is generally married or lives with his parents, and he cannot spend more than 10 francs (\$2) per week for all. For a family of five persons the weekly wages are perhaps about 20 to 25 francs, (\$4 to \$5.) They can save but a few francs out of this.

DRINKING HABITS.

Drinking is a terrible misfortune to the workmen of Belgium. They not only drink beer but gin; and rum being so cheap, thousands of laborers go reeling home daily from their toil. Especially upon the docks women hawk the accursed liquid from man to man, and on Saturday nights begin the revels that often continue until the middle of Monday. The people of late are making an effort to do something to stop this scourge of the poor man, this chief source of ignorance, superstition, and crime. I regret that lack of time prevents me from placing before you the actual condition of the working-class in this country; such information should be systematized to be of use; to do this demands labor and time. * * *

I am, sir, very respectfully,

JAS. RILEY WEAVER,
United States Consul.

WAGES IN ANTWERP IN 1872.

Statement showing the average weekly wages paid the various classes of workmen at Antwerp during the year 1872.

Occupation.	Weekly wages.	Occupation.	Weekly wages.
Bakers.....	\$1 30	Paper-makers.....	\$1 30
Blacksmiths.....	4 30	Poster-ornament makers.....	6 60
Boiler-makers.....	4 80	Plumbers.....	4 08
Bookbinders.....	4 50	Painters.....	3 30
Boot-makers.....	5 40	Rattan workers.....	3 72
Brewers.....	3 00	Rice-meds.....	3 76
Cabinet-makers.....	3 78	Salt works.....	2 76
Carpenters.....	3 72	Saw-mill.....	4 62
Cigar-makers.....	3 00	Sewing-silk makers.....	3 60
Coopers.....	4 80	Shirt-makers.....	2 70
Diallers.....	3 36	Sperm-candle makers.....	3 60
Dyers.....	2 82	Stone-cutters.....	4 21
Engineers.....	4 80	Sugar-refiners.....	3 60
Engine-drivers.....	6 50	Tailors.....	5 10
Hair-dressers.....	3 51	Upholsterers.....	4 80
Lace-makers.....	1 98	Weavers.....	3 60
Locksmiths.....	4 20	Weavers of Antwerp silk.....	4 20
Marble-cutters.....	5 10	White-washers.....	3 60
Masons.....	3 30	Wood cutters.....	6 20
Oil-refiners.....	3 78	Wool-washers.....	4 30
Printers.....	4 50		

* The author paid 14 francs (25 cents) for a pair of the best quality; common, strong *sabots* for working-people cost 75 centimes, (15 cents.)

STRIKES IN BELGIUM.

Having devoted considerable space to a history of the strikes in England, the following condensed account of the strikes of the workmen employed in several branches of industry, chiefly in Antwerp, is presented. It was prepared by Mr. Grattan, British consul in Antwerp, who formerly occupied the same position in Boston, a gentleman whose long experience and mature judgment eminently fit him for such an investigation. The author personally visited Antwerp, but after consultation with the United States consul, Mr. Weaver, it was deemed unnecessary to make an original investigation.

The Belgian manufacturers have, in general, always endeavored to conciliate the interest and well-being of the working-class with the exigencies of the times, and it may be affirmed that within a few years past there has been a rise in wages of about 25 to 30 per cent. Nevertheless, the operatives are far from being satisfied, and their demands, on the contrary, increasing from day to day, strikes have taken place in the different industrial centers.

For some time past strikes had occurred among the workmen of various trades, with the limited object of demanding an increase of wages or a reduction of hours of labor. The masters, being unable to resist, were compelled to yield; and thus, at Antwerp the masons, shipwrights, tailors, and others have been engaged in disputing the increasing demands of their men.

The masters in these various trades, not having much capital at their command, and unable, from the nature of their business, to close their establishments, have been precluded from resisting the strike by a suspension of work. At the same time the so-called "unions," or associations of workmen who supply hands for the loading and unloading of ships, and for other commercial operations in the port of Antwerp, entered the mercantile body that they would no longer work either at night or on Sundays, although it must be stated that numerous exceptions to this general rule took place in consideration of extra pay. Strikes had also taken place in Brussels and Ghent among the mechanics, which offer much analogy to the

STRIKE OF THE CIGAR-MAKERS OF ANTWERP.

There are in Antwerp about 45 to 50 establishments exclusively devoted to the manufacture of cigars, and employing altogether about 10,000 workmen and apprentices.

The wages of a workman amount to from 25 to 35 francs (\$5 to \$7) a week; those of the apprentices to 5 francs, (\$1.) which are deducted from the wages of the workman. These apprentices, termed "ponpetiers," are children of from ten to fourteen years of age, whose business it is to make the inner roll, the workman's task being the more difficult and complicated one of completing the cigar by means of the exterior leaves. The preparatory labor thus performed by these "ponpetiers" tends very considerably to diminish and simplify the work done by the men, and leads of course to a proportionate increase in the productive power of the factory; and hence it follows that the manufacturers attach great importance to having this preliminary work performed by children or apprentices, who by this means also acquire a knowledge of the trade, and become ultimately available workmen.

The rate of wages being very high in proportion, and the competition extremely active, especially in respect to low-priced cigars, it is a matter of considerable importance that the factory should be made to yield as much as possible, as it is only through large sales that a profit can be realized.

During the summer of 1871 the operatives of all the cigar-factories struck simultaneously. They had formed a considerable reserved fund, and it is also understood that they received pecuniary assistance from England and Germany. They required, independently of a reduction of the hours of labor, that the wages of the "ponpetiers" should be paid by the manufacturers, without deduction from their own wages, and that the "ponpetiers" should in fact be employed by the manufacturers; whereas, according to the system hitherto prevailing, every workman brought his own "ponpetier," for whose work he was responsible. The effect of the change demanded would have been not only to increase the wages of the men considerably, but to relieve them of a large share of their responsibility as to the performance of the work, as it would have been in the power of the workman to attribute any imperfection in the article produced to the "ponpetier" appointed and paid by the manufacturer himself. They at last went further, and their demands embraced the eventual dismissal of the "ponpetiers." This pretension was entirely new, and revealed a settled purpose of diminishing the number of operatives, and preventing the instruction and training of apprentices. Their power was no longer to reside in their numbers, but precisely the contrary; for, according to their calculation, the less abundant the supply of workmen the more indispensable do their services become.

Not being able to enter into factories either in the capacity of apprentices, in consequence of the opposition of the men, nor ultimately as workmen, from the fact of their not possessing the necessary qualifications, it is evident that the enormous number of unemployed hands will constitute a real danger to social order and public security.

This movement toward the suppression of the apprenticeship system is doubtless favorable to the present operatives, who will profit by it for a time; but were the tendency to become general, and to be applied to all trades, a most formidable crisis might be the result. This danger was at once clearly recognized by the Antwerp cigar manufacturers, and they took immediate measures to resist the demand. A league was formed among the employers, and it was agreed that in case the operatives should cease work and leave any one factory, all the other establishments should be immediately closed, and hence the strike became general. The masters were quite prepared to consent to a reduction of the hours of labor and to a reasonable increase of wages, but they entirely refused to agree to the new conditions, as far as the "poupetiers" were concerned.

This state of things lasted for some weeks, but it could not be indefinitely prolonged; the workmen, subsidized by foreign agencies, stoutly refused to abate any of their pretensions; while the masters, seriously crippled in their resources by the stoppage of their works, found themselves in danger of being supplanted by foreign manufacturers, being no longer able to necessarily expected. Certain manufacturers, however, yielded, to a considerable extent, to the demands of the workmen. The resistance of the employers was thus weakened and disorganized, while the strike acquired increased strength, and was the better able to persist in its pretensions and demands. Some of the manufacturers endeavored to introduce workmen from Holland, in order to be enabled to resume work.

Some came, but the Antwerp operatives resorted to intimidation and violence for the purpose of compelling the intruders to return to their own country; collisions and encounters occurred, which in some cases necessitated the employment of coercive measures, but the work of intimidation had produced its effect—the Dutchmen quit the town. Other manufacturers went to Metz and to Strasbourg for the purpose of engaging women to do the work, but this attempt was equally unsuccessful, in consequence of the number of the female operatives, coupled with the inferiority of their work, having always been insufficient to make up for the deficiency of male hands. The resistance of the workmen was so well organized, their resources so varied, that they were able to prolong the strike for the period of four months and a half, during which time the great mass of the operatives and their families subsisted without work, no doubt owing to assistance obtained from abroad. The result has been a slight increase of wages to the workmen engaged in some of the branches of the cigar trade, but in some of the principal establishments the "poupetiers" have almost entirely disappeared, and will not, it is said, be replaced, and the hours of labor have been reduced from 11 to 9½ hours a day.

The resistance they were for so long a period enabled to make has tended to encourage the pretensions of all the operatives engaged in the cigar-factories, and leaves room to fear that renewed attempts may ere long be made to enforce their anterior views. These men make a good living, earning on the average about 30 francs (\$6) a week for five days' work. They desire, it is said, to obtain the same amount of pay for four days' labor.

Work was resumed in all the factories, but the Antwerp cigar trade had received a serious blow; and as far as cigars of ordinary quality are concerned, it would appear that the native manufacturers are no longer able to make headway against foreign competition.

STRIKE OF MECHANICS IN BRUSSELS AND GHEENT.

Some time after these events, a strike of mechanics occurred in Brussels. The artisans asked for a reduction of working-hours, additional pay for all extra work, and a general increase of wages. They announced at the same time that the strike was not to be a general one, but that it would be carried on from one workshop to another, so that, while economizing their own resources, the men might compel the masters, one by one, to accept their terms.

The employers determined to resist, and decided that, upon the occurrence of a strike in any one establishment, a general lock-out should at once be proclaimed. The strike took place, and, whether from want of union among the masters, or from a feeling on their part that the demands put forth were, to a certain extent, well founded, it had a pacific solution, and ended by a compromise between the parties.

A short time later, another strike of a very similar character took place at Ghent. Thanks to the conciliatory intervention of the burgomaster of that town, a mutual understanding between the masters and the workmen, based also upon a compromise, was promptly and peaceably attained.

IRON INDUSTRY.

The report of the Charleroi Chamber of Commerce, extracts from which appear on preceding pages, shows the extent of the various branches of the iron industry in that part of Belgium.

One of the first objects which attracted the attention of the author on his first visit to Brussels was a statue of John Cockerill, an English engineer, the founder of the works at Seraing, who received posthumous honors, although in his lifetime he obtained but a small portion of the material reward to which his eminent abilities and enterprise entitled him. The works were established in 1816, and occupy the former palace of the Prince Bishop of Liège, with the enormous constructions since added to fit it for its present purpose. The vast pile of buildings forms a little town of itself. Iron and coal are extracted from mines within its walls, which also inclose a canal and railroad leading down to the river. Blast-furnaces, puddling-furnaces, rolling-mills, and forges occupy the interior, where iron is wrought into articles of all sorts, from pen-knives up to steam-engines and locomotives, some of them of twenty-five hundred horse power. The lion on the field of Waterloo was cast at these works. Mr. Cockerill was originally in partnership with the King of Holland, and after his expulsion from Belgium in 1830, purchased his share and became sole proprietor. The works are now carried on by an association known as the "Société John Cockerill."

As these celebrated works require more than a passing notice, the following extended and more recent account than that contained in the note-book of the author, extracted from the London Engineering, is here presented:

THE COCKERILL IRON AND STEEL WORKS, SERAING.

Since the death of John Cockerill the works at Seraing have been further enlarged, and at the present time they occupy a position perhaps second only to those of Krupp at Essen. The collieries are four in number, and are worked at depths of about 500 yards by the aid of twenty-four engines, giving a total of 900 horse-power. They give employment to 2,400 workmen, and their annual production is 350,000 tons. The company always keep from fifteen hundred to two thousand tons of coal on hand in case of a strike or of any other emergency. * * * The coke-furnaces consist of four groups, comprising 143 horizontal kilns, and twelve groups, comprising 216 Appolt kilns. Connected with them are six washing-machines, and thirteen steam-engines of 168 horse-power collectively. The number of workmen is 140, and the annual production of coke is 140,000 tons.

The blast-furnaces are five in number, with stoves for heating the blast and tapping-sheds for ordinary pig-iron. In this department are fifteen engines of 480 collective horse-power, and 300 workmen, the annual yield being 55,000 tons. * * * There are four more blast-furnaces now in course of construction for producing steel pigs. There are two foundries for iron and one for copper, employing 280 workmen, and six engines of 90 horse-power collectively, the annual yield being 5,000 tons. * * *

The foundries are large and commodious, and are well fitted with cranes and other appliances suited for the heavy work turned out there. The castings in and about the foundries were decidedly good and clean.

In the wrought-iron department there are 7½ heating-furnaces, 7 steam-hammers, 12 rolling-mills, and 55 engines of 1,900 aggregate horse-power; the workmen number 1,240, and the annual production is returned as 40,000 tons in rails, girders, bar and sheet-iron.

A very fine mill, by Collier of Manchester, was at work rolling tires for railway wheels, and a noticeable feature here was the care taken to insure the identification at any time of every tire rolled in this mill by impressing it with no less than fourteen stamps.

In the steel-works are ten Bessemer converters of from 5 to 7 tons, (six of which are in course of erection,) 16 heating-furnaces, 7 steam-hammers, 4 rolling-mills, and 46 engines of various kinds, of 3,079 horse-power collectively. This department employs 560 workmen, and turns out 17,000 tons of steel annually.

In the forges are 12 heating-furnaces, 7 steam-hammers, 70 smiths' fires, and 5 engines of 288 horse-power, the number of workmen being 200, and the annual production 1,500 tons of large and small work.

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The machine-shops are well arranged and appointed, and contain 363 tools, including lathes, shaping, planing, slotting, drilling, boring, and other machines. There are two hydraulic-presses, a number of portable, fixed, and overhead-traveling-crane, and 20 steam-engines representing 264 horse-power. The workmen here number 1,100, and the weight of the machinery produced annually is put at 7,000 tons.

In the bridge-building department and the boiler-shops are 55 drilling, bending, shearing, planing, riveting, and other machines; 3 hammers, 51 furnaces, and 11 engines of 120 collective horse-power, with 500 workmen, the annual production being 6,000 tons. The work turned out in the boiler-shops is very good, the marking-off being done in a systematic and workmanlike manner.

The iron-mines belonging to the company, by which they have secured a supply of iron for one hundred years, are not at Seraing, as already observed, but in the Liège and Namur districts, as well as in Luxembourg and Spain. They are 30 in number, and those in Belgium employ 17 engines and 800 workmen, the annual yield being 150,000 tons. The company's ship-building yard is at Antwerp, where they construct both ocean and river steamers.

It will thus be seen that, so far, at the Seraing works alone more than 7,000 hands are employed, while the engines represent considerably more than 7,000 horse-power. But this is not all, for there is a brick-field producing 15,000,000 of bricks per year, and giving work to a large number of hands, besides which there are 15 locomotives of small power for hauling purposes, and 420 workmen employed on the system of railways by which the works are traversed, and thus connected with the main railways of the country.

Besides the locomotives, there are also 80 horses employed about the works, 15 of them being in the collieries. From the annual report for 1872 it appears that there were 8,972 persons employed on the works; 254 steam-engines of 7,831 collective horse-power; the wages paid amounted to 8,500,000 francs, (\$1,700,000); the fuel consumed amounted to 350,000 tons, and the produce is put down at \$6,000,000.

It may readily be supposed that an establishment like that at Seraing does not consist wholly of workshops and machinery, but that in such a community the interest and welfare of the employees receive some consideration. This is especially so here, for a large dining-room, with a kitchen, proper arrangements being made for the custody of each workman's provisions. Similar arrangements being made for the custody where there are also baths for the use of the miners. There is likewise a dispensary, from which medicine is delivered gratuitously to all those employed on the works and their families. On the heights of Seraing, a short distance from the works and in an elevated and healthy situation, is a hospital built by the company. It has a special physician attached to it, and will accommodate between 80 and 90 patients, the staff of nurses and attendants consisting of nuns. There is also an orphanage near the hospital, at which 45 children of both sexes are now being brought up, most of whom lost their parents during a visitation of cholera at Seraing. Besides all this, the company extends its care to the future as well as to the present welfare of the workmen, and has established a society for relief and pensions. It is not compulsory on the workmen to belong to the society, but they are expected to join it, and every inducement is offered to them to do so. The company, however, in really deserving cases, grants, out of its own funds, temporary relief and pensions to those who do not belong to the society. We thus have an establishment possessing enormous resources, and being entirely self-contained and self-supplying, and independent of external aid, except in the matters of copper and timber. The company is managed by a board composed of five members, the active supervision of the works devolving upon M. Sadoine, as director-general, who is assisted by twelve chief engineers, each of whom is placed in charge of a distinct department. The working staff have suites of offices, besides which there are arrangements for facilitating engineering studies; there is also a library and laboratory attached to the establishment. One thing which strikes the visitor to Seraing is the extreme neatness and order which prevail throughout the works, and which is rigidly insisted upon.

The author's visit to these celebrated works was inopportune, as the Comte de Flanders, brother of the King of Belgium, and, as is commonly believed, a large stockholder, was on that day making an examination of the establishment, accompanied by M. Sadoine, the director-general, (on a previous attempt to personally examine the works the presence of the king caused a suspension of all business at Seraing.) From one of the chief engineers much information was obtained in regard to the extent and production of the establishment, which, however, it is unnecessary to present, as the foregoing statement is more complete.

From the author's note-book the following is selected in regard to—

Wages.—The men work chiefly by the piece, and their earnings, consequently, depend upon their industry. The price of puddling was stated to be 1 franc 56 centimes for 350 kilograms, being 90½ cents for a ton of 2,240 pounds, and 97 cents for 2,400 pounds, which latter usually constitutes a ton in English iron-mills. At this rate the men were said to average 7½ francs (\$1.50) per day. The price seemed remarkably low, but the gentleman who gave the information asserted that it was entirely accurate.

In the rolling-mills men earn from 5 to 6 francs (\$1 to \$1.20) per day. In machine-shops, the foremen earn from 6 to 7 francs, (\$1.20 to \$1.40,) the skilled workmen average 3½ francs, (65 cents,) and common laborers from 2 to 3 francs (40 to 60 cents) per day. In the coal-mines men average about 5 francs (\$1) per day. Hours of labor: from 6 to 8, 9 to 12, 1 to 4, and 4.10 to 6 o'clock, being nearly 10 hours per day.

Only about one fifth of the workmen are residents of Seraing; the principal part of the remainder live in the villages of Engis and Amay, from which they come daily in the cars.

Rents in Seraing: Two or three rooms, 20 francs (\$4) per month. Price of coal: 26 francs (\$5.20) per ton of 1,000 kilograms.

The ore used in the works is chiefly brought from the vicinity of Namur.

Engineering-shops at Antwerp.—For the purpose of building marine-engines and other machinery, the Société John Cockerill has shops at Antwerp. If all the engines built there are equal to the powerful one which propelled a steamboat from Ostend to Dover, in a terrible sea, after the equinoctial storm in September, 1872, the author can commend them—the only thing connected with the boat or passage indicated which deserves commendation.

LIÈGE.

Liège is finely situated at the junction of the Ourthe with the Meuse, in a fertile valley. The clouds of smoke usually seen from a distance hanging over it proclaim the manufacturing city, the Birmingham of Belgium; and the dirty houses, murky atmosphere, and coal-stained streets are the natural consequence of the branch of industry in which its inhabitants are engaged. The staple manufacture is that of fire-arms, employing at least 20,000 persons in and about the town. Liège is, in fact, one great armory, and has produced nearly a million fire-arms annually for some time past.*

The saddlery is also very good here, and a coarse cloth is manufactured in large quantities.

There is a royal cannon-factory and a small-arm factory in the suburb of St. Leonhard.

The cause of this commercial prosperity is the presence of coal in great abundance close at hand. The mines are worked upon very scientific principles. Some of them are situated so near to the town that their galleries are carried under the streets, so that many of the houses, and even the bed of the river, are in some places undermined.

Here, as well as at other places on the Meuse, at the mines in the district of Charleroi, as well as in many parts of Germany, women are employed in various occupations, which appear, to Americans at least,

*The number of fire-arms made at Liège in 1872 was as follows: Single-barreled fowling pieces, 179,866; double-barreled, 154,170; barter guns, called "bords," 49,471; holster-pistols, 17,664; pocket-pistols and revolvers, 326,181; muskets, 29,841. Total, 757,133.

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entirely unsuited to their sex. The author noticed that manure was swept from the streets and the markets by women, who earned thereby 30 cents per day. In the coal-mining regions of Belgium some were seen shoveling coal, others carrying coal on their backs in baskets made for the purpose. Their work is, however, now confined to the surface, and they do not, as was formerly the case in some places, work in the mines.

WAGES IN MAUBEUGE.

On entering Belgium from France, the rail-mills at Manheuge, on the French side of the line, were visited, and the rates of labor ascertained. Puddlers work by the ton, and, after paying assistants, earn from 8 to 9 francs (\$1.60 to \$1.80) per day. Other workmen not skilled earn, on an average, 3½ francs, (70 cents.)

From farm-laborers at work in the fields cutting grain it was learned that during harvest they received 3 francs (60 cents) per day.

SUGAR-INDUSTRY IN 1872.

There were 174 manufactories of beet-sugar and 41 sugar-refineries in 1872. After balancing the imports and exports, there remained for home-consumption of refined sugar and treacle 19,519,731 kilograms, which is an average consumption of 4.05 kilograms, or nearly 9 pounds per capita. In regard to this industry the British minister writes:

The sugar-industry is productive of unmixed advantages and profits to Belgium. It enriches the farmer, the landlord, and the treasury; it provides good wages for agricultural laborers near their own homes during the winter months, thus counteracting the noxious temptations offered by the great towns, and promoting the interests of social order as well as of agriculture. This industry doubles the produce of the land in cattle and corn. It thus supplies man with bread and meat, as well as with sugar and alcohol.

BRUSSELS.

At Brussels, the capital of Belgium, French is the prevailing language; and those who are acquainted with the French metropolis will find here many familiar features which give Brussels the character of Paris on a small scale. It has its picture-galleries, its opera, its cafés, a palace-garden in imitation of that of the Tuileries, and boulevards inferior only in extent to those of its great prototype. The *Bois de la Cambre* is to Brussels what the Bois de Boulogne is to Paris. The most remarkable manufacture at Brussels is that of lace, which is celebrated all over the world. The peculiarity which distinguishes it, in addition to its fineness, is that the patterns are worked separately with the most microscopic minuteness and are afterward sewed on.

The flax employed in the manufacture grows near Hal; the best comes from a place called Rebecque. The finest variety of the manufactured article is worth its weight in gold. The persons who spin the thread for Brussels lace, and also for the French cambric of Saint Quentin, are obliged to work in confined dark rooms, into which light is admitted only partially by a small aperture; and thus, being compelled to pay the most constant and minute attention to their work, they discipline the eye, and attain the faculty of spinning the flax of that web-like fineness which constitutes the excellence of these fabrics.

Kid-gloves, which are also made at this place, may be purchased cheaper here than elsewhere.

During the Franco-German war, when trade was diverted from Paris, there was an increased demand for the products of Brussels, which con-

sequently increased in price, and there was also an increase in the expenses of living, and these rates are still continued. Brussels derives substantial benefit from the permanent and temporary residence of large numbers of English-speaking people, who purchase largely of the laces, gloves, and other products for which this "*Petite Paris*" is celebrated. To statisticians and scientists it is known as the home of that eminent man, Adolphe Quetelet*, recently deceased, and the city where the first international statistical congress was held, (in 1853.)

GHENT.

This was formerly one of the largest manufacturing towns in Belgium, and is still a place of considerable manufacturing industry, the principal product being cotton goods. It is chiefly known in this country as being the place where the treaty of peace was signed in 1815 between the United States and Great Britain. In 1804, while united to France, it was rated as the third manufacturing town after Lyons and Rouen. During the discontents which broke out in Belgium in the fourteenth century, Edward III invited to England many Flemings, who brought over with them the art of manufacturing the finer woolen cloths, previously unknown; and by their assistance the English manufactures soon surpassed those of Flanders in point of excellence. In 1801 Lieven Baens, a Fleming, brought English workmen and spinning-jennies from Manchester to Ghent, and their work became so popular that in a few years 30,000 workmen and 80 steam-engines were employed. In 1460, the city of Ghent is said to have had 80,000 men capable of bearing arms. The number of weavers at that time amounted to 40,000. Ghent is especially noted for its celebrated prison, *La Maison de France*. This prison was visited and approved by Howard, and has been the model for most of the improved penitentiaries of Europe.

Capital punishment is abolished, and as there are no colonies to which convicts can be transported, offenders are condemned to imprisonment in proportion to the atrocity of their crimes. As the rations of food are so calculated as to be barely sufficient to sustain life, the prisoners are thus compelled to contribute to their own support. According to the nature of their offenses, the proportion of earnings they receive is more or less liberal. Part is paid to them at once, with which they are allowed to purchase such articles of convenience or comfort as the governor is authorized to supply at prices fixed by tariff, and the remainder is placed in a savings-bank, in order to accumulate until the period of their liberation. Three meals a day are the allowance, and the hours of work are never more than twelve nor less than six. On his discharge from confinement, the prisoner is frequently in possession of 250 francs from the produce of his industry; and a society has been formed for the purpose of procuring the employment, and thereby guarding against the relapse into crime, of liberated convicts. The prison now contains 1,200 convicts, chiefly employed in the manufacture of linen for the use of the army.

One of the latest novelties in Ghent is the introduction of penny-banks for the children in the schools—an innovation which is already doing much to give the workmen of the future provident habits, and is being introduced into England with good results.

BRUGES.

Early in the thirteenth century Bruges, among the cities of the Hanseatic League was the principal mart of the English wool trade, and became the chief resort of the Lombard and Venetian traders, who brought thither the manufactures of India and the produce of Italy to exchange for the merchandise of Germany and the Baltic. Ships from Venice,

*M. Quetelet, director of the Royal Observatory, died at Brussels, February 17, 1874.

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Gegoa, and Constantinople might at the same time be seen unload-
ing in its harbor, and its warehouses were filled with wool from En-
gland, linen from Belgium, and silk from Persia. Bruges is the cheapest
place in Europe in point of house-rents. A first-rate house may be
had for \$90, and a very good house for \$60 per annum. The chief
manufacture carried on is that of lace.

INDUSTRY OF BELGIUM IN 1872-73.

[Condensed from a report by the British minister, Sir H. Barron.]

The year 1872 has given the most brilliant results in most branches of industry. The
prosperity which set in after the peace of 1871 became further considerably increased.
Some trades, however, suffered partially from not having been able to command prices
commensurate with the enhancement of materials and labor. The working-classes
found in the great rise of wages ample means of comfort and savings. But their in-
come increases with their prosperity, as is proved by the actual decrease in sav-
ings-bank deposits. On the whole, the activity of all branches of trade in 1872 was
rare and unparalleled.

Above all, the trades connected with the manufacture and working of iron enjoyed
an exceptional prosperity. All the smelting-furnaces, iron-works, rolling-mills, ma-
chine-works, foundries, and nail-makers worked without intermission during the
whole year. Many new factories were erected; many of the old ones were enlarged.
At the same time the prices of iron and of its products rose without a check from the
beginning till the end of the year to figures previously unknown. Pig-iron doubled in
value during the twelve months. These prices left the producers good profits during
the first six months; but the prices of labor and of coal rose to such exorbitant rates
as to absorb finally the whole profits of the iron trade. Thus the year which began
so rich in promise ended in disappointment. The masters now find that they cannot
tempt buyers at the prices of iron, and cannot reduce those prices on account of the
excessive cost of production. Many works have been closed and furnaces blown out
in 1873, so that this trade is falling into a state of general stagnation. The present
year will leave no profits to the iron-masters in general, save to such as possess col-
lieries of their own; as, for instance, the monster establishments of Seraing, Coniliet,
Scheidt, &c.

The zinc and lead works are passing through a real crisis. The former industry,
long a speciality of Belgium and a staple element of Belgian trade, employs an
immense capital and working population. It is becoming quite crippled by the gradual
exhaustion of the zinc-mines of the country, especially of the once rich deposits of
Moresnet. The zinc-works thus losing their main source of profits are obliged to look
for supplies of ore to Spain, Italy, and Sweden, and have to struggle against the
English zinc-trade which has sprung up within the last few years. The English zinc-
works, now seventeen in number, producing about 18,000 tons of metal, are better cir-
cumstanced for procuring the ore at cheap rates from distant countries. This com-
petition has run up the price of ores, while at the same time all other raw materials
and labor have risen by 50 per cent., without a corresponding progression in the price
of zinc.

The glass-trade began the year 1872 favorably, and continued to prosper till October.
The demand was abundant; the prices were improving as well as remunerative. But
here again the prices of coal and labor outstripped those of the manufactured article.
Suddenly, in November, the orders from abroad ceased entirely; the warehouses be-
came encumbered with stocks; the manufacture had to be partially suspended; prices
had to be lowered; buyers continued to hold back. The trade is still passing through
a crisis, owing, in addition to other causes, to the increasing competition of the French
glass-blowers in the London market, aided by the superiority of their coals for this
industry.

The year 1872 was, on the whole, disastrous for the woolen-trade. An extreme and
unnatural prosperity had marked the whole of 1871 and the beginning of 1872. The
prices of wool and of all its products were run up beyond all reasonable limits by a spec-
ulative mania. The reaction set in at the end of March, followed by an intense crisis
of a year's duration, which caused heavy losses to the trade of Verriers. It subsided
gradually in the spring of the present year. The factories have resumed their usual
activity. The linen-trade has had a calm and prosperous year. The flax-crop of 1872
was one of the most abundant on record. The stalks grew to the unusual height of
from 3½ to 4½ feet. The bulk of the crop was sold rapidly at high prices, varying from
1,400 francs to 1,800 francs per hectare. The steeping of flax in the river Lys takes a
greater development every year. The year was a good one for all the trades connected

with this textile, notwithstanding the enhancement of the raw material. Some complaints emanate from the makers of flax sewing-threads that this product is losing ground in foreign markets, owing to the increasing use of sewing-machines, and consequently of cotton threads.

COAL TRADE.

*Statement showing the movement of the Belgian coal-trade during the following years.**
[Quantities in tons of 1 000 kilograms = 2,204 pounds English.]

	Produce.		Imports.	Exports.	Home consumption.
	Tons.	Value.			
1860	9, 610, 895	\$107, 128, 282		3, 450, 306	.....
1865	11, 241, 703	124, 896, 178	76, 041	4, 440, 488	7, 090, 000
1866	12, 774, 662	134, 031, 571	187, 137	4, 853, 758	8, 109, 000
1867	16, 755, 222	158, 252, 241	461, 130	4, 400, 364	8, 816, 594
1868	12, 298, 520	134, 871, 627	247, 719	4, 553, 000	7, 887, 318
1869	12, 926, 894	136, 116, 076	239, 362	4, 608, 940	8, 575, 299
1870	13, 697, 118	148, 646, 223	235, 250	3, 964, 841	9, 397, 224
1871	13, 331, 176	153, 603, 361	204, 584	4, 158, 569	9, 779, 130
1872	15, 658, 948	208, 559, 508	221, 890	5, 630, 197	10, 672, 024

* In this table coke is included under the imports and exports, being reduced to its estimated original weight in raw coal, at the rate of 100 kilograms of coal to 70 kilograms of coke.

It will be seen from the above table that the production, the export, and the home consumption of coal attained their climax in 1872. The quantities raised were—

	Tons.
In the province of Hainault	11, 616, 166
In the province of Liège	3, 653, 054
In the province of Namur	359, 688
Total	15, 658, 948

This is an amount never previously recorded, being an increase over 1871 of 1,925,772 tons. In 1872 the total exports of coal and coke exceeded those of 1871 by 891,800 tons and 259,007 tons respectively.

One extraordinary phenomenon of the year has been the shipment of many cargoes of coal to England, even to Newcastle itself.

PRICES OF PROVISIONS, GROCERIES, ETC.

The following statement indicates with but approximate accuracy the prices of groceries, meats, and the various articles of ordinary consumption by the families of work-people. The blank form was originally prepared for the United States, and therefore the names and classifications are not in all respects suited to Belgium.

Prices of provisions, groceries, and other leading articles of consumption, also of house-rent and board, in the towns of Antwerp and Charleroi.

Articles.	Antwerp.		Charleroi and vicinity.		General average.
	1872.	1874.	1872.	1874.	
PROVISIONS.					
Flour:					
Wheat, superfine	per bbl.	\$6 00	\$7 60	\$8 20	\$8 20
Wheat, extra family	do.	9 00	$\left\{ \begin{array}{l} 9\ 00 \\ \text{to} \\ 9\ 60 \end{array} \right.$	$\left\{ \begin{array}{l} 8\ 40 \\ 8\ 80 \end{array} \right.$	\$7 50
Rye	do.	$\left\{ \begin{array}{l} 5\ 00 \\ \text{to} \\ 7\ 00 \end{array} \right.$	$\left\{ \begin{array}{l} 9\ 60 \\ 4\ 00 \end{array} \right.$	12	8 87
Corn-meal	do.	$\left\{ \begin{array}{l} 5\ 00 \\ 7\ 00 \end{array} \right.$	$\left\{ \begin{array}{l} 4\ 09 \\ \text{to} \\ 4\ 28 \end{array} \right.$	$\left\{ \begin{array}{l} 4\ 10 \\ 4\ 20 \end{array} \right.$	
Beef:					
Fresh, roasting-pieces	*per lb.	7 00	18	17½	17½
Fresh, soup-pieces	do.	15	14	18	15½
Fresh, rump-steaks	do.	17	16	18	17
Corned	do.	11	16	17½	15
* It is probable that in this and other cases					

* It is probable that in this and other tables the "pound" is really $\frac{1}{2}$ kilogram, equal to 1.1 pounds.
† Per pound.

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ing the following years.*
[English.]

ts.	Exports.	Home consumption.
....	3,450,306
044	4,440,488	7,050,060
137	4,853,758	8,109,600
130	4,400,364	8,816,594
719	4,659,000	8,887,338
362	4,606,946	8,575,291
250	3,964,241	9,067,534
583	4,158,569	9,779,190
890	5,630,197	10,672,024

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	<i>Tons.</i>
.....	11, 616, 160
.....	3, 653, 094
.....	389, 688

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Charleroi and vicinity.		General av. charge.
1872.	1874.	
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17½	18	
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Prices of provisions, &c., in the manufacturing towns of Antwerp and Charleroi—Continued.

Articles.	Antwerp.		Charleroi and vicinity.		General average.
	1872.	1874.	1872.	1874.	
Veal:					
Fore-quarters					
Hind-quarters	per lb.				
Cutlets	do.				
Mutton:					
Fore-quarters	do.				
Leg	do.				
Chops	do.				
Pork:					
Fresh	do.				
Corned or salted	do.				
Bacon	do.				
Hams, smoked	do.				
Shoulders	do.				
Sausages	do.				
Lard					
Codfish, dry	do.				
Mackerel, pickled	do.				
Butter	do.				
Cheese	do.				
Potatoes	do.				
Rice	per bush.				
Beans	per lb.				
Milk	per qt.				
Eggs	per doz.				
GROCERIES, ETC.					
Tea, Oolong, or other good black	per lb.				
Coffee:					
Rio, green	do.				
Rio, roasted	do.				
Sugar:					
Good brown	do.				
Yellow C.	do.				
Coffee B.	do.				
Molasses	per lb.				
Sirup, common	per lb.				
Starch	do.				
Fuel:					
Coal	per ton				
Wood, pine	per cord				
Oil, coal	per quart.				
DOMESTIC DRY GOODS, ETC.					
Shirtings:					
Brown, 4-4, standard quality	per yard				
Bleached, 4-4, standard quality	do.				
Sheetings:					
Brown, 9-8, standard quality	do.				
Bleached, 9-8, standard quality	do.				
Cotton flannel, medium quality	do.				
Tickings, good quality	do.				
Prints	do.				
Mouseline, medium quality	do.				
Satinets, medium quality	do.				
Boots, men's heavy	per pair				
HOUSE-RENT.					
Four-roomed tenements	per month				
Six-roomed tenements	do.				
BOARD.					
For men, (mechanics or other workmen)	per month				
For women employed in factories	do.				

* Per 2,000 pounds.

PRICES OF FARM PRODUCTS AND MEAT IN BRUSSELS.

Mean price of the principal agricultural products and meat during five years, terminating with 1870.

[1 kilogram = 2.2046 United States pounds.]

Articles.	1865.	1867.	1868.	1869.	1870.
Farm products:					
Wheat..... per 100 kilograms..	Francs. 23.11	Francs. 36.02	Francs. 35.22	Francs. 27.61	Francs. 29.34
Rye..... do.....	15.80	25.11	25.97	21.02	21.10
Meadow..... do.....	16.41	29.82	30.35	23.69	24.52
Spelt..... do.....	17.41	25.07	25.31	20.65	20.76
Buckwheat..... do.....	18.31	24.39	25.46	25.49	21.40
Oats..... do.....	17.77	22.20	23.51	21.58	21.21
Barley..... do.....	18.25	27.14	25.54	23.13	22.49
Pears..... do.....	21.54	26.66	27.53	24.80	24.50
Horse beans..... do.....	20.10	21.11	25.21	21.72	24.79
Flax..... do.....	37.22	38.37	38.59	38.85	36.01
Rapeseed..... do.....	45.21	39.61	36.56	39.90	45.64
Potatoes..... do.....	5.09	9.76	8.20	6.66	8.47
Hay..... do.....	4.98	4.29	4.61	5.73	6.37
Hay..... do.....	10.40	6.88	7.15	9.69	10.30
Hops..... do.....	235.00	290.00	155.00	112.00	88.00
Butter..... do.....	2.55	2.36	2.66	2.63	2.97
Meat, (in Brussels market):					
Ox-beef { On foot..... per kilogram..	.71	.83	.80	.80	.81
{ Slaughtered..... do.....	1.38	1.56	1.42	1.41	1.50
Bull-meat { On foot..... do.....	.60	.68	.60	.69	.68
{ Slaughtered..... do.....	1.14	1.37	1.14	1.17	1.28
Cow-beef { On foot..... do.....	.62	.73	.64	.66	.71
{ Slaughtered..... do.....	1.16	1.45	1.21	1.29	1.33
Venison { On foot..... do.....	.97	.97	.94	.97	1.01
{ Slaughtered..... do.....	1.28	1.50	1.50	1.53	1.61
Mutton { On foot..... do.....	.63	.58	.71	.71	.73
{ Slaughtered..... do.....	1.22	1.32	1.21	1.36	1.33
Pork { On foot..... do.....	.82	.97	1.14	1.11	1.11
{ Slaughtered..... do.....	1.26	1.46	1.00	1.62	1.57

EXPENDITURES BY WORKMEN'S FAMILIES.

The difficulty of obtaining from workingmen the amount expended for provisions and other necessities of life was felt in Belgium as in other countries, arising chiefly from the fact that the laboring classes keep no account of their expenses. The following indicates a larger outgo than the ordinary workingman can afford, and it must have come from one of those large families whose aggregate earnings amount to a considerable sum; for the amount expended is in excess of the ordinary earnings of the head of a family. It is to be regretted that the weekly earnings were not stated.

Average weekly expenditures of a family consisting of two adults and four children in Charleroi, Belgium.

Articles.	Cost.	Articles.	Cost.
Flour and bread.....	\$2 10	Oil or other light, (in winter).....	\$0 20
Fresh, corned, salted, and smoked meats.....	2 21	Spirits, beer, and tobacco, (if any).....	40
Lard.....	30	House-rent.....	2 00
Butter.....	70	For educational, religious, and benevolent objects.....	05
Sugar.....	18		
Milk.....	16		
Coffee.....	28	Total weekly expenses.....	10 65
Soap, starch, salt, pepper, vinegar, &c.....	40		
Eggs.....	48		
Potatoes and other vegetables.....	60	Clothing per year.....	40 00
Fuel.....	50	Taxes per year.....	8 60

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The following statement comes from Juncet, the seat of the window-glass industry:

The cost of necessary provisions, such as bread, butter, cheese, coffee or chocolate, apples, vegetables, soup and meat for Sundays and fête days, for a laborer's family consisting of two adults and four children, \$5 to \$6. The same for the family of a skilled workman, the number being the same, from \$8 to \$10.

CONDITION OF THE WORKING CLASSES OF BELGIUM.

In addition to the facts already presented, the following condensed statements from the report of Mr. Gratian, British consul at Antwerp, in regard to the condition of the working classes of Belgium, will be read with interest.

In considering the economical causes which militate against the well-being of the working-classes of Belgium, the following are especially to be noted:

1. The low rate of wages.
2. The want of prudence, foresight, and economy.
3. Habits of intemperance.
4. The tendency to have recourse to coalitions and strikes.
5. Certain defects in the mode of taxation and in economical science.

As respects physical causes:

6. Wars and sufferings caused by armed peace.
7. Unsatisfactory relations subsisting between masters and men.
8. Unwholesome nourishment, insalubrious dwellings, and absence of home life.
9. Defective organization of public charity.

Among the moral causes are the following:

10. Ignorance, prejudice, sophisms, and social errors.

LOW RATE OF WAGES.

The standard of wages, taking all degrees of labor into consideration, is undoubtedly insufficient to satisfy the legitimate wants of the laboring population, and adopting, as an illustration, the position of workmen employed in manufacturing establishments, the following facts are brought to light. The average daily wages of mill-operatives do not exceed 2 francs (40 cents) a day. Setting aside Sundays, holidays, and days on which the operative remains idle, either on account of stoppage of work, or by his own default, the working-days will hardly exceed 250 in the year, making a maximum wage of 500 francs (\$1000) a year, 42 francs (\$8.40) a month, or about 10 francs (\$2) per week. Adding, in the case of a married operative, with wife and three children, 1 franc a day earned by some member of his family, a weekly budget of 16.50 francs (\$3.30) will be reached for five people. The expenses of this family, calculated at the lowest possible rate, will be the following:

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s and four children in

	Cost.
.....	\$0 20
.....	40
.....	2 00
.....	05
.....	10 65
.....	40 00
.....	8 60

Articles.	In ordinary seasons.	In dear seasons.
Bread, (2½ kilograms per day for five persons, at 30 or 50 centimes)	\$1 05	\$1 75
Potatoes, (3 kilograms a day, at 10 or 15 centimes)	42	63
Coffee and chicory, (beverage)	40	50
Vegetables	40	50
Butter or dripping	20	30
Clothing	40	40
Washing, soap, &c	20	30
Rent	40	40
Total weekly expenditures	3 47	4 68

There is no mention here of beer, meat, sugar, or of anything beyond the bare necessities of life. Diminish the family by one child, or add one-third even to the wages of the operative, and it still remains next to impossible that he can make both ends meet. This is by no means an exaggerated statement. There are probably 10,000 or 20,000 workmen's households in Belgium in this sad position.

ABSENCE OF PRUDENCE, FORESIGHT, AND ECONOMY.

No economical truth is more evident or more amply proved by experience than that reckless and improvident habits indulged in by the working-classes inevitably lead to misery and ruin. No artisan can cherish the hope of raising himself in the social scale, either in a moral or physical point of view, who is unable, when circumstances are propitious, to put by some of his earnings; and there is probably not one man, however hardly dealt with by fortune, who has not at some time or other of his life had such an opportunity. A small beginning made at an early period in life may bear marvelous fruit in the course of time, and there are workmen in Belgium who can easily earn 3, 4, or 5 francs a day. How many are there of those who actually do lay by money?

It is estimated that about 200,000 workmen in this country are certainly in receipt of the lowest of the above-mentioned rate of wages, and yet probably not one-fifth of them are in the habit of saving money. It is stated that only about 40,000 workmen in the whole country have accounts in the various public or private savings-banks, or hold public securities.

A great cause of misery to the workman is the loss of one day's work in the week, Monday being almost invariably an unemployed day in Belgium. May not the loss of this one day's wage suffice to put a stop to all possibility of saving, or even in some cases be sufficient in itself to throw a family into inextricable difficulties?

TENDENCY TO HAVE RECOURSE TO STRIKES.

According to a very prevalent opinion, the almost invariable result of coalitions and strikes on the part of the working-classes has been to aggravate their misery and distress. Workmen, however, do not, as has been seen, admit these arguments; and, following the lead of the English trades unions, strikes and combinations have acquired of late a wide-spread and cosmopolitan character. It was said, it is true, that at the workmen's congress held at Brussels in September, 1868, an opinion unfavorable to strikes had prevailed in the assembly; but this was not the fact; the following declaration, among others, relative to strikes, having been unanimously adopted by the congress:

"The congress declares that strikes, though not an infallible mode of remedying the evils to which the working-classes are exposed, are nevertheless, in the present situation of capital and labor, a necessity."

UNSATISFACTORY RELATIONS BETWEEN EMPLOYERS AND THE EMPLOYED.

One of the greatest drawbacks to the prosperity and well-being of the industrial classes consists undoubtedly in the absence of good-will and confidence between them and those by whom they are employed, particularly in the great industrial centers. This especially applies to the case of large joint-stock companies, where the ties existing between the operatives and the managers are of the slenderest description. So many men are wanted to-day, and they can be supplied at a moment's notice. When their services are no longer required, they are turned off. What becomes of them? They go to the "estaminet," and there their schemes of resistance are concocted, disturbances are organized, and riots planned. Such is probably the real history of the disturbances in Ghent, the Borinage, Marchiennes, Chatelineau, and Serding. Independently of the evil influences exercised by the leviathan establishments above referred to, M. Danby does not hesitate to throw the immediate responsibility of this unhappy state of things upon the middle and higher classes, and the spirit of speculation pushed to the extreme which characterizes the present period. The apparent disregard of the rights and interests of others involved in the reckless pursuit of wealth has embittered the feelings of those who have been its victims, and a character of extreme gravity, fraught with much future danger, has been imparted to these recent popular outbreaks.

UNWHOLESOME NOURISHMENT—INSALUBRIOUS DWELLINGS—WANT OF HOME LIFE.

Workmen in this country are, as a rule, very ill-housed and badly fed. Improvidence and carelessness combine to keep them and their families in a position of privation and discomfort, if not of absolute misery and want. A little more experience and knowledge of household economy on the part of the female population might avert in this respect an infinity of mischief. The evils of bad cookery have formed the subject of many a bitter diatribe, but they cannot be too frequently pointed out and insisted upon, especially in connection with the industrial classes, to whom an economical and skilful employment of their slender stores is so important a consideration. That the well-being of all classes of society depends, to a very considerable extent, upon good and wholesome nourishment cannot be contested; but it is not a little surprising

by experience than that classes inevitably lead to himself in the social scale, when circumstances are only not one man, however other of his life had such in life may bear marvel-ghum who can easily earn tually do lay by money y are certainly in receipt probably not one-fifth of about 40,000 workmen in private savings-banks, or

the day's work in the week, sum. May not the loss of saving, or even in some difficulties?

THINGS.

le result of coalitions and vate their misery and dis- it these arguments: and, mbinations have acquired id, it is true, that at the in opinion unfavorable to a fact; the following decim- nously adopted by the

le mode of remedying the s, in the present situation

D THE EMPLOYED.

l-being of the industrial confidence between them great industrial centers, uies, where the ties exist- endedst description. So ment's notice. When What becomes of them? stance are concocted, dis- ly the real history of the eam, and spending. Inde- en establishments above ate responsibility of this and the spirit of specula- at period. The apparent a reckless pursuit of s victims, and a character been imputed to these

—WANT OF HOME LIFE.

and badly fed. Improvi- families in a position of out. A little more expe- female population might cookery have formed the equently pointed out and ses, to whom an economi- a consideration. That considerable extent, upon t is not a little surprising

that so small a share of attention is in reality bestowed upon the proper education of women in the various matters connected with alimentation and the preparation of food. Society at large suffers more seriously from this cause than persons who have not de- voted some consideration to the hygienic questions involved in the matter would be disposed to believe.

Suitable and convenient habitations for the working-classes, at reasonable rents, are of the utmost importance also to their well-being. Fortunately this want has been partly met at Antwerp, and the lodging-houses erected of late years have contributed greatly to the comfort of their occupants, besides affording a fair interest upon the capital invested in these benevolent enterprises. It is to be inferred that commodious lodgings may have a tendency also to develop among the working-classes a greater love of home life, ("l'esprit de famille,") the absence of which has been so often and so justly deplored in this country.

HABITS OF INTEMPERANCE.

Among the causes which tend to aggravate the situation of the working-classes, intemperance may be placed in the first rank. The allurements of the estaminet (public house,) combined with the cheapness of spirituous liquors in this country, form an attraction which the majority of workmen are unable to resist, and hence flow incalculable dangers and mischief to themselves and their families. All efforts to extirpate or modify this evil have hitherto proved fruitless. According to calculations which have not been contradicted, it is estimated that there are about one hundred thousand licensed public houses in Belgium, for the supply of five million inhabitants, a proportion which is generally exceeded in the industrial centers. The evils resulting from this state of things were fully exposed in the report submitted to the House of Representatives during the session of 1867-'68.

It appears, however, that nothing was done to check this terrible evil, for in a report to the British government, dated Brussels, December 30, 1873, Sir H. Barron says in reference to this subject:

Nothing whatever is done to check the consumption of spirits, a main source of pauperism, crime, disease, and insanity. On the contrary, the authorities vie with each other in multiplying kermesses and festivals of all kinds, which are mere excuses for dissipation and drunkenness.

This vice more than keeps pace with the national prosperity, and completely prevents any improvement of the working-class. No temperance societies, licensing acts, or liquor-laws exist. The authorities shut their eyes to all abuses and disorders. The number of drink-shops goes on increasing in the following ratio:

1866.....	94,671
1867.....	95,754
1868.....	96,900
1869.....	99,244
1870.....	100,763

There is now one liquor shop for every forty-eight inhabitants. The official record of the average home consumption of spirituous liquor (proof-spirit) for the ten years 1861-1870 was 396,152 hectolitres = 8,715,314 gallons, being 1.80 gallons per head of the population per annum. This large figure is, however, really much below the truth, as the quantity produced is, as shown above, certainly much understated.

LABOR IN SWEDEN AND NORWAY.

The following information in regard to cost and condition of labor in Sweden and Norway is condensed from a report made to the Department of State by Hon. C. C. Andrews, minister resident of the United States at Stockholm, under date of September 24, 1873:

In my report of May 10, 1872, I had the honor to report that there had recently been in Sweden an almost general increase of the wages of mechanics 25 per cent. Since then a similar rise of wages has extended to about all other industries. In some, in the immediate neighborhood of the lumber-shipping ports, it has amounted to upward of 100 per cent. Substantially the same may be said as to Norway.

The principal causes of this increase of wages have been the excellent agricultural crops for four successive years; the remarkable rise in the prices of iron and lumber, and consequent increased activity in those industries; the emigration, which from both these countries to the United States has reached in the aggregate about 150,000 persons; the demand for labor in constructing new and extensive lines of railway, and the influence of workmen's organizations. As the importance of the labor question seemed to render it proper that I should take more than ordinary pains to collect reliable data on the subject, I began, personally, the collection of facts bearing on the matter as early as January last, since when I have visited a large number of leading industrial establishments, as well as dwellings of working-people in various parts of Sweden and Norway. Although both of these countries annually publish very thorough statistics—Sweden having annually collected and published population statistics for a century and a quarter past—there are none in either country as to wages of labor, except in Sweden as to the single industry of agriculture, which fact has made it necessary to resort to special and personal investigation. I now have the honor, therefore, to transmit herewith—

1. A table showing the wages of labor in Sweden in Swedish money, and also in money of the United States.

2. A table showing the prices of the necessities of living, which, in the main, will answer equally well in respect to Norway; also to submit some facts and remarks on the condition of the industrial classes of Sweden and Norway, separately as to each country.

WAGES IN SWEDEN.

Table showing the rates of wages in Sweden (in Swedish and in United States money) in 1873.

[NOTE.—3.76 rik-dollars (3 rik-dollars and 76 öre) are equivalent to \$1, United States gold. Gold dollars of the United States sell in Stockholm at 3.75 rik-dollars each; but in buying them at a bank in Stockholm one must pay 3.83 rik-dollars. Exchange on New York, payable in gold, is at the same rate, namely, 3 rik-dollars and 83 öre for \$1. Where Swedish money is reduced to money of the United States in this and the following tables, as well as in the text, I have assumed 3.76 rik-dollars to be equivalent to \$1 in gold.]

Occupation.	Number of hours of actual labor.	Wages per day.		Remarks.
		Swedish money, (rik-dollars.)	United States gold.	
Agriculture:				
Best male hands { Winter.	7 to 10	1.75	\$0 46	
Best male hands { Summer.	12 to 13	2.50	66	
Bakers:				
Best	12	2.00	53	Free board and lodgings.
Average	12	1.50	40	Free board.
Basket-makers:				
Best	10	3.00	80	
Average	10	1.25	33	
Best-sugar operatives:				
Best	12	1.75	46	Technical director, \$975 a year.
Women	12	1.00	26	Engineer, \$530 a year.
Blacksmiths	11	2.00	80	
Bone-meal-factory hands	11	1.50 to 2.50	\$0 40 to 66	Free rent and fuel.
Book-binders:				
Average	11	3.00	80	
Women, best	11	1.40	37	
Book-keepers, average				\$525 to \$800 a year; cashiers, \$1,000 to \$1,600 a year.

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tical statistics for a cen-
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United States gold. Gold de-
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3.76 six-dollars to be equivalent

Remarks.

Free board and lodgings.
Free board.

Technical director, \$975 a year.
Engineer, \$530 a year.

Free rent and fuel.

5 to \$900 a year; cashiers, \$1,000
to \$1,400 a year.

LABOR IN SWEDEN AND NORWAY.

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Table showing the rates of wages in Sweden, &c.—Continued.

Occupation.	Number of hours of actual labor.	Wages per day.		Remarks.
		Swedish money, (rix-dollars.)	United States gold.	
Boot and shoe makers:				
Best	12	3.00	\$0 50	Generally by piece.
Average	12	2.50	66	
Apprentices	12	2.00	51	
Women, with machine	12	2.50	66	20 per cent. of those working on shoes are women.
Brewers:				
Foreman	12 to 13	4.00	1 06	
Common	12 to 13	3.00	53	Paid monthly; free room, fuel, lights, and 24 bottles beer daily. \$50 a year; free room and washing.
Cabinet-makers:				
Best	10	2.86	76	
Average	10	2.31	62	Generally work by hour; several hands at one shop save 200 rix-dollars a year.
Apprentices	10	2.00	53	
Candle (stearine) makers	12	2.00 to 3.00	53 to 80	
Candle (stearine) women	12	1.00 to 1.25	26 to 33	Nearly all free rent; the work-master has \$900 a year and per-centage.
Carpenters, house	12	3.00	60	
Carvers in wood	10	5.00 to 8.00	1 32 to 2 12	
Carriage-makers:				Generally by hour.
Foreman	11	3.00	60	
Average	11	2.50	66	
Cigar-makers:				By piece; free allowance of cigars to males.
Finishers	11	4.00	1 06	
Average	11	3.30	87	
Boys	11	.75	20	\$132 a year, board and lodgings; best boys, \$54 a year, board and lodgings; boys under 11, only clothes, board, and lodgings. Foreman, \$500 a year; overseers, \$265.
Women } Best	11	3.00	80	
Women } Average	11	1.25	33	
Chimney-sweepers, foreman				Those with families, free rent and doctor
Cloth (woolen) factory weavers:				
Women	11	.84 to 1.33	22 to 35	
Girls	11	.66	16	Rorsstrand factory.
Boys	11	.75	20	
Spinners, male	11	2.00	53	
China-ware factory:				Free board and lodgings.
Best men	10 1/2	7.00	1 85	
Average	10 1/2	2.25 to 4.00	66 to 1 06	
Boys	10 1/2	1.00	26	Free doctor and medicine; wages likely to rise 20 per cent.
Women	10 1/2	1.50 to 3.00	40 to 80	
Confectioners:				
Best	11	1.66	41	Free board and lodgings.
Average	11	1.45	41	
Coppersmiths:				
Best	12	6.00	1 59	Free doctor and medicine; wages likely to rise 20 per cent.
Average	12	3.00	80	
Cotton-spinners, male	12	3.00	96	
Cotton-weavers:				Free doctor and medicine; wages likely to rise 20 per cent.
Females	11	1.33	35	
Over 18, average	11	1.00	26	
Girls under 18	11	.65	17	Free board and lodgings.
Doors and sash makers	12	3.50	93	
Dyers:				
Foreman	11	4.16	1 10	Free board and lodgings.
Journeymen, average	11	2.50	66	
Engineers on sea-steamers				
Firemen on sea-steamers				\$730 to \$530 a year and board. \$10 to \$12 per month and board
Flower (artificial) makers		1.00	26	
Furriers:				
Men	12	3.00	80	Females paid by the month.
Women } Best	12	2.33	62	
Women } Ordinary	12	1.33	35	

Table showing the rates of wages in Sweden, &c.—Continued.

Occupation.	Number of hours of actual labor.	Wages per day.		Remarks.
		Swedish money, (rix-dollars.)	United States gold.	
Gas-makers:				
Foreman	12	6.00	\$1 59	
Stokers	12	2.50	66	Free doctor and medicine.
Mechanics, fitters, &c.	12	2.50 to 3.00	60 to 80	Free doctor and 13 cents a day when sick.
Common laborers	12	1.75	46	
Gilders:				
Workmen	10	2.00 to 2.66	53 to 71	
Foremen	10	3.25	86	
Glassmakers:				
Workmen	10	5.00	1 32	} Free rent, fuel, and lights.
Common laborers	10	1.00	26	
Glaziers	11	2.00 to 2.50	53 to 66	
Glycerine-factory:				Mostly by piece.
Men	12	2.00	53	
Women	12	1.25 to 1.50	33 to 40	
Gold and silver smiths:				
Best	11 to 12	3.35	90	
Average	11 to 12	2.50	66	
Foreman	11 to 12	3.35	90	Free rent and 6 per cent. of profits.
Hair-cutters	11	1.66	43	Paid by month; free board and lodgings.
Harness-makers	11	2.50	66	
Hat-makers:				
Best	11	5.00	1 32	
Average	11	3.00	80	
Female assistants	11	1.60	41	
Instrument-makers:				
Chemical	10	2.00 to 8.00	53 to 2 12	
Surgical	10	4.00 to 5.00	1 06 to 1 32	Free rent.
Apprentices	10	2.00	53	
Iron-fundry:				
Best hands	12	3.00	80	
Average	12	2.00	53	
Common molders & found-ers	12	2.75	72	Free lodging.
Iron-production:				
Master at refining-heater ..	12	6.60	1 75	
Master at rolling-mills ..	12	4.75	1 26	
Master at blast-furnace ..	12	3.25	86	
Master-mechanics	12	5.00	1 32	
Workmen at blast-furnace ..	12	2.00	53	} Lodgings and fuel free.
Workmen at roasting-fur-nace	12	2.00	53	
Workmen at rolling-mills ..	12	2.40	63	
Smiths	12	2.37	62	
Laborers, common	12	1.25 to 2.00	33 to 53	
Lamp-lighters, (60 lamps each)	12	2.00	53	
Lithographers:				
Best	9	5.00	1 32	
Average	9	2.00	53	
Stevedores	12	4.44	1 15	} Are paid 37öre (10 cents) per hour.
Lumbermen	12	2.00	53	
Cutting trees in winter ..	12	2.00	53	
In saw-mills, average	12	3.00	80	Free rent and doctor.
Machinists:				
First-class	10	3.25	86	
Second-class	10	2.75	73	
Apprentices	10	1.25	33	
Masons:				
Bricklayers (Best	12	4.25	1 12	} By hour.
(Average	12	3.60	95	
(Tenders to	12	2.50	66	
Women tenders	12	1.50	40	
Plasterers	12	2.00	53	
Masters of steam-vessels:				4 to 7 cents per square foot.
First				\$13.25 to \$16 per month and 5 per cent. of gross earnings.
Second				\$53 to \$80 per month and 8-10 per cent. of net earnings.
Third				\$26.50 to \$40 per month and no per centage of earnings; generally small vessels.

LABOR IN SWEDEN AND NORWAY.

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Table showing the rates of wages in Sweden, &c.—Continued.

Remarks.	Occupation.	Number of hours of actual labor.	Wages per day.		Remarks.
			Swedish money, (rix-dollars.)	United States gold.	
	Mates:				
	Fish steam-coasters.....				\$16 per month and 1 per cent. of net earnings.
	Fish sea voyages.....				\$35.50 per month.
	Second.....				\$30 to \$32 per month.
	Masters of sailing-vessels.....				\$13.25 to \$16 per month and 5 per cent. of gross earnings.
	Mates of sailing-vessels:				\$20 to \$21 per month.
	Fish.....				\$13.25 to \$16 per month.
	Second.....				
	Match-factory:				
	Skilled hands.....	11	4.00	\$1 06	And free rent.
	Ordinary hands.....	11	2.00	80	
	Women.....	11	1.25	33	
	Boys { 18 years old.....	11	1.25	33	
	{ 14 years old.....	11	.80	21	
	Boys { 12 years old.....	11	.60	16	
	Second.....				
	Musket-factory:				
	Skilled hands.....	11	4.00	1 06	
	Average hands.....	11	2.50	66	
	Painters:				
	In fresco.....				
	Common, first-class.....		6.00	1 50	
	Average.....	11	4.01	1 06	
	Apprentices.....	11	3.00	80	
	Photographers.....		4.00 to 5.00	1 06 to 2 12	About the same as cabinet-makers.
	Print-makers.....				Free doctor.
	Planing and mooling with machine.....	12	2.00	53	
	Printers:				
	Compositors { Best.....	10	5.00	1 33	
	{ Average.....	10	3.00	80	
	On machine { Best.....	10	4.00	1 06	
	{ Average.....	10	3.00	80	
	Rope-makers:				
	Best.....	11	3.00	80	
	Average.....	11	2.50	66	
	Days under 18.....	11	1.75	46	
	Saddle-makers.....	11	2.00 to 2.50	53 to 66	Also \$10 a year clothing.
	Seamen:				
	On steamers.....				
	On sailing-vessels.....				\$3 to \$10 per month and board.
	Ordinary.....				\$12 to \$14 per month and board.
	Shirt-makers:				\$3 to \$10 per month and board.
	Best, with machine.....	10	3.33	90	One-half of the operatives in a factory of 400 sew at home.
	Women { Average, with machine.....	10	2.33	64	
	{ On collars, average.....	10	2.75	73	
	Shirt sewing, by hand:				
	Over 16 years { Best.....	10	2.30	58	
	{ Average.....	10	1.00	26	
	Girls under 15 years.....	10	.50 to .80	13 to 21	Generally at home.
	Ironers:				
	Best.....	10	2.00	51	
	Average.....	10	1.58	41	
	Servants:				
	Male.....				
	Female.....				20 to 60 rix-dollars (\$3.30 to \$16) per month and board.
	Ship-builders, iron:				8 to 30 rix-dollars (\$2.14 to \$3) per month and board.
	Most skilled.....	11	5.00	1 32	
	Less skilled.....	11	4.00	1 06	
	Second-class.....	11	3.00	80	
	Ship-girls, best.....		2.00	53	Paid by month.
	Silk-factory:				
	Work-master.....	12	5.00	1 32	And free rent.
	Weavers, women { Best.....		3.00	80	Hand-looms, by piece.
	{ Average.....		1.33	35	Hand-looms, by piece; free doctor.
	Stone-cutters:				
	Letterers on monuments.....		5 75	1 51	
	Best cutters.....	12	4.50 to 5.50	1 18 to 1 32	Generally by piece.
	Average on granite.....	12	3.50	93	

Table showing the rates of wages in Sweden, &c.—Continued.

Occupation.	Number of hours of actual labor.	Wages per day.		Remarks.
		Swedish money, (rix-dollars.)	United States gold.	
Stone-blasters.....	12	3.75	\$1 00	
Stove-makers, earthen.....				
Artistic hands { Summer.....		10.00	2 64	
{ Winter.....		4.00	1 06	
Average workmen.....	11	3.00	80	
Women { Summer.....	12	1.60	26	
{ Winter.....	9	.80	21	
Straw-hat makers:				
Foreman.....	11	5.00	1 32	
Average male hands.....	11	4.00	1 06	
Women { Best, by piece.....	11	3.00	80	
{ Average.....	11	1.66 to 2.00	44 to 53	
Tailors:				
Best cutters.....				\$400 a year.
Male sewers.....	12	3.00	80	
Women, with machine.....	12	1.25	33	
Tannery:				
Tanners.....	11	3.00	80	
Common laborers.....	11	2.00	53	
Tin-plate:				
Best.....	11	5.00	1 32	
Second-class.....	11	3.00	80	
Boys.....	11	1.25	33	
Women.....	11	1.00	26	
Trunk-makers.....	12	2.33	61	
Upholsterers.....	12	2.00 to 4.00	53 to 1 06	
Washing and ironing.....				Finest shirts, per dozen, 3.60 rix-dollars, or 96 cents; ordinary shirts, per dozen, 3 rix-dollars, or 80 cents; miscellaneous, per 20 pounds, 3 rix-dollars, or 80 cents.
Wine factory:				\$1.25 a year.
Workmen.....	10½	2.00	53	
Women.....	10½	1.25	33	

Statement of the standard retail prices, in United States coin, of subsistence and other necessities, at Stockholm, for the year 1873.

Articles.	Value.	Articles.	Value.
Flour, best..... per bbl.....	\$11 00	Tea..... per lb.....	\$1 10
Wheat-meal..... per 50 lbs.....	70	Soap..... do.....	11
Rye-flour..... do.....	53	Starch..... do.....	12
Rye-meal..... do.....	40	Stearine candles..... do.....	20
Oats grits:		Kerosene oil..... per gall.....	66
Swedish..... per lb.....	4	Wood:	
English..... do.....	6	Beech, in common use..... per cord.....	8 00
Barley grits..... do.....	31	Pine and spruce..... do.....	5 50
Rice, Carolina..... do.....	8	Shirting:	
Potatoes..... per bush.....	60	Bleached..... per yd.....	20
Pease..... per qt.....	6	Unbleached..... do.....	11
Fresh beef, mutton, veal, and pork..... per lb.....	14	Calico..... do.....	11
Salt pork, American..... do.....	14	Linen..... do.....	45
Ham, smoked..... do.....	20	Mixed half wool and cotton checkered cloth, in common use for working-women's dresses..... per yd.....	35
Lard..... do.....	16	Black woolen cloth, double width, suitable for trousers and coats..... per yd.....	2 65
Baltic herring, fresh..... per 50.....	40	Shoes:	
Salt herring..... per lb.....	4	Plain, but durable, for women..... per pair.....	1 75
Salt codfish..... do.....	6	For ladies..... do.....	4 00
Poultry, undressed..... do.....	35	Boots:	
Butter, undressed..... do.....	28	Plain, but durable, for workmen..... do.....	3 75
Cheese..... do.....	20	For gentlemen..... do.....	5 50
Milk..... per qt.....	6	White woolen undershirts..... each.....	2 50
Eggs..... per doz.....	20	White woolen drawers..... per pair.....	2 50
Sugar:		Woolen stockings..... do.....	53
Lump..... per lb.....	14	House-rent, two rooms, for working people..... per month.....	4 00
Brown..... do.....	10		
Molasses..... per qt.....	12		
Ginger..... per lb.....	37		
Coffee, best Java..... do.....	27		

LABOR IN SWEDEN AND NORWAY.

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WAGES AND THE PURCHASE-POWER OF MONEY.

It seems natural and just that a man's labor should be worth, and that his wages should be, as much as, with economy and prudence, will comfortably maintain himself and family, enable him to educate his children, and also to lay by enough for his decent support when his laboring powers have failed.

Whether wages are high or low, of course, depends not on their absolute amount, but on their purchase-power. If in one country a dollar will go as far in procuring necessities as two dollars will in another, other things being equal, then a dollar a day in the first country is equally as high wages as two dollars a day in the latter country.

AGRICULTURAL LABOR.

As to agricultural labor, it may be said that in 1871 the average wages of best workmen by the day in summer was 1 rix-dollar and 85 öre, and in winter 1 rix-dollar and 18 öre; and of best female hands, in summer, 96 öre, and in winter, 64 öre. During the past three years agricultural wages have risen on an average 36 per cent. Assuming that they have risen 25 per cent. since 1871, the average day-wages for best male hands in summer would now be 2 rix-dollars and 31 öre, (61 cents.) and in winter 1 rix-dollar and 45 öre, (38 cents.); of best female hands, 1 rix-dollar and 20 öre (31 cents) in summer, and 80 öre (21 cents) in winter. It is common to employ men, women, and children in agricultural labor. Sometimes a dozen or twenty such hands will be seen at work together in a field not larger than twenty acres. Sometimes a gang, one might say, of women may be seen hoeing all abreast, with a male overseer standing in front and facing them. And here I may say that generally, in Sweden, the earnings of workmen's wives will average 150 rix-dollars each a year, though, of course, in most cases, for a woman to work out who has young children must be at a sacrifice of true domestic economy.

I estimate the average wages of mechanics to be 73 cents per day, equal to \$4.38 per week, or for a year of 300 working-days, 825 rix-dollars (\$220.)

COST OF LIVING.

As to the expenses of living, there are no published statistics which go into details. The average value of the allowance of subsistence among agricultural employers for a family, say of man, wife, and three children for one year, is 253 rix-dollars, (\$75.26.) But this would furnish too meager a diet to admit of its being adopted as a standard. To bring it up to what is reasonably nourishing, there should first be added to it 25 per cent. on account of increased prices in towns, which would make it 353 rix-dollars and 75 öre. There should then probably be added the retail value of the meat-ration of a garrison soldier for a year, namely, 85 rix-dollars and 31 öre, which would bring the sum up to 439 rix-dollars and 6 öre, which must cover all expenses of provisions and groceries.

The average value of the ration of a garrison soldier at government price is, as above stated, 56.12 öre (14.9 cents) per day, or 204 rix-dollars and 47 öre (\$51.47) per year. (The commutation value of a single ration in the United States Army during the civil war was 30 cents.) Allowing that the family of a workman, wife and three children, will consume double such a ration in a year, the expense of so much subsistence at government price would be 409 rix-dollars and 67 öre, (\$108.94.) But a workman would need to exercise extraordinary foresight, and buy his subsistence at wholesale, in order to get so much for that sum of money. If we allow, then, for such a family—

	Rix-dollars.	
For subsistence	409.67	\$108.94
House-rent	110.00	37.33
Clothing	130.00	34.50
Fuel	70.00	18.25
Miscellaneous	50.00	13.25
Total	799.67	212.27

We have, say, 800 rix-dollars as the total annual living-expenses of a family of five members. This would answer tolerably well out of Stockholm, but here one should add the sum of 60 rix-dollars on account of rent, in order to procure two reasonably good rooms beside a small kitchen. This would then make an allowance for the expenses of living in Stockholm, for such a family as above mentioned, 860 rix-dollars, which, with prudent management, would be sufficient to carry them through the year in a tidy and wholesome manner. But the wages of an average mechanic having constant employment will, as we have seen, amount to but 825 rix-dollars per year, so that if he has a family, they will have to live sparingly in order to get along. As a general rule, the

Remarks.

year.

t shirts, per dozen, 3.60 rix-dollars, or 96 cents; ordinary shirts, per dozen, 3 rix-dollars, or 75 cents; miscellaneous, per 20 shirts, 3 rix-dollars, or 75 cents. 1 year.

subsistence and other necessa-

	Value.
.....per lb	\$1 10
.....do	11
.....do	12
.....do	20
.....per gall	66
.....per cord	8 00
.....do	5 50
.....per yd	50
.....do	11
.....do	11
.....do	45
.....cotton checked	
so for working-women	
.....per yd	35
double width, suitable	
coats.....per yd	2 65
for women per pair	1 75
.....do	4 00
for workmen do	3 75
.....do	5 50
.....do	2 50
.....per pair	2 50
.....do	53
.....for working people	
.....per month	4 00

families of workmen do not spend 800 rix-dollars, nor even perhaps 700 rix-dollars, for the necessities of living. On the whole, considering present prices and the acknowledged scarcity of suitable dwellings for working-people, wages cannot be considered as more than living wages for men with families. A single man, however, can make good savings, and ought to lay up money enough for a good support when he becomes unable to work.

The larger mechanical and manufacturing establishments usually clear from 10 to 25 per cent. on their capital.

CERTAINTY OF PAYMENT OF WAGES.

Wages are paid with certainty, and either weekly or semi-monthly. Not unfrequently they are paid on a Friday, partly that the family can have the money for Saturday's market, and partly to prevent the money from being dissipated away by the workmen on Sunday. In trade the cash-system generally obtains. In the larger towns it is the same here as everywhere else, that a certain class will pay cash at a shop till they can manage to run up a bill, and then will go to another shop to trade. Of course all such losses compel shopkeepers to charge higher prices, and the dishonest purchaser, in the long run, gains nothing by his tricks.

As to the legal collection of debts, if one desired, for instance, to collect a demand of 20 rix-dollars, he would, in the country, sue before the "härads-rätt," or district court, or before the provincial executive court, and in a city, before the city executive court.

It is not requisite that an attorney be employed, though it is more convenient to have one. His charges in a city would be about 10 rix-dollars, (\$2 65). In the city a defendant must answer in eight days; in the country, fifteen days, or three weeks if out of the district. Appeal to a higher court may be had in the smallest matter. Fees of witnesses depend on their occupation, and vary from 1 to 10 rix-dollars a day. Everything, except actual or necessary clothing, bed, and necessary tools, can be taken on execution. Half the salary of an official may be attached in the hands of the governments. Imprisonment for debt is allowable, but not often resorted to. A poor debtor can swear out.

CLOTHING.

As to clothing, it may be said, in brief, that the Swedes take a pride in being tidily dressed, and that the clothing they wear is generally serviceable. In the province popularly known as Dalecarlia the peasantry of each parish have a different and fanciful style of dress. A sort of blouse worn by women, and coats worn by men, are trimmed with sheep-skin with the wool on. The men there still adhere to the fashion of tight breeches. Wooden shoes are worn a good deal by working-people in the country for every day, also leather shoes soled with wood. A common article for dresses among working-women is a home-woven cloth of half wool and cotton. There is a large shoddy manufactory at Stockholm.

Operatives at most of the larger establishments have either a voluntary sick-fund of their own, or else a small amount of their monthly wages is retained by their employers for a fund for the payment of a doctor for medicine, and if need be the expenses of burial. At the Stockholm gas-works the men have their own fund, to which they contribute 1 rix-dollar a month. In case of sickness, a man receives 6 rix-dollars a week during six weeks, and after that time 4 rix-dollars a week, if he is sick so long, and in case of death, 100 rix-dollars for funeral expenses. The book-binders of Stockholm have an old fund, so that by contributing 5 rix-dollars per year, a member can receive 5 rix-dollars a week when sick, and 50 rix-dollars for burial. It does not appear to be usual to incur extravagant expense for funerals.

There is still a great supply of labor of certain kinds, and especially of house-servants. People in rather humble life employ one or more servants; and probably the average of families do not pay for a house-maid over 75 rix-dollars (\$20) a year and board. The 21st of October is the usual time of changing help held by the year.

In the summer the number of hours for actual work often exceeds twelve per day. For the whole year eleven hours per day is probably the average of actual work. There is a desire among workmen to have the time reduced. The tendency to work by the piece or by the hour is rapidly increasing. Some employers have, with advantage, introduced the practice of allowing their workmen a percentage of the whole earnings; for example, as extra compensation, to divide 10 per cent. of the gross earnings among their hands. The leading printer in Stockholm pays compositors 30 öre per 1,000 eas, and every three months adds 5 per cent. additional on what has been earned.

The Swedish "Patriotic Society" makes numerous awards of medals every year to persons in humble life who have performed many years of exemplary service.

As the most of the railways in Sweden belong to the state, there are many men thereby employed by the government in their construction.

SAVINGS.

The Swedes are naturally inclined to free living, and are less sparing than most of the other continental nationalities. The practice of saving is, however, much on the increase, and is undoubtedly considered among the more intelligent as a moral duty. The first savings-bank started in Stockholm was in 1823. The whole number of such banks in Sweden in 1865 was 186. In 1870 they had increased to 235. The number of new depositors during 1870 was 66,020; the amount deposited during the year was 19,409,657 rik-dollars; the amount taken out, 12,031,056 rik-dollars. At the end of that year 354,357 persons had deposits in the savings-banks amounting to 57,376,611 rik-dollars, of which 276,863 rik-dollars were in deposits (the whole amount the party had on deposit) of from 1 to 10 rik-dollars, belonging to 80,477 different depositors; 631,624 rik-dollars in deposits of from 10 to 25 rik-dollars, belonging to 38,410 depositors; 1,119,479 rik-dollars in deposits of from 25 to 50 rik-dollars, belonging to 30,825 depositors; 2,363,774 rik-dollars in deposits of from 50 to 100 rik-dollars, the largest proportion being in deposits of upward of 500 rik-dollars. It is estimated that at the end of the present year the amount on deposit will be 80,000,000 rik-dollars.

MEANS TO ENCOURAGE SAVINGS.

There is an association in Stockholm called the Fosterlands Union, for the purpose of encouraging savings. During the few years it has been in operation it has gratuitously circulated about twenty thousand pamphlets and circulars, explaining the advantages of even small savings. It also awards premiums in money for exemplary permanent savings, such as investments in the annuity and capital institution of Stockholm, which has branches in various parts of the country. In this institution, for example, if 25 rik-dollars be deposited at the time of a person's birth to procure him a life annuity when he arrives at the age of fifty-five, it will yield him from that age as long as he shall live 100 rik-dollars a year. In 1872 the Fosterland Union awarded this annuity institution in all to 2,884 rik-dollars, for exemplary investments in working-people. The highest premium awarded was 75 rik-dollars. No premium has been given for deposits amounting in any year to over 500 rik-dollars; and hereafter none will be given for deposits amounting to over 200 rik-dollars in a year.

Savings-banks can be established in any province (the Swedish counties, being large, are habitually called provinces) by the consent of the governor of that province. The depositors or shareholders have right to choose the directors of the bank, and there are no other guarantees of security. The government appoints one director or inspector of the annuity institution of Stockholm, but the other members of the board of direction are chosen by the investors. There are no other guarantees of security. The following are a few of the instances of savings that have come under my knowledge:

The operatives at the Gustafsberg china-factory have a union store, to the fund of which each operative is required to contribute one rik-dollar a month, his whole share not to exceed 100 rik-dollars. The sale of goods out of the store last year amounted to 100,000 rik-dollars, with a profit of 25 per cent. on each one's stock. A private savings-bank connected with the factory, which has been in operation less than a year, has deposits of the operatives amounting to 1,000 rik-dollars.

The hands of the government machine-shop at Stockholm have a private savings-company under their own control, the treasurer being chosen from among their numbers. The money is loaned out at 8 per cent., generally to such workmen as are erecting houses of their own, and the income divided *pro rata*.

At Eshilstuna, where the government musket-factory is situated, and where the number of people working for wages is about 2,000, and the number working at out-letery on their own account is about 500, the cashier of a savings-bank, in which 88,920 rik-dollars were deposited in 1872, estimates that about 1,000 of the depositors were working people living in town.

A second-class workman in the match-factory at Jönköping earns 700 rik-dollars a year; he has a family of wife, mother-in-law, and three children, the eldest a boy of ten years old, who goes to school. He has a kitchen 14 by 12, a sitting-room 15 by 15, a cellar, and shed-room for three cords of wood. His expenses for subsistence are 370 rik-dollars a year; taxes, 6 rik-dollars 61 öre; and total expenses about 650 rik-dollars. He lays up annually from 30 to 50 rik-dollars a year in the savings-bank.

A workman in a foundry at Stockholm, who has a family of wife and three children—a boy thirteen years old at school, a girl seven, and the youngest a boy three years old—lives in a second-story room up a steep pair of stairs, (down which the youngest child has fallen several times,) which is 10 by 10, and 7 feet high. He earns 2 rik-dollars a day, has worked at the same place ten years, and since the eighth year has had

free rent. They have fresh meat three times a week. He has money in the savings-bank, and saves annually about 100 rik-dollars.

A book-binder in Stockholm, who earns 1,060 rik-dollars a year, has a wife and three children, pays 200 rik-dollars a year for a fair-sized living-room, a smaller room without windows, and a kitchen, all four stories up. His annual expenses are 870 rik-dollars. His wife earns 150 rik-dollars a year, so that their clear income is 334 rik-dollars.

These are all cases of temperate men, who have prudent wives, and they show that where people have the disposition, and do not meet with serious misfortune, they can most always make savings. Many an employer or manager has remarked to me, "Everything depends on the wife," which shows how important it is, by education and otherwise, to improve and elevate the condition of women.

At the Motala Iron Machine Works, where 1,100 hands are employed eleven hours a day, working by the hour, 300 workmen have invested 75,000 rik-dollars in a savings-bank, with interest at 5 per cent. A leading workman has 10,000 rik-dollars in bank. About 150 workmen own the dwellings which they occupy and a piece of land. A few own small farms. The workmen have a union, with a building, which cost 10,000 rik-dollars, paid for by a loan, one-third of which has been redeemed.

When I was at Sundswall last summer, and was paying a porter for bringing my baggage from the steamer to the hotel, our consular-agent remarked, "That young man has 5,000 rik-dollars in the savings-bank. Everybody has confidence in him, and likes to employ him, because he keeps his word." A member of the Diet living at Sundswall assured me that workmen there could earn 10 rik-dollars a day, and, in respect to wages, could do as well as in the United States.

VENTILATION.

As to ventilation, and the quantity of atmosphere allowed to adult persons in sleeping-rooms, 1,000 cubic feet, equivalent to a room 10 by 10 and 10 feet high, being the acknowledged standard allowance, it would seem that the care in such matters taken by the state for its best soldiers, should afford fair means of forming a judgment as to what is general.

At a shirt-factory in Stockholm, 40 young women sit through the day sewing in a room 24 by 24 and 12 feet high. At a large paying factory of another kind at Stockholm, 12 female operatives are lodged in one room, two together, in beds only 3 feet wide. At the quarters of chimney-sweep boys it is usual for about 8 to lodge in a room 15 by 12 and 9 feet high. These boys seem to be well fed but poorly paid, though their employers derive a good income.

USE OF SPIRITS AND BEER.

The reports of district physicians to the board of health, for a few years preceeding 1870, mention a diminution of whisky-drinking, which probably was partly owing to the scarcity of money caused by several failures of the crops. During the past year or two of flush times it has seemed as if the copious use of spirits was again increasing, and yet there are evidences of a steady abatement of intemperance. In 1829, when the population was a million less than it is now, the annual production of whisky was 32,000,000 gallons, while now it is 10,500,000 gallons. The actual production in 1872 was 16,674,364 kanner, or, in round numbers, 10,500,000 gallons. It was distilled from potatoes, and contained 50 per cent. of alcohol. About the same quantity was produced in each of the immediately-preceding years. Very little is exported. The most, or say 24 gallons in proportion to every inhabitant, is consumed as drink.

By the license-act any one can sell quantities of $\frac{1}{2}$ gallons and upward without a license. Two classes of licenses are issued: one for selling quantities not less than three-tenths of a gallon, another for selling by the glass; and both classes are disposed of to the highest bidder. The local authorities can grant all the licenses to a single company, or may even prohibit the sale entirely. It is illegal to sell to minors under fifteen years of age or to persons who are intoxicated.

The number of shops licensed to sell whisky by the glass in Stockholm for the year 1872 was 322, which was 5 less than for the year 1869, and 150 less than for the year 1845. Beside these licensed shops there are places which have old and permanent privileges to sell by the glass. The licensed shops are also a cheap sort of restaurants. The applicant for license in Stockholm must pay to the city 40 öre on every kanner (24 quarts) he asks the privilege of selling. The income to the city from licenses was 350,307 rik-dollars. The public expenses for its poor in 1870 were 635,374 rik-dollars.

The ordinary Swedish whisky-glass holds a fifth part as much as a common tumbler, and as much whisky as it will contain is sold at 6 öre, ($1\frac{1}{2}$ cents.) Five such drinks in the course of a day by a workman, or 30 öres' worth, is not considered an immoderate quantity. The expense of so much whisky in a year, at that rate of use per day, would be 109 rik-dollars at 50 öre.

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The Gothenburg plan for retailing spirits appears to have operated favorably, and is attracting much attention. That city puts the business into the hands of a company of philanthropic gentlemen, which has it sold in orderly restaurants without a view of profit. The theory that the use of beer has conduced to temperance is hardly sustained by experience in Sweden. A great deal of beer has been consumed in late years, and though it is not so strong as the English beer, it is nevertheless intoxicating. The report of one of the official physicians to the board of health in 1869 mentions cases of actual delirium tremens from excessive use of beer. Another physician states that when a doctor visits a peasant family the man of the house always urges him to take a glass of whisky, and is astonished when told that its use as a beverage is unhealthy. The sight of drunken workmen in the streets of Stockholm, especially on Saturday evenings, on Sundays, and on Mondays, is common.

The phrase "Free Monday" comes from the custom of men engaged in sedentary and manual trades spending Monday as well as Sunday in drinking and frolicking. There are shops employing from sixty to one hundred hands which on Monday will only have a third of that number. There are also shops which have their private temperance societies. At the Motala Machine-Works is a society of 100 members—workmen pledged to abstain from whisky. At no work-shop employing workmen is whisky allowed to be brought upon the premises.

Among the causes which make the use of spirits so common may be mentioned the fashion among all classes of the male population to partake of a glass of whisky immediately before dining; the common practice, even among the young, of drinking beer with meals; the common use of tobacco among males, in smoking and snuffing; and among the poorer classes of men of chewing snuff; the lack of sources of recreation during leisure hours; and lastly, and perhaps the most important of all, the insufficient diet of the workingman, his lack of elevation, and of home attractions.

DWELLINGS.

In the larger cities the houses are of unpressed bricks; the walls over a foot thick, plastered, and washed in a sort of cream color. The roofs of the larger ones are covered with sheet-iron; those of the common-sized dwellings in city and country are covered with tiles. In the larger houses each story is finished as apartments for a family. There is a spacious fire-proof stairway common to the whole house. Neither balconies nor outer blinds are in use. The windows are in two parts from top to bottom, and open outward on hinges. In the winter double windows are universally used, with a roll of white cotton laid between at the bottom, openings of at least one large pane on hinges being provided for in each room in the better houses. In the country, among the working-class, it is common for the double windows to be put in so as not to be opened. The manner of warming is by an earthen stove in each room, generally reaching from the floor to the ceiling, and usually standing in a corner. They belong to and are fixtures of the house. Near the Norwegian frontier iron stoves are used, which is the habit in Norway. An average earthen stove in the Stockholm houses costs 500 six-dollars, (\$132.) and the most elegant ones as high as 2,000 six-dollars, (\$530.) The interior of the stove is of brick-masonry work, the exterior of white glazed earthen material in the form of hollow panes. The whole can be taken apart and put up with but little labor. Their Swedish name signifies literally earthen-pane ovens. In shape they are about as frequently oval as square, but sometimes are highly ornamented, occasionally having a fine mirror for a part of their surface, and being so put up as to appear as merely a part of the wall of the room. Wood is used for fuel, being cut in pieces about a foot long. All that can be conveniently put in at once, say as much as would ordinarily be taken in one's arms, is laid in at one heating, and after it has burned to coals, and the gas has all escaped, the stove-door is shut and a damper drawn at the top to prevent the heat escaping. In an ordinary-sized room, and if the weather is not excessively cold, such a heating will answer for twenty-four hours. Some of this sort of stoves, from the Stockholm factory, have been imported to the United States. It is probable they are more comfortable and conducive to health than iron stoves. Among most of the peasantry in the country, and among many working-people who only occupy a kitchen, the rooms are warmed solely by the kitchen fire-place, the hearth of which varies in elevation from one to two feet above the floor. Its hearth is often of iron. There is a damper in the chimney to prevent the heat from escaping.

It is rare to see squalor in the homes of the working poor. Generally, even in the poorest cottage, there is an indication of pride, tidiness, and taste.

AVERAGE DWELLING OF WORKINGMAN.

The average apartments of a Swedish workman, having a family of wife and three or four children, consist of a living-room and a kitchen, with dimensions and furniture

about as follows: The kitchen is 9 feet high. In it stand a small cupboard and a box for wood. On the raised hearth of the open angular fire-place are some cooking-utensils, among them a copper coffee-boiler. On a pole hanging under the ceiling are strung some thin cakes of rye hard bread, about a foot in diameter. The floor is unpainted, and while not actually dirty, is not white. The living-room is 16 feet by 14, and the same height as the kitchen. The floor is of spruce or pine, the boards closely matched, and scrubbed clean. A couple of strips of home-woven carpet are laid across it. There are two windows, with cheap, yet clean and tasteful, lace curtains hung on each side. On one side of the room is a plain sofa-bed, which can be drawn out so as to make a double bed four feet wide, something over a foot higher than the floor. Commonly in Sweden beds are shut up during the day to half their length. The bedding is laid together on the single breadth of the sofa, resembling a high single bunk, over which is laid a white cotton spread. On the opposite side is a wooden sofa of stained birch, the bottom of which can also be drawn out so as to form a double bed; and there are three or four wooden chairs. At one corner of the room is a plain stained bureau. A white cotton crochet is spread over the top, and on that are some little articles of china—a cup and saucer, or a vase, and a couple of plated candlesticks. Between the windows stands a table with a red woolen cover, and above it a gilt-framed mirror. On the walls are two or three framed pictures, some little shelves for books suspended with a cord, and a cheap clock. In another corner of the room is a small cupboard or dresser. In still another corner stands the earthen stove, and on the floor against it is placed a spit-box, the bottom of which is covered with spruce twigs. On the window-seats are several pots of flowers—the oleander, the geranium, &c.

INFLUENCE OF A WORKMAN'S HOME.

The influence which a workman's home exerts on his own and his family's welfare is becoming more and more recognized. Employers begin to understand that, in proportion as a workman's dwelling is ample in size, neat and attractive within, and wholesome in its surroundings, does his efficiency increase. In Gottenburg, and perhaps in some other places, share-companies have been formed for the building of model tenements for the industrial classes, and a few buildings of the kind have already been put up there. In all parts of the country a few of the principal employers are preparing to erect model dwellings, with the intention that their workmen may ultimately, by annual payments, become the owners of them.

Some of the best model dwellings that I have seen are at the china-ware factory at Gustafsborg, about two hours' distance by steamer from Stockholm. About a dozen have already been erected, and it is the purpose of the proprietors to continue their construction till the most of their hands—400—are supplied, though the old accommodations are as good as the average. The factory is situated in a retired and somewhat romantic region, on what seems more like a lake than a bay, yet with navigable communication with the sea, and the model dwellings are five minutes' walk distant, with a view of the water, and 30 feet above its level. The land, of which 2,000 acres belong to the factory-owners, is moderately rolling, mostly open timber of birch and oak, with here and there a small pond, and the balance fields. The dwellings in question are pleasantly situated on each side of a graded and macadamized road, and 30 feet from it. Each house is designed for only two families, and is 46 feet long, 28 feet wide, and one and a half stories high. They are built of pine or spruce timber, in tasteful cottage style, and are of light-brown color, being stained so as to leave the grain of the wood visible. They rest on solid stone or brick foundations. The walls are three-quarters of a foot in thickness. The outer boards are planed clapboards, two-thirds of an inch thick; next is a thickness of paper, such as is used in house-building, then battens three inches thick, then paper, then boards, and again thick paper, the latter forming the interior walls of the rooms, so that the whole constitute exceedingly dry and warm walls. The roof is covered with wooden shingles steeped in iron vitriol, which gives them a dark color, and projects from the eaves two feet from the walls, with some ornamental work on the edges. There is a brick chimney for each family near each end of the house. Each family has two entrances, at their own end of the house, from a veranda 18 feet by 5, two steps from the ground, and along which runs a neat balustrade. One door opens into the kitchen, the other into the sitting-room. There are three rooms to a family, namely, kitchen, bed-room, and sitting-room. The kitchen is 13 by 13 feet, 9 feet high; bed-room ditto, with one window. The sitting-room is 18 by 15 feet, and 9 feet high, with, in some houses, one large window, in others two windows. Under each kitchen is a small cellar. There is also a garret for each family, reached by portable steps from the veranda. Good water is obtained from a well 5 feet deep on each lot. The closets stand several rods in rear of the houses, at the farthest edge of the premises. The dwellings being partly experimental, the relative size of the rooms varies in some, though each family has the full space as above given. But what is most striking about these dwellings is the land which each family has connected with their part of the house, and the beautiful flower-gardens, and nice, thrifty vegetable-gar-

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dens which surround them. Each family has the use of a quarter of an acre of good smooth ground, which is divided into a vegetable and a flower garden. There are no fences between the different gardens, but instead hedges have been planted between the different lots. There is a simple rustic fence between them and the road. The gardener of the principal proprietor comes in the spring and assists the people in laying out their gardens, and the rest of the work is done by the housewife and children. The flower-gardens are prettily laid out, with grass margins and graveled walks, and contain an abundance of nice flowers and shrubbery, also fine-bearing apple and pear trees. I noticed on September 8, on a young tree, handsome ruddy apples 2½ inches in diameter. Shade-trees have been planted on each side of the road. The occupants are charged but 60 rik-dollars (\$16) a year for rent, and this sum is about covered by the income from the vegetable garden. They also have free use of a nice hilly park, close to their premises. The cost of each house, exclusive of land, is \$1,322, or 5,000 rik-dollars. Everything about them is thorough and neat, and, with the ample space about them, their attractive surroundings of flowers and shrubbery, and their white lace curtains at the windows, they might readily be taken as the homes of the well-to-do middle-class. Of course the oldest and best lands have the preference in obtaining such dwellings.

FOOD.

It can truly and happily be said that there is scarcely any adulterated food used in Sweden. The poorest people in the country sometimes mix burnt-bread crumbs with their coffee, or use chicory, of which there were 416,485 pounds imported in 1871, while, inceptions, the food is pure. One hears no complaint of adulterated milk being sold in the market-squares of Stockholm. A person may travel all over Sweden, and find at convenient distances on every public road hotels that furnish clean, good, and palatable food. Some of them, even in remote places, will be found luxurious. The meals at railway eating-stations and on steamboats are habitually good.

The principal articles of diet for the working-class in scarce times have been potatoes, rye-bread, milk, salt herring, and a porridge of rye-meal, called "velting." In the past year or two, as wages have risen, it has become common to consume salt pork from the United States, which is considered a luxury as compared with salt fish. Much of the rye-bread is of unbolted meal, and after baking is dried hard, so as to last many months. The herring used on the eastern coast, and perhaps half way to the Norwegian boundary, are from the Baltic Sea and Bothnia Gulf, and called "strömming." They are about eight inches in length, and covered with small scales to that of a brook-trout. When broiled quite fresh their flavor is not much inferior to that of a brook-trout. They are salted at home, and often, in the north part of the country, become half decayed during some days' transportation before getting to their destination.

The Swedish working-people may be regarded as hearty eaters; yet, if their fare is copious, it is at the same timesimple. In the towns it is perhaps an unfortunate habit of very many workmen to take their meals and lunches at the common whisky-shops, where cold meats, sausages, and the like are always at hand. The import of coffee shows an allowance of over five pounds to every inhabitant, and its use is excessive among a good many of the common class, especially among the women. It is almost always well and strongly made. It is common to take coffee soon after rising in the morning. Breakfast, among the industrial classes, is eaten at about 8 o'clock. By many coffee is taken again at 11, also at 4 p. m. Dinner is eaten at 1 p. m., when the drink is usually beer. Bavarian beer, so called, though brewed in Stockholm in large quantities, is much liked, and sells by the dozen at 8 öre, say 2½ cents per half bottle. There is, however, a cheaper and weaker beer, called "svogdricker," wholesomely brewed, reasonably palatable, and used by poorer people. The supper will be taken at 6 o'clock, when oat or barley grits, thoroughly boiled, will be eaten with a little sugar or butter. In the long summer days working-people usually eat four times a day, a lunch being taken at 4 p. m. Neither hot bread nor pies are ever eaten, nor is saleratus used in bread-making. The practice of frying instead of boiling meat is universal.

The "smörgåsbord" is peculiarly Swedish. It is preliminary to any formal sitting-down meal, and answers for sharpening—sometimes for satisfying—the appetite. It is a daintily-arranged side table, on which are set some small, thin slices of cold meat, varieties of pickled fish, bread and butter, pickles, and, with very rare exceptions, "brännvin" (Swedish whisky,) a white and somewhat flavored spirit. Medium-sized wine-glasses are set around the decanter, and after the men (for Swedish women do not drink whisky) have taken a few mouthfuls of solid food, they pour out and drink at a swallow a glass of whisky. While eating at this table, on which generally, in private families, there are also milk and beer, people stand or walk about. This table and the glass of whisky—sometimes two glasses—are in daily use among people in comfortable circumstances, and by the industrial classes on any special occasion, or

when their means will allow. At dinner-parties, among the more genteel, instead of the table being set, a part of its contents in more delicate form, yet including the spirit, are passed around on waiters before the guests go in to dinner.

RATION OF GARRISON SOLDIER.

The rations for one hundred soldiers in the Swedish garrisons for one day, for example Sunday, are as follows: Soft rye-bread, 200 pounds; potatoes, 2 bushels; butter, 1½ pounds; salt herring, 1½ pounds; fresh meat, 75 pounds; peas, dry, 10 quarts; hulled wheat, 10 pounds; barley-grits, 35 pounds; flour, 1½ pounds; a little pepper and salt.

The ration varies in kind during the week, but quantities are issued averaging with the above. It will be seen that two pounds of bread are issued to each man daily, the Swedish pound being a trifle less than the pound avoirdupois. For the breakfast, there are salt herrings four times in the week; boiled cod-fish, which has been dry-cured, twice; stewed peas four times, potatoes three times, butter three times. For dinner, fresh meat three times in the week, corned meat twice, salt meat once, fresh pork once, stewed peas every day, potatoes four times, hulled wheat three times, with a little flour, pepper and salt. For supper, daily, boiled barley-grits, with butter and salt. This ration is considered here as a strong one, and is sufficiently ample to admit of the exchange of a portion of it for coffee and sugar, as the regulations permit, and the men in that way obtain coffee with loaf sugar every morning before breakfast. No company savings are made from the ration. Its average cost per day, singly, at government prices, is 56.12 öre, or 15 cents in gold. At retail prices, and in the quantities which working-people usually purchase, the cost would be 20 per cent. additional, namely, 67 öre, or 18 cents.

The daily ration per man for such men as perform labor in the public workhouse of Stockholm, including those sent from the institution to clean the streets, is as follows: 1 pound of rye-bread, or as much as is required. Breakfast: ½ pound pickled herring, ½ pound potatoes, ½ pound peas, 1 pennyweight butter, 3 pennyweights flour, 1½ pints light beer, "svogdriker?" in winter, rye-porridge instead. Dinner: ½ pound fresh meat free of bone, ½ pound potatoes, 1½ pints soup. Supper: 1 pint rye or barley grits, ½ pint light beer, with some variations in kind during the week.

The following shows the daily fare for each boy at the Stockholm Institution for Orphan Boys: 1 pound soft rye-bread. Breakfast: 1 pint rye-meal porridge, ½ ounce butter. Dinner: 1 pint soup, ½ pound fresh meat free of bone, ½ pound potatoes. Supper: 1½ pints barley-grits, ½ pint milk, with changes in kind during the week.

The average cost of maintaining sick persons in all the public hospitals is 92.5 öre each per day, or 25 cents.

As a general rule, working-people do not consume fresh meat oftener than once or twice a week, and it may fairly be assumed that subsistence, amounting to double the quantity of the ration of a garrison-soldier, as above specified, somewhat exceeds what an average industrial family, of husband, wife, and three children, are able to procure. A very common, nutritious, palatable, and at the same time cheap article of food consists of boiled oat-grits, eaten with milk; also, oat-meal porridge, made with milk and slightly sweetened.

CITIES.

Stockholm, the capital, has a population of 150,000, with a picturesque situation on the outlet of the Mälär Lake, and twenty miles from the Baltic, with several ample and charming parks in its environs; the deer-park, for example, being pronounced by competent judges as naturally the finest in Europe. With numerous benevolent and learned institutions and rich collections of art, with a fine opera in the Swedish language, with a fair commerce and growing manufactures—a city founded on granite and built of bricks and of stone—it is the capital of the North, of which every Swede is proud, and may well be supposed an agreeable winter home for many of the country gentry.

Göteborg, on the western coast, has 60,000 inhabitants, a good harbor, and communication with the interior by a canal, and two lines of railway, and without exaggeration may be pronounced a model city.

Malmö and Norrköping have a population of about 30,000 each. Ten other cities have a population each of 10,000 and upward, while there are twenty others that have from four to ten thousand each. About 13 per cent. of the whole population live in towns.

POPULATION AND RESOURCES.

According to the census of 1871, the whole population of Sweden was then 4,204,171. It has trebled in the last one hundred years. The commercial marine of Sweden in the same year consisted of 3,495 vessels, with an aggregate tonnage of 367,614. The

LABOR IN SWEDEN AND NORWAY.

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value of its imports the same year was \$45,260,372, United States gold, and its exports
\$42,825,265. The value of the export of grain was \$10,791,600; of lumber, \$17,416,576;
of manufactures and fabrics was \$28,000,000, which sum, however, is under the actual
value, and is exclusive, also, of the products of hand-trades, which are considered
equal in value to "manufactures" and "fabrics."

The agricultural crops in 1871, according to the statistics for that year, which are
considered to be rather under the actual figures, were as follows:

Wheat	imperial bushels.	589,288
Rye	do	17,921,180
Barley	do	14,143,312
Oats	do	37,061,669
Mixed grain	do	4,818,005
Pease	do	1,639,384
Beans	do	227,524
Buckwheat	do	15,277
Potatoes	do	11,124,692
Other root-crops	do	4,404,677
Vetches, fodder of pea species	do	651,199

Hemp	tons.	1,720
Hay	do.	1,768,220

SOCIAL STATISTICS.

The number of households in 1870 was 1,017,323. Of these the number having but
a single member was 131,565, a proportion that appears to be on the increase. The
average number in a household was within a small fraction of 5. In 1860 the average
number was 6.80. The rate of mortality was 1.98 per cent. Eighteen per cent. of the
number of living children born annually in proportion to every 1,000 inhabitants was
31½. Of these, the proportion of illegitimate births, including the whole kingdom,
was 5.85; but, including only cities, the proportion of illegitimate was 14.32. Three-
and a quarter per cent. of all births were still-born. During the ten years 1861 to 1870
the percentage of legitimate still-born was 3.13; of illegitimate still-born, 4.82. During
the same period the average number of marriages annually in proportion to every
10,000 inhabitants was 65.41. For the same period the whole number of divorces from
marriage was 1,301; of dissolution of betrothals, 1,549. The average number of sui-
cides per year in proportion to every 100,000 inhabitants was 8.04; number of deaths
from drowning, 1,132; from accidental burning or scalding, 153; from accidental poi-
soning, 20; from accidental suffocation, 146; from accidental shooting, 32; from centu-
rions, breaking of bones, and the like, 461.

In 1870, the number of blind under twenty years of age was 400; of deaf and dumb
under the same age, 1,500. The number of patients at the insane asylums was 1,247,
of whom 46 belonged to the first paying-class, 151 to the second, and 920 to the third,
while 127 were of public charge.

The number of poor wholly supported by the public was 85,147; the number assisted,
but not wholly supported by the public, was 119,231. The average number of convicts
in all the prisons in 1870 was 5,951.

EDUCATION.

Previous to 1812 there were as many as 786 schools, with 30,773 pupils. Compulsory
education was established in 1812, and has operated very successfully. In the more
sparsely-settled districts there are "movable" schools; that is, the teacher holds a
school for a few days or weeks in one part of a district and then for a certain time in
another part of it, which shows that there is always a way for a people to be edu-
cated, if they only have the disposition. In 1870 there were 1,164 such movable schools.
The whole number of "folk" or common district schools the same year was 7,303, at-
tended by 555,595 pupils. In 1871 the number of male teachers of such schools was
5,029, of whom 52 were clergymen and 1,057 church clerks. The number of female
teachers was 2,776. Of the whole number of teachers, 838 were extra or assistants.
Of the regular or ordinary teachers, 2,455 received the minimum pay of 400 rik-dollars
a year, besides apartments for lodgings, a piece of ground, and hay for a cow, which
year, besides apartments for lodgings, a piece of ground, and hay for a cow, which
minimum, beginning with next year, is to be 500 rik-dollars, and in five years thereafter
600 rik-dollars, and only 713 received over the minimum pay. The number of school-
houses was 4,413, with 2,168 gardens attached. The amount expended in 1871 for the
support of these schools was 3,537,968.62 rik-dollars, or nearly \$1,000,000 gold. Of this
the principal part, or 2,573,227.58 rik-dollars, was contributed by parishes, 842,907 81
rik-dollars by the state, and 121,133.13 rik-dollars from interest on endowments. In 1870
there were 98 high schools for boys, having 756 teachers and 12,755 pupils.

CLASS-DISTINCTIONS.

Aristocratic birth here gives a person great preference socially and politically. The better offices are almost exclusively held by the aristocracy. The number of persons in Sweden of noble birth in 1855 was 11,742. Their political power as a distinct class ceased with the new constitution of 1866. The titles of count and baron, which of themselves are influential, are still used. In one of the guard-regiments the custom is still adhered to of appointing only noblemen as commissioned officers.

There are five different orders of knighthood, of which one confers rank equal to that of a cabinet minister. Titles are much used. In addressing a person in writing, his title, profession, or occupation is prefixed to his name; so that if a man is a shoemaker it is as natural to address him by that title as to address a captain as captain. Even the surnames of people have a signification of caste. The nobles generally have names borrowed from animals, as "Lionhead," or from some heroic device, such as a shield; while the names of the humble are more frequently taken from objects of nature, such as "Meadowstream," "Rockstream," and the like. On the other hand, the peasants very generally have the word "son" attached to their names. It would be singular, perhaps, if a person should rise to the rank of prime minister with an humble name. If we go among the peasantry, we shall find that even they are a sort of aristocracy as compared with a class below them. What is technically the peasant is in Swedish "bonde," and implies one of the class of countrymen who own and cultivate moderate-sized farms. Below him in social rank is the "torpar," or cottager, a man with family, who hires a house and small patch of land, which he pays for by so many days' work every week.

A house-man-servant is called a "betjent," and an outdoor hired man a "dräng." A servant-girl of lowest rank, who does some outdoor work, is a "piga," the ordinary house-maid a "jungfru," and a maid intrusted with some responsibility and working with a seamstress a "mamsel." A young unmarried lady is addressed as "fröken," the wife of a workman as "madam," and of a gentleman as "fru."

Fashion seems more favorable to young men than to young women. The latter, if employed as kitchen or house servants, generally wear black silk kerchiefs closely pinned over their heads, but not hats or bonnets, notwithstanding that the law prescribing their dress was several years ago repealed. Young men in the humblest occupation can appear, when wearing their best clothes, in the dress of a gentleman. In the country the workman, of whatever trade, wears a leather apron, which extends from over his breast to below his knees.

The relations between the higher classes and those in humble life, and between employer and employed, are decidedly kind. Indeed, it is almost universal to address servants, or those of whom any act of service is desired, as "snäll," meaning very capable and servicable, and in rather a beseeching tone. In the winter, family-servants among the wealthy are allowed fires in their rooms, two servants generally occupying a room together. The whipping of persons in service was abolished by law in 1855, and the whipping of soldiers in 1868.

SALARIES.

The highest salaries are paid to foreign ministers. The annual salary of the minister to London is \$17,011, and the same for the minister at Paris; the minister to St. Petersburg receives \$15,957; to Berlin, \$10,000; to Copenhagen, \$10,000. The minister of foreign affairs receives a salary of \$6,387 and a furnished house. The other members of the cabinet who are chiefs of the departments receive \$4,000 a year; those not chiefs of departments, \$3,500. The pay of first under-secretaries is \$1,462 a year; the King's attorney-general, \$1,835; judges of the supreme court, \$2,127 each; the directors-general of prisons, posts, telegraphs, and the president of the board of health, \$2,127 each; the director-general of railways, \$2,659; the surveyor-general, \$1,595; the chief engineer of railways, \$1,835; the attorney-general of the Diet, \$1,835; accountants, from \$500 to \$930; copyists, \$267; a general in command, \$2,333; colonels, from \$1,433 to \$1,962; captains, from \$319 to \$1,117; lieutenants, from \$80 to \$516. In most cases pensions, after long and meritorious service, are paid. The constitution prohibits removals from office without good cause, excepting those officers of a confidential character, such as the heads of departments or bureaus and first under-secretaries.

The latest published statistics on this head are for the year 1866, those for 1870 being in course of publication.

In 1860, the number of persons of both sexes employed in the various occupations were as follows as to each: Agriculture, including fisheries, 664,063; mining and productive industry, 174,073; commerce and trade, 20,431; transportation, 21,054; personal service, 93,350; sick care, 2,371; instruction, 7,400; church service, 5,773; state and local administration, 9,392; army and navy service, 39,050.

The more thoroughly labor is divided, the higher naturally will be the degree of skill. In the government musket-factory, and, indeed, in all industries where a high

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ally will be the degree of l industries where a high

degree of skill has been attained, the division of labor will be found very extensive. Swedish skill in the production of iron and steel is widely acknowledged. In the manufacture of chinaware, of paper from wood, and of matches, much skill is shown. A match-factory at Åsköping consumes \$40,000 worth of timber, principally poplar, yearly in matches, and ships off one and a half car-loads of matches daily. It pays every year nearly \$100,000 in wages. The Swedish laws prohibit the employment of children under twelve years of age in any factory. Operatives under eighteen years of age are prohibited from being employed in any factory at night.

It is in only a few hand-trades as yet in which more than ordinary skill is to be seen. Boots, however, nearly as good as the French, are made in Stockholm. A great part of the cloth used by the country people is woven at home by women. Co-operative labor has lately been introduced with success in the production of butter and cheese. Sewing-machines have been introduced into the country. During the present year a number of American agricultural

Much out-door work is still done by women. Besides doing certain kinds of farming work, they are also generally employed as traders to bricklayers; they prepare the mortar and carry it in buckets. They sometimes carry bricks, which is done with a rope over their shoulders. They are frequently to be seen hauling small carts in the street, and especially in hauling washing to and from the quays, it being the practice all over Sweden to take clothes, after they have been partly washed, to some stream or lake and there rinse and beat them. Summer and winter, therefore, women may be seen on their knees down by the water's edge, on platforms specially designed for the purpose, in this occupation. In most of the large manufactories the coarsest of the drudgery is done by women. The law has not yet given the wife control of her earnings.

MINING AND MANUFACTURING INDUSTRIES IN 1871.

The following statement of the products of the mining and manufacturing industry of Sweden in 1871, was obtained from another source:

The number of iron-mines in operation in Sweden during the year 1871 was 487, from which 636,453.15 tons of ore were obtained, (besides 15,509.54 tons of argillaceous iron-stone.) This is the largest annual yield ever recorded in that country.

The products of the iron manufacture were as follows:

	Tons.
Pig-iron	293,982.85
Bar-iron	184,696.48
Cast iron	12,636.45
Steel	8,389.05
Sheet-iron	6,455.66
Nails	6,636.83
Other manufactures of iron	14,079.72

Of gold, silver, copper, nickel, and lead, the following quantities were produced:

Gold	13.38 pounds avoirdupois.
Silver	2,147.78 pounds avoirdupois.
Nickel	40,568.86 pounds avoirdupois.
Copper	1,398.18 tons.
Lead	87.67 tons.

The total number of factories in operation during the same year was 2,305, employing 40,410 hands, and the aggregate value of the manufactured products of these amounted to \$29,002,930, of which the percentage from each of the principal branches is exhibited as follows:

	Per cent.
Cotton-factories	23.0
Sugar-refineries	16.2
Woolen-mills	10.8
Iron-works	10.3
Tobacco-factories	6.7
Leather-factories	5.0
Paper-mills	5.0
Match-factories	2.5
All other branches	20.5
	100 %

CONDITION OF THE WORKING-CLASSES IN SWEDEN.

Although Mr. Andrews has indicated in the foregoing report the condition of the laboring classes in Sweden, yet the following categorical replies to the questions submitted by the author afford, in a concise form, information of value:

A report on the condition of the working-people of Sweden in reply to questions from the Chief of the Bureau of Statistics.

- I. They are industrious.
- II. Probably 40 per cent. of the males are intemperate.
- III. They lose about two days a week in consequence.
- IV. The comforts of their families are seriously abridged by the loss of time and money occasioned by drink, yet more, probably, by that moral degradation and wretchedness occasioned where the head of the family is a drunkard.
- V. The condition of the rooms of the working-people is in general tidy.
- VI. It is common for one family to occupy one room besides a small kitchen.
- VII. The advances in wages which have occurred in the past two years have on the whole resulted to the advantage of the families of the workmen.

STOCKHOLM, December 15, 1874.

NORWAY.

The manufactures of Norway are unimportant. Wood and fish are the chief products of the country; and these find their way to every part of Europe, chiefly in Norwegian vessels, which in return bring home whatever foreign articles are required at the cheapest possible rate of freight. The import duties are very moderate. Before the importer pays his duties he is allowed to take his goods to his own warehouse or shop, on giving security for the amount of the duties ascertained by the custom-house officers on landing. He also keeps an account of his sales, and pays the duty every three months on the quantity which appears to be sold.

Coffee, sugar, tea, liquors, tobacco, and some spices, are the principal articles for which the housekeeper has to disburse money; the other necessities of life are produced by themselves. Shoes, furniture, clothes, and the like, are all made at home. Looms are at work in almost every house in the country. Carding, spinning, weaving, trimming, constitute the occupation of the female part of the household. Woolen cloth, substantial but coarse, excellent bed and table linen and checked or striped cotton or linen for female apparel, are the ordinary fabrics produced. These home-made stuffs, including boots, gloves, and, in bad weather, great-coats, clothe the greater part of the inhabitants with more comfort than is the case with the lower and middle classes of people in most other countries. The upper classes dress as in other parts of Europe.

The principal articles of export are timber, bark, iron, copper, fish, and some others. The principal articles of import are corn, colonial produce, woolen, linen, and cotton goods, wine, brandy, and some others.

RATES OF WAGES IN 1871.

The following statements, showing the rates of wages paid for farm, mechanical, and factory labor in Norway in the year 1871, were chiefly obtained from the British consular reports:

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LABOR IN SWEDEN AND NORWAY.

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Table showing the weekly earnings of work-people employed in agriculture.

[Computed in United States gold.]

Employment.	Mini- mum.	Maxi- mum.	Employment.	Mini- mum.	Maxi- mum.
Agricultural laborers	\$1 25	\$1 92	Man, horse, and cart	\$5 10	\$5 76
Head-gardeners	2 50	3 72	Dressing wool for shipment	3 24	4 26
Laborers	1 94	2 12	Common laborers at dressing wood for shipment	2 12	2 54
Women weederers	1 26	1 60			

Weekly rates of wages in woolen-factories.

Employment.	Mini- mum.	Maxi- mum.	Employment.	Mini- mum.	Maxi- mum.
Wool-sorters, women		\$2 12	Dressers:		
Wool-washers		3 30	Foremen		\$6 40
Overseers		6 40	Fullers		3 20
Assistants	\$1 20	4 26	Dressers or giggers		3 20
Carders	3 20	4 26	Finishers:		
Spinners:			Men		3 20
Boys		2 12	Women		2 12
Foremen		6 40	Press-tenders		3 20
Warpers and beamers	3 20	4 26	Drawers		3 20
Reelers		2 12	Brushers		2 12
Overseers, (British)		14 40	Packers		3 20
Assistants	3 20	4 26	Overseers		6 40
Weavers	2 12	3 20	Assistants	\$9 20	4 26
Butlers		2 12	Engineers—foremen		1 25
Overseers		6 40	Mechanics	4 26	6 40
			Laborers		3 20

Weekly rate of wages in cotton-mills.

Employment.	Mini- mum.	Maxi- mum.	Employment.	Mini- mum.	Maxi- mum.
Carding department:			Dressing department—Cont'd.		
Overseer		\$6 40	Drawers and twistors	\$2 12	\$3 20
Picker-tenders		2 50	Dressers and twistors	3 20	4 26
Drawing-frame tenders		1 70	Weaving department:		
Picker-boys		1 48	Overseers	5 32	6 40
Grinders		3 20	Weavers	2 12	3 20
Strippers		3 20	Drawers in hand	2 12	3 20
Spinning department:			Repair-engine room:		
Overseer	\$4 26	5 32	Iron-workers		4 26
Mule-spinners		1 70	Engineer		6 40
Mule-backside piecers		1 48	Laborers		3 20
Frame-spinners		1 48	Cloth-room:		
Dressing department:			Overseer	4 26	6 40
Spoolers, women		2 12	Second-hand		3 20
Warpers	3 20	4 26			

It is to be observed that cotton and woolen goods in this country are all of a second or third rate quality, none being manufactured of a first-rate quality.

Weekly wages in paper-mills.

Employment.	Mini- mum.	Maxi- mum.	Employment.	Mini- mum.	Maxi- mum.
Machine-tenders	\$3 57	\$5 37	Bleachers	\$2 58	
Assistant tenders	2 58	3 22	Sizers	2 58	
Enginemen:			Carpenters	3 27	
Men	2 58		Blacksmiths	3 27	
Women	1 28	2 14	Carters	2 58	
Engineemen	3 22	3 27	Boys	1 61	
Assistants	2 58	3 22			

Weekly wages in sail-cloth manufactories.

Employment.	Minim.	Maxim.	Employment.	Minim.	Maxim.
Hackers	\$3 87	.....	Weaving, by the piece, 36 yards	\$0 19	\$0 21
Women, spinners, twiners, and preparers		\$1 53	Hushing or crasing, by the piece, 40 yards	19	21
Children		76			

The sail-cloth manufactory in Christiania employs about 500 people, and appears based on the Dundee system; earnings much the same as in Scotland, but skilled labor proportionately not so good. Two English foremen receive, respectively, £200 and £300.

Weekly wages in iron-foundries and machine-shops.

Employment.	Minim.	Maxim.	Employment.	Minim.	Maxim.
Skilled draughtsmen	\$9 68	\$17 43	Pattern-makers	\$5 16	\$5 97
Mechanics:			Molders	3 22	5 97
Best	5 16	6 45	Joiners	3 87	5 16
Second	3 87	4 96	Joiners' assistants	2 56	2 90
Ordinary	2 56	2 90	Laborers, carriers, &c.	2 56	2 90
Blacksmiths	5 16	5 81	Apprentices and boys	1 29	2 18
Blacksmiths' assistants	2 56	3 14	Brass-founders	3 22	4 29
Riveters	2 56	3 14	Brass-turners	3 22	4 29
Holders, &c.	2 18	2 78	Millwrights	4 29	5 36
Boiler-makers	4 29	5 56	Millwrights' assistants	2 56	3 22
Boiler-makers' assistants	2 56	3 22	Engineers	6 17	12 90

Weekly wages in the building-trade and its branches.

[Working-hours per day, 10. When on contract, in the summer, men frequently work from 14 to 16 hours per day and receive wages in proportion.]

Employment.	Minim.	Maxim.	Employment.	Minim.	Maxim.
House-carpenters, (according to proficiency)	\$3 87	\$6 45	Smiths	\$1 85	\$5 96
Sawyers and timber-luggers, (according to proficiency)	2 56	5 14	Brick-makers	3 22	3 87
Joiners, (according to proficiency)	3 87	5 14	Brick-makers' foremen	4 29	6 45
Common joiners	3 65	4 49	Common laborers	1 94	2 76
Stone cutters	3 87	6 45	Builders' foremen	6 45	9 68
Quarrymen, (furnished with tools)	2 56	3 87	Journeymen cabinet-makers	4 49	7 74
Bricklayers	3 87	6 45	Plasterers	3 22	3 87
Masons	2 86	3 22	Carpenters, &c.	5 36	8 08
Tile-layers	3 87	6 45	Shipwrights	5 14	6 45
			Painters	2 56	3 87
			Plumbers	3 22	4 29

Monthly rate of wages of railway-officials, 1870.

Employment.	Minim.	Maxim.	Employment.	Minim.	Maxim.
Traffic department:			Locomotive department—Cont'd.		
Station-masters, (some with percentages)	\$16 13	\$13 02	Firemen	\$19 36	\$22 50
Good clerks at principal stations	14 03	26 26	Mechanics, smiths, carpenters	15 00	21 72
Chief telegraph and booking clerks	8 47	23 72	Laborers	10 65	15 00
Telegraph-clerks at intermediate stations	4 96	8 47	Foremen	26 26	37 51
Porters		13 07	Permanent way:		
Foremen of goods stations	12 83	17 18	Foremen platelayers	15 01	21 54
Horse drivers		14 01	Platelayers	12 23	11 03
Head guards, (with mileage and extra for Sundays)	15 00	26 66	Laborers	10 20	12 83
Under-guards, (with mileage and extra for Sundays)	12 83	17 18	Steamboat service:		
Locomotive department:			Captains	26 86	44 77
Engine-drivers	37 51	45 25	Mates		21 54
			Engineers	32 18	37 75
			Firemen	14 03	16 21
			Sailors	12 23	14 03
			Clerks in chief office and workshops	12 83	43 08

LABOR IN SWEDEN AND NORWAY.

695

Weekly wages of shipwrights, rope-makers, and sail-makers.

Employment.	Minimum.	Maximum.
Foremen	\$0 19	\$0 21
Assistant foremen	19	21

Employment.	Minimum.	Maximum.	Employment.	Minimum.	Maximum.
Foremen	\$6 46	\$12 90	Culkers	\$2 70	.....
Assistant foremen	5 11	Loaders	2 54
Master-riggers	6 46	Boys	1 29	\$1 81
Shipwrights	3 21	3 87			

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Monthly rate of wages of miners, quarrymen, &c.

-shops.

Employment.	Minimum.	Maximum.
Miners	\$5 16	\$5 97
Miners on outwork or contract	3 22	5 97
Cubbers and splitters (per barrel)	3 87	5 16
Common laborers	2 56	2 90
	2 56	2 90
	1 29	2 18
	3 22	4 29
	3 22	4 29
	4 29	5 36
	2 56	3 22
	6 17	12 90

Employment.	Minimum.	Maximum.	Employment.	Minimum.	Maximum.
Miners	\$7 74	\$8 59	Quarrymen (working per fath- om) of stone	\$8 59	12 90
Miners on outwork or contract	8 59	12 10	Smelters	9 68	12 90
Cubbers and splitters (per barrel)	4 29	6 45	Chemical-workers	9 68	14 56
Common laborers	5 12	5 36			

Weekly wages of gas workers and fitters.

Employment.	Minimum.	Maximum.	Employment.	Minimum.	Maximum.
Firemen	\$3 22	\$9 75	Gas-fitters	\$2 90	\$5 14
Purifiers	2 56	3 87	Layers of main gas and water pipes	3 87	5 14
Engineers	4 29	4 49	Lamp-fitters	1 03	.....
Carpenters	3 87	.....	Laborers	2 13	2 56
Bricklayers	3 87	.....	Foremen	1 61	1 94
Blacksmiths	2 90	4 29		3 87	4 29
Pipe-layers	2 90	3 55			

Weekly wages of journeyman-hatters.

Employment.	Minimum.	Maximum.	Employment.	Minimum.	Maximum.
Hat makers	\$3 75	\$4 29	Common workmen	\$2 68	\$3 29
Finishers, blackers, &c.	4 29	5 36	Foremen	6 46	7 52
Engineer-workmen	4 29	5 36			

Weekly wages of printers, bookbinders, and type-founders.

Employment.	Minimum.	Maximum.	Employment.	Minimum.	Maximum.
Printers:			Bookbinders—Continued.		
Type-setters	\$4 29	\$5 36	Journeyman	3 63	\$4 84
Printers	3 23	5 36	Girls	1 72	2 36
Boys	1 07	2 13	Type-founders:		
Girls	1 29	1 29	Journeyman	4 29	6 45
Bookbinders:			Grinders	2 14	2 92
Gilders	4 84	5 36	Boys	54	1 61

Wages in miscellaneous trades.

Employment.	Minimum.	Maximum.	Employment.	Minimum.	Maximum.
Tailors and shoemakers:			Dress-makers, (needle-women,) per day	\$0 10	\$0 20
Journeyman	\$0 64	\$0 81	Office-clerks	5 42	53 52
Workmen	30	42	Shopmen	5 42	26 64
Apprentices	18	26	Footmen, (with board and livery)	3 20	4 36
Painters and glaziers:			Coachmen, (with board and livery)	2 15	4 36
Journeyman	42	54	Women-cooks	2 42	3 59
Boys	20	34	Maids-servants	93	2 18
Bakers:			Cartman and horse	90	1 32
Journeyman	66	84			
Boys	18	24			
Errand-boys	18	21			

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Employment.	Minimum.	Maximum.
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	10 65	15 00
	26 86	37 51
ers	15 01	21 54
	12 83	14 03
	10 89	12 83
	26 86	44 77
	32 18	37 53
	14 03	16 21
	12 83	14 03
and work-	12 83	43 08

CONDITION OF THE INDUSTRIAL CLASSES IN NORWAY.

The following is condensed from the report of Hon. C. C. Andrews, United States minister resident at Stockholm, under date of September 24, 1873:

The fact that Norway is united with Sweden under the same crown seems to have led many people into a misapprehension as to the true political situation of the former. Norway is a perfectly independent state, having her own separate written constitution, her own separate legislature, cabinet, administration, system of revenue, army, navy, and flag. Even if Sweden should be engaged in a foreign war, Norway would not necessarily be involved. The Norwegian language, though similar to the Danish, differs much from the Swedish, and it can be said that Norway has a literature peculiarly her own; so also of her coinage, weights, and measures.

The population of Norway in 1871 was 1,753,000. The number of landed estates in 1869 was 147,453, and the number of such estates cultivated by owners was 131,780, which shows a fair division of property as compared with many European states. The same year the public expenses for the support of the poor was in country districts 883,000 species, (dollars,) and in the cities 454,000 species. In the country districts the number of poor was 38 to every 1,000 inhabitants. During the period, 1862-'66, the number of convicted criminals was 11 to every 1,000 inhabitants.

The classification of persons who had the right of suffrage in 1868 is as follows: Farm-owners, 95,764; tenants, (husmen,) 237; nomads, 172; mill and factory owners, 128; artisans, 6,207; journeymen, 394; merchants and shippers, 5,509; clerks, 233; masters and mates of vessels, 3,784; sailors and fishermen, 4,188; wagoners, 161; laborers, 5,023; officials and pensioned officials, 2,265; persons in public service, 2,656, of whom 877 were in church and school service, 216 in the military, and 1,572 in other service.

Next to agriculture the principal industries are navigation, the fisheries, lumbering, mining, and the common hand-trades. The state industrial exhibition at Drammen, which I visited, showed a creditable development of mechanical industry.

AGRICULTURE.

The common farm-owners in Norway till the soil themselves, with the assistance of their tenants, a class of people called "husmen." The number of husmen in 1865 was 60,330, of whom many since then have emigrated to the United States. They hire from the "gardman," or farm-owner, a patch of land that will keep one or two cows and a few sheep, for which and the simple cot in which they live they have to pay a certain number of days' work in each season of the year. The manure made at their barns goes upon the farmer's land. They are so much in the power of the owners that they cannot make reasonable bargains for the payment of rent in money. At home they and their families live chiefly on herring and barley-bread. In most of their houses a barrel of sour whey is kept over for the winter, with which to mix their barley-meal. They scarcely have fresh meat, except perhaps at Christmas, and their diet is extremely frugal. In 1869, when Rio coffee was cheap, it was used by them, but since its rise there are many who have to abstain from it. The cofts of these husmen will sometimes be seen far up in a little scallup or natural shelf on the steep mountain side, where it seems dangerous to attempt to dwell. Not only are sheep and cattle pastured wherever there is a green patch, on the acclivities of the mountains, but even grass is cut and hay made and lowered on ropes or wires.

The condition of the agricultural laborer, as well as his wages, varies, of course, according to whether he is located in a secluded, a poor, a fertile, or a wealthy region. About the Mjösen Lake the soil is so rich as not to require manuring. Undoubtedly there are several districts where the condition of the agricultural laborers is better than that of the husmen above described. But generally their homes are very scantily provided. In some localities, such as Setursdal, in the south central part of the country, people are said to live in the same manner they did three centuries ago. A good deal of agricultural work all over the country is done by women. As in Sweden, women have not by law control of their earnings; and here it may be said that the practice of so much field-work by women causes the house to look less tidy. The practice of scrubbing floors is not so common as in Sweden. In Norway, too, the roofs of the dwellings of the poorer country-people are covered with turf, on which the grass springs up.

At Vossvangen, during the present harvest-season, good agricultural workmen earn at day-work in the field 31 cents a day and board; without board, from 42 to 55 cents a day. At Gudvangen, in the same section of country, the wages of a capable lad of nineteen years at miscellaneous work were 12 species and board for six months, including the summer. In Lærdal, the wages of good farm-workmen are seven species a

NORWAY.

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month and board during the summer, and 5 species a month and board during the winter, which would be at the rate of 28 cents per day in summer and 21 cents per day in winter, with board. In the vicinity of the larger towns wages would be from 50 to 75 per cent. higher.

FISHERIES.

The two principal fisheries are the cod and herring. The latter, carried on along the western coast south and north of Bergen, has from the oldest times been considered one of the chief resources of the country. The so-called spring fishery, beginning in January, employs 50,000 persons for about two months, with a product usually of 800,000 barrels. The autumn herring-fishery is less productive; the spring-catch of 1870 was only 160,000 barrels; that of 1869, 680,000 barrels, valued at $2\frac{1}{2}$ species a barrel. A minute calculation of the expenses of the fishery for that season, made by the government, shows that the earnings of each fisherman in the last-mentioned catch were only 3 cents a day, and that the industry is a loss rather than a benefit to the country.

The cod-fisheries appear to be more profitable. They are divided into the sea-cod fishery and the bay or fjord fishery. The latter, of less extent, is carried on during all months of the year, though least in summer. In this division may be classed the Romsdal cod-fishery, which occupies the latter part of the spring, and which in 1870 yielded 3,000,000 fish. The two great sea-cod fisheries are the Lofoden and the Finmark. The former begins about the middle of January and lasts till the middle of April. The average number of persons employed in it is 22,000, with 5,500 boats, and the average catch 20,000,000 fish, being the largest cod that are caught. The Finmark fishery begins later in the spring and finishes about the last of May. The catch amounts to from 11,000,000 to 15,000,000 fish, which are smaller than the Lofoden, and resemble those caught off Labrador.

The clothing of the Lofoden is coarse woolen; also, goat-skin coat and trowsers, and long boots up to their hips; usually a tarpaulin-hat, sometimes a red cap. Fish-cloze of export to Germany.

In 1869, 117 vessels and boats, with 558 men, engaged in the shark-fishery in the Arctic Sea, taking 7,277 barrels of liver for oil, worth 44,000 species. The same year, 268 men with 27 vessels, Hammerfest, cleared 45,000 species in seals and walrus off Nova Zembla and Spitzbergen. The product of the seal-fisheries to the Ice Sea is estimated at 400,000 species a year.

WAGES OF MECHANICS, THEIR HOMES, EXPENSES OF LIVING, ETC.

In Christiania ship-builders earn 3 marks, (64 cents,) the highest $3\frac{1}{2}$ marks, (75 cents,) a day, (11 hours' actual work;) gas-workers $2\frac{1}{2}$ marks (524 cents) per day, working five days in the week; best bricklayers, by piece, 4 marks (84 cents) to 1 specie (\$1.06) per day. One or two fishing-stations in the south part of the island have nearly 4,000 fishermen.

In the large cotton and woolen factory of Mr. H. Schon, employing 600 operatives, of whom two-thirds are women and one-third are men, the latter earn from 3 species to 6 species a week, and on an average 4 species per week; the former from 2 species to 4 species a week, or on an average 3 species a week. One-third of the operatives are Swedes, and are more economical than the Norwegians. Not more than 10 per cent. of the operatives make deposits in the savings-banks. Perhaps two dozen men own the dwellings which they occupy. The proprietor donated 10,000 specie dollars as the basis of a fund for the benefit of aged and enfeebled operatives, on the condition that each operative who is to have the benefit of it shall contribute out of 600 operatives are contributors to the fund. At the iron machine-foundry and ship-building works in Throudhjem, employing 300 hands, (with a branch nearer the sea employing 90 hands,) and where the actual working time is 10 hours a day, the work-master has 600 species a year and 12 skillings (11 cents) an hour for extra time. The foremen—one for every shop—have 400 species each a year providing 50 men are under him, and 300 species each a year if less than 50. The highest wages paid to a few skilled workmen are 1 specie (\$1.06) a day; the average wages of workmen are from half a specie (54 cents) to 3 marks (65 cents) a day. Boys receive 15 skillings (11 cents) a day. One day's wages are retained by the employers every week to insure the giving eight days' notice of leaving; the rule as to notice being mutual. Four skillings a week are retained from each man's wages for the sick-fund; and in case of sickness a workman gets 1 specie dollar a week for six weeks, and in case of death 5 species for burial. There is a singing-class connected with the shops. Only a few of the workmen are absent on Monday on account of drink. The manager at the works stated that the number so absent was not enough to cause complaint

The average cost of rent in the neighborhood was stated to be from 2 to 3 species a month for a kitchen (by which is meant a very small cooking-room and not large enough to live in) and living-room.

The following is a brief description of some of the homes of these workmen which I visited in company with the shop-urnager, Mr. Olsen:

1. Quarters of a workman about forty-six years old, earning 5 species a week, having a family of a wife and five children, three of whom are small and at home, the other two, respectively sixteen and eighteen years of age, earn their board but not their clothing; all live and lodge at home. The apartments are reached by some rather steep stairs outside of the house from the yard. There is a small entry, a kitchen used by two families, and a living-room 12 feet wide by 15 feet long and 6 feet high. There are two windows, with short lace curtains across the top; a clean scrubbed floor; a bed made up as a single one; a woden sofa or settee that could be used for a bedstead; a table, cupboard, clock, pictures, flowers. There is a cellar to the premises. The rent is 18 species a year, which is cheap, and the same family have occupied the apartments ten years. It requires all he can earn, the workman states, to support his family.

2. The quarters of another family include the same kitchen as the last, a living-room 9 feet wide by 10 feet long and 6 feet high, with close, suffocating air. The workman's family consists of a wife and two small children. He earns 34 species a week, but lays up nothing. He pays 14 species a year for rent. The floor is clean scrubbed; there are short lace curtains at the window; a white knit cotton cover over a small bureau; also flowers and plants, as in the last family; the housewife had a tidy appearance.

3. The third quarters visited were in a wooden house, owned by the workman, occupant. The house is one and one-half stories high, has a cellar, yard with tidy graveled walks, and out-building or shed. There is a fair-sized kitchen and comfortable living-room, with painted floor, hair-cloth sofa and chairs, remarkably neat white bedspread and calico curtains, many pictures and photographs on the walls, plants in pots, three windows with lace curtains, a very bright, nice-looking wife, and four handsome children. The man pays 10 species a year ground-rent and 3 species for taxes. He lets another of his rooms to a tidy mechanic for lodging. His house cost 350 species; he owes about 100 species on it, and pays 20 species a year. Fuel costs 20 species a year. In his house, as in all others, high, narrow iron stoves are used.

4. The fourth home visited was at a house owned by its occupant, a workman, who earns 6 species a week. There are six rooms, two kitchens, a cellar, out-houses, and yard. The sitting-room 10 feet wide 18 feet long and 64 feet high, painted floor, strips of carpet over it, neat table and cloth cover, mahogany secretary and drawers, black-walnut-veneered bureau, black hair-cloth chairs and sofa, pictures, lace curtains at the windows, neat and tasteful in all respects; his family, a wife and two children.

At the iron machine and ship-building works at Bergen, which were visited in August, 500 men are employed eleven hours a day in actual labor. The foreman receives 30 species (\$31.80) a month. About 20 of the more skillful hands receive from 4 marks (86 cents) to 1 specie (\$1.06) a day. The average pay of workmen is 3 marks 12 skillings, (76 cents,) to 3 marks 18 skillings, (81 cents,) which is probably as high an average for mechanical labor as is paid in any part of the country. For overtime 12 skillings an hour are paid. Three days' wages are retained by the employers at each weekly payday. Twenty skillings (18 cents) are retained for the sick-fund, and in case of sickness a workman receives 6 marks (\$1.29) a week when sick, and in case of death 10 species for burial.

A couple of skilled workmen concurred in the statement that fresh meat is used by the families of workmen two or three times a week, and costs 12 skillings (11 cents) a pound; that coffee is used there three times a day; that tobacco for chewing (for nearly all Norwegian workmen chew tobacco) costs twenty skillings (18 cents) a week; that workmen, on an average, spend 3 marks (65 cents) a week for spirits or beer, the greater part of the sum being for beer; that some workmen spend 2 species (\$2.12) a week for drink; that including Sundays, holidays, and the time the shops are closed for repairs, usually at the time of the mid-summer or Christmas holidays, there are eighty non-working days in the year, which the workman loses; that a majority of workmen do not attend any church; and that only a few save money.

The homes of a foreman and a workman were here visited. The first was in a house owned by the foreman himself, whose family consisted of six members. Their apartments were three rooms, the larger one used for a sitting-room, being 14½ by 12, and 8 feet high; the floor was painted; here were nice-looking lace curtains to the windows, a neat sofa, table, &c., and were better apartments than working-people usually have. Other rooms in the house were rented out.

The other apartments were occupied by the family of a workman, who earns a specie-dollar a day, and were in a cheerless frame building, having no fence about it, nor trace of cultivation, even to a shrub. The apartments were in the second story, and reached by a steep pair of stairs from the rear. First was a fair-sized entry, used by different families; next was the kitchen, 4 by 9, and 8 feet high, in which was a small

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iron stove; one window; the floor unpainted and unscrubbed. The living-room was 12 by 12, and 8 feet high, with two windows, but no curtains. On one of the window-seats were several pots of plants. There were some cheap pictures on the walls; a bed by about 4 feet wide, without any window or any light, and on the floor, in a heap. There is no cellar to the house. The workman was a man of fair appearance, and apparently well disposed; the wife was of ordinary appearance. They have five children; the eldest a daughter, about eighteen, earns 24 skillings a day in a net fac-tory; a son, fourteen years old, earns 16 skillings a day in a machine-shop. There are three other smaller children. The rent is 22 species a year. These apartments and other similar tenement buildings a few rods apart, built by the company owning the shops, and intended for four families each. They stand within a few rods of each other. The closets are built only a few feet in rear of the dwellings. The workman just mentioned said his apartments were quite cold in winter, a statement which the appearance of the building seemed to verify.

Food.—The following is a good specified statement of the ration for a garrison soldier at Christiania for each day of the week and its cost:

SUNDAY.

Breakfast: Coffee and bread and butter, and the same for breakfast every morning.
Dinner: Beef and porridge. Supper: Milk and bread and butter.

	United States cents.
$\frac{1}{2}$ pound fresh meat, at 12 skillings.....	7.87
$\frac{1}{2}$ pound potatoes.....	.87
$\frac{3}{4}$ pound hulled barley.....	.44
$\frac{1}{2}$ pound coffee.....	.87
$\frac{1}{2}$ pound butter.....	1.97
Vegetables.....	.22
$\frac{1}{16}$ gill cream.....	.44
$\frac{1}{4}$ pints milk.....	.66
Bread.....	3.72
	17.06

MONDAY.

Dinner: Cod-fish and milk broth. Supper: Boiled barley-grits and milk; and the same for supper every week-day.

	United States cents.
$\frac{1}{2}$ pound cliff fish, at 7 skillings.....	3.06
$\frac{1}{2}$ pound potatoes.....	.87
$\frac{3}{4}$ pound barley-grits.....	.44
$\frac{1}{2}$ pounds milk.....	1.53
$\frac{1}{2}$ pound coffee.....	.87
$\frac{1}{2}$ pound butter.....	2.30
$\frac{1}{2}$ pound barley-grits.....	.87
Bread.....	3.94
$\frac{1}{16}$ gill cream.....	.44
	14.32

TUESDAY.

Dinner: Salt meat, (pork,) and porridge, with pease.

$\frac{1}{2}$ pound salt meat, at 10 skillings.....	4.37
$\frac{1}{2}$ pound pork, at 16 skillings.....	3.50
$\frac{1}{2}$ pound potatoes.....	.87
$\frac{3}{4}$ pound of barley.....	.87
$\frac{1}{2}$ pound hulled barley.....	.87
$\frac{1}{2}$ pound pease.....	.22
$\frac{1}{2}$ pound coffee.....	.87
$\frac{1}{2}$ pound butter.....	.87
$\frac{1}{4}$ pint milk.....	1.53
$\frac{1}{16}$ gill cream.....	.67
Bread.....	3.44
	18.15

WEDNESDAY.

Dinner: Hash and porridge.

$\frac{1}{2}$ pound salt meat, at 10 skillings	2.25
$\frac{1}{2}$ pound salt pork, at 16 skillings	1.75
$\frac{3}{4}$ pound potatoes	1.50
$\frac{3}{4}$ pound barley-grits .....	.87
$\frac{3}{4}$ pound hulled barley .....	.44
$\frac{1}{8}$ pound coffee .....	.87
$\frac{3}{4}$ pound butter	1.53
$\frac{3}{4}$ pound sirup .....	.67
$\frac{3}{4}$ pound dried plums .....	.32
$\frac{1}{4}$ pound onions .....	.11
$\frac{7}{8}$ pound pepper .....	.04
$\frac{3}{4}$ pound juice .....	.87
$\frac{1}{2}$ pint milk .....	.66
$\frac{1}{4}$ gill cream .....	.44
Bread	3.94
	15.89

THURSDAY.

Dinner: Beef and porridge.

$\frac{1}{2}$ pound fresh meat, at 12 skillings ..	7.87
$\frac{3}{4}$ pound potatoes .....	.87
$\frac{3}{4}$ pound hulled barley .....	.44
$\frac{3}{4}$ pound barley-grits .....	.87
$\frac{1}{8}$ pound coffee .....	.87
$\frac{3}{4}$ pound butter	1.53
Vegetables .....	.22
1 gill milk .....	.66
$\frac{1}{4}$ gill cream .....	.44
Bread	3.94
	17.71

Friday, the same as Tuesday.

SATURDAY.

Dinner: Soup made of beer and pickled herring.

	United States cents.
$\frac{1}{2}$ pound herring	1.31
$\frac{1}{4}$ pints beer	1.09
$\frac{3}{4}$ pound wheat meal .....	.33
$\frac{3}{4}$ pound sirup .....	.44
$\frac{3}{4}$ pound barley-grits .....	.87
$\frac{1}{8}$ pound coffee .....	.87
$\frac{3}{4}$ pound butter	1.53
$\frac{3}{4}$ pound potatoes .....	.87
$\frac{1}{4}$ pints milk .....	.67
$\frac{1}{4}$ gill cream .....	.44
Bread	3.94
	12.36

The average value of the ration is 18 to 19 skillings, or say 16 cents; but at retail prices it would be about 25 per cent. higher, which would make it cost the working-man 20 cents. Such a ration is, however, a considerably larger and better supply of food than workmen generally have.

At the penitentiary at Throudhjem the fare for each convict on Sunday is: For breakfast, $\frac{1}{4}$ pints beer, $\frac{1}{2}$ pound rye-bread; for dinner, $\frac{1}{4}$ pints pea-soup, $\frac{1}{2}$ pound pork, $\frac{1}{2}$ pound rye-bread, $\frac{1}{2}$ pint potatoes; for supper, $\frac{1}{4}$ pints barley-meal mush, $\frac{1}{4}$ pints beer, $\frac{1}{2}$ pound bread. The same quantity of bread, $2\frac{1}{2}$ pounds, is allowed every day, or in lieu thereof one-half of the quantity in bolted rye-flour bread. The meat or fish allowance is, on Monday, 2 ounces of herring; Tuesday, 3 ounces of meat; Wednesday, 3 ounces of herring; Friday, 2 ounces of herring; and Saturday, 5 ounces of herring, which are generally made into soup. The supper for every day, except Mon-

day and Friday, is barley mush. The daily allowance of beer is about the same as for Sunday. The cost of the ration, per day, for each man is 12 skillings; and it was the opinion of the superintendent that at retail prices it would cost 24 skillings (24 cents) a day. At Throldhem is a public eating-house for poor people, where nice barley-grits, excellently cooked, can be obtained very cheap. A portion which when dry is a fraction less than $\frac{1}{2}$ pound of barley-grits, after being cooked by steam three hours, makes one Norwegian potter, or 1½ pints; but it is the practice to deal out even a larger measure. For such a quantity one pays 2 skillings. If eaten at the house 2 skillings' worth of beer or sirup can be had to eat with it; so that for little less than 4 cents a palatable and wholesome meal can be obtained. People are accustomed to send to the establishment for boiled grits to eat at home. If we assume that an average workman's family of five members will consume twice the quantity of the ration of a garrison soldier, his subsistence will cost for a year \$146. Rent of dwellings in Christiania is at the rate of 30 species a year for one living-room and a small kitchen in use by another family; and that sum is none too large an allowance to procure such quarters in the larger towns as a workingman's family needs. Allowing \$15 for fuel, \$30 for clothing, and \$15 for miscellaneous, we have in all the sum of \$236 to cover the whole annual expenses for such a family. The average wages of mechanics, probably, cannot be put higher than 60 cents a day, which, for 300 working-days, would amount to \$180; which is \$56 less than what has just been estimated for his expenses. It is therefore obvious that the estimate for expenses is considerably higher, especially in the item of subsistence, than the average mechanic actually incurs. The supply of necessities must be still further diminished if we take into account the items of \$9.36 for tobacco, and \$33.69 for spirits and beer, which, taking the Bergen workman's estimate, are the sums spent in that locality each year by the average workman for those articles. The same incentives to drink prevail among workmen in Norway as in Sweden, though it is not the practice in Norway to use whisky in the house and just before the meal. The Norwegian whisky is a third stronger than the Swedish. Undoubtedly any thorough reform as to the use of such drink must come from a fixed habit of not drinking; which, if formed at all, is generally in early life amid the influences of a good home. When these continue the habit is likely to continue. As in Sweden, companies are now being formed in various parts of Norway to build better dwellings for the working poor, which is one of many indications that just notions of their real needs are becoming prevalent.

.....	2.25
.....	1.75
.....	1.50
.....	.87
.....	.44
.....	.87
.....	1.53
.....	.67
.....	.32
.....	.11
.....	.04
.....	.87
.....	.66
.....	.44
.....	3.94
.....	15.89
.....	7.87
.....	.87
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.....	.87
.....	.87
.....	1.53
.....	.22
.....	.66
.....	.44
.....	3.94
.....	17.71

United States cents.	1.31
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LABOR IN DENMARK.

Although Denmark is not extensively engaged in manufacturing, yet the information in regard to labor which appears in the following pages, and which was furnished by the minister resident and the consuls of the United States, will prove interesting.

The following information was prepared for this report by Mr. Vice-Consul Hansen, under date of September 20, 1872 :

COPENHAGEN.

Copenhagen, which is the capital of Denmark, and a considerable place of commerce in Scandinavia, had, according to the last census of 1870, 181,291 inhabitants, (84,326 of the male, and 96,965 of the female sex;) of these, 18,039 are dependent workers, besides 9,915 day-laborers, and 839 servants without fixed service. Of the 18,039, 14,686 are mechanics, and the rest, 3,353, employed in commerce.

The ordinary time of labor is twelve hours, from 6 o'clock in the morning till 6 in the evening, with a leisure time of two hours for the meals.

The wages for mechanics are about as follows: Machinists, 57½ cents; smiths, 61½ cents; carpenters and joiners, 61½ cents; masons, 7½ to 87½ cents; painters, 61½ cents; shoemakers, 52½ cents; tailors, 43½ to 52½ cents; country workmen and other day-laborers, from 35 to 70 cents a day.

Women working in manufactories are paid 21½ to 26½ cents a day. Children do not generally find much of any occupation in the metropolis, but in return they receive a cheap, and in part a free, and good education at the public schools, which are partly free and partly payment schools.

At the payment-schools of the community 26½ cents a month is paid down for each child, and they are taught, in their mother-tongue, in writing, arithmetic, and religion. The going to school generally commences at the age of seven years and closes at the age of fifteen.

At the beginning of 1871 the number of children attending and bound to go to school, in the metropolis and the suburbs, were 25,191 above the age of six years; of these, 3,262 were above seven years without going to any school, but were taught either at their homes or did not receive any instruction at all, for which reason 1,391 out of 3,262 had to be directed to the public schools for a trial, if it was necessary to direct them to going to school. It was proved that the remaining 1,871 received a proper instruction at their homes; 9,490 children were taught at the free and payment schools of the community; 1,241 at the charity schools; the rest at grammar and other schools subordinated to different authorities.

At the Royal Orphan Asylum, 240 orphans, or at least fatherless children, are instructed without payment; and of these 78 are educated till the fifteenth, sixteenth, or seventeenth year of their age, after which time the boys are bound apprentices to shop-keepers or mechanics by the association, and the girls placed in good families as servants.

The metropolis has several evening and Sunday schools for adults, where mechanics and laborers receive various instructions, partly without payment and partly for a very small contribution.

With regard to the comfort of the laborers, their state of health, &c., it must be remarked that the Danish laborer generally lives airy and cleanly, for which reason many have taken up their abode in the suburbs, where many dwellings for laborers have been erected, the rent of which is from \$2.36½ to \$2.62½ a month for two rooms and a kitchen.

The state of health is generally good, and the district physicians, who are paid by the community, afford medical assistance to the laborers who are not members of the sick-associations, which they can become by paying a small contingent, whereas the hospitals also afford free cure and attendance to poor people.

The educational coercion creates a generally good moral education. Drunkenness is unfrequent among the Danish laboring classes.

With respect to the present prices of the necessaries of life, as well as the weekly expenses for a family, the two filled-up blanks hereto annexed are referred to.

The expenses of a family of the laboring-class vary much according to the earnings, as the saving of anything but small amounts is seldom thought of.

The diversions are cheap and useful, and very much frequented.

The establishment employing the greatest number of workmen in this country is the ship-building and engineering company of Burmeister & Wain, where from 900 to 1,000 workmen find continual employment. Five iron steamships, of about 1,200 tons, with engines of 120 horse-power, and two smaller ones of 300 tons, with engines of 70 horse-power, were, in the course of this year, have been delivered from this establishment, the laborers of which have founded various useful institutions; for instance, a

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It must be observed that the employment of the dock-laborers is of very uncertain nature, depending in great measure upon the number of vessels entering our port under average, attended with discharging and reloading of their cargoes. There have been times when these laborers have earned as much as \$2 per day, but again there are several days when they are without employment.

Rate of wages paid for farm and mechanical labor in Elsinore, Denmark, in the year 1873.

Occupation.	Daily wages.		Monthly wages.
	With board.	Without board.	With board.
FARM-LABORERS.			
Experienced hands in summer	\$0 54	\$0 80	\$5 50
Experienced hands in winter	40	60	4 00
Ordinary hands in summer	36	60	3 00
Ordinary hands in winter	None.	60	2 00
Common laborers at other than farm-work	None.	60	2 00
Female servants, (cooks)			3 00
Female servants, (house-maids)			2 00
SKILLED WORKMEN.*			
Blacksmiths		85	
Bricklayers or masons		80	
Cabinet-makers		85	
Carpenters		80	
Coppers		85	
Miners		None.	
Machinists		1 00	
Painters		80	
Plasterers		80	
Shoemakers	11 00 to 1 50	85	
Stone-cutters	11 00 to 1 50	85	
Tailors	11 00 to 1 50	85	
Tanners	80	85	
Tinsmiths	80	85	
Wheelwrights		85	

* By the day only.

† Piece-work.

Price of board for workmen per week, October, 1873, \$2.50.

HENRY CHARLES CAREY,
Vice-Consul and Acting Consul.

ELSINORE, November 1, 1873.

Prices of provisions, groceries, and other leading articles of consumption, also of house-rent and board, in the towns of Copenhagen and Elsinore, Denmark, furnished by Mr. Olaf Hansen, United States vice-consul.

Articles.	Retail prices in 1872.	
	Copenhagen.	Elsinore.
PROVISIONS.		
Flour, wheat, superfine	\$4 72½	\$8 50
Flour, wheat, extra family	4 20	9 50
Flour, rye	3 02	7 00
Corn-meal	do	do
Beef, fresh, roasting-pieces	13½	12
Beef, fresh, soup-pieces	10½	10
Beef, fresh, rump-steaks	13½	12
Beef, corned	14½	do
Ven, fore quarters	11½	10
Ven, hind quarters	13½	11
Ven, cutlets	13½	do
Mutton, fore quarters	11½	10
Mutton, leg	13½	12
Mutton-chops	13½	12
Pork, fresh	09	11
Pork, corned or salted	13½	12
Pork, bacon	13½	14
Pork, hams, smoked	15½	15
Pork, shoulders	09	do
Pork, sausages	14½	16
Lard	do	16
Cod-fish, dry	02½	06
Mackerel, pickled	do	27
Butter	25	27
Cheese	9 to 14	12

* Per 100 Danish pounds.

† Danish weight.

Prices of provisions, groceries, and other leading articles, &c.—Continued.

light.

From the above list will be observed, that the family in question do like munny or most others, live upon bread, butter, and coffee, with milk and sugar, in preference to meat and potatoes, but the wife is often engaged in larger houses for washing, cleaning, &c., where she will get a little substantial food.

Tea.....	\$0 07
Fish, fresh and salt.....	17
Soap, starch, salt, pepper, vinegar, &c.....	12
Eggs.....	5
Potatoes and other vegetables.....	16
Fuel.....	48
Oil or other light.....	10½
Other articles.....	8½
Spirits, beer, and tobacco, (if any).....	50
House-rent.....	87
For educational, religious, and benevolent objects.....	13
Total weekly expenses.....	5 03
Clothing per year.....	26 25

TWO ADULTS AND THREE CHILDREN.

Weekly earnings in 1872, \$3.90, besides the earnings of the wife, amounting to 75 cents.

	Cost or value.
Flour and bread.....	\$0 82
Fresh, corned, &c., meats.....	15
Butter.....	71
Cheese.....	18
Sugar.....	10½
Milk.....	35
Coffee.....	26½
Fish.....	15
Soap, salt, pepper, vinegar, &c.....	4½
Potatoes and other vegetables.....	12
Fuel.....	17½
Oil or other light.....	5
Other articles.....	7
Spirits, beer, and tobacco.....	17½
House-rent.....	65
For educational objects, (one child at school).....	13
Total weekly expenses.....	4 11½
Clothing per year.....	20 00

ECONOMIC CONDITION OF THE WORKINGMEN OF DENMARK.

Dispatch of Hon. M. J. Cramer to the Department of State.

LEGATION OF THE UNITED STATES,
Copenhagen, November 9, 1874.

SIR: Under the title of "information concerning the economic condition of the workingmen of the kingdom of Denmark," the Danish minister of the interior has published the result of inquiries made in three classes of circulars issued by him under date of October 14, 1872.

The first class of these circulars was prepared with special reference to procuring information concerning the economic condition of artisans, mechanics, and factory-hands, and was intended to be filled up by the employes; the second was designed to procure information concerning the economic condition of the laborers in the country, and was intended to be filled up by the parish and town councils. The intention of the third class was to procure information: 1. Concerning the amount necessarily required annually for the support of a workingman with a family, and for other necessary expenses, such as taxes, &c. 2. Concerning the debts of workingmen and the causes thereof.

Although the information obtained is not as full and complete as could be desired, yet it furnishes a tolerably reliable insight into the economic condition of the laboring classes in the kingdom of Denmark.

.....	\$0 07
.....	17
.....	12
.....	5
.....	16
.....	48
.....	10½
.....	8½
.....	50
.....	87
.....	13
.....	5 03
.....	26 25

, amounting to 75 cents.

Cost or value.	
.....	\$0 82
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November 9, 1874.

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LABOR IN DENMARK.

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I have, therefore, prepared a condensed "statement" of this information, which I have the honor to transmit to you, herewith inclosed.
I have the honor to be, &c.,

Hon. HAMILTON FISH,
Secretary of State, Washington, D. C.

M. J. CRAMER.

THE ECONOMIC CONDITION OF THE LABORING CLASSES IN DENMARK.

From the returns made under the first class of circulars it appears that there are 40,209 laborers, viz: 28,021 males over eighteen years of age, 3,428 females, 6,411 youths married; of the females, 1,904.

AVERAGE EARNINGS.

The annual average earnings in large factories in Copenhagen was: for men, 410 rix-dollars,* (\$215.25); for women, 169 rix-dollars, (\$84.72). For other mechanics, artisans, &c.: for men, 357 rix-dollars, (\$187.42); for women, 143 rix-dollars, (\$71.07); and in the provincial cities and towns, under the same division, respectively, 300 (\$157.50) and 135 (\$70.87) rix-dollars, and 357 (\$187.42) and 95 (\$49.87) rix-dollars, at 1 in the country, under the same divisions, respectively, \$116.10 and \$9.14, \$105.50 and \$13.74.

The average number of daily working-hours for both children and adults is from twelve to thirteen, including the time consumed in short rests and for meals. In some instances it is, however, higher, and in some cases it is higher for women than for men, and for children 1½ hour in the country than for children in cities. The average time allowed for meals is about two hours per day.

The total amount of wages paid, annually, to the 40,209 laborers is over eight millions of rix-dollars, (\$4,210,000). Supposing this number of laborers to be only one-half of the number of laborers in Denmark, it will then appear that sixteen millions rix-dollars (\$8,420,000) are paid to them annually as wages, that is according to the rate of wages paid in 1872, which now is somewhat higher than then.

As to extra earnings, very meager information has been received, yet in many instances such extra wages by extra labor are made. Besides, the housewife, in many cases, earns something which contributes a not inconsiderable amount to the support of the family.

It does not often happen that laborers coming under this class of circulars have a share in the profits of factories, &c. In place of this they have a share in a fund established to render them assistance in case of sickness or death.

The information coming under the second class of circulars may be grouped as follows:

The total number of tenants, subtenants, &c., within the kingdom is 101,832, making about 15 per cent. of the male inhabitants. This, it must be remembered, has reference only to the population in the country, and not in cities and towns. Under the term tenants are included those who own their cottages, with, perhaps, one third of an acre of land connected with it. Among the 101,832 tenants, &c., are about 23,785 traders and mechanics, &c., or about 25 per cent. of the entire class.

WAGES OF FARM-LABORERS.

With regard to the average wages paid to farm-hands it may be observed that those in Jutland receive during the summer season higher wages than those in other parts of the kingdom, while the contrary is the case during the winter season, with the exception of female laborers, who, in Jutland, receive, without board, 35 skilling (17 cents, gold,) and in other parts a little over 23 skilling (11 cents) per day.

The average number of working-hours per day is, during the summer season, about 14, and during the winter season about 10. Deducting from these the hours devoted to meals, &c., and the average number of hours devoted to actual labor throughout the kingdom will be about 11 during the summer season and 8 during the winter season.

With regard to the question: Do these farm hands receive other emoluments besides their regular wages, such as milk, pasture for a cow, turf, &c.? it may be said that in a few counties they do receive such emoluments, averaging from 10 (\$5.20) to 40 (\$21) rix-dollars per annum. And yet, properly speaking, these emoluments cannot be regarded as extra wages, for they are generally stipulated in the contract as part of the wages. The question: Do the laborers earn anything by extra work; and, if so, how much? is partly answered in the affirmative and partly in the negative. Some, besides their ordinary daily work, spend a few extra hours in making baskets or plaiting mats,

* A rix-dollar is equivalent to 52½ cents, gold.

&c., and earn that from 5 (\$2.62) to 40 (\$21) rix-dollars per annum. Likewise, many housewives, by extra domestic industry, such as washing, sewing, knitting, spinning, &c., earn from 20 (\$10.50) to 40 (\$21) rix-dollars per annum. To the question: How much of their time do these housewives devote to labor outside the house? the answer is that only during the time of the harvesting, of taking up potatoes and of turf-cutting, they are employed out of the house.

The question: At what age and to what kind of work are the children hired out? has been answered thus: They are hired out from the seventh to the tenth year of their age, principally to watching cattle in pastures. The total number of children thus hired out is 33,436. Besides watching cattle, they are also employed in potato-digging, fruit-plucking, turf-cutting, &c.

The question: Whether the farm-hands, &c., have employment the whole year round? has generally been answered in the affirmative. There are some districts, however, where during the winter season labor is rather scarce, and where, consequently, they can earn little or nothing during at least one month of the year.

The question: Whether there are, in the various districts, endowment funds for assisting the sick and the aged? has been generally answered in the affirmative; but the question: What proportion of the laborers become *self-supporting* or independent of assistance? has been misunderstood, and hence no reliable data have been furnished in regard to it.

EXPENDITURES.

The information sought under the third class of circulars relates to the *necessary expenses for support, &c., of the families of the laboring-classes*.

For those in Copenhagen the minimum may be placed at 254 rix-dollars, (\$133.35;) that is, for rent, 36 rix-dollars, (\$18.90;) for food, 192 rix-dollars, (\$100.80;) for clothing, 15 rix-dollars, (\$7.87;) for tobacco and whisky, 11 rix-dollars, (\$5.77;) and the maximum at 615 rix-dollars, (\$322.87;) that is, for rent, 120 rix-dollars, (\$63;) for food, 365 rix-dollars, (\$191.62;) for clothing, 78 rix-dollars, (\$40.95;) for tobacco and whisky, 52 rix-dollars, (\$27.30;) while in most cases the expenses vary from 350 (\$183.75) to 405 (\$212.62) rix-dollars per annum. To the question: In what proportion are the earnings of a laboring family sufficient to afford them a support adequate to their condition? the answers received from both the employers and employes vary greatly. The former believe these earnings to be generally sufficient, while the latter contend that they are not. This difference of opinion is accounted for partly from the fact that five among the employers show special care for the well-being of their employes, (the latter of whom earn enough for a decent support,) and partly from the fact that some of the latter send their children to paid-schools, and partly from the fact that a part of their earnings is applied to pay interest on debts incurred in the course of time.

The question: To what extent do the laboring-classes participate in public amusements? has been variously answered. It appears that in one district they engage in them very sparingly; while in nine other districts the young people are said to engage in them to a very considerable extent.

Some of the people, in themselves filling up these circulars, put down their expenses for public amusements from 4 (\$2.10) to 6 (\$3.15) rix-dollars per annum. The preceding account of the expenses of laboring-families refers only to those in the city of Copenhagen.

The annual expenses of laboring-families in provincial towns and cities range from 210 (\$110.25) to 365 (\$191.62) rix-dollars; that is, for rent, from 20 (\$10.50) to 40 (\$21) rix-dollars; for food, from 150 (\$78.75) to 250 (\$131.25) rix-dollars; for clothing, from 30 (\$15.75) to 50 (\$26.25) rix-dollars; for tobacco and whisky, from 10 (\$5.25) to 25 (\$13.12) rix-dollars. The question: How far are the earnings of the laboring-classes in these cities and towns sufficient for their support? has been answered that in most cases such earnings are sufficient; though the answers received from several cities and towns show that they are insufficient. With regard to the question, Whether these laboring-classes are in debt? the answers are very unfavorable; and only very few incur any expenses whatever for the education of their children.

With regard to the amount of expenses for the laboring-families in the country, the information obtained shows that it ranges annually, for rent, from 10 (\$5.25) to 16 (\$8.40) rix-dollars; for food, from 150 (\$78.75) to 180 (\$94.50) rix-dollars; for clothing, from 20 (\$10.50) to 50 (\$26.25) rix-dollars; for tobacco and whisky, from 10 (\$5.25) to 15 (\$7.87) rix-dollars. The question, Whether the earnings are paying the expenses? is generally answered in the affirmative; though in a number of cases the answer is, "scarcely sufficient." As to whether the laboring-classes in the country districts are in debt, the information received shows a large number of them to be in debt. They spend nothing extra for the education of their children, nor do they often engage in public amusements.

As to the age at which laborers marry, it may be said that the majority of both sexes marry between the twenty-fifth and thirtieth year; some even below the age of twenty-five; and in most cases before they had "laid up" anything. Hence, many commence their married life with debt.

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LABOR IN THE NETHERLANDS.

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LABOR IN THE NETHERLAND.

The Netherlands, or Low Countries, so called from their natural conformation, now composed of North and South Holland, have a population of 3,515,360. The commerce of the country, though not as great as formerly, is still quite extensive. There are important silk manufactories at Amsterdam, Haarlem, and Breda. Woollen is principally manufactured at Tilburg; linen and cotton in many parts of the two provinces. The earthenware works at Delft are extensive and celebrated. Schiedam is noted for its production of ardent spirits, particularly of gin. Butter and cheese are among the chief articles of export.

An interesting branch of industry is the manufacture of paper, and the manufacture of bricks and tiles is also worthy of note. This remarkable country largely rewards the skill and labor of the agriculturist; the annual production of cereals amounting to 16,000,000 bushels, and of potatoes 20,000,000. But the fisheries are the most famous for their extent and productiveness, especially the herring fishery, which has been carried on since the twelfth century, and has been termed the "Dutch Gold Mine." The Netherlands possess little or no mineral wealth. Among the various branches of industry pursued ship building holds the first place. The Dutch East Indianmen, in the time of wooden ships, were justly renowned. Societies "for the promotion of the public good," as they are styled, abound throughout the provinces, for the establishment of schools, hospitals, asylums, and other works of public utility. Institutions for the relief of the destitute and suffering are abundant, though in general the poor are taken care of by the churches to which they belong. There are forty institutions for employing poor laborers. Education is provided for by the government.

In Holland the laws of nature seem to be reversed; the sea is higher than the land. The greater portion of the country has been perseveringly rescued from the water by the continued efforts and ingenuity of man. The dikes and hydrographical works between Dallart and the Schelde are estimated to have cost \$1,500,000,000. The people of the Netherlands, though placed apparently under circumstances the most unfavorable for the accumulation of wealth, overcame one difficulty after another with matchless perseverance, until they rendered their country the center of European commerce, and diffused the appliances of comfort and the means of enjoyment among the lowest orders of the people.

RATES OF WAGES.

As the author was prevented by want of time from visiting this interesting country, he is indebted to others for even the meager information in regard to labor which appears in the following pages.

Wages in North Holland.

Place, occupation, &c.	Wages per week.	Hours of labor.
HELVESIN.		
Steam spinning-factory:		
Wavers	\$5 20 to \$1 00	Five days of 12 hours and one day of 6½ hours.
Spinners	4 40 to 5 60	
Boys under 16 years	70 to 2 60	
Women	2 00 to 3 20	
Girls under 16 years	60 to 1 60	
Carpent manufacturers:		
Men's average salary	2 50	8 to 10 hours per day.
Boys' average salary	1 50	
Manufacture of moltons	5 00	
Average rate of wages	5 00	

Wages in North Holland—Continued.

Place, occupation, &c.	Wages per week.	Hours of labor.
LAREN.		
Hair floor-cloth manufactory:		
Weavers	\$5 00	} 13½ hours per day.
Spinners	3 60	
NAARDEN.		
Bale-goods factory:		
Men	\$6 00 to 9 00	} 12 to 15 hours per day.
Boys and girls	2 00 to 3 00	
ZAANDAM.		
Spinning factory:		
Piece-work	6 cts. for ¼ kilog.	12 hours per day.
KROMMENIE.		
Machine-yarn-spinning factory:		
Weavers	1 florin 10 c.	14 hours per day.
The weavers who work at home from four to seven days receive from	\$2 00 to \$3 20	
HAARLEM.		
Gauze-factory:		
Weavers	2 40 to 2 52	
Spinners	21 to 54	
Ribbon-weaving factory:		
Weavers	1 60 to 4 80	

Return respecting the spinning and weaving factories in South Holland.

Commune.	Kind of factory.	Hours of labor.	Rate of wages.	Produce.
Alblasserdam...	1 steam spinning and weaving factory.	12 hours a day	Average full-grown men, 44 cents per day; for children and soisters, 8 to 24 cents per day.	In the last few years rather decreasing than increasing.
Griessendam...	2 hand weaving factories, principally for sail-cloth.	Winter 8 a. m. to 8 p. m.; summer 5 a. m. to 8 p. m.	Winter, 50 cents per day; summer, 70 cents per day.	As the manufacture is on a small scale particulars can be given.
Gouda	1 steam cotton-spinning factory	12 hours a day	For men, from \$2 to \$6 per week; for women, from \$1.20 to \$2.40 per week.	Increased at the rate of 15 per cent in 1851.
Do	30 cotton-factories where the yarn is spun by hand.	Summer, 13 to 14 hours; winter, 10 to 11 hours.	In this factory work is done by piece, at the rate of from \$1.30 to \$3.20, for some \$1.60, per week; turners and children receive 32 to 60 cents per week.	Decreasing.
Krimpen on the Lek.	2 tow-spinning factories.	From sunrise to sunset.	40 cents per day	Tolerably regular.
Leiden	1 flax factory	11 hours a day	From \$0.80 to \$5.70 per week.	Increasing.
Do	1 flax factory	14½ hours a day	From \$0.60 to \$6.40 per week.	Fairly on the increase.
Do	1 grain seed and damask factory.	10½ hours a day deducting 3½ hours rest.	For all laborers, average rate of wages \$1.60 per week.	Increasing.
Do	1 flag duck factory.	10 to 12 hours a day.	From \$0.80 to \$4.80 per week.	Regular.
Do	1 blanket factory	12 hours a day	Boys and girls, \$0.60 to \$1.20 per week; work-people paid by piece, \$1.60 to \$4 per week; weekly wages, \$2.40 to \$4.80.	Increasing.
	Woolen-cloth and blanket factory.	11 hours a day	For men, \$2 to \$8 per week; boys from 11 to 16, \$1.20 to \$1.60 per week; women, \$1.20 to \$1.80 per week; girls from 11 to 16, \$0.80 to \$1.20 per week.	Increased by 20 per cent. in the last five years.
Nieuwerkerk on the Yssel.	3 fine-cotton-spinning-factories.	11 hours a day	Average 60 cents per day	Moderate.
Rotterdam....	1 sail-cloth weaving factory.	10 hours a day	Paid by piece, on an average \$1.25 per week.	Increasing.
	2 hair-cloth and jute-weaving factories.	10 hours a day	Paid by the piece, the wages on an average \$4 per week.	Increasing.

Wearing factories.

Hours of labor.	Districts.	Number.	Working hours.	Number of workmen.				Average wages per day.			
				Above 16.		Below 16.		Above 16.		Below 16.	
				M.	F.	M.	F.	M.	F.	M.	F.
13½ hours per day.	Aalsd.	19	10	60	16	6	7	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>	<i>Cents.</i>
	Asten (woolen and cotton).	1	10	26				28	16	12	3
12 to 15 hours per day.	Bhat 1	1	10					48			14
	Boxtel	1	10					12	48		
12 hours per day.	Breda (carpet-weaving).	18	9-10	156	28	61	11	40	10	12	14
	Geldrop	1	11	3		3		42	28	18	14
14 hours per day.	Gennert	15	13	395	95	97	30	40	20	20	16
	Heeze (edgings)	2	10	50				28	20	20	16
14 hours per day.	Heimond	2	9	14				28			
	Herfogenbosch, (5 ribbon, 4 lace, 1 lamp-cotton, 1 carpet-factory.)	13	10	34	116	30		13	40	20	14
	Olischoot	11	10-11	137		43		88	26	26	16
	Oosterhout	1	10					41		11	
	Stratum (woolen).	1	12	7		2	1	32	32		
	Stryp (linen)	3	13	105	10	4	3	36	20	24	14
	Tilburg	1	11	50	18		4	40	30	11	12
	Tongeloo	727	10-11	1,600		160		40	31	16	16
	Uden	1	11	8				32	7	26	
	Veghel	2	10	21	10	1	6	28	21	16	
	Waalre	1	10-11	20	9	1	1	2	19	20	12
	Wierusel	14	10	56	4	12	3	27	16	12	8
	Zecist	2	10	14				31			20
		9	10	63	11	18		28	16	12	

South Holland.

	Produce.
men, 44 children 24 cents	In the last few years rather decreasing than increasing.
day; Sunday.	As the manufacture on a small scale not particulars can be given.
to \$6 per from \$1.20	Increased at the rate of 15 per cent. in 1871.
is done by from \$2.40 \$1.60, per children cents per	Decreasing.
.....	Tolerably regular.
per week.	Increasing.
per week.	Fairly on the increase.
average rate per week.	Increasing.
per week.	Regular.
0 to \$1.20 people paid per week; 10 to \$1.00.	Increasing.
per week; \$6, \$1.30 to men, \$1.20 girls from \$1.20 per	Increased by 20 per cent. in the last five years.
r day.....	Moderate.
an average	Increasing.
the wages per week.	Increasing.

Spinning-factories.

Dreda	1	15	5	4	6	25	25	34
Dongen	1	12	17	26	5	30	54	40
End oven, (wool-spinning)	1	13	22	3	3	32	40	20
Goldrop	4	13	41	26	24	13	28	16
Stratton, (wool spinning)	10	11	41	6	5	50	30	11
Thong	52	10-11	1, 252	646	288	177	46	20
Woonel	1	10	8	34	4	46	20	22

* In these numbers are included the weavers who work at home.

RATES OF WAGES IN AMSTERDAM.

Statement showing the rate of wages and the hours of labor of some of the principal factories and trades in Amsterdam in 1872.

Occupation.	Hours of labor.	Paid per—	Average amt of wages per week.	Remarks.
Blacksmiths:				
Ordinary workmen	10½	Hour	\$3 16 to \$3 78	
Competent workmen	10½	do	4 40 to 5 05	
Bread-bakers:				
Bakers' foremen	12	Week	5 04	
Workmen	12	do	3 40 to 4 20	
Millers:				
Foremen	12	do	6 81 to 8 01	
Workmen	12	do	3 40 to 3 60	
Builds	12	do	6 84	
Breweries:				
Foremen, (Germans)	Unlimited	Month	7 88 to 13 92	
Brewers, (Germans)	12 to 15	do	4 02 to 6 52	
Engineers, (Dutchmen) ..	13	Week	6 04	
Carters, (Dutchmen)	13 to 14	do	3 21 to 6 04	
Laborers, (Dutchmen) ..	12	do	3 00 to 4 84	
Carpenters, (Dutchmen) ..	11	do	4 40	
Bricklaying:				
Bricklayers	12	Hour	4 32 to 5 98	
Hodmen	12	do	3 60	
Assistants	12	do	2 88 to 3 24	

Statement showing the rate of wages and the hours of labor, &c.—Continued.

Occupation.	Hours of labor.	Paid per—	Average am't of wages per week.	Remarks.
Brushmakers	10 to 12	Piece	\$2 40 to \$4 84	
Cabinet-making:				
Cabinet-makers	11	Hour	3 60 to 5 32	
Superior workmen, (carv- ers and upholsterers.)	11	do	6 64 to 7 90	
Candle-factories:				
Foremen	12	Week	4 32	
Workmen	12	Piece	3 36	
Females	10	Hour	1 20 to 2 40	
Engine-driver	10	Week	4 84	
Carpenters:				
House	12	Hour	3 60 to 4 32	The men employed in the government-yard are, for the most part, engaged permanently, and the married men have to pay 30 cts. per week to the widows' fund.
Ship	10	Day	4 84	
Ship, (in government-yard)	10	Week	4 00	
Coach-builders:				
Smiths	11	Hour	2 64 to 7 96	
Builders, painters, and up- holsterers.	11	do	2 64 to 6 64	
Diamond cutters and polish- ers.	12	Karat & piece	10 08 to 32 24	
Distillers	11	Week	2 40 to 4 84	These men are often out of work.
Duck-laborers	10	Day	4 84 to 7 24	
Gas-works:				
Boys	12	Week	4 84 to 7 24	
Stokers	12	do	4 40 to 5 08	
Painters	12	do	2 60 to 5 64	
Coal-quenchers	12	do	3 60 to 4 04	These men work 7 days per week, Sundays included.
Coal-quenchers	12	do	3 14	
Siphon-pumpers	12	do	3 20 to 3 72	
Gate-keepers	12	do	3 20	
Lamp-lighters	6	do	1 60 to 2 64	
Smiths	10	do	2 64 to 4 84	
Hammer-men	10	do	1 92 to 2 40	
Brecklayers	10	do	3 12 to 3 84	
Hollmen	10	do	2 88 to 3 36	
Carpenters	10	do	2 88	
Coopers	10	do	2 40 to 4 24	
Tunmen	10	do	3 60 to 3 36	
Turners	10	do	2 00 to 4 08	
Fitters	10	do	3 12 to 3 36	
Meter-inspectors	10	do	2 00 to 3 60	
Occasional laborers	11 1/2	Day	3 60 to 4 84	
Gunsmiths	12	Piece	4 00 to 4 84	
Hatters	11	Day	72 to 4 84	From 72 cents to \$6 16 when working extra hours.
Iron-works	8 to 12	do	4 84	
Lumpers	11	do	4 84 to 6 04	
Navvies	10	Hour	4 20	
Painters and glaziers	11	do	2 40 to 3 20	
Plumbers	11	Hour and day	2 40 to 3 20	
Printing:				
Compositors	10	Hour, week, or piece.	3 20 to 4 60	
Pressmen	10	do	3 60 to 10 96	
Railways:				
Watchmen	15	Day	2 80 to 3 92	These men work 7 days per week, Sundays included.—The engine-drivers are employed two-thirds of the week in driving engines and are kept in reserve the other third. Every third week the engines are examined, and during that time the drivers are paid as if actively employed.
Pointsmen	15	do	3 08	
Guards	15	Week	3 80 to 5 12	
Engine-drivers	15	Day	3 78 to 7 04	
Engine-drivers	11	Hour	5 44 to 6 20	
Laborers	15	Day	2 80 to 2 96	
Segar-makers	10	1,000	3 60 to 7 24	Of ordinary kinds, a man can make from 500 to 700, and of the better sorts from 200 to 300 per day. He is assisted by a boy, to whom he has to pay from 40 cents to \$1.20 per week out of his wages.
Shoemakers:				
Ordinary workmen	Unlimit'd	Piece	2 40 to 3 20	
Superior workmen	do	do	3 60 to 4 84	
Stone-masons	11	Hour	4 84	
Sugar-refiners	11	Week	5 00 to 5 24	
Tailors	Unlimit'd	Hour & piece	4 84 to 5 64	
Tanners	10	Week	2 40 to 3 40	
Upholsterers	10	Hour and day	2 40 to 3 60	

LABOR IN THE NETHERLANDS.

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Statement showing the rate of wages and the hours of labor, &c.—Continued.

Remarks.	Occupation.	Hours of labor.	Paid per—	Average amt of wages per week.	Remarks.
	Workmen employed on the Amsterdam Canal and Harbor Works:				
	Divers	11	Day	\$7 24	{ 36 cents per hour when under water.
	Masons	11	do	4 81	
	Plate-layers	11	do	4 56	
	Trimmers	11	do	4 84	
	Blacksmiths	11	do	6 01	{ During the summer months these men often work 14 hours per day, and then earn about \$1 per week. When employed on extensive works they are usually paid per mile, the wages varying according to the nature of the soil.
	Strikers	11	do	4 11	
	Stokers	11	do	4 81	
	Carpenters	11	do	5 22	
	Sailors	11	do	4 81	
	Sawyers	11	do	4 81	
	Laborers	11	do	4 32	
	Horse-keepers	11	do	4 81	
	Horse-drivers, (Englishmen.)	11	do	4 56	
	Watchmen, (Englishmen)	11	do	5 41	
	Boys, (English)	11	do	4 03	
	Puo-drivers, (Englishmen)	9	do	1 68	
				3 13	

In consequence of the continually increasing price of food and house-rent, a general rise of wages has been effected during the last few months, without causing any ill-feeling between the employers and their workmen, and in many instances the former, ble wishes of the latter by allowing them a higher rate of wages, without awaiting any demonstration on the part of the men. Of late the system of payment by the hour has become pretty general, and works well, as by that means there is hardly any employer to reduce the number of hours of labor, the men having an interest in working as long as their employers will permit. The question then naturally arises how do Dutch workmen and their families manage to live on these small incomes in such an expensive place? In reply I must, in the first place, explain that to the industrial classes in Holland, animal food, cheese, eggs, beer, currants, raisins, sugar, &c., are luxuries of which they partake only on Sundays, and then but sparingly, and in some instances not at all. They live chiefly on potatoes, cheap vegetables, such as carrots, turnips, onions, cabbage, &c., stewed with lard, and bread, both wheat and rye. When cheap vegetables are not procurable, they vary their meal by dried pease and beans of various kinds, or rice, barley, and flour, prepared with butter milk and treacle. The rent of a single room now varies from 45 to 84 cents per week, and a floor of the same sized rooms can be obtained at from 72 to \$1.20.

WAGES IN ROTTERDAM.

Statement showing the rates of wages and the hours of labor in Rotterdam in 1872.

Trades.	Hours of labor.	Paid per—	Average amt of wages per week.
Bakers	12	Week	\$3 60
Blacksmiths	10	Hour	\$2 88 to 4 32
Brewers	12 to 15	Month	7 24 to 7 14
Bricklayers	10 to 12	Hour	3 06
Butchers	10	Week	4 40
Cabinet-makers	12	Hour	4 32 to 5 80
Carpenters	11	Week	3 52 to 4 32
Distillers	10	Day	2 40 to 4 00
Dock-laborers	10	Hour	3 60 to 4 61
Painters	10	Week	3 60
Plumbers	10	do	3 20 to 3 60
Printers	10	do	3 20 to 4 44
Railway-guards	10	do	3 80 to 5 12
Railway-laborers	10	Day	2 40 to 2 88
Sail-makers	10	do	2 88
Shoemakers	Unlimit'd	Piece	2 40 to 3 60
Stone-masons	10	Hour	3 84
Sugar-refiners	10 to 12	Week	3 60 to 4 84
Shipwrights	10	Day	3 81 to 4 32
Tailors	Unlimit'd	Hour or piece	4 81 to 5 64
Upholsterers	10	Day	3 60

DUTCH ARTISANS—DIAMOND-CUTTING.

[From the British Almanac, 1874.]

In the Netherlands the rates of wages approximate somewhat more closely to those current in England, but the cost of house-rent and provisions is greater, so that, in fact, every 50s. earned in Holland does not go so far as 15s. in this country. The Dutch artisans are, as a rule, steady, patient, and skilful, but their work lacks finish and taste. Holland is not in any sense of the word a manufacturing country. It is as a maritime people that we encounter the rivalry of the Dutch, who make excellent sailors and fishermen, and are content with lower wages than would satisfy English seamen. But there is one industry, that of diamond-cutting, peculiar to Holland. It is carried on at Amsterdam, and is chiefly in the hands of Jews, who earn from £6 to £7 per week. With the exception of this class of workers, the general condition of the Dutch artisans is in every respect inferior to that of their English brethren.

EXPENDITURES OF WORKMEN'S FAMILIES.

Estimate of the weekly expenses of a blacksmith, with his family of a wife and one child.

[From British consular reports.]

Articles.	U. S. gold.	Articles.	U. S. gold.
Rye-bread	\$0 40	Vinegar, pepper	\$0 04
Wheaten bread	10	Oil	8
Butter	20	Turf and wood	14
Milk	10	Coal or coal	14
Sugar	12	Salt	8
Coffee	10	Starch	4
Tea	10	Washing and mangling	10
Flour	40	Thread	4
Potatoes	20	Water	40
Greens	10	House-rent	10
Meat	10	Sick-fund	3
Beef	10	Unlaid fund	40
Mutton	10	Clothes	40
Pork	10	Spirits or beer	6
Eggs	21	Tobacco	6
Lard	6	Total	3 81
Salt	6		

The following is an estimate of expenses made by a mason, with a wife and two children. He must be well off, for he indulges in butter and much bacon, and spends nearly half as much again as the smith:

Articles.	U. S. gold.	Articles.	U. S. gold.
House-rent	\$0 48	Salt	\$0 06
Potatoes	50	Vegetables	16
Fishing	30	White bread	6
Rye-bread	30	Tobacco	10
Coffee	22	Doctor's fund	8
Oil	16	Sick and burying fund	10
Bacon	84	Unforeseen expenses	10
Butter	52	Schooling	50
Coal or coal	18	Clothing	50
Milk	11	Total	5 03
Soap	8		

Next, we have a list of what is considered a legitimate expenditure by a bricklayer, with a wife and four children. The family is larger than that of the mason, but the house would seem to be inferior and the weekly expenses are much smaller.

Articles.	U. S. gold.	Articles.	U. S. gold.
Rye-bread		Salt and pepper	\$0 16
Wheaten bread	\$0 40	Oil	16
Butter	4	Turf and wood	12
Milk	20	Coke or coal	13
Cheese	8	Soap	8
Sugar	4	Starch and washing	5½
Coffee	16	Thread	6
Tea	2	Water	5½
Treacle	2	House rent	40
Flour	2	Burial-fund	5
Potatoes	40	Clothing	40
Vegetables	8	Spirit wine beer	6
Meat	14	Tobacco	6
Pork	18	Miscellaneous	6
Bacon	11		
Lard	16	Total	3 90

Lastly, we have the modest estimate of a bricklayer's laborer, who, blessed with a wife and four young children, reckons his expenditure by the day, subscribes, like the others, to the doctor and the undertaker, and finishes by spending considerably more than he is supposed to earn.

Articles.	U. S. gold.	Articles.	U. S. gold.
Bread	\$0 08	Milk	\$0 1½
Rice or grits	5½		
Lard	4	Total per day	43
Eggs	5		
Butter	3	Total per week	3 01
Coffee	2½	House rent	40
Oil	2	Sick and burial fund	8
Salt	1½		
Potatoes	10	Total weekly expenses	3 49

There are two points specially to be observed in these estimates. The one is the inferior style of living, which such estimates denote. As a rule, no meat but bacon is ever tasted, and but little of that. With one exception, it is not admitted by any of these men that they should lay out any portion of their wages on spirits or beer, or drink anything stronger than tea and coffee. I imagine that in practice they are not all of them thorough temperance men; still, it is remarkable that they do not reckon even beer as a legitimate item of expenditure.

The other point to be remarked is that, notwithstanding the narrow limits within which the household expenses are kept, they in every case considerably exceed the nominal wages of the head of the family. This point was noticed by the committee, who, after examining and comparing many more of these estimates than I have given above, came to the conclusion that the average bare necessities of an ordinary workman, with an average family, amounted to 9 florins (15s.) a week, while his average wages did not exceed 6 florins 40 centimes (11s.) if he was a skilled, and 4 florins 80 centimes (8s.) if he was a perfectly unskilled laborer; that there thus remained a deficit of 2 florins 40 centimes (4s.) in the one case, and 4 florins 2 centimes (7s.) in the other, which had to be provided for by the man working out of hours, or by the help of the wife or children.

CONDITION OF THE LABORING-CLASSES IN HOLLAND.

[From British consular reports.]

There can be little doubt that if the laboring-classes in Holland are prosperous and happy, they owe it to their own patient industry, their provident habits, and their natural contented disposition. Living in a land which owes its very existence to the ingenuity and labor of man, at any moment liable to be called out to work again for their lives and homesteads, they owe little to nature, much to themselves. What they acquire with pain they guard with care. The Dutch laborer, whether in field or town, reflects on the value of his earnings; the energies which a warmer blood and a more

Impetuous temperament would expend in political excitement, he consecrates to the improvement of his own individual lot; the question of the hour, the news of the day, possess little interest for him; he prefers his Bible to his newspaper, and his family fireside to the public, the reading-room, or the political meeting. Jealous to a degree over the liberty he already possesses, he does not sigh for more, and prefers enjoying in peace the advantages already secured to him, to agitating for others which his fathers did without. The Dutch artisan can live comfortably and contentedly on what would ill-suffice to satisfy the wants of an English laborer. He gets lower wages, he lives in a country where protection is still professed and duties are still high, where the necessities of life are about as dear as in England, and the luxuries dearer, and yet his home is happier and his family healthier than many which could be found elsewhere. Spending less on himself he has more left for his children, and what he saves in beer he spends in bread. The usual wages of a skilled artisan, such as a carpenter, joiner, plumber, or smith, may be reckoned, in the larger towns of Holland, at about \$3.81 a week; his wife, perhaps, adds 72 or 96 cents by taking in washing, and the man himself, by working out of hours, on odd jobs, often adds another shilling or two. I imagine a steady family would thus find the united earnings not fall short of \$5.28 a week. Men whose trades or occupations require less skill are worse paid, unless, indeed, the absence of skill is compensated for by the additional severity of the labor. The firemen or stokers in the gas-works at the Hague receive 17s. 6d. a week; but for this they have to work in relays of twelve hours at a time, day or night, as the case may be, and seven days in the week, with an additional six hours every Saturday to secure the weekly rotation of day and night work. In the smaller towns in the interior of the country, where living is cheaper, house and ground rent low, and skilled labor less in demand, wages are much lower; there, an artisan who might earn \$4.60 or \$3.84 a week in the capital, has to content himself with \$2.40. These are the wages often paid to factory hands. A favorite mode of remuneration for labor is that of paying by piece-work. This plan is adopted even on the premises of the employer. Thus a master cabinetmaker will furnish all the materials for making a table; the table will be made in his own workshop, under his eye; but whether his workman is industrious or idle will make no difference to him, for he will pay him the same sum on its completion. Another very general mode of payment is by the hour instead of by the week. In this case the artisan naturally earns more in the summer, when the days are long, than he can do in the winter. The pay varies according to the nature of the labor, skilled or otherwise. The rates of from 4 to 8 cents per hour embrace the principal variations. Each skilled workman is required to find his own tools, with the exception of those of an immovable nature, such as lathes, presses, and machinery of all kinds. The hours of labor in the summer are generally twelve, including intervals for two or three meals. These consist of breakfast, at about 8; dinner, about mid-day; and occasionally tea toward evening. Half an hour is considered enough for the first and last, but dinner is a more important matter and occupies, with its subsequent repose and pipe, an hour or an hour and a half.

LABOR IN RUSSIA.

The last of the transatlantic countries to which attention will be directed in connection with the subject of labor, is that vast and interesting section of the Russian Empire which forms the western portion of her territory. Whether considered in regard to its population,* which falls but little short of the combined population of any two of the most populous countries of Europe, or the vast extent of its territory, which extends through thirty degrees of latitude, or great diversity of its products, which comprise the rich flora of the extreme north, the fruits of semi-tropical climates, and all the varied products of the temperate zone, it stands without a peer among the nations of the old world. In its vast areas of fertile soil, its great forests of valuable timber, and the great variety and abundance of its mineral products, it possesses the germs of a vast development. Although largely devoted to stock-raising, producing a breed of horses which are perhaps, not excelled for strength and hardihood, it is also extensively devoted to agriculture, although only about three hundred million acres are under cultivation. Grain and hemp are exported in vast quantities, the former competing sharply with the United States in the corn markets of England. The Russian manufactories are, however, of comparatively recent origin, commencing in the reign of Peter the Great, by whom, and by his enterprising successors, the Empress Catherine the Great, the Emperors Alexander and Nicholas, and the present enlightened sovereign, Alexander II, they have been encouraged. Except in sheet-iron, in the quality of which product Russia stands unrivaled, her exports of manufactured products have not been extensive.

EXPORTS FROM RUSSIA TO THE UNITED STATES.

The following statement shows the extent and values of the products of Russia which find a market in the United States. It will be observed that our imports of raw products from that country consist, chiefly, of wool, flax, and hemp, while sheet-iron forms the only manufactured article of considerable value.

* Population of the principal European countries.

Russia in Europe, with Finland	71, 174, 198
Germany	41, 080, 846
France, without Algiers	36, 102, 921
United Kingdom	31, 483, 700

Statement of imports into the United States from Russia during the year ended June 30, 1874.

Year ended June 30, 1874.	Imports direct from Russia.		Imports indirect from Russia.	
	Quantities.	Values.	Quantities.	Values.
FREE OF DUTY.				
Chemicals				\$10,335
Hair of all kinds, unmanufactured	pounds.. 80,284	\$12,511		
Paper materials	do 318,913	11,011		
All other articles		41,804		3,931
Total free of duty		65,425		14,266
DUTIABLE.				
Bristles	pounds..		214,698	\$56,150
Cordage, rope, and twine	do 5917,329	\$29,637	27,027	3,501
Cotton-manufactures		325		
Fancy goods		119,559	111	33,756
Flax, raw	tons.. 869	129,283		7,143
Manufactures of		51,655		31
Hemp, raw	tons.. 297	161		
Manufactures of				
Iron, bar-iron	pounds..			
Sheet-iron	do 2,609,662	226,552	2,244,028	219,711
Jute, manufactures of	pounds.. 3,638	4,583		142
Leather of all kinds		2,430	42,378	32,566
Manufactures of		1,625		1,283
Seeds, flaxseed or linseed	bu. shels.. 50	167		
Tobacco, cigars	pounds.. 1,00	162	88	109
Wine, in bottles	dozen.. 40	380	125	762
Wool, raw	pounds.. 3,118,939	545,088	847,465	137,718
All other articles		60		536
Total dutiable		1,121,745		631,678
Total free of duty		65,425		14,266
Total imports		1,187,170		705,944

The indirect imports came through the ports of—

France	\$293
Germany	319,250
England	356,692
Total	705,944

MINERAL PRODUCTS AND RESOURCES.

The future capabilities of manufacturing industry in Russia may be estimated in part by the abundance of raw material, especially of minerals. From a work prepared for the Vienna Exhibition by Mr. Skatjzkowsky, entitled "Tableaux de l'Industrie des Mines de Russie en 1871," the following information in regard to Russian mining industry is extracted:

In 1871 the number of mines owned by Russia and producing gold was 979; platinum, 6; silver-lead, 21; copper, 76; iron, 1,174; zinc, 6; cobalt, 1; tin, 1; coal, 323; pyrites, 1; chrome, 6; rock-salt, 4; besides 637 naphtha pits. Their yield was from 1,069,400 tons of gold-sand, 83,400 pounds of gold, from 16,800 tons of platinum-sand, 4,504 pounds of platinum, 35,120 tons of silver-lead ore, 100,365 tons of copper-ore, 829,000 tons of iron-ore, 42,400 tons of zinc-ore, 10½ tons cobalt-ore, 2,000 tons of pyrites, 81,000 tons of coal (black coal and brown coal), 22,000 tons of naphtha, 7,000 tons of chrome iron-ore, and 433,000 tons of rock-salt. The smelting-works of Russia produced from these raw ores, silver, 29,000 pounds; lead, 1,740 tons; copper, 3,200 tons; tin, 8 tons; spelter, 2,700 tons; pig iron, 351,000 tons; iron castings, 30,000 tons; wrought-iron, 241,500 tons; steel, 7,000 tons; copper sheets, 350 tons; and zinc sheets, 500 tons, and material for 11,355,000 roubles. The works gave employment to 253,300 men.

year ended June 30, 1874.

Imports indirect from Russia.

Quantities. Values.

\$10,335

3,931

14,206

\$256,190

3,391

214,698

7,330

242,087

210,741

112

42,378

32,566

1,283

8

125

137,718

206

205,944

205,944

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THE TEXTILE INDUSTRIES OF RUSSIA.

From a work similar in character to the one above quoted from, but relating to another branch of industry, as indicated in its title,* the following facts are condensed. The quantities and values have been reduced to the weights, measures, and currency of the United States:

THE WOOLEN INDUSTRY.

The fabrication of tissues of wool was founded in Russia by Peter the Great. The principal branch of this industry, the manufacture of cloth, was not originally established for supplying the general consumption, but to furnish uniforms for the Russian soldiers, and the ulterior development of this industry is intimately connected with supplying cloth for the army.

The first manufactory of cloth for the use of the troops was founded at Moscow by Peter the Great, in 1698, on his return from his foreign travels. Later, in 1812, it was provided by ordinance that Russian cloths should be generally used by the army; and with this object in view there were created thirty factories, which received various privileges. The sovereign gave them lands, granted to them the right of holding serfs as workmen, and, moreover, made advances to cover the expenses of starting the establishments.

In 1822 the quantity of cloths furnished by the Russian manufacturers for the army exceeded, for the first time, the demand, reaching 4,000,000 arshins (3,111,111 yards.) The progress of the cloth factories from 1800 to 1830 is as follows: In 1801 there were 155 cloth factories, in 1814, 235, and in 1830, 504, employing 53,000 workmen, and making more than 4,100,000 yards per year; finally, in 1830, the number of factories had risen to 390, employing 67,000 workmen and making 5,923,885 yards per year. At the present time the woolen industry fully supplies the necessities of the army. In 1856, at the epoch of the Crimean war, it was able to supply the army with 10,000,000 yards of cloth.

The manufacture of articles of fashion from combed-wool did not commence in Russia until after 1830, and then foreign yarns were employed. Spinning combed-wool was not attempted until some time later.

The gradual progress of this industry is shown by the importations of yarn. Before 1830 the importations were absolutely nothing:

	Pounds.
From 1830 to 1832.....	113,400
From 1839 to 1844.....	900,000
From 1851 to 1853.....	2,016,000
From 1859 to 1861.....	3,240,000
From 1859 to 1871.....	7,500,000

A notable increase is observed in 1860-1871; and in order to represent fully the production of woolen fabrics for this period, these figures should be increased about one-eighth for the combed-wool spun in the four establishments now in operation in Moscow. It may be added that the great care devoted to the raising of sheep, and to the shearing and washing of wool in the interior of Russia and the Baltic Provinces, by furnishing excellent raw material, has contributed much to the progress of manufactures in spinning and weaving wool. The progress within twenty years has been such that many woolen fabrics now rival the best that come from abroad.

The following table exhibits the progress of the wool-manufactures for three-year periods from 1832 to 1871:

Woolen industry of Russia.

Years.	Woolen yarns.			Cloths.		
	Number of factories.	Number of workmen.	Value of products.	Number of factories.	Number of workmen.	Value of products.
1832-61.....	22	2,100	\$4,152,000	390	74,420	\$20,476,050
1865-67.....	27	2,250	1,087,030	418	74,420	25,691,475
1868-70.....	29	2,620	1,630,150	483	74,440	28,698,675
1871.....	40	3,760	2,323,675	510	75,100	32,925,000

* "Notice Statistique sur les Industries Textiles en Russie," by M. A. Nébolsine, prepared under the direction of the Imperial Russian Commissioner of the Universal Exposition of Vienna in 1873. An arshin or aumen is 23 inches. The poos computed at 36 pounds.

Woolen industries of Russia—Continued.

Years	Fabrics of combed wool.			Total.		
	Number of factories.	Number of workmen.	Value of products.	Number of factories.	Number of workmen.	Value of products.
1862-64.....	129	14,580	\$5,863,650	532	91,390	\$27,492,300
1865-67.....	125	17,400	8,410,950	580	93,550	35,325,475
1868-70.....	160	12,400	9,417,675	672	96,060	39,166,590
1871.....	218	30,560	14,700,000	798	110,200	49,560,675

* In this and subsequent tables the Russian rouble is computed at 75 cents, which is about its equivalent in the currency of the United States when the premium on gold is 15 per cent.

It will be seen by the foregoing table that a steady progress has been made in the woolen industry, especially in the weaving branch, but that while the number of establishments and the value of products have increased, the number of workmen has diminished. This decrease in the number of workmen since 1861 must be attributed to the enfranchisement of the serfs. Many establishments which produced the coarse cloths for clothing the troops were carried on by the landed proprietors upon their own estates, and the labor employed by them was almost exclusively that of the serfs, who paid rent for the lands in this way. The influence of emancipation upon the cloth industry is shown by the following figures:

In 1860 there were 430 cloth factories, employing about 95,000 workmen and producing annually about \$19,500,000 of merchandise. The number of factories and workmen commenced to diminish in 1862, and in 1863 reached the minimum number of 365 factories and 72,000 workmen; but the total value of products remained the same. Since that time the cloth industry has taken a new direction. The necessity of economizing labor has led the manufacturers to adopt improved machines which do the work with fewer workmen.

The following table shows the statistics of the woolen industry of Russia, of Poland, and of Finland, separately and in the aggregate:

Countries.	Number of factories.	Number of workmen.	Value of production in dollars.
In the empire.....	798	110,201	\$49,950,600
Kingdom of Poland.....	531	10,720	7,702,500
Grand Duchy of Finland.....	10	150	50,700
Total.....	1,339	121,070	57,703,200

The products of the several provinces of the empire, which exceed a million dollars in value, are the following:

Moscow.....	\$30,874,500	Tschernigoff.....	\$1,986,750
Piotrkoff.....	6,138,000	St. Petersburg.....	1,942,500
Grodno.....	3,886,500	Livonia.....	1,866,750
Simbirsk.....	2,503,500	Kalisz.....	1,368,000

The principal raw material used is native wool. Foreign wools are imported only in small quantities. (100,000 pounds in 1871,) and are used principally in Poland and the Baltic provinces.

The wools used are, first, the merino wools, of which Russia produces about 1,800,000 pounds annually, but a part is exported; second, the Russian wool of the borders of the Don and the countries beyond the Volga; third, the Tsigans wool, the wool of the hordes, (Ural, Emba, and Adaew;) fourth, camel's hair, of which 700,000 pounds are collected annually. A part of the Russian wool is exported.

THE CLOTH INDUSTRY.

In 1871 there were in Russia 510 cloth-factories, employing 76,000 workmen, and producing an annual value of \$33,000,000; in the kingdom of Poland, 236 cloth-factories,

Total.		
Number of factories.	Number of workmen.	Value of products.
532	91,390	\$7,492,300
580	93,570	35,225,475
672	96,000	39,166,500
798	110,200	49,950,675

which is about its equivalent.

has been made in the number of establishments of workmen has 361 must be attributed to the coarse cloth produced the proprietors upon their side of the serfs, emancipation upon the

workmen and produce factories and workmen minimum number of 365 sets remained the same. The necessity of economic machines which do the of Russia, of Poland,

Factories.	Number of workmen.	Value of production in dollars.
738	110,200	\$49,950,600
531	19,730	7,762,570
40	150	50,500
1,339	121,070	57,763,200

exceed a million dollars

.....	\$1,936,750
.....	1,942,500
.....	1,866,750
.....	1,368,000

are imported only in Poland and the

produces about 1,600,000 in wool of the borders of gals wool, the wool of the which 700,000 pounds are

76,000 workmen, and Poland, 236 cloth-factories,

with 3,300 workmen and a product of \$2,812,500; and in the Grand Duchy of Finland, 5 factories, employing 20 workmen, and producing annually \$5,700; a total of 751 establishments, with 79,000 workmen and an annual production of the value of \$35,250,000.

The products may be divided into three classes: the coarse cloth for clothing the troops; the cloth for private consumption at home, and the cloth for the China trade, which is delivered at the market of Kiahkta.

The exports to China of cloths and other manufactures, by way of Kiahkta, which in 1856-61 amounted to an annual value of \$1,620,870, fell off in the years 1862-65 to \$1,426,850. In the years 1866-70 it rose again to \$1,571,336, and was \$1,156,232 in 1871.

The adoption of *baschilk* for use in the army has given a value to the camel's hair, formerly useless. Added to this is another kind of cloth, called "camel's cloth," but which is made from the white wool of Kirghiz sheep, dyed yellow. This cloth is used to a considerable extent by the poor inhabitants of the Lower Volga, as well as by the nomadic peoples. Its price varies from 88 cents to \$1.00 per yard. The cloth for general use is made by two classes of factories: one producing a cloth not exceeding in price \$2.40 to \$2.90 per yard, the other a cloth worth \$3.25 and over per yard; the latter establishments being principally in Livonia and Poland, but to some extent in Moscow and St. Petersburg.

As the demand for faced cloth has materially diminished of late, while it has increased for other tissues, such as moleskins, tricots, cassimeres, diagonals, satins of wool, &c., many manufacturers who formerly made faced goods exclusively are now manufacturing the modern tissues with success.

WOOL-SPINNING FACTORIES.

In 1871 there were 40 spinning-mills in the empire, employing more than 3,700 workmen, and producing annually about \$2,325,000. Adding those of Poland, there are in all 65 spinning-mills, with 4,720 workmen, and a production of \$3,372,675. These are the establishments where nothing but spinning is done. The cloth-factories have their own spinning departments. In four of the mills where combing-wool is worked there are 33 combing-machines, 26,100 spindles, and an annual production of 27,300 pounds of yarn, valued at \$1,350,000.

TISSUES OF COMBING-WOOL AND HALF-WOOL.

In 1871 there were 524 factories of this class, 36,550 workmen, and an annual product valued at \$18,657,000. The manufacture of fancy tissues of wool and half-wool (worsted with cotton warps) is principally carried on in the government of Moscow, where the number of establishments reaches 228, with 11,650 looms, 29,000 workmen, and an annual production valued at \$13,312,000.

Shawls, scarfs, &c., are manufactured quite extensively. In 1872 the government of Moscow sent to market more than three million woolen shawls and scarfs of different kinds.

CARPETS AND FELTS.

In 1871 there were 5 factories, employing 390 workmen, with an annual product valued at \$244,500. The greater part of the carpets are made of printed warps, (tapestry.) The printing is sometimes done at the factories, but oftener the printed warps are ordered from abroad. A few carpets are made on the Jacquard looms. The Persian and Turkish carpets made in Ancaasia are noted for their firm texture and excellence. They are made by hand, and are very expensive.

The manufacture of felt goods is not important. In 1871 there were 33 factories, with 275 workmen, producing annually a value of \$590,000. The goods are principally carpets and gloves of felted wool, and are remarkable for their good quality and cheapness.

There is another branch of the woolen industry carried on quite extensively—that of the peasants, some of whose domestic cloths have a great reputation. In places where this industry is carried on extensively, the wealthy peasants furnish the workmen the raw wools or yarns, which are returned to them in cloth. The spinning of wool for knitting, and the knitting of stockings, constitute still another branch of the domestic industry of the peasants. The data are wanting for an estimate of this household industry.

The distribution of these products is principally made at the fairs in the interior of Russia. The quantity of foreign goods sold at these fairs is very small compared to the home products. In the three years 1861-66 there were delivered at the fair of Nijni-Novgorod about \$112,000 of foreign woollens, and \$6,975,000 of Russian products. The quantity of foreign manufactures sold at this fair has gradually diminished since

that time. It was valued at \$3,337,500 in 1867, and in 1872 it was only \$1,177,500, while the stock of Russian woolens in the same year was as high as \$15,000,000.

Notwithstanding the diminution of foreign goods at this fair and the increase of home products the importation of woolens is quite large, and has increased of late years. In 1867 the imports of woolen goods amounted to \$4,806,794, and in 1871 to \$7,950,668. The exports of woolen goods were in 1867 about \$2,050,000, and in 1871 about \$2,054,000.

THE COTTON INDUSTRY.

The cotton industry gives a product of 162,000,000 roubles.*

In the last years of the eighteenth century, Russia contained, according to official documents, only 90 establishments for weaving cotton, (spinning not having then been introduced.) At the commencement of the nineteenth century weaving began to rapidly develop itself, and in 1820 there were 440 establishments, employing 36,000 workmen, and supplying commerce with 35,000,000 archines of cottonades.†

The progress of the industry of weaving cotton was still more rapid after the prohibitive tariff of 1822, which absolutely interdicted the entry of printed cottons, and placed a very high duty upon the importation of other cotton tissues as well as upon cotton yarns. Under the very marked influence of this tariff the national fabrication was more than doubled in a few years. In 1830 we possessed 538 establishments for weaving, producing, with 76,000 workmen, 83,000,000 archines of cottonades. But it is, above all, by contributing to power-spinning that the tariff of 1822 placed upon a solid basis our cotton industry. Machine-spinning had been carried on at the imperial manufactory of Alexandrovsky since 1805; but this was only a commencement, and that establishment belonging to the state, was placed in exceptional conditions, which could not be made general. It was only at the epoch which followed the publication of the tariff of 1822 that the introduction of power-spinning was properly made in Russia.

The two first private spinning establishments were founded, in 1824, at St. Petersburg and Moscow, and in ten years after, that is 1835, there were 25 establishments.

The progress of this industry became particularly marked from the period of the year 1842, when the exportation of spinning-machines was authorized in England. We must also attribute this progress, in a certain measure, to the increase of the duty upon cotton yarns from \$3.60 to \$4.68 per pood,‡ effected in 1841, in consequence of the crisis of that year.

In 1849 the number of spinning establishments rose to 45, and the value of their products represented no less than \$3,280,000.

An important change took place, in 1850, in the commercial policy of Russia, which passed from the prohibitive regime to the protective system. The tariff of 1850 reduced the duties on cotton yarns from \$4.32, the old rate, to \$3.96 per pood. The tariff of 1857 lowered the duty to \$2.52. The duty was also lowered upon other articles of cotton. The national industry had then become so solidly established that, far from prejudicing it, the reductions of duty gave it a new impulse, and stimulated it to develop and perfect its processes. In the revenue-reform of 1868, the duties established in 1857 underwent but slight modifications, and the protection accorded to the Russian fabrication of cotton remains nearly the same.

Table showing the condition of the cotton industry in the Russian empire in 1871.

Industries.	Number of establishments.	Number of workmen.	Value of produce in roubles.
Spinning.....	51	44,400	55,070,000
Weaving.....	738	78,700	48,290,000
Dyeing and printing.....	511	34,700	48,228,000
Total in Russia.....	1,300	157,700	151,658,000
Kingdom of Poland.....	1,086	13,410	8,613,100
Grand Duchy of Finland.....	5	4,900	2,027,000
Total.....	2,391	175,110	162,298,100

* A rouble of 100 kopecks is equal to about 66 cents gold, or 75 cents in paper currency of the United States.

† One hundred archines are equal to 77.77 yards.

‡ A pood is equal to 36.4 pounds.

it was only \$1,177,500, as \$15,000,000.

and the increase of has increased of late \$66,794, and in 1871 to \$2,050,000, and in 1871

d, according to official g not having then been weaving began to rapidly employing 36,000 work-

pro rapid after the pro- of printed cottons, and tissues as well as upon the national fabrication 538 establishments for of cottonades. But it of 1822 placed upon a rried on at the imperial a commencement, and ional conditions, which allowed the publication g was properly made in

, in 1824, at St. Peters- were 25 establishments. From the period of the rized in England. We e of the duty upon e. equence of the crisis

, and the value of their

policy of Russia, which The tariff of 1850 reduced per pood. The tariff of on other articles of cot- established that, far from e, and stimulated it to 1868, the duties estab- protection accorded to the

ian empire in 1871.

	N	* of work- men.	Value of produce in rubles.
71		44,400	55,070,000
8		78,700	42,290,000
11		34,700	42,298,000
00		157,700	151,658,000
6		13,410	8,613,100
5		4,900	2,027,000
91		175,110	162,293,100

paper currency of the United

The cotton industry of Russia is fitted to the necessities and tastes of the country. In the great market of Nijni-Novgorod the presence of the Russian merchandise reduces very considerably the demand for foreign cottons to supply the markets of the interior.

In the triennial period of 1864-66 there were sold at the fair of Nijni-Novgorod \$1,256,400 worth of foreign cottonades, while the Russian fabrics figured at a value of \$11,016,000. In 1872, the value of all the foreign products of cotton, wool, flax, and silk sold at this fair was \$1,130,400, while the Russian cottonades sold represented a value of \$23,325,000.

The cotton industry, although introduced artificially into Russia, has no less rapidly acquired an economical importance, so great as to now occupy the first rank among the industries of prime necessity.

THE SILK INDUSTRY.

The manufacture of silk was commenced in the last century; but it is only since 1830, under the influence of a protective tariff, that this fabrication has become developed, or acquired any considerable importance. In 1872 there were 460 silk-factories, 15,800 workmen, and an annual production of the value of \$7,416,000, including the production of Transcaucasia, which is more of a domestic than manufacturing character. The importation of foreign silks, in 1871, was of a value of \$4,531,633.20; so that the value of the importations was nearly equal to one-half of the national fabrication. The latter, in the character of its products, has reached a high excellence. The manufacture of brocatelles, used in the churches, has attained a very great perfection.

An industry which has been developed among us on a very vast scale is that of the manufacture of light silks, and, above all, tissues of half-silk, plain and figured. In perfection of finish, taste, and price, our fancy stuffs of silk can bear comparison with foreign fabrics.

The following statement, obtained from another source, shows the mineral productions of Russia in the year 1871.

The state foundries smelted 1,225,000 Russian poods* of bronze, 557,000 of iron, and 1,000 of steel; 89,000 poods weight of articles in bronze were cast, and 508,000 poods weight of ammunition; 9,000 poods weight of steel cannon, and 15,000 weight of iron cannon, 15,000 poods of lead, and 6,600 of zinc were smelted; 7,800 poods weight of iron articles; 10,000 poods weight of sheet-iron, and 7,500 roubles' worth of iron for use in ship-building were also made, besides 46,700 side-arms; 20,000 blades, and 5,725 gun-barrels. The amount of metal passing through private factories can only be approximately computed, as the year is reckoned from May 1 to April 30. The following return, however, is supposed to be tolerably correct. The productions of the smelting establishments of the Ural are estimated at 13,200,000 poods of bronze, 1,017,000 of iron, 69,000 of steel, and 100,000 of copper. Those around Moscow are supposed to have produced 3,300,000 poods of bronze, and 1,830,000 of iron. South Russian produce is estimated at 430,000 poods of bronze, and 440,000 of iron. That of the Polish provinces at 1,370,000 poods of bronze, 800,000 of iron, and 120,000 of zinc. Lastly, 44,000 poods of copper is computed as the return from the Caucasus. Gold, to the amount of 1,806 poods, has been extracted during 1874, without reckoning the districts of Altaï and Nerelmeck, which yield an annual average of 165 poods. The production of coal has increased; the total amount, including anthracite, raised in 1874 being 83,575,000 poods. The extraction of mineral oils in the Caucasus shows a great increase, and oil-wells have lately been discovered in Poland.

THE INDUSTRIAL CLASSES OF RUSSIA.

When the author visited Russia in 1872, as a delegate from the United States to the International Statistical Congress, the eighth session of which was held in St. Petersburg in August of that year, his time was so fully engrossed in the work of the congress that he was unable to make a personal investigation in regard to the cost and condition of the mechanical and factory labor of that country. His stay at Moscow, the center of the manufacturing industry of Russia, as well as at Nijni-Novgorod, where he attended the great fair, and subsequently at Warsaw, was so brief that but limited information was obtained in regard to the industrial classes of that great empire. As to the peasantry—the farm-laborers who were recently emancipated from serfdom—his observations were more extensive than his inquiries; for, traveling as he did about 4,000 vershs (over 2,600 miles) through the center of that country, he was able to observe the habits of the people,

* Pood = 36.4 pounds avoirdupois.

to view their dwellings, and thus inform himself of their condition, although unable to converse with them.

In regard to factory and mechanical labor, however, he has gathered from other sources, and presents in the following pages, information of much value.

The following table, showing the nature and extent of the chief industries of Russia, was prepared by Mr. Mitchell, then British consul at St. Petersburg:

Nature of industry.	Number of work- ers and horses.	Number of work- men.	Value of produc- tion in roubles.
Cotton.....	606	49,347	71,735,459
Hemp and flax.....	225	82,259	11,465,486
Wooden.....	614	92,922	29,565,518
Silk.....	202	7,533	4,498,431
Dye-works.....	204	3,919	4,196,603
Paper.....	170	13,593	5,275,816
Leather.....	2,471	13,245	13,164,297
Tallow.....	1,595	19,566	23,533,255
Wax.....	216	1,053	2,722,621
Pottery.....	229	4,178	1,321,678
Glass.....	210	19,744	4,402,774
Metals.....	713	47,379	28,628,124
Chemicals.....	377	6,136	23,193,817
	7,922	369,314	*229,654,072

* Equal to about \$165,500,000 in United States currency.

Spirits distilled, about 73,000,000 gallons; beer and mead brewed, about 21,000,000 gallons; beet-root sugar produced, 3,300,000 poods; tobacco manufactured, 594,000 poods; iron raised, 15,781,000 poods.

FACTORY LABOR IN 1841.

The following statement shows the wages, per month, of work-people in a cotton-mill in St. Petersburg, in the year 1841.

Occupations.	Wages.	Cost of board, lodge, fuel, and light.	Cost of clothes.	Surplus money re- maining to each.
Men in the blowing or mixing rooms.....	\$2.40	\$3.60	\$1.02	\$2.82
Boys in the blowing-rooms.....	6.00	3.60	1.20	1.20
Men at carding-engines.....	8.40	1.20	1.02	2.88
Boys at the back of cards.....	6.00	1.20	1.20	1.20
Boys at the front of cards.....	4.80	1.20	96	96
Girls at the calendars.....	3.60	1.20	96	24
Women or girls at drawing-frames.....	6.00	3.60	1.20	1.92
Women or girls at back of "frames".....	4.80	60	1.20	36
Girls at back of tube-machine.....	4.80	64	1.20	72
Girls at front of tube-machine.....	4.80	60	1.20	72
Spinners.....	7.20	4.32	1.92	16.10
First or large piecer.....	7.20	3.36	1.20	3.61
Second or back piecer.....	7.20	2.88	1.20	3.12
Largest boy at back of the mules.....	4.80	2.88	1.20	72
Smallest boy at back of the mules.....	2.40	2.88	72	72
Reckers.....	2.40	2.88	1.20	3.12
Piler, first class.....	14.40	4.32	1.92	8.16
Smiths, machinists, &c.....	16.80	4.32	1.92	10.56
Watchman.....	7.20	6.00	1.44	2.16

RATES OF WAGES IN 1869.

[From the British consular reports.]

ST. PETERSBURG, 1870.

Wages vary considerably, and are dependent on a variety of causes, such as the locality, season of the year, &c.; the lowest wages being paid in districts where handloom-weavers abound. Good mill-hands make from \$7.50 to \$15 per month, and are often paid by piece-work.

Fitters, ordinary mechanics, joiners, blacksmiths, &c., will earn from 75 cents to \$1.50 a day. Skilled mechanics, engine-drivers, engineers on river steamers, &c., earn very high wages—from \$1.50 to \$2.50 per day, and even more.

English foremen receive \$20 to \$30 a week, with lodging, fuel, and light free. Apprentices generally receive from \$2.50 to \$3 a month for the first year, increasing each succeeding one by a rouble a month.

In cotton-mills, piecers, iron-tenters, and reelers generally get paid according to the amount of work done; the others are paid by the day.

WAGES IN MOSCOW.

The following tables give the rates of wages per month at Moscow, the industrial center of Russia, in the year 1869, and also the prices of the chief articles of consumption:

Wages in cotton-mills.

	Wages per month.
Mixing-room—cotton-pickers, women	\$3 52
Scutching—overlookers, men	8 36
Tenters, men	4 84
Card-room—overlookers, men	11 23
Strippers, men	6 08
Grinders, men	6 14
Drawing-tenters, women	3 60
Speed-tenters, women	4 54
Speed-piecers, girls	2 08
Overlookers, men	12 20
Male spinners, men	9 16
Male spinners, first piecers, boys	5 32
Male spinners, second piecers, boys	4 16
Male spinners, scavengers, boys	2 83
Throstle-piecers, girls	2 30
Reelers, women	4 54
Overlookers, men	11 60
Winders, women	3 04
Warpers, women	7 46
Sizers, men	10 74
Heald-knitters, girls	3 44
Weavers, men and women	7 88
Enginemmen	11 76
Stokers, men	6 85
Oilers, men	6 44
Mechanics	11 60
Blacksmiths	13 00
Boiler-makers	19 36
Molders	12 83
Joiners	10 96
Pattern-makers	13 52
Packers	9 32
Storemen	5 80
Gasmen	6 44
Watchmen	3 87
Day-laborers	5 03
Carters	6 44
Clerks, in 1869, from	\$6 44 to 19 36

Flax-mills.

Ruffers, men	9 63
Sorters, men and boys	11 60
Machine-hacklers, men and boys	3 84

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Number of work- men.	Value of produc- tion in roubles.
56,347	71,735,459
22,459	11,405,680
62,392	22,563,514
7,933	4,438,431
3,919	4,196,693
13,303	5,275,816
13,215	18,164,507
19,566	24,531,355
1,083	2,722,621
4,178	1,331,678
10,744	4,402,774
47,379	28,688,134
6,136	23,193,817
302,314	*220,654,672

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and mead brewed,
3,300,000 poods;
5,781,000 poods.

in a cotton-mill in St.

Cost of board, bed- ding, and light.	Cost of clothes.	Surplus money re- maining to each.
\$3 00	\$1 92	\$2 12
3 00	1 20	1 80
1 00	1 92	2 08
1 00	1 20	1 80
96	96	00
1 00	1 20	1 80
63	1 20	73
61	1 20	36
3 00	1 20	73
4 32	1 92	16 10
2 06	1 30	5 61
2 06	1 20	3 12
2 06	1 20	72
72	72	00
1 20	3 12	00
1 92	3 16	00
1 92	10 56	00
1 44	2 16	00

	Wages per month.
Spreaders, women	\$4 16
Carder-spreaders, women	3 84
Drawers, women	3 52
Rovers, women	3 84
Spinners, women and children	3 84
Doffers	2 56
Bobbin-carriers, boys	4 48
Twisters, boys and girls	4 48
Band-tiers, boys	4 48
Reelers, women	1 28
Dryers, men	4 84
Bleachers, men	5 16
Winders, women and girls	3 52
Piecers, girls	2 56
Warpers, women	6 44
Dressers, men	9 68
Weavers, boys and women	4 48
Cloth-pickers, boys	4 22
Calenderers, men	8 36
Reel-makers, boys	6 44
Head-knitters, boys and girls	2 02
Packers, men	6 44
Enginemmen	9 68
Stokers, men	7 72
Shaft-oilers, men	5 16
Meehanics, men	5 16
Blacksmiths, men	13 84
Model-makers, men	15 48
Joiners, men	11 60
Brass-founders, men	12 88
Gasmen	6 44
Watchmen	5 16
Day-laborers	5 16
Carters	6 44
Sweepers, boys and men	4 48
Clerks	19 36
Overlookers, from	£5 80 to 16 12

Bleaching, dyeing, and print works.

Laborers in laboratory and about printing-machines, men	6 44
Work-people about agency-room, dye-house, and calenderers, men and women	5 80
Overlookers about agency-room, dye-house, and calenders, men	9 68
Packers, men	9 68
Overlookers, men	10 96
Wool-washers, men	6 12
Card-cleaners, men	6 44
Card-feeders, women	3 20
Comb-tenters, women	3 84
Drawing-tenters, women	3 52
Roving-tenters, women	3 20
Twisters, women	3 20
Reelers, women	5 16

Woolen manufacture.

Overlookers, men	12 88
Card-cleaners, men	5 80
Card-tenters, women	3 03
Shearing, women	3 03
Weavers, women	6 44
Cloth-cleaners, women	4 48
Wool-washers, men	5 48
Cloth-dryers, men	5 48
Cloth-pressers, men	5 80
Spinners, boys	2 88
Spinners, men	10 32

LABOR IN RUSSIA.

727

Wages per month

\$4 16
3 84
3 52
3 84
3 84
2 55
4 48
4 48
4 48
1 25
4 84
5 16
3 52
2 56
6 44
9 68
4 48
4 22
8 36
6 44
2 02
6 44
9 68
7 72
5 16
5 16
13 84
15 48
11 60
12 88
6 44
5 16
5 16
6 44
4 48
19 36
\$5 80 to 16 12

Glass-works.

Glass-workers	Wages per month
Glass-blowers	\$8 36 to \$14 16
Rough-polishers	6 44 to 11 60
Cutlers	8 36 to 16 12
Designers	7 08 to 10 96
Gilders	3 36
Assistants to blowers, boys	2 72
Mixers of materials at furnace	16 12
Hardeners, boys	5 16
Storers and packers, men	6 44

Paper-mills.

Overlookers	9 68 to 11 60
Workmen	5 16 to 6 44
Workwomen	3 20 to 3 84
Average cost of food per month for—	
One man	3 04
One woman	2 30
One child	1 42

PRICES OF PROVISIONS.

Flour, black, per cwt	2 18
white, best, per cwt	5 58
white, second, per cwt	3 96
white, third, per cwt	3 56
Buckwheat, per measure	83
Wheat, per measure	1 15
Malt, per cwt	3 18
Salt, per cwt	1 98
Pease, per measure	3 56
Oil, (used during fasts), per cwt	12 80
Butter, per pound	13
Small fish, per pound	11
Beef, first sort, per pound	09
second sort, per pound	07
Salted beef, per cwt	7 98

In the larger towns the price of the best beef and mutton often runs as high as 17½ cents per pound.

The increase in the prices of the chief articles of consumption during the last ten years may be roughly stated to be at the rate of from 30 to 50 per cent, but the rates of wages have increased in an equal and in many cases in a greater proportion. The condition of the Russian artisan has improved very materially during late years, and were it not for the lowering of the duty on the already too-cheap "vodka," (corn brandy,) the working-class in Russia would be, comparatively speaking, well off.

Prices of provisions in Nicolaieff, Russia, in 1870.

Beef, veal, mutton, and pork, per pound	\$0 06 to \$0 08
Bread, middling, per 2 pounds	06
best, per pound	03
Rye, best, per pound	03
Butter, fresh, per pound	28
Butter, salt, per pound	24
Cheese, bad, native, per pound	14
Swiss and English, per pound	60
Millet, per pound	02
Buckwheat, per pound	02
Sugar refined, (no other qualities are used,) per pound	18
Tea, cheapest, per pound	90
Firewood, fir, per cart-load	4 84
Firewood, oak, per cart-load	6 29
Coals, native, anthracite, per ton	14 52
Coals, English bituminous, per ton	9 68
Water, per cart	60
per pail	02
Bong, brackish, per pail	01
Cabbages, per 100	2 42
Carrots, per 10	08

12 88
5 80
3 03
3 03
6 44
4 48
5 48
5 48
5 80
2 88
10 32

Onions, per 50	\$0 06
Parsley, per bunch	00 04
Potatoes, per pound	03
Solanum, per 100	60
Tallow dips, per pound	12
molds, per pound	14
Composition candles, per pound	21
Petroleum, per quart	24
Flour, best, per pound	04
seconds, per pound	03
Coffee, per pound	\$0 24 to
Milk, per quart	10
Bacon, lard, ham, per pound	14
Fowls, per pair	60 to
Geese, each	60 to
Turkeys, each	72 to 1 69
Soap, per pound	10
March, per pound	03
Macaroni, per pound	06
Rice, per pound	06
Eggs, per 100	81
Fish, average, per pound	20
Crawfish, per 100	05
Wine, commonest, bad, per bottle	12
passable, per bottle	28
Vodki or brandy, per bottle	36

Manure, dried and caked for fuel, is this year at \$7.26 per 7 cubic feet. Peeds and linseed straw and flax-stems and brushwood, \$1.21 per 30 bundles.

INDUSTRIAL CLASSES IN RUSSIA.

St. PETERSBURG, January 12, 1870.

It is not easy to state at all accurately the proportion which the number of Russians employed in industrial pursuits, exclusive of the agricultural population, bears to the other classes.

The difficulty arises in great measure from the existence of a very numerous class of nomads; for independently of those employed in the internal navigation, carpenters, bricklayers, stonemasons, painters, joiners, and other artisans are in the habit of flocking into the great towns in the spring and of returning to their villages in the autumn.

The following is a rough estimate of the numbers employed in various manufactures in Russia:

	Hands.
Cotton—Spinning-mills	50,000
Weaving-mills	70,000
Hand-loom weavers, reelers, &c.	100,000
Calico-printing, dyeing, bleaching, &c.	50,000
Total employed in cotton-manufacture	270,000
Wool—Spinning-mills	5,000
Weaving-mills	25,000
Total employed in woolen-manufacture	30,000
Flax—Spinning-mills	8,000
Weaving-mills	12,000
Dressers, &c.	30,000
Total employed in flax-manufacture	50,000
Hemp—Yarn-spinning	4,000
Rope and cordage	4,000
Dressers	20,000
Total employed in hemp-manufacture	28,000
Cloth—Weaving, dressing, &c.	70,000
Carpet-manufacture	2,000

.....	\$0 06
.....	00
.....	03
.....	60
.....	12
.....	14
.....	21
.....	21
.....	01
.....	03
\$0 21 to	36
.....	10
.....	11
60 to	72
60 to	72
72 to	1 09
.....	10
.....	03
.....	06
.....	06
.....	81
.....	29
.....	05
.....	12
.....	23
.....	36

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ERG, January 12, 1870.
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.....	Hands.
.....	50,000
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.....	270,000
.....	5,000
.....	25,000
.....	30,000
.....	8,000
.....	12,000
.....	30,000
.....	50,000
.....	4,000
.....	4,000
.....	20,000
.....	28,000
.....	70,000
.....	2,000

Silk—Ribbons, &c.....	Hands.
Silks, &c.....	1,500
Gauze.....	7,000
.....	1,500
Total employed in silk-manufacture.....	10,000
Iron.....	150,000
Leather.....	30,000
Deals, &c.....	20,000
Oils—hemp, linseed, sunflower, &c.....	15,000
Sugar.....	50,000
Total number of hands employed in the foregoing manufactures.....	725,000

To the above must be added those engaged in glove, boot, hat, watch, carriage-mak-
ing, and other employments, no reliable statistics to arrive even approximately at their
numbers being obtainable.

CONDITION OF AGRICULTURAL LABORERS.

The agricultural laborers live almost entirely in houses of their own, which are
throughout the empire constructed in the following simple fashion: Logs of the red
pine are cut into the required lengths—3, 4, or 5 fathoms, according to the proposed
size of the house; the lengths are placed one above the other, the ends being dove-
tailed together, thus forming, as it were, a huge box of logs; the doors and windows
are then cut out, and the pieces carefully numbered by notches; the box is now taken
on boulder-stones, and wooden posts for foundations, then each succeeding tier is added,
grass, or hemp and tow, being used between each layer, to fill up all interstices; the
walls thus completed, floors and ceilings of red or white pine are added, both
ceiling and flooring generally being double, with a layer of earth between; the whole
is crossed over with boards, the roofing generally consisting of wooden tiles; in one
corner of a room a large brick stove, similar to an English baking-oven, is built, a
chimney, either of bricks (put loosely together without mortar) or of wood, is carried
through the roof, and the house, or hut, is complete. Here the whole family lives.
Generally the house contains but a single room, but sometimes a well-to-do peasant
has a house of three or four rooms, and even uses plaster and paper-hangings for the
walls of his hut.

CONDITION OF FACTORY LABORERS.

The mill-people in large towns or their suburbs, for the most part, live as lodgers, in
houses varying in size from the peasant's hut to large buildings of two or three stories,
but in no case are comfort and cleanliness taken into consideration. The rooms are
generally small, low, badly ventilated, and crowded; the same room is used for sleep-
ing and eating; shelves or benches serve as beds. The occupants are generally only
known to each other from working at the same mill; very few, indeed, are members of
the same family, and children, even where employed in the same neighborhood as their
parents, seldom live with them. Separate sleeping-apartments are almost unknown,
save in the case of the superior workmen who rise to be overlookers, foremen, &c.; these
men have often neat, tidy lodgings, and live with some regard to appearances. It is a
general practice among mill-hands to form themselves into *artels*, a kind of club, con-
sisting, according to the size of the room, of five, ten, eighteen, twenty, or even a greater
number of members. Each *artel* will engage a woman as cook, appoint a treasurer to
encash monthly the subscriptions due to the general fund for provisions, &c. The food
of the workmen generally consists of black bread, fresh and salt fish, soup from cabbage
and meat, potatoes, mushrooms, cucumbers, &c. Tea, corn brandy, quass, and beer are
the beverages. Beer has gained great favor with the mill-hands, both in St. Peters-
burg and Moscow; otherwise it is very little drunk by the poorer classes.

As a rule, in the neighborhood of large towns the people live much better, generally
at an average rate of about \$5 per month per man; at other places, (except in the cen-
tral and southern provinces, where the food of the people is generally good,) however,
the living is very wretched, the food consisting of little else besides black bread and
water, and occasionally only a little tea, the living in this case costing only about from
\$1.20 to \$1.44 per month. With the extension of the railway system, the wages and
style of living are improving, even in the more remote districts.

Of late years, some mill-owners have adopted the plan of providing lodgings for
their work-people, and in many instances have built large houses, constructed on sani-
tary principles. Here the people are divided into three classes: the married, the
unmarried men, and the unmarried women; to each is allotted a separate house or

part of the house. The supervision of the lodgings is intrusted to competent persons, and an extent of cleanliness and comfort is attained which would be quite impossible to arrive at in any other way. The inmates pay for their lodgings according to the size or the number of rooms occupied by them, the amount due for rent being deducted every month from their wages. Under this system a single man will pay from 72 cents to \$1.44 a month; married men from \$1.44 to \$2.16. Attached to these houses there is generally a store, where the people can purchase the necessities of life, of good quality and at reasonable prices; this store is under the control of the mill-owner or manager. * * * Some of the more wealthy mill-owners have already established hospitals in direct connection with their works; the ground and buildings being provided by the proprietor, while the hands generally support the hospitals by a payment of from $\frac{1}{2}$ to 1 per cent. on their wages.

HOURS OF LABOR.

The hands work on an average thirteen hours per day, commencing at 5 a. m. in the summer and at 5.30 a. m. in the winter, and stopping work at 8 p. m. An hour in the middle of the day, generally from 12 to 1, is allowed for dinner, and the operatives usually have a short time allowed for breakfast at 8 a. m., and again, for a luncheon, at 5 p. m. Adults and children keep the same hours, but only very inconsiderable numbers of the latter are employed in mills.

EDUCATION IN RUSSIA.

In Russia, in 1872, there were 1,081 preparatory and higher schools, attended by 37,430 pupils, of whom 16,461 were boys and 21,789 girls. There were 126 gymnasia, in which Latin, French, Greek, and science generally, were taught; and 32 progymnasia, attended by 42,751 pupils. Of preparatory and higher schools for girls only, there were 186, attended by 23,404 pupils. The universities, of which there are now eight, have been organized on the German model. They employ 512 professors, and have 6,799 pupils, nearly all the latter being from the middle and poorer classes.

In reference to the condition of the working classes of Russia, the British Ambassador says:

In Russia the working classes may be regarded as being in a kind of transition state, in consequence of the recent abolition of serfdom throughout the empire; many workmen who have been serfs enjoying from their owners permission to live and work in the large towns. Again, there seems to be a tendency on the part of the newly-emancipated population to drift toward the large cities and towns, agricultural labor being miserably remunerated in Russia. On the other hand, the Russian mechanic appears disposed to emigrate to the United States, but for the political obstacles in the way of his so doing. In every respect, the social condition of the Russian artisan is inferior to that of his brethren in Western Europe, and years must elapse before he can hope to become on terms of industrial equality with them.

BERDIANSK.

The British consul at Berdiansk, under date of March 22, 1872, writes as follows:

The keen demand for grain has brought large tracts of land under cultivation, and a severe strain on the labor market has resulted, which has within the last four years brought up wages to very high rates. The Russian workman has not yet learned the value of time, and he does not appreciate home comforts or wholesome food. Earning from \$5 to \$10 in a week, he will waste the next, and spend his money in drink. He knows very well that he has never to wait for work, but that work is always waiting for him. His wants are few and easily satisfied. He lives in a wretched, unfurnished hovel, possessing but one recommendation, warmth in the winter. His bed is but a piece of felt and a straw pillow; he has no sheet or other covering. He sleeps in his clothes, and his sheep-skin coat serves him for a quilt. His dress is of common print, and he generally wears it until it drops off from age. A thick sheep-skin coat is his dress in winter, and this is seldom taken off during the cold months. His food consists principally of black bread, made from rye, salted, sun-dried fish, cheese of very poor quality, eggs, and occasionally pork; the better class of workmen generally have a

1 to competent persons, could be quite impossible. The wages according to the for rent being deducted man will pay from 72 (attached to these houses a necessities of life, of control of the mill-owner have already established and buildings being pro-hospitals by a payment

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kind of transition state, he empire; many work- lon to live and work in rt of the newly-eman- agricultural labor being ssian mechanic appears t obstacles in the way of ssian artisan is inferior apse before he can hope

of March 22, 1872,

under cultivation, and a ithin the last four years has not yet learned the wholesome food. Earning his money in drink. He work is always waiting a wretched, unfurnished inter. His bed is but a vering. He sleeps in his dress is of common print, k sheep-skin coat is his onths. His food consists ish, cheese of very poor rmen generally have a

noon-day meal of soup made with meat and vegetables.— His drink is tea, quass, (a kind of weak beer,) and vodka, (a very pure and cheap spirit made from rye.) Of this spirit large quantities are consumed. His recreation is drinking, with its accom- paniments, singing and dancing. Such lodging, such food, such clothing, such amuse- ments, are totally unfit for an Englishman. Under such circumstances he could not long retain health. In considering, therefore, what the cost of living in this part of Russia would be for an Englishman, (and it is necessary to estimate this, for the lines of railway now projected must ere long create a demand for skilled workmen,) we must take his way of living at home, and see what the expense would be to live in the same style here. Supposing him to be married, and to have three children, he would require a house with three rooms. The interior comforts and arrangements which such a house would possess in England would not be found; it would be without drains, closets, or water, and the doors and windows would be ill constructed. For such a house the rent would be about \$75 a year; four meals a day, breakfast, dinner, tea, and supper, could not be estimated at less than 84 cents; clothing, fuel, light, and household expenses could not be estimated at less than 72 cents a day. Thus, with strict economy, the English workman's yearly expenditure with his family would be—

For food.....	\$319 08
For clothes, fuel, &c.....	273 00
For rent.....	75 00
Total.....	667 08

The above does not include drinks or any kind of recreation, and though the sum may appear large, yet it is carefully calculated, and, if anything, underestimated. An English second-class engineer who, with his wife, has resided in this town (Berdiansk) for the past two years, assures me that his monthly bill for food alone, without liquor, amounts to £9. He receives £18 a month, and these wages he computes as equal to about £12 in London. As already shown, the diet of the natives is unfit for an En- glishman, but the country possesses all the requisites for an Englishman. The average prices of necessities are as follows: Meat, per pound of 14 ounces, 6 cents; bread, 4 cents; butter, 28 cents; potatoes, 1 cent; tea, \$1.20; coffee, 20 cents; loaf-sugar, (there is no brown,) 20 cents; coals, per ton, \$9.68.

During the winter months the entire population are dressed in fur. The ordinary material is sheep-skin, and coats made from it cost from \$12.50 to \$22.50.

WAGES IN ODESSA IN 1870.

[From report of the British consul.]

The wages paid to native workmen and laborers are as follows;

	United States gold.
Working engineers, from.....	\$0 94 to \$1 32
Working carpenters, from.....	87 to 1 32
Working blacksmiths, from.....	87 to 1 18
Ordinary laborers, (mechanics,) from.....	50 to 66
Common laborers employed in paving, &c., in 1866, from.....	21 to 1 05
Common day-laborers, (according to the season,) from.....	40 to 1 32
Watchmakers, monthly wages, from.....	16 50 to 40 00

Apprentices are taken from four to six years, bound with lodging and food, and, after the above periods, promoted to be workmen.

Gold and silver smiths: Workmen are paid monthly at the rate of \$6.00 to \$10, and upward of \$10, a very few as high as from \$50 to \$60.

The Russian workman appears to be intelligent and laborious, but is said to be care- less and indifferent as to the quality of the work he turns out, and, therefore, will always require to be sharply looked after. It is not thought that he is often conscien- tious, or that he takes a pride in the quality of the work he may execute, and he would undertake any that was given him without reference to his character as a workman. It is probable that Russian artisans are fast acquiring greater skill in all departments of their trade, for the Russian is of an imitative, if not an inventive, turn, and as he improves in skill he will naturally, one may suppose, improve in the care and quality of the work he executes.

WAGES IN ODESSA IN 1873.

The following information was furnished by Mr. Smith, consul of the United States at Odessa, October, 1873:

Rate of wages paid for farm and mechanical labor in Odessa, Russia, in the year 1873.

Occupation.	Daily wages.		Monthly wages.
	With board.	Without board.	With board.
FARM-LABORERS.			
Experienced hands in summer*.....	\$1 00	.....	\$30 00
Experienced hands in winter*.....	50	.....	12 00
Ordinary hands in summer*.....	67	.....	10 00
Ordinary hands in winter.....	50	.....	8 00
Common laborers at other than farm-work.....	75	.....	10 00
Female servants.....	50	\$0 75	7 00
SKILLED WORKMEN.†			
Blacksmiths.....	1 50	1 60	.....
Bricklayers or masons.....	1 50	1 60	.....
Cabinet-makers.....	1 25	1 30	.....
Carpenters.....	1 50	1 60	.....
Coopers.....	1 25	1 30	.....
Machinists.....	1 75	2 00	.....
Painters.....	1 50	1 60	.....
Plasterers.....	1 50	1 60	.....
Shoemakers.....	1 50	1 60	.....
Stone-cutters.....	.....	1 25	.....
Tailors.....	1 25	1 50	.....
Tanners.....	1 00	1 12	.....
Tinsmiths.....	1 00	1 12	.....
Wheelwrights.....	1 00	1 12	.....

* Women one-third price.

† By the day only.

Price of board for workmen, per week, October, 1873, \$3; for workwomen, per week, October, 1873, \$3.

PRICES OF PROVISIONS, GROCERIES, ETC.

Prices of provisions, groceries, and other leading articles of consumption, also of house-rent and board, in the town of Odessa; furnished by Mr. Bragg, of the establishment of Kendrick & Co.

Daily wages.		Monthly wages.
With board.	Without board.	With board.
\$1 00		\$20 00
50		12 00
67		10 00
50		8 00
75		10 00
50	\$0 75	7 00
1 50	1 60	
1 50	1 60	
1 25	1 30	
1 50	1 60	
1 25	1 30	
1 75	2 00	
1 50	1 60	
1 50	1 60	
1 25	1 59	
1 00	1 12	
1 00	1 12	
1 00	1 12	

y only.
er week, October, 1873, \$3.

Articles.	Retail prices in 1872.	Articles.	Retail prices in 1872.
PROVISIONS.			
Flour:		Sugar:	
Wheat, superfine.....per barrel	\$ 50	Coffee B.....per pound.	\$0 10
Wheat, extra family.....do.	10 00	Soap, common.....do.	7
Rye.....do.	7 00	Starch.....do.	9
Corn-meal.....do.	1 00	Fuel:	
Beef:		Coal, best.....per ton	12 00
Fresh, roasting pieces.....per pound	10	Wood, hard, (cutting in-	
Fresh, soup pieces.....do.	7	cluded).....per cord	12 00
Fresh, rump-steaks.....do.	10	Wood, pine, (cutting in-	
Corned.....do.	5	cluded).....per cord	8 00
Veal:		Oil:	
Fore-quarters.....do.	8	Petroleum.....per gallon	75
Hind-quarters.....do.	11	Lamp.....do.	1 34
Cutlets.....do.	12	DOMESTIC DRY-GOODS, ETC.	
Mutton:		Shirtings:	
Fore-quarters.....do.	7	Brown, 44, standard qual-	
Leg.....do.	8	ity.....per yard	20
Chops.....do.	10	Bleached, 44, standard qual-	
Pork:		ity.....per yard	20
Fresh.....do.	15	Sheetings:	
Corned or salted.....do.	11	Linen, 98, standard qual-	
Hams, smoked.....do.	14	ity.....per yard	90
Shoulders.....do.	20	Linen, 98, standard qual-	
Sausages.....do.	17	ity.....per yard	95
Lard.....do.	16	Cotton flannel, medium qual-	
Codfish, dry.....do.	25	ity.....per yard	25
Mackerel, pickled.....do.	40	Tickings, linen.....do.	55
Butter.....do.	6	Prints.....do.	30
Cheese.....do.	25	Mousseline de laine.....do.	40
Potatoes.....per bushel	1 00	Satinets, medium quality.....do.	1 00
Rice.....per pound	5	Boots, men's heavy.....per pair.	5 00
Beans.....per quart	12		
Milk.....do.	10		
Eggs.....per dozen	12		
HOUSE-RENT.			
GROCERIES, ETC.		Four-roomed tenements per month.	35 00
Tea, Oolong or other good		Six-roomed tenements.....do.	50 00
black.....per pound	1 00	BOARD.	
Coffee:		For men, (mechanics or other	
Raw, green.....do.	25	workmen).....per week	5 00
Raw, roasted.....do.	30	For women.....do.	3 00
Sugar:			
Good brown.....do.	9		

EXPENDITURES OF A WORKMAN'S FAMILY.

Average weekly expenditures of a family consisting of two adults and five children, the head of which is employed in the establishment of Messrs. Kendrick & Co., in the town of Odessa, Russia.

Weekly earnings in 1873, \$15 per week.

Articles.	Value.	Articles.	Value.
Flour and bread	\$1 75	Fuel	\$1 10
Fresh, corned, salted, and smoked meats.	1 60	Oil or other light	30
Lard	35	Spirits, beer, and tobacco, (if any)	25
Butter	40	House-rent	2 20
Sugar and molasses	60	For educational, religious, and benevolent objects	1 50
Milk	50	Total weekly expenses	12 80
Tea and coffee	50	Clothing per year	75 00
Fish, fresh and salt	20	Taxes per year	2 00
Soap, starch, salt, pepper, vinegar, &c.	35		
Eggs	20		
Potatoes and other vegetables	50		
Fruits, green and dried	50		

DEVELOPMENT OF RUSSIAN MANUFACTURES.

While the manufactures of Russia are as yet very limited,* her agricultural resources are such as to make her a sharp competitor with the United States in the European grain market. That which, for the present, gives us a decided advantage over her is the extensive use in this country of improved agricultural machinery, which, to the great mass of Russian agriculturists, is as yet unknown.† She possesses vast areas of territory whose soil and climate are all that could be desired, and her facilities for transportation, which were formerly very imperfect, have been so much improved of late years that the wheat product of a large region can now be carried by rail to Odessa and other ports of shipment. The cheapness of labor, and that tardiness to adopt new modes of industry, which is natural to a peasantry but recently released from serfdom, have thus far militated against the introduction of machinery and improved implements into agricultural industry; but it must be remembered that the word "progress" has been stamped upon the operations of modern Russia, and that the masses of the peasantry cannot long remain unaffected by that spirit of improvement of which the visitor to Russia sees so many evidences on every side. Moreover, special efforts for the elevation of the peasantry will not be lacking, for the large-hearted beneficence of the Emperor Alexander II, (properly surnamed "The Great,") who, in a single day, created over forty millions of freemen, will not permit him to leave the great work he has undertaken in an incomplete condition. Already, in fact, have measures been adopted to surround the emancipated serfs, as rapidly as practicable, with the conditions befitting the state of freedom to which they have been raised.

In view of the rapidity with which the events of national development succeed each other in this age of progress, we may look forward to a day by no means remote when Russia will so far utilize her ample stores of ore, both of iron and other metals, of anthracite and bituminous coal, and of all the raw materials of industry, as to compete successfully, both in textile and metallic products, with the manufacturing nations of Western Europe.

*As has already appeared in the extracts from the works of MM. Skaliowski and Nébolsine, presented on previous pages, the manufacture of textile fabrics for home consumption has attained a considerable magnitude, while the manufacture of iron, both for the domestic and foreign market, has long been a very important industry.

†At the exposition held at Moscow in 1872 the author observed an extensive variety of the most improved agricultural machinery of foreign origin. Within three miles of that old and celebrated city he saw in actual use the primitive plow, described in sacred and profane history, consisting of a bent root or a crooked stick, without any improvement on the ancient model, except a piece of iron as a shoe, or apology for a share.‡ He also noticed, in the same vicinity, the threshing of grain with a flail, not on a threshing-floor, but on the bare ground.

limited,* her agri-competitor with the t which, for the pres- extensive use in this to the great mass of possesses vast areas d be desired, and her imperfect, have been duct of a large region ts of shipment. The w modes of industry, d from serfdom, have binery and improved t be remembered that operations of modern ot long remain unaf- visitor to Russia sees pecial efforts for the or the large-hearted erly surnamed "The millions of freemen, has undertaken in an sures been adopted to tlicable, with the con- y have been raised. national development look forward to a day ze her ample stores of and bituminous coal, pete successfully, both afacturing nations of

ss of MM. Skaliowski and of textile fabrics for home the manufacture of iron, very important industry. erved an extensive variety gin. Within three miles of imitive plow, described in crooked stick, without any as a shoe, or apology for a of grain with a flail, not on

LABOR IN AFRICA.

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LABOR IN AFRICA.

Although it was not intended to submit in this report any data in regard to labor in Africa, yet, as circulars similar to those used elsewhere were sent to the consuls of the United States at Tunis and Tripoli, the information which, in response thereto, they have furnished is here- with presented.

RATES OF WAGES.

Statement showing the rates of mechanical and farm labor in Tunis and Tripoli, Africa, in the year 1873.

Occupation.	Tunis.			Tripoli.		
	Daily wages, with board.	Daily wages, without board.	Monthly wages, with board.	Daily wages, with board.	Daily wages, without board.	Monthly wages, with board.
Skilled workmen, (by the day only):						
Blacksmiths.....		\$0 60			\$0 00	
Bricklayers or masons.....		60			52	
Cabinet-makers.....		75			52	
Carpenters.....		60			52	
Coopers.....		60			52	
Machinists.....		75				
Painters.....		75				
Plasterers.....		75				
Shoemakers.....		50				
Stone-cutters.....		37			60	
Tailors.....		60				
Tanners.....		60				
Tinsmiths.....		37			43	
Wheelwrights.....		60				
Farm-laborers:		50				
Experienced hands in summer.....	\$0 30	60	\$0 00	\$0 21		\$3 80
Ordinary hands in summer.....	30	60	9 00	16		3 40
in winter.....	20	40	7 50			
Common laborers at other than farm-work.....	20	40	7 50			
Female servants.....	20	40	7 50		13	
	10	20	5 00			1 64

EXPENDITURES OF WORKMEN'S FAMILIES.

Statement showing the average weekly expenditures of two families, one in Tunis and one in Tripoli, Africa, in the year 1873.

Articles.	Tunis, two adults and five children.		Articles.	Tripoli, two adults and three children.	
	Tunis, two adults and five children.	Tripoli, two adults and three children.		Tunis, two adults and five children.	Tripoli, two adults and three children.
Flour and bread.....	\$2 00	\$0 85	Eggs.....	\$0 30	
Fresh, corned, salted, and smoked meats.....	1 00	15	Potatoes and other vegetables.....	1 00	\$0 06
Lard, olive-oil.....	37		Fruits, green and dried.....	37	03
Butter.....	37		Fuel.....	63	13
Cheese.....	50		Oil or other light.....	50	24
Sugar and molasses.....	20	07	Other articles.....	50	16
Molasses and sirup.....	25		Spirits and tobacco (if any).....	37	
Milk.....	30	06	House-rent.....	1 00	61
Coffee.....	30	06	For educational, religious, and benevolent objects.....	3 50	
Tea.....	25	29	Total weekly expenses.....	13 60	3 67
Fish, fresh and salt.....	40	06	Clothing per year.....	60 00	25 00
Soap, starch, salt, pepper, vinegar, &c.....			Taxes per year to British consul.....	5 00	1 21

Weekly earnings in 1873, \$15 per week.

PRICES OF PROVISIONS, GROCERIES, ETC.

Statement showing the prices of provisions, groceries, and other leading articles of consumption, also of house-rent and board, in Tunis and Tripoli, Africa, in the year 1873.

Articles.	Tunis.	Tripoli.	Articles.	Tunis.	Tripoli.
PROVISIONS.			GROCERIES, ETC.		
Flour:			Ten, Oolong, or other good black,		
Wheat, superfine per bush	\$4 00		per pound	\$0 20	\$1 33
Wheat, extra family	8 00		Coffee, Rio:		
Beef:			Green per lb	30	
Fresh, roasting-pieces	14	\$0 10	Roasted	40	
Fresh, soup-pieces	14		Sugar:		
Fresh, rump-steaks	14		Good brown	19	
Veal:			Yellow C	10	
Fore quarters	11		Coffee B	10	
Hand quarters	14		Soap, common	13	11
Cutlets	14		Starch	12	7
Mutton:			Fuel, coal per ton	22 00	19 10
Fore quarters	10	08	Oil per jar.	62	2 31
Leg	11				
Chops	14		DRY-GOODS, ETC.		
Pork:			Gray T-cloth, 32 inches		67
Fresh		16	Shirtings, bleached		14
Sausages		20	T-shirts, good quality		16
Codfish, dry	68	17	Fruits		24
Mackerel, pickled	08				
Butter	50	18	HOUSE-RENT.		
Cheese	37	20	Four-roomed tenements	10 00	7 24
Potatoes per bush	1 25		Six-roomed tenements	12 00	4 13
Rice per lb.	60	09			
Beans per qt.	1 25		BOARD.		
Milk	18		For men, (mechanics or other		
Eggs per doz.	18	09	workmen) per week.	3 00	

* The jar weighs 23 pounds.

In transmitting the foregoing statement, Mr. Consul Vidal remarks:

The chief expense in Tripoli for the lower classes, Christians, Jews, or Mussulmans, is for barley, coffee, olive-oil, charcoal, and house-rents. Fuel is scarce, and therefore pretty high. Barley is the principal article of consumption for men and horses. The former will make a hearty meal with one or two pancakes of barley-flour and dipped in oil. Sometimes barley is eaten in its natural state. A person who keeps horses and Arab servants has to see that the latter do not eat the barley placed in the manger of the former, and do not drink the oil of his lamps.

Many of the articles enumerated in the above lists are luxuries here, and can scarcely be considered as forming part of the expenditures of a mechanic's family.

[Extract from a letter from G. H. Heap, esq., United States consul at Tunis, Africa.]

The Arab farm-laborer, who is paid sixty cents a day without board, lives upon black bread, a few olives, and some olive-oil, the whole not costing over fifteen cents. In consequence of the construction of a railroad by an English company, the price of common labor has increased over 50 per cent.

The manufactures in this consular district are carried on in a manner and on a scale as primitive and as small as in the Middle Ages. There are several guilds the members of which employ a few hands each. The principal corporations are the makers of red caps, worn everywhere in the East, the finest and most costly being made here; and the goat-skin tanners and dyers, the Tunisian skins being equal to those made in Morocco. In the south there are manufactures of woolen goods of various descriptions, some of which are fine and costly, and but little known out of this country. The Tunisian bermoose, however, is well known in Europe, and much prized. Beyond these there are few manufactures of any value and importance, and none on a large scale.

Nothing whatever is done here for the health, comfort, education, or morals of mechanics, and I can, therefore, give no facts in regard to these subjects.

ing articles of consumption,
in the year 1873.

	Tunis.	Tripoli.
Good black,	\$0 20	\$1 33
per lb	30	.....
do.	40	.....
do.	19	.....
do.	10	.....
do.	10	.....
do.	12	34
do.	22 00	19 14
per jar.	62	2 51
per yd.	65
do.	19
do.	16
do.	13
do.	10 00	3 21
do.	12 00	4 13
do.	3 00

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LABOR IN AMERICA.

The pages in the preceding part of this report have been devoted to the consideration of labor and the condition of laborers in ancient, mediæval, and modern times in various portions of the Old World.

It now only remains to present such facts as have been gathered in relation to labor in America; and as this volume is intended for circulation chiefly within the United States, it is only necessary to present, in a tabular form, the rates of wages paid in agricultural, mechanical, and manufacturing industry, together with the cost of subsistence and the expenditures of families of work-people in the several sections and States of the Union. An inquiry into the establishment and growth of the leading industries of the United States would enhance the value of this part of the work, but to treat this subject with the care and minuteness necessary to enlist the interest of readers already sufficiently familiar with its general outlines would require a separate volume, and would, moreover, be the repetition of a task which has already been accomplished by private enterprise.*

FARMS AND FARM-LABORERS IN THE UNITED STATES.

The following statement shows the acreage of improved and the total land in farms, and the number of persons engaged in agriculture, in the United States in the year 1870:

[Compiled from the United States Census.]

States and Territories.	Acreage of land in farms.		Number of persons engaged in agriculture.	
	Total.	Improved.	Males.	Females.
Alabama	14,961,178	5,062,291	226,768	61,869
Arizona	21,607	14,285	1,251	1
Arkansas	7,597,286	1,859,821	109,663	8,641
California	11,427,165	6,218,133	47,559	283
Colorado	329,347	95,791	6,462	.....
Connecticut	2,364,416	1,695,752	33,523	130
Delaware	304,356	42,615	2,322	.....
District of Columbia	1,652,322	69,115	13,867	66
Florida	11,677	8,292	1,320	15
Georgia	2,373,511	736,172	36,911	5,542
Idaho	23,645,911	6,851,856	262,452	73,993
Illinois	75,131	38,603	1,462	.....
Indiana	25,822,811	19,329,952	296,341	356
Iowa	18,119,648	10,101,379	375,167	1,631
Kansas	15,511,793	9,396,467	299,967	356
Kentucky	5,656,579	1,971,003	72,918	219
Louisiana	18,609,108	8,103,850	257,426	3,654
Maine	7,628,817	2,013,610	114,536	26,937
Maryland	5,838,055	2,415,753	79,195	55
Massachusetts	4,512,579	2,911,007	79,195	1,292
Michigan	5,710,283	1,736,221	79,756	21
Minnesota	10,019,142	5,696,939	187,606	175
Mississippi	6,183,828	3,323,162	71,643	494
Missouri	13,121,111	4,399,116	193,725	65,971
Montana	21,707,220	9,139,615	292,757	1,393
Nebraska	1,39,537	84,671	2,110	1
Nevada	2,673,781	615,631	23,653	32
New Hampshire	208,510	92,611	2,663	7
New Jersey	3,665,991	2,354,357	46,562	11
New Mexico	9,989,511	1,936,371	62,913	185
New York	83,117,219	413,467	15,142	236
North Carolina	22,190,810	13,627,266	373,455	868
Ohio	19,855,410	5,258,742	211,010	98,928
Oregon	21,712,430	11,469,133	396,267	757
Pennsylvania	32,348,252	4,116,295	13,122	16
Texas	17,994,260	11,513,965	258,772	1,270

* See "History of American Manufactures from 1860 to 1866," by J. Leander Bishop, M. D., 3 vols., New York: B. Young & Co.

Farms and farm-laborers in the United States—Continued.

States and Territories.	Acreage of land in farms.		Number of persons engaged in agriculture.	
	Total.	Improved.	Males.	Females.
Rhode Island.....	503,308	259,030	11,767	13
South Carolina.....	12,105,280	3,010,539	117,708	58,946
Tennessee.....	19,581,214	6,843,278	247,953	19,067
Texas.....	18,396,523	2,961,836	152,722	14,611
Utah.....	148,361	118,555	10,117	11
Vermont.....	4,528,804	3,053,257	57,889	94
Virginia.....	18,145,911	8,165,040	228,082	16,468
Washington.....	649,139	192,016	3,739	12
West Virginia.....	8,528,394	2,580,254	73,735	245
Wisconsin.....	11,715,321	5,899,313	158,300	1,387
Wyoming.....	4,341	338	164	1
Total.....	407,735,041	188,921,099	5,525,503	396,968

Table showing the values of farms and of farm implements and machinery in the United States in the year 1870.

[Compiled from the United States Census.]

States and Territories.	Of farms.	Of farming implements and machinery.
Alabama.....	\$67,779,036	\$3,986,921
Arizona.....	161,340	20,165
Arkansas.....	30,029,698	2,257,400
California.....	101,210,023	5,316,690
Colorado.....	3,385,746	272,604
Connecticut.....	124,211,882	3,205,509
Dakota.....	2,075,265	142,612
Delaware.....	46,712,870	1,201,644
District of Columbia.....	3,800,230	39,470
Florida.....	9,947,920	565,674
Georgia.....	94,559,468	4,614,501
Idaho.....	492,260	23,295
Illinois.....	920,566,346	34,576,587
Indiana.....	634,804,189	17,676,301
Iowa.....	392,662,441	20,569,582
Kansas.....	90,327,040	4,653,312
Kentucky.....	311,238,916	8,572,896
Louisiana.....	68,215,121	7,130,333
Maine.....	102,964,954	4,809,113
Maryland.....	170,369,684	5,968,656
Massachusetts.....	116,432,784	5,000,791
Michigan.....	398,210,578	13,711,359
Minnesota.....	37,847,412	6,731,180
Mississippi.....	21,716,576	4,456,663
Missouri.....	392,908,047	15,596,426
Montana.....	729,193	145,478
Nebraska.....	30,242,186	1,549,716
Nevada.....	1,475,565	163,718
New Hampshire.....	90,589,313	3,435,943
New Jersey.....	257,924,376	7,882,491
New Mexico.....	2,260,139	121,114
New York.....	2,272,857,766	45,997,712
North Carolina.....	78,211,083	4,682,111
Ohio.....	1,654,165,226	27,092,757
Oregon.....	32,357,980	1,202,717
Pennsylvania.....	1,043,181,582	35,458,411
Rhode Island.....	21,574,968	78,800
South Carolina.....	44,808,703	2,282,703
Tennessee.....	218,743,717	8,190,107
Texas.....	60,149,970	3,396,743
Utah.....	291,891	21,800
Vermont.....	3,297,922	5,259,275
Virginia.....	139,367,055	4,694,111
Washington.....	213,020,145	29,573
West Virginia.....	3,978,341	2,112,965
Wisconsin.....	101,604,584	14,220,564
Wyoming.....	569,414,064	4,721
Total.....	9,262,800,861	336,874,429

continued.

Number of persons engaged in agriculture.	Males.	Females.
1,099	5,595	396,968

Machinery in the United States

Of farms.	Of farming implements and machinery.
\$67,739,036	\$3,266,924
161,340	20,105
40,029,698	2,237,409
101,240,628	5,316,690
3,383,748	372,694
131,241,369	3,245,320
2,495,265	142,612
46,712,870	1,201,614
3,800,230	39,420
9,917,920	565,651
94,559,468	4,614,501
492,829	59,253
920,546,346	34,556,567
634,891,189	17,676,291
392,662,441	20,599,562
90,327,040	4,653,312
311,238,916	8,552,896
68,215,121	7,129,333
102,964,551	4,809,113
110,369,681	5,268,656
116,432,781	5,000,751
398,210,578	13,711,359
97,875,412	6,731,129
4,716,576	4,456,633
392,908,047	15,596,426
729,193	145,328
30,212,186	1,549,716
1,475,565	163,718
80,569,313	3,129,941
257,523,376	7,882,191
3,260,139	121,114
1,252,857,766	45,997,712
78,211,083	4,062,111
1,054,165,226	27,692,755
33,322,060	1,263,717
1,043,471,582	35,668,151
21,574,068	736,006
44,898,764	2,242,151
218,738,147	8,199,151
60,149,920	3,080,751
9,237,922	291,309
139,305,075	5,250,457
213,029,815	4,924,010
3,978,341	283,531
101,604,581	2,112,427
560,414,061	14,253,151
18,187	5,759
9,262,600,861	336,574,450

LABOR IN THE UNITED STATES.

739

I.—FARM-LABOR.

Table showing the average wages paid for farm and other labor in the several States and sections in the respective years 1860, 1870, and 1874.

States.	Experienced hands in summer.						Experienced hands in winter.					
	With board.			Without board.			With board.			Without board.		
	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.
<i>Daily wages.</i>												
NEW ENGLAND STATES.												
Maine	\$1 67	\$1 59	.....	\$1 49	\$2 14	.....	\$0 81	\$1 25	.....	\$1 09	\$1 67	.....
New Hampshire	1 04	1 63	\$1 75	1 38	2 12	\$2 25	75	1 06	\$1 00	1 06	1 44	\$1 50
Vermont	94	1 50	1 44	1 13	2 00	2 12	72	1 12	1 06	1 00	1 67	1 62
Massachusetts	1 06	1 49	1 50	1 40	1 99	1 87	73	1 09	1 05	1 05	1 53	1 50
Rhode Island	75	1 06	.....	1 00	1 50	.....	42	75	.....	75	1 25	.....
Connecticut	1 13	1 50	1 25	.....	2 00	1 50	75	1 25	1 00	.....	1 75	1 50
MIDDLE STATES.												
New York	59	1 42	1 48	1 21	1 97	2 00	67	1 06	96	90	1 49	1 48
New Jersey	79	1 63	1 65	1 16	2 14	2 00	54	1 00	1 00	85	1 46	1 42
Pennsylvania	84	1 35	1 13	1 22	1 83	1 57	62	1 00	84	94	1 56	1 25
Delaware	75	1 50	1 00	.....	2 00	1 25	56	1 00	75	.....	1 50	1 00
Maryland	58	93	.....	63	1 32	.....	25	67	.....	50	1 03	.....
West Virginia	77	1 06	1 03	95	1 42	1 46	61	76	74	86	1 10	1 15
WESTERN STATES.												
Ohio	59	1 23	1 03	1 16	1 66	1 48	65	85	90	92	1 25	1 25
Indiana	96	1 23	1 13	1 26	1 50	1 47	71	89	86	90	1 27	1 11
Illinois	1 02	1 31	1 33	1 32	1 83	1 68	75	94	97	1 00	1 26	1 22
Michigan	63	1 30	1 25	1 22	1 50	1 75	70	98	1 25	1 65	1 33	1 31
Wisconsin	1 27	1 40	.....	1 06	1 81	1 50	88	1 17	75	1 14	1 67	1 25
Minnesota	1 42	1 60	1 00	2 73	2 50	.....	83	94	.....	1 20	1 31	.....
Iowa	1 06	1 49	78	1 34	1 97	.....	70	1 03	.....	1 17	1 47	1 25
Kansas	1 25	1 33	.....	1 75	1 96	.....	1 15	1 14	78	1 00	1 46	.....
Nebraska	1 00	1 63	.....	1 38	2 25	.....	75	1 03	.....	2 33	1 60	.....
Missouri	81	1 14	1 50	1 12	1 52	.....	69	84	1 00	99	1 17	.....
Kentucky	77	1 06	.....	1 08	1 43	.....	60	81	.....	90	1 16	.....
SOUTHERN STATES.												
Virginia	60	85	64	1 02	1 23	80	47	63	47	69	90	67
North Carolina	60	68	1 00	63	93	1 25	36	53	75	52	77	.....
South Carolina	53	62	1 00	73	96	1 25	40	50	75	60	75	1 00
Georgia	55	76	.....	81	1 07	.....	50	64	.....	71	80	.....
Florida	63	75	75	88	1 03	1 00	75	63	50	80	94	75
Alabama	60	95	75	75	1 45	1 00	52	75	.....	60	1 11	.....
Mississippi	1 00	1 03	65	1 25	1 39	1 05	1 00	54	65	1 25	1 34	1 05
Louisiana	66	90	87	1 00	1 31	1 25	58	75	75	81	1 07	1 00
Texas	75	1 07	.....	1 03	1 54	.....	67	86	.....	92	1 15	.....
Arkansas	74	1 00	.....	97	1 37	.....	55	73	.....	75	86	.....
Tennessee	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
PACIFIC STATES.												
California	2 07	2 11	1 50	2 50	2 60	2 50	1 39	1 57	1 00	2 13	2 06	2 50
Nevada	3 50	4 33	2 50	5 00	7 10	3 50	3 50	1 67	2 50	5 40	2 33	3 50
Oregon	2 14	1 75	1 00	2 50	2 25	1 60	1 51	1 25	1 25	1 94	1 62	2 00
TERRITORIES.												
Washington	3 12	2 50	2 25	4 12	3 00	.....	2 25	1 37	1 50	3 00	2 12	.....
Colorado	2 17	2 11	.....	2 83	2 86	.....	1 50	1 42	.....	2 20	2 12	.....
Dakota	1 50	2 57	1 00	2 00	3 16	1 25	1 46	75	1 50	2 15	1 00	.....
Idaho	.....	2 83	1 50	.....	3 25	2 12	1 30	1 12	.....	3 00	1 25	.....
Arizona	.....	2 50	.....	.....	3 08	.....	1 94	.....	.....	2 41	.....	.....
Montana	.....	5 00	.....	.....	6 00	.....	3 00	.....	.....	4 10	.....	.....
New Mexico	75	1 06	1 00	1 13	1 50	2 50	50	75	1 00	1 40	1 25	1 50
AVERAGES.												
New England States	1 00	1 45	1 48	1 28	1 96	1 93	70	1 09	1 03	99	1 55	1 53
Middle States	64	1 32	1 26	1 03	1 76	1 66	53	92	86	81	1 56	1 36
Western States	1 03	1 34	1 15	1 37	1 81	1 58	77	97	93	1 17	1 40	1 35
Southern States	67	86	81	91	1 20	1 08	65	69	71	78	88	89
Pacific States	86	1 34	1 17	1 15	1 69	1 58	61	92	88	84	1 32	1 26
Territories	2 17	2 66	1 67	3 53	2 65	2 54	2 13	1 47	1 58	3 32	2 60	2 67
General average	2 23	2 35	1 55	3 03	2 96	2 19	1 76	1 55	1 33	2 56	2 19	1 96

Table showing the average wages paid for farm and other labor, &c.—Continued.

States.	Experienced hands in summer.						Experienced hands in winter.					
	With board.			Without board.			With board.			Without board.		
	1860.	1870.	1871.	1860.	1870.	1871.	1860.	1870.	1871.	1860.	1870.	1871.
<i>Monthly wages.</i>												
NEW ENGLAND STATES.												
Maine.....	\$19 00	\$27 55	\$25 00	\$29 37	.....	.....	\$15 22	\$22 00	\$15 50	\$24 75	.....	.....
New Hampshire.....	16 28	23 50	21 25	24 00	.....	.....	12 50	18 25	23 50	18 33	.....	.....
Vermont.....	17 28	28 10	29 00	25 83	.....	.....	13 80	21 25	20 00	21 50	.....	.....
Massachusetts.....	20 05	29 30	21 33	31 30	.....	.....	16 22	22 40	20 00	27 00	.....	.....
Rhode Island.....	14 00	22 00	.....	24 00	.....	.....	10 00	18 00	.....	20 00	.....	.....
Connecticut.....	16 00	28 33	20 00	.....	.....	.....	10 00	17 00	15 00	.....	.....	.....
MIDDLE STATES.												
New York.....	15 41	21 58	23 42	22 34	.....	.....	11 53	19 12	16 75	18 41	.....	.....
New Jersey.....	14 00	21 07	20 50	22 00	.....	.....	8 31	15 87	10 67	15 00	.....	.....
Pennsylvania.....	15 28	25 40	22 32	24 05	.....	.....	10 13	17 75	16 81	17 30	.....	.....
Delaware.....	14 00	20 00	15 00	.....	.....	.....	10 00	12 00	7 00	.....	.....	.....
Maryland.....	6 00	11 43	.....	7 00	.....	.....	4 00	11 00	.....	6 00	.....	.....
West Virginia.....	13 62	21 53	21 75	19 50	.....	.....	10 08	16 33	15 50	16 77	.....	.....
WESTERN STATES.												
Ohio.....	15 03	22 67	21 66	24 77	.....	.....	12 14	17 38	16 40	19 00	.....	.....
Indiana.....	16 74	23 33	21 69	24 50	.....	.....	13 03	18 51	14 62	19 55	.....	.....
Illinois.....	16 61	24 53	22 50	24 05	.....	.....	12 42	18 14	17 00	18 50	.....	.....
Michigan.....	15 00	23 20	21 00	23 20	.....	.....	11 87	18 75	25 60	20 00	.....	.....
Wisconsin.....	19 27	25 02	25 00	28 03	.....	.....	17 48	17 68	18 00	24 28	.....	.....
Minnesota.....	17 55	29 11	20 00	29 06	.....	.....	13 31	18 30	20 00	20 39	.....	.....
Iowa.....	16 08	24 88	20 00	23 08	.....	.....	13 11	18 30	20 00	20 39	.....	.....
Kansas.....	17 60	23 33	.....	27 50	.....	.....	11 75	20 83	.....	25 00	.....	.....
Nebraska.....	15 00	25 00	.....	20 00	.....	.....	15 00	20 00	.....	30 00	.....	.....
Missouri.....	14 57	23 10	.....	18 00	.....	.....	11 17	18 00	.....	11 50	.....	.....
Kentucky.....	14 77	20 21	.....	21 31	.....	.....	11 12	16 33	.....	17 52	.....	.....
SOUTHERN STATES.												
Virginia.....	11 42	13 26	10 40	17 78	.....	.....	9 01	9 54	8 80	13 01	.....	.....
North Carolina.....	9 00	12 80	12 00	13 50	.....	.....	8 00	9 80	.....	11 33	.....	.....
South Carolina.....	9 28	11 67	12 00	13 11	.....	.....	8 51	10 30	5 00	11 71	.....	.....
Georgia.....	11 43	11 50	12 00	16 00	.....	.....	9 36	11 41	12 00	11 75	.....	.....
Florida.....	.....	14 00	.....	.....	.....	.....	.....	14 00	.....	.....	.....	.....
Alabama.....	12 42	16 00	13 50	17 50	.....	.....	11 00	14 50	13 50	15 40	.....	.....
Mississippi.....	13 00	18 58	12 00	19 00	.....	.....	11 06	14 50	.....	20 00	.....	.....
Louisiana.....	11 00	20 00	19 00	17 33	.....	.....	11 00	16 91	19 00	17 33	.....	.....
Texas.....	13 00	18 50	16 00	20 33	.....	.....	10 66	15 40	13 00	19 33	.....	.....
Arkansas.....	15 00	18 88	.....	20 00	.....	.....	12 33	16 20	.....	17 30	.....	.....
Tennessee.....	14 16	18 32	.....	20 00	.....	.....	10 50	14 26	.....	15 33	.....	.....
PACIFIC STATES.												
California.....	40 56	42 69	25 00	55 63	.....	.....	31 67	33 80	25 00	48 33	.....	.....
Nevada.....	78 33	53 33	.....	101 25	.....	.....	70 00	40 00	.....	100 00	.....	.....
Oregon.....	45 83	35 75	40 00	70 00	.....	.....	35 71	30 75	30 00	66 67	.....	60 00
TERRITORIES.												
Washington.....	67 50	40 00	50 00	97 50	.....	.....	45 00	30 00	30 00	70 00	.....	.....
Colorado.....	30 00	39 75	.....	52 50	.....	.....	21 50	28 57	.....	41 00	.....	.....
Dakota.....	25 00	30 00	20 00	35 00	.....	.....	20 00	27 50	15 00	25 00	.....	.....
Idaho.....	70 00	40 00	40 00	.....	.....	.....	33 33	30 00	.....	.....	.....	.....
Arizona.....	90 00	60 00	.....	150 00	.....	.....	33 33	.....	.....	.....	.....	.....
Montana.....	.....	75 00	50 00	.....	.....	.....	35 00	35 00	.....	.....	.....	.....
New Mexico.....	15 00	30 00	40 00	30 00	.....	.....	20 00	20 00	.....	.....	.....	.....
AVERAGES.												
New England States.....	17 10	26 46	27 09	26 90	.....	.....	12 97	19 85	18 60	22 32	.....	.....
Middle States.....	14 06	21 77	20 60	19 17	.....	.....	9 01	15 32	13 35	14 70	.....	.....
Western States.....	16 26	21 07	22 12	23 99	.....	.....	12 58	18 43	17 26	20 07	.....	.....
Southern States.....	11 97	16 11	13 45	17 52	.....	.....	10 21	13 35	11 88	15 30	.....	.....
General average.....	14 60	22 10	20 81	21 89	.....	.....	11 49	16 79	15 42	18 10	.....	.....
Pacific States.....	51 91	43 92	32 50	75 63	.....	.....	45 79	31 70	27 50	64 32	.....	.....
Territories.....	45 50	50 82	40 00	73 00	.....	.....	28 83	31 10	26 00	45 00	.....	.....
Average.....	50 21	47 37	36 25	71 32	.....	.....	37 31	32 93	26 75	56 67	.....	.....

, &c.—Continued.

Table showing the average wages paid for farm and other labor, &c.—Continued

board.					Without board.					Ordinary hands in summer.					Ordinary hands in winter.									
					States.					With board.		Without board.			With board.		Without board.							
										1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.			
Daily wages.																								
NEW ENGLAND STATES.																								
Maine					\$0 94					\$1 18					\$0 63					\$0 94				
New Hampshire					25 1 31					21 25					1 25					1 55				
Vermont					25 1 11					1 00					1 50					1 02				
Massachusetts					79 1 15					87 1 13					1 58					1 50				
Rhode Island					50 83										83 1 31									
Connecticut					1 00					1 58					1 00					2 08				
MIDDLE STATES.																								
New York					68 1 13					1 18					99 1 54					1 71				
New Jersey					73 1 23					1 13					1 09					1 72				
Pennsylvania					63 1 01					89 95					1 17					1 25				
Delaware					50 75					88 1 25					1 00									
Maryland					38 74										62 1 01									
West Virginia					52 82					64 76					1 13					93 25				
WESTERN STATES.																								
Ohio					68 98					82 96					1 28					1 07				
Indiana					71 94					84 96					1 32					1 23				
Illinois					78 98					1 06					1 43					1 43				
Michigan					73 1 00					1 00					1 02					1 45				
Wisconsin					1 01					1 01					1 41					1 40				
Minnesota					1 10					1 39					75 1 38					1 86				
Iowa					76 1 09					70 1 01					1 52					1 00				
Kansas					1 08					1 04										1 50				
Nebraska					1 00					1 25										1 88				
Missouri					67 82					1 00					94 1 14									
Kentucky					61 84										89 1 15									
SOUTHERN STATES.																								
Virginia					52 63					54 66					97 76					40				
North Carolina					33 48										47 70					28				
South Carolina					34 53					75 58					78 1 50					31				
Georgia					47 68										68 81					38				
Florida					47 61					75 70					88 1 00					43				
Alabama					48 75					50 81					1 20					73				
Mississippi					48 75					50 81					1 20					73				
Louisiana					79 75										1 11					1 25				
Texas					51 69					50 75					1 00					75				
Arkansas					55 84										81 1 13					45				
Tennessee					51 72										71 1 01					50				
PACIFIC STATES.																								
California					2 00					1 52					1 00					2 15				
Nevada					3 00					1 84					1 50					4 00				
Oregon					1 61					1 25					1 09					1 88				
TERRITORIES.																								
Washington					2 25					1 88					2 75					2 37				
Colorado					1 75					1 68					2 75					2 46				
Dakota					1 25					1 94					1 25					2 75				
Idaho										2 00					1 25					2 33				
Arizona										1 75					1 25					2 33				
Montana										4 00										3 03				
New Mexico					60					75					1 25					1 00				
AVERAGES.																								
New England States					81					1 20					1 02					1 07				
Middle States					57					95					95					88				
Western States					83					1 04					88					1 12				
Southern States					47					67					64					99				
General average					67					96					87					94				
Pacific States					2 20					1 53					1 17					2 68				
Territories					1 46					2 00					1 25					2 00				
Average					1 83					1 77					1 21					2 34				

Table showing the average wages paid for farm and other labor, &c.—Continued.

States.	Ordinary hands in summer.						Ordinary hands in winter.					
	With board.			Without board.			With board.			Without board.		
	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.
<i>Monthly wages.</i>												
NEW ENGLAND STATES.												
Maine	\$11 44	\$20 67	\$20 00	\$22 37			\$11 41	\$17 67	\$12 60	\$20 75		
New Hampshire	13 34	19 00	18 75	22 00			9 00	12 60	19 67	14 50		
Vermont	13 66	23 00	18 00	22 67			10 50	14 00	16 50	17 00		
Massachusetts	15 28	24 10	22 50	26 57			11 67	18 60	12 50	21 75		
Rhode Island	12 69	18 00		20 00			8 09	18 60		18 60		
Connecticut	12 00	19 33	15 00				8 00	14 33				
MIDDLE STATES.												
New York	11 83	19 88	24 92	18 28			9 48	15 46	19 50	15 31		
New Jersey	9 99	19 33	16 00	17 17			7 00	12 80	10 00	13 81		
Pennsylvania	11 52	18 57	17 04	20 00			8 04	11 80	13 21	14 93		
Delaware	10 00	15 00	10 00				7 00	9 00				
Maryland	5 00	11 51		8 00			4 00	9 21		6 00		
West Virginia	10 01	16 00	16 67	15 41			8 17	13 16	15 00	13 47		
WESTERN STATES.												
Ohio	12 91	17 33	10 29	18 21			10 43	13 01	12 50	15 49		
Indiana	13 09	18 48	16 11	19 02			11 41	15 04	13 41	16 48		
Illinois	13 61	19 63	19 45	19 87			10 62	15 01	11 30	15 70		
Michigan	12 30	18 50		20 50			10 25	13 77		17 65		
Wisconsin	11 90	16 76	20 00	21 65			12 94	14 00	13 00	31 63		
Minnesota	12 64	20 55	16 00	22 71			9 00	15 89	10 00	20 11		
Iowa	13 00	18 87	17 00	19 33			11 06	11 01	17 00			
Kansas	14 25	19 67		24 00			11 50	11 83		19 00		
Nebraska	15 00	20 25		20 00			15 00	16 00		20 00		
Missouri	11 81	17 00		15 25			10 20	14 45		13 50		
Kentucky	10 50	15 29		16 11			9 89	12 58		13 83		
SOUTHERN STATES.												
Virginia	8 04	10 09	9 25	12 35			7 02	7 81	8 25	12 11		
North Carolina	7 10	9 16	12 60	10 00			6 50	7 60		7 60		
South Carolina	6 65	10 67	15 00	11 17			5 83	9 67	20 00	9 50		
Georgia	9 50	11 89	10 00	14 33			7 40	8 75	10 00	11 33		
Florida		10 00						10 60		11 60		
Alabama	9 67	11 64	11 00	15 20			8 40	9 21	11 00	11 60		
Mississippi	11 00	14 67	10 00	19 00			10 60	10 85		20 00		
Louisiana	9 66	15 25	15 00	11 00			10 33	12 56	15 00	15 00		
Texas	10 66	14 60	12 00	17 66			9 33	13 00	12 00	16 00		
Arkansas	11 60	14 80		17 80			8 66	15 00		13 49		
Tennessee	9 20	13 98	10 00	13 00			8 47	10 65		12 30		
PACIFIC STATES.												
California	30 45	30 53		43 33			36 87	26 61		38 00		
Nevada	50 00	40 00		60 00			60 00	30 00		87 50		
Oregon	37 00	28 25	40 00	51 60			32 00	23 25	60 00	45 00		
TERRITORIES.												
Washington	50 00	37 50	40 00	62 50				35 00	22 50			
Colorado	30 00	33 00		55 00			15 60	22 75		27 50		
Dakota	20 00	34 00		38 00			15 60	25 00		22 50		
Idaho		55 00	32 50					35 00	30 00			
Arizona		41 67						25 00				
Montana		57 50	40 00					25 00	30 00			
New Mexico		25 00	30 00					20 00	10 00			
AVERAGES.												
New England States	13 79	20 68	18 60	23 13			9 66	16 38	11 42	18 36		
Middle States	9 71	16 75	16 93	15 77			7 38	12 45	12 20	12 71		
Western States	13 12	18 33	17 53	19 97			11 01	11 48	13 37	17 60		
Southern States	9 23	12 43	11 58	14 15			8 19	10 04	12 71	12 89		
General average	11 46	17 05	16 11	18 28			9 07	13 34	13 17	15 39		
Pacific States	45 82	32 91	40 00	61 77			39 62	26 62	60 00	56 83		
Territories	33 33	39 95	35 62	51 89			15 00	25 39	23 12	25 00		
Average	39 58	36 41	37 81	58 31			27 31	26 00	41 50	40 92		

nond.		Withont beard	
0, 1874.	1860, 1870, 1874	1860, 1870, 1874	1860, 1870, 1874
66 513 00	820 75	.....	.....
60 19 67	14 26	.....	.....
40 16 50	15 00	.....	.....
40 12 50	21 55	.....	.....
60	18 60	.....	.....
31	6 00	.....	.....
46 10 70	15 31	.....	.....
80 10 00	14 11	.....	.....
40 12 21	14 93	.....	.....
00	14 00	.....	.....
21	13 45	.....	.....
16 15 00	13 45	.....	.....
01 12 50	15 69	.....	.....
01 13 41	16 48	.....	.....
01 13 30	15 70	.....	.....
77	17 65	.....	.....
60 13 00	21 63	.....	.....
89 10 00	20 11	.....	.....
01 17 00	19 00	.....	.....
89	20 00	.....	.....
45	13 50	.....	.....
58	13 83	.....	.....
61 8 25	12 11	.....	.....
60	7 60	.....	.....
67 50 00	9 50	.....	.....
75 15 00	11 33	.....	.....
60	11 00	.....	.....
30 10 00	11 60	.....	.....
56 56 15 00	15 00	.....	.....
00	14 40	.....	.....
00	14 30	.....	.....
61	36 00	.....	.....
00	37 50	.....	.....
31 25 60 00	45 30	.....	.....
50 00 22 50	.....	.....	.....
25 50	27 50	.....	.....
50	23 50	.....	.....
30 00 30 00	.....	.....	.....
50 .....	.....	.....	.....
50 30 30 00	.....	.....	.....
68 41 42	18 36	.....	.....
2 45 12 30	12 71	.....	.....
1 48 13 35	17 00	.....	.....
10 40 12 71	12 83	.....	.....
23 34 13 17	15 39	.....	.....
26 62 69 00	56 84	.....	.....
25 39 23 12	25 00	.....	.....
36 00 41 56	40 92	.....	.....

States.	Common laborers at other than farm-work.						Female servants.		
	With board.			Without board.			With board.		
	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.
<i>Daily wages.</i>									
NEW ENGLAND STATES.									
Maine.....	\$0 40	\$1 19	.....	\$1 11	\$1 51	\$1 50	\$0 38	.....	.....
New Hampshire.....	87	1 31	81 37	1 12	1 31	1 37	38	.....	\$0 50
Vermont.....	80	1 19	1 25	1 08	1 11	1 50	32	.....	40
Massachusetts.....	80	1 15	1 25	1 15	1 60	1 67	41	.....	.....
Rhode Island.....	50	1 00	.....	83	1 50	.....	25	.....	.....
Connecticut.....	1 60	1 67	1 00	.....	2 17	1 50	.....	.....	50
MIDDLE STATES.									
New York.....	88	1 28	1 19	1 21	1 67	1 53	41	.....	49
New Jersey.....	75	1 20	1 17	1 07	1 61	1 41	36	.....	75
Pennsylvania.....	79	1 16	99	1 19	1 65	1 41	31	.....	50
Delaware.....	50	1 00	.....	.....	1 56	.....	.....	.....	50
Maryland.....	78	75	.....	.....	1 08	.....	38	.....	.....
West Virginia.....	72	95	92	98	1 27	1 50	21	.....	31
WESTERN STATES.									
Ohio.....	79	1 08	97	1 08	1 49	1 29	31	.....	45
Indiana.....	81	1 16	84	1 06	1 56	1 25	26	.....	40
Illinois.....	87	1 14	1 13	1 19	1 60	1 58	35	.....	49
Michigan.....	82	1 08	1 50	1 20	1 57	1 55	36	.....	50
Wisconsin.....	89	1 08	.....	1 19	1 51	.....	32	.....	.....
Minnesota.....	80	1 31	.....	1 05	1 75	.....	33	.....	.....
Iowa.....	81	1 23	1 00	1 13	1 69	1 25	35	.....	28
Kansas.....	1 19	1 38	.....	1 55	1 85	.....	60	.....	.....
Nebraska.....	1 25	1 50	.....	1 62	2 13	.....	40	.....	.....
Missouri.....	73	98	1 60	1 03	1 18	1 50	29	.....	50
Kentucky.....	72	1 01	.....	99	1 39	.....	38	.....	.....
SOUTHERN STATES.									
Virginia.....	58	72	67	75	1 01	90	28	.....	29
North Carolina.....	41	60	.....	67	82	.....	16	.....	.....
South Carolina.....	53	80	80	78	1 01	1 00	29	.....	.....
Georgia.....	67	81	.....	88	1 03	.....	31	.....	.....
Florida.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Alabama.....	64	91	50	84	1 21	.....	.....	.....	25
Mississippi.....	50	95	50	75	1 15	75	37	.....	.....
Louisiana.....	.....	1 25	62	.....	1 70	1 62	40	.....	30
Texas.....	61	93	.....	92	1 27	.....	37	.....	.....
Arkansas.....	75	1 01	.....	1 00	1 39	.....	32	.....	.....
Tennessee.....	61	80	.....	83	1 15	50	29	.....	.....
PACIFIC STATES.									
California.....	1 65	1 78	1 00	1 96	2 31	2 50	1 19	.....	.....
Nevada.....	3 50	2 18	1 59	4 12	3 60	2 50	4 00	.....	.....
Oregon.....	1 71	1 50	1 00	2 12	2 42	2 03	1 15	.....	1 00
TERRITORIES.									
Washington.....	2 00	1 88	1 00	2 50	2 50	1 50	1 59	.....	1 00
Colorado.....	2 50	1 82	.....	3 59	2 50	.....	2 75	.....	.....
Dakota.....	.....	2 21	.....	.....	3 00	.....	50	.....	47
Idaho.....	.....	2 50	1 25	.....	3 50	1 25	.....	.....	.....
Arizona.....	.....	2 25	.....	.....	3 25	.....	.....	.....	.....
Montana.....	.....	5 00	.....	.....	6 00	.....	.....	.....	.....
New Mexico.....	50	1 00	55	1 00	1 50	1 25	25	.....	.....
AVERAGES.									
New England States.....	80	1 25	1 22	1 06	1 68	1 61	37	.....	49
Middle States.....	67	1 15	1 05	99	1 48	1 47	31	.....	56
Western States.....	68	1 18	1 07	1 21	1 61	1 41	31	.....	41
Southern States.....	59	88	62	82	1 16	92	31	.....	35
General average.....	74	1 09	99	1 02	1 49	1 36	31	.....	46
Pacific States.....	2 29	1 82	1 17	2 73	2 48	2 33	2 11	.....	1 60
Territories.....	1 67	2 35	1 00	2 31	3 18	1 33	1 25	63
Average.....	1 98	2 10	1 08	2 57	2 83	1 81	1 67	81



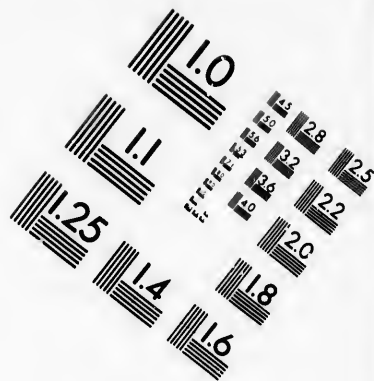
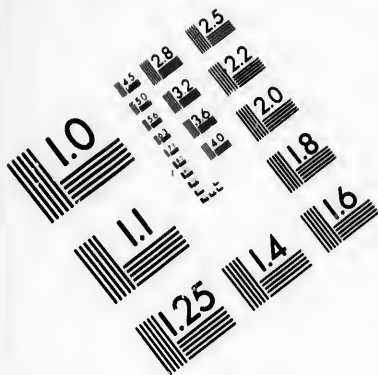
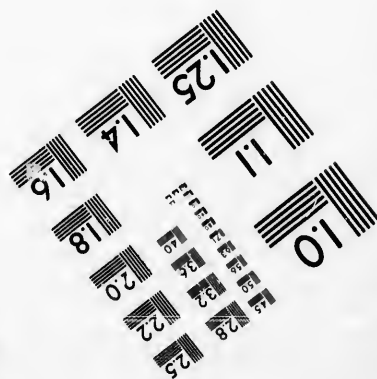
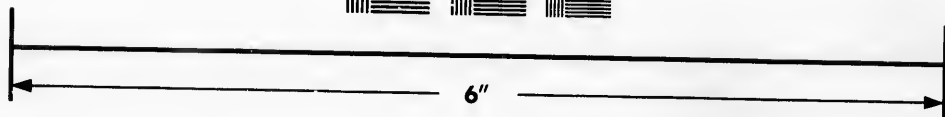
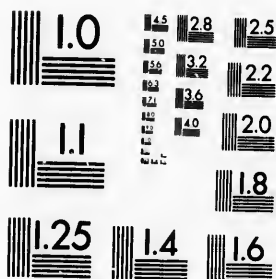


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Table showing the average wages paid for farm and other labor, &c.—Continued.

States.	Common laborers at other than farm-work.						Female servants.		
	With board.			Without board.			With board.		
	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.
<i>Monthly wages.</i>									
NEW ENGLAND STATES.									
Maine.....	\$15 63	\$19 11	.....	\$20 62	.....	.....	\$8 50	\$10 89	\$11 00
New Hampshire.....	10 00	17 00	\$25 00	16 00	.....	\$25 00	7 33	11 12	12 00
Vermont.....	11 40	22 50	30 00	21 00	.....	.....	6 40	10 30	10 25
Massachusetts.....	19 13	26 50	.....	29 57	.....	.....	6 36	10 39	13 70
Rhode Island.....	12 60	20 60	.....	21 00	.....	.....	6 00	12 00	.....
Connecticut.....	16 69	23 33	15 00	.....	.....	.....	6 00	10 50	8 60
MIDDLE STATES.									
New York.....	15 21	20 10	25 33	21 78	.....	.....	5 06	9 55	10 00
New Jersey.....	12 00	18 80	11 00	19 50	.....	.....	4 64	8 83	10 40
Pennsylvania.....	13 80	20 07	19 28	20 56	.....	.....	4 82	7 88	8 30
Delaware.....	.....	16 00	10 00	.....	.....	.....	4 60	8 00	4 00
Maryland.....	5 63	11 50	.....	7 00	.....	.....	2 60	7 83	.....
West Virginia.....	4 10	29 67	14 00	20 54	.....	.....	4 50	6 36	7 60
WESTERN STATES.									
Ohio.....	14 31	18 00	18 80	18 86	.....	.....	5 29	8 52	7 93
Indiana.....	11 62	21 38	17 00	20 17	.....	.....	6 12	9 11	8 55
Illinois.....	12 90	22 45	24 25	31 37	.....	.....	6 69	9 45	10 15
Michigan.....	13 82	20 28	.....	22 25	.....	.....	6 06	9 91	12 60
Wisconsin.....	16 46	20 42	.....	24 59	.....	.....	6 17	8 85	9 00
Minnesota.....	13 41	22 89	.....	22 67	.....	.....	5 97	9 08	.....
Iowa.....	14 05	21 10	.....	21 25	.....	.....	5 73	9 31	8 80
Kansas.....	21 50	24 20	.....	31 67	.....	.....	7 60	9 50	.....
Nebraska.....	20 00	21 50	.....	25 00	.....	.....	13 00	11 50	.....
Missouri.....	16 00	21 80	.....	18 00	.....	.....	4 67	7 55	.....
Kentucky.....	12 43	19 27	.....	19 96	.....	.....	6 10	8 67	.....
SOUTHERN STATES.									
Virginia.....	10 15	11 98	10 80	15 32	.....	.....	4 04	5 48	4 80
North Carolina.....	8 31	11 70	.....	12 00	.....	.....	3 04	5 00	7 00
South Carolina.....	10 33	12 60	8 00	14 17	.....	.....	5 28	7 40	8 00
Georgia.....	13 33	11 11	.....	19 33	.....	.....	5 50	6 95	7 00
Florida.....	.....	16 00	.....	.....	.....	.....	.....	7 00	.....
Alabama.....	14 15	16 85	0 00	18 67	.....	.....	7 00	8 31	7 50
Mississippi.....	13 60	17 60	10 00	19 60	.....	.....	8 00	10 43	5 60
Louisiana.....	14 50	19 70	22 50	22 25	.....	.....	7 00	10 05	14 00
Texas.....	10 09	16 20	.....	17 00	.....	.....	8 00	8 59	11 00
Arkansas.....	12 67	17 70	.....	18 40	.....	.....	8 00	9 80	.....
Tennessee.....	10 00	15 26	.....	15 13	.....	.....	4 80	6 62	9 00
PACIFIC STATES.									
California.....	42 86	31 81	.....	47 50	.....	.....	27 08	27 89	.....
Nevada.....	53 33	40 00	.....	100 00	.....	.....	52 50	31 31	30 00
Oregon.....	36 33	30 00	.....	60 00	.....	60 00	30 00	22 55	36 00
TERRITORIES.									
Washington.....	.....	35 00	.....	.....	.....	.....	30 00	22 00	.....
Colorado.....	31 00	36 43	.....	51 00	.....	.....	32 14	25 05	.....
Dakota.....	25 00	40 00	.....	35 00	.....	.....	20 00	16 00	.....
Idaho.....	.....	73 33	27 50	.....	.....	.....	.....	40 00	30 00
Arizona.....	.....	60 00	.....	.....	.....	.....	.....	40 00	.....
Montana.....	.....	70 00	50 00	.....	.....	.....	50 00	19 00	.....
New Mexico.....	12 00	25 00	16 00	18 00	.....	.....	8 00	10 00	6 00
AVERAGES.									
New England States.....	14 52	21 41	20 00	22 24	.....	.....	6 73	10 87	10 80
Middle States.....	10 01	17 86	15 92	17 88	.....	.....	4 17	8 08	8 08
Western States.....	15 41	21 12	20 02	22 31	.....	.....	6 68	9 43	9 28
Southern States.....	11 65	15 32	12 06	17 13	.....	.....	6 12	7 79	8 48
General average.....	12 00	18 92	17 00	19 90	.....	.....	5 93	9 04	9 16
Pacific States.....	50 84	31 94	.....	69 16	.....	.....	26 53	27 89	30 00
Territories.....	23 67	48 54	31 16	34 67	.....	.....	22 41	29 54	21 50
Average.....	37 96	41 11	31 16	51 92	.....	.....	20 29	28 78	25 55

II.—MECHANICAL LABOR.

Table showing the average daily wages, without board, paid in the several States and sections to persons employed in the under-ment ones trades in the respective years 1860, 1870, and 1874.

Table showing the average daily wages, without board, paid in the several States and sections to persons employed in the under-mentioned trades in the respective years 1860, 1870, and 1874.																									
work.	Female servants.				States.	Blacksmiths.				Blacklayers or masons.				Cabinet-makers.				Coopers.				Carpenters.			
board.	With board.					1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.		
1874.	1860.	1870.	1874.			1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.		
NEW ENGLAND STATES.																									
					Maine	81.97	82.78	82.37	82.20	83.25	83.50	81.82	82.14	82.12	81.74	82.67	82.12	82.00	82.43	82.75	82.94				
					New Hampshire	3.96	3.00	3.41	2.20	3.30	3.87	1.63	2.56	3.40	1.75	3.00	3.67	1.73	2.63	3.00	3.75				
					Vermont	2.21	2.88	3.88	2.61	3.56	4.75	1.63	3.12	4.25	1.34	3.17	4.25	1.06	3.37	4.25	3.00				
	\$15.00	7.33	11.12	12.40	Massachusetts	1.91	2.95	2.50	2.42	3.00	3.67	2.00	3.12	3.50	1.30	3.00	3.67	1.50	2.50	3.00	3.00				
	6.60	10.50	10.25		Rhode Island	1.20	2.50	2.00	1.75	3.10	3.67	2.00	3.25	3.16	2.25	3.19	2.57	2.05	2.87	3.00	3.00				
	6.56	10.29	14.70		Connecticut	1.67	2.92	2.00	1.40	3.58	3.67	1.75	3.25	3.16	2.25	3.19	2.57	2.05	2.87	3.00	3.00				
	6.00	12.00			MIDDLE STATES.																				
	6.00	10.50	8.60		New York	1.66	2.74	2.64	2.02	3.64	3.23	1.72	2.74	2.55	1.64	2.66	2.19	1.71	3.16	2.65					
					New Jersey	1.47	2.60	2.46	1.57	2.86	3.34	1.32	2.74	2.55	1.64	2.66	2.19	1.71	3.16	2.65					
					Pennsylvania	1.47	2.43	2.33	1.82	3.60	3.34	1.32	2.74	2.55	1.64	2.66	2.19	1.71	3.16	2.65					
	5.06	9.55	10.60		Delaware	1.50	2.50	3.60	2.09	4.00	3.50	1.35	2.19	2.91	1.31	2.59	2.22	1.59	2.75	2.75					
	4.61	8.83	10.40		Maryland	1.50	2.21	2.50	1.5	3.50	4.00	2.50	3.00	3.00	1.50	2.50	2.00	1.50	2.75	2.75					
	4.82	7.88	8.40		West Virginia	1.60	2.45	2.50	1.66	3.41	3.25	1.66	2.46	2.81	1.53	2.61	2.19	1.73	2.35	2.50					
	4.00	8.00	4.00		WESTERN STATES.																				
	2.00	7.83			Ohio	1.75	2.48	2.30	2.15	3.37	3.06	1.90	2.38	2.24	1.58	2.30	2.12	1.78	2.73	2.33					
	4.50	8.36	7.60		Indiana	1.34	2.60	2.00	2.60	3.61	3.25	1.81	2.55	2.62	1.62	2.41	2.25	1.63	2.28	2.33					
					Illinois	2.10	3.70	2.81	2.73	2.55	3.49	1.97	2.40	2.83	2.09	2.41	2.25	1.63	2.28	2.33					
					Michigan	2.10	3.70	2.81	2.73	2.55	3.49	1.97	2.40	2.83	2.09	2.41	2.25	1.63	2.28	2.33					
					Wisconsin	2.25	3.47	2.50	2.71	3.36	3.00	2.10	2.61	2.61	1.70	2.41	2.25	1.63	2.28	2.33					
	5.39	8.52	7.93		Minnesota	1.90	3.03	3.00	2.41	3.36	3.00	2.10	2.61	2.61	2.03	2.26	2.00	1.43	2.74	2.50					
	6.12	9.11	8.55		Iowa	2.17	3.01	2.50	2.47	3.63	3.50	1.96	2.47	2.50	2.06	2.60	3.00	1.69	2.72	2.50					
	6.69	9.45	10.14		Kansas	2.60	3.40	3.00	3.17	3.92	3.00	3.00	3.16	2.50	1.85	2.61	2.00	2.61	2.96	3.00					
	6.06	9.91	12.60		Nebraska	2.30	3.20	3.00	3.10	4.25	2.50	3.15	2.50	2.50	2.50	3.62	2.50	2.50	3.62	3.00					
	6.17	8.85	9.00		Missouri	2.03	2.75	2.50	2.75	3.70	3.00	2.50	3.00	3.00	2.00	2.61	2.50	2.50	3.62	3.00					
	7.79	9.31	8.00		Kentucky	2.63	2.74	2.63	2.61	3.81	3.50	1.84	2.83	2.75	1.88	2.41	2.90	3.28	3.32	3.30					
	5.00	9.50			SOUTHERN STATES.																				
	13.00	11.50			Virginia	1.40	2.00	2.20	1.75	2.09	2.00	1.68	2.14	1.88	1.55	2.13	1.63	1.71	2.5	1.70					
	4.67	7.55			North Carolina	1.50	2.04	2.50	1.81	2.50	2.50	1.70	2.00	2.50	1.00	1.75	1.00	1.50	2.29	2.75					
	6.10	8.07			South Carolina	1.67	2.25	2.50	1.73	2.50	2.50	1.70	2.00	2.50	1.00	1.75	1.00	1.50	2.29	2.75					
					Georgia	1.88	2.71	3.00	2.58	3.00	2.50	2.08	2.58	2.75	1.44	2.43	3.00	2.13	2.40	2.50					
	4.04	5.48	4.60		Alabama	2.20	2.25	2.25	1.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25					
	3.60	5.00	7.00		Louisiana	2.50	2.50	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25	2.25					
	5.58	7.40	8.00		Arkansas	2.06	2.80	3.00	3.33	3.32	3.75	3.12	2.71	2.50	2.37	3.00	3.00	2.50	3.75	3.25					
	3.20	6.25	7.00		Texas	2.50	3.11	3.00	2.94	3.06	3.00	2.25	3.03	3.00	2.25	2.59	3.58	2.12	4.11	2.50					
	7.00	8.31	7.50		Mississippi	2.60	3.21	3.50	2.83	3.57	4.00	2.71	3.03	3.00	2.25	2.59	3.58	2.12	4.11	2.50					
	8.00	10.43	5.60		Tennessee	2.03	2.70	3.25	2.28	3.42	4.00	2.29	2.63	2.81	1.78	2.49	2.50	2.20	3.13	2.50					
	7.00	10.05	14.00		PACIFIC STATES.																				
	8.00	9.50	14.00		California	4.22	4.40	3.00	4.06	4.61	5.59	3.75	3.87	3.00	4.00	3.75	3.51	3.95	4.41	3.00					
	7.00	10.05	14.00		Nevada	6.80	5.50	6.00	6.80	5.75	5.00	6.85	3.87	3.00	4.00	3.75	3.51	3.95	4.41	3.00					
	8.00	9.50	14.00		Oregon	4.50	3.88	5.00	5.42	5.00	5.00	4.41	3.88	4.00	4.12	3.93	4.00	4.50	4.06	4.00					
	8.00	6.62	9.00		TERRITORIES.																				
	27.08	27.89			Washington	8.50	5.00	4.00	8.00	6.00	5.00	6.00	4.50	3.00	5.00	4.00	3.00	6.00	5.00	4.50					
	52.50	34.33	30.00		Colorado	5.25	4.88	6.00	6.50	6.00	5.00	6.00	4.50	3.00	5.00	4.00	3.00	6.00	5.00	4.50					
	60.00	30.60	22.55	36.00	Dakota	2.25	3.50	3.50	3.25	3.00	3.25	4.87	5.13	3.00	5.31	3.00	4.38	5.00	4.00						
					Idaho	6.00	3.75	9.00	9.60	5.50	6.00	6.00	5.50	3.00	5.50	3.00	4.38	5.00	4.00						
	30.00	32.00			Arizona	6.00	6.00	7.50	7.50	6.00	6.00	6.00	6.00	5.00	5.00	5.00	6.00	6.00	6.00						
	32.14	35.05			Montana	7.00	4.00	4.00	9.00	5.00	5.00	7.00	4.00	5.00	5.00	5.00	5.00	5.00	5.00						
	18.00	20.00			New Mexico	2.50	1.00	3.75	3.00	4.00	4.00	2.50	4.00	2.75	3.03	4.10	4.00	4.00	4.00						
					AVERAGES.																				
					New England States.	1.89	2.84	2.88	2.27	3.50	3.45	1.91	2.88	2.70	1.70	2.92	2.44	1.83	2.19	2.93					
					Middle States.	1.55	2.41	2.65	1.83	3.33	3.32	1.68	2.45	2.89	1.46	2.59	2.43	1.43	2.29	2.50					
					Western States.	2.13	2.88	3.05	2.97	3.66	3.37	2.11	2.75	2.56	1.95	2.69	2.50	1.26	2.29	2.50					
					Southern States.	2.12	2.68	2.90	2.41	3.00	2.90	2.31	2.61	2.95	1.95	2.57	2.63	1.26	2.29	2.50					
	6.73	10.87	10.40		General average	1.98	2.72	2.79	2.30	3.40	3.33	2.00	2.67	2.78	1.82	2.67	2.51	1.92	2.82	2.69					
	4.17	8.08	8.04		Pacific States (gold).	5.15	4.49	4.67	5.73	5.16	5.50	5.01	4.54	5.30	4.06	4.41	4.00	5.15	4.65	4.33					
	6.68	9.43	9.28		Territories (gold).	4.63	5.20	3.80	5.19	6.65	4.10	4.46	5.41	3.65	4.00	4.75	3.00	4.16	4.40	4.25					
	6.12	7.79	8.48		Average.	4.90	4.25	4.24	5.46	5.96	5.05	4.74	4.99	3.57	4.03	4.58	3.59	4.66	5.05	4.29					
	26.53	27.99	30.00																						

^π Piecework.

Table showing the average daily wages paid, &c.—Continued.

States.	Painters.			Plasterers.			Shoemakers.			Stone-cutters.		
	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.
NEW ENGLAND STATES.												
Maine.....	\$1 92	\$2 69	\$2 50	\$2 27	\$3 28	\$3 50	\$1 70	\$2 46	\$2 50	\$2 32	\$3 41	\$3 50
New Hampshire.....	1 75	3 00	2 75	2 00	3 25	3 60	1 84	2 58	2 50	2 12	3 18	3 75
Vermont.....	2 01	3 00	2 62	2 65	3 03	3 00	1 41	2 31	2 50	2 55	3 31	3 00
Massachusetts.....	1 91	2 24	2 23	2 42	3 24	3 33	1 72	2 69	2 25	2 50	4 05	3 94
Rhode Island.....	1 50	2 75	.....	1 75	3 00	.....	.....	2 25	.....	2 00	3 50	.....
Connecticut.....	1 67	2 92	.....	1 92	3 42	.....	1 37	2 25	.....	2 13	3 63	.....
MIDDLE STATES.												
New York.....	1 77	3 01	2 63	2 11	3 72	3 07	1 52	2 30	2 36	2 17	3 87	3 15
New Jersey.....	1 75	2 45	2 92	1 81	2 10	3 17	1 83	2 30	1 96	1 92	3 00	3 00
Pennsylvania.....	1 85	2 52	4 42	1 76	3 15	2 74	1 35	2 61	1 78	2 01	3 24	2 25
Delaware.....	1 50	2 50	3 00	2 00	2 50	3 75	(*)	(*)	2 00	1 50	4 50	2 10
Maryland.....	1 50	2 50	3 00	2 00	3 58	3 25	2 00	2 29	2 50	2 60	2 75	3 50
West Virginia.....	1 84	2 70	2 40	2 08	3 15	2 58	1 57	2 25	2 62	2 18	3 11	3 25
WESTERN STATES.												
Ohio.....	1 94	2 71	2 29	2 08	3 57	2 64	1 59	2 30	2 08	2 28	3 25	2 89
Indiana.....	1 96	2 78	2 37	2 33	3 35	3 00	1 64	2 27	2 25	2 25	3 17	3 18
Illinois.....	2 12	2 77	2 56	2 49	3 28	3 38	1 98	2 41	2 31	2 40	3 51	3 50
Michigan.....	1 90	2 65	.....	2 30	3 40	.....	1 54	2 43	.....	2 25	3 13	.....
Wisconsin.....	2 08	2 74	2 75	2 49	3 17	4 00	2 13	2 26	1 25	2 75	3 19	4 00
Minnesota.....	1 96	2 92	3 00	2 33	3 50	.....	1 86	2 66	2 50	2 43	3 72	3 00
Iowa.....	1 93	2 78	2 50	2 47	3 37	3 00	1 85	2 46	1 50	2 36	3 53	3 10
Kansas.....	2 55	3 21	.....	2 69	4 13	.....	2 12	2 88	.....	3 25	4 08	.....
Nebraska.....	2 50	1 00	.....	4 00	3 95	.....	3 00	3 43	.....	4 00	3 13	.....
Missouri.....	2 46	3 04	.....	2 71	3 70	3 50	2 00	2 64	2 79	2 92	3 72	3 50
Kentucky.....	2 17	2 96	2 90	2 37	3 53	3 10	1 96	2 36	2 50	2 65	3 52	3 10
SOUTHERN STATES.												
Virginia.....	1 80	2 40	1 63	1 71	2 82	2 00	1 44	1 86	1 58	2 00	9 94	3 35
North Carolina.....	1 50	2 34	3 00	1 67	2 46	3 00	1 06	1 60	1 00	1 58	2 67	.....
South Carolina.....	1 85	2 40	2 50	1 90	2 70	2 50	1 88	2 00	2 20	2 67	2 75	2 50
Georgia.....	2 13	2 75	2 75	1 94	3 66	2 50	1 75	2 36	2 50	2 18	3 50	3 50
Florida.....	.....	2 25	.....	.....	2 00	.....	.....	2 00	.....	.....	4 00	.....
Alabama.....	2 50	3 00	.....	2 67	3 42	.....	2 00	2 65	.....	3 50	.....	.....
Louisiana.....	2 50	3 35	2 50	2 50	3 77	2 00	1 00	2 81	2 00	3 50	.....	2 60
Texas.....	2 50	3 05	2 50	2 87	3 18	3 50	2 33	2 67	.....	3 1	.....	3 75
Mississippi.....	2 00	3 32	.....	3 50	4 11	3 00	1 50	3 00	.....	1 75	.....	.....
Arkansas.....	2 42	1 11	3 00	2 67	3 32	3 00	2 08	2 97	2 00	2 4	.....	5 00
Tennessee.....	2 36	2 86	2 83	2 32	3 32	3 16	2 20	2 33	2 33	2 53	3 27	3 42
PACIFIC STATES.												
California.....	4 06	4 07	4 00	4 75	4 72	5 00	3 82	3 82	.....	4 95	4 68	5 00
Nevada.....	7 80	5 80	5 00	7 80	6 81	6 00	5 88	4 75	4 00	7 00	6 04	6 60
Oregon.....	4 34	4 10	4 50	5 00	5 00	5 00	3 95	3 50	3 50	5 40	5 00	5 00
TERRITORIES.												
Washington.....	6 00	5 50	5 00	6 00	6 00	5 00	5 00	4 00	.....	6 00	6 00	5 00
Colorado.....	4 37	5 15	.....	5 77	6 43	.....	4 00	4 83	.....	5 87	6 21	.....
Dakota.....	2 50	1 50	3 00	3 00	7 50	3 50	3 50	3 25	3 00	.....	4 00	.....
Idaho.....	.....	9 00	5 00	.....	11 00	6 01	.....	6 00	4 25	.....	11 00	5 00
Arizona.....	.....	6 75	.....	.....	8 50	.....	5 67	.....	.....	.....	8 50	.....
Montana.....	.....	7 50	4 01	.....	9 00	5 00	7 00	4 00	.....	.....	8 00	.....
New Mexico.....	2 00	4 00	3 50	4 00	4 00	3 00	.....	4 00	2 50	4 00	4 00	3 00
AVERAGES.												
New England States.....	1 80	2 87	2 67	2 17	3 40	3 38	1 61	2 42	2 41	2 22	3 51	3 55
Middle States.....	1 70	2 65	2 73	1 97	3 17	3 09	1 65	2 34	2 29	1 96	3 41	2 86
Western States.....	2 13	2 96	2 67	2 57	3 55	3 23	1 97	2 58	2 41	2 69	3 50	3 28
Southern States.....	2 16	2 81	2 59	2 37	3 11	2 85	1 81	2 41	2 27	2 51	3 29	3 36
General average.....	1 95	2 82	2 66	2 27	3 31	3 14	1 76	2 44	2 25	2 35	3 43	3 36
Pacific States (gold).....	5 40	4 66	4 50	6 65	5 52	5 31	4 57	4 12	3 75	5 18	5 21	5 33
Territories (gold).....	3 97	6 06	4 00	4 72	7 49	4 50	4 17	4 96	3 44	5 29	6 96	5 25
Average.....	4 69	5 36	4 25	5 39	6 51	4 21	4 37	4 49	3 59	5 54	6 10	5 29

* Piecework.

ocmakers. Stone-cutters.

1870. 1874. 1860. 1870. 1874.

\$2.46 \$2.50 \$2.32 \$3.41 \$3.50
 2.58 2.50 2.12 3.18 3.75
 2.31 2.50 2.53 3.31 3.00
 2.09 2.25 2.50 4.05 3.94
 2.25 2.00 3.50
 2.25 2.13 3.63

2.39 2.36 2.17 3.87 3.15
 2.20 1.96 1.92 3.00 3.00
 2.61 1.78 2.01 3.24 2.28
 (*) 2.00 1.50 4.50 2.10
 2.29 2.50 2.10 2.75 3.50
 2.25 2.62 2.18 3.11 3.43

2.30 2.08 2.28 3.25 2.89
 2.25 2.25 2.25 3.17 3.68
 2.24 2.31 2.40 3.54 3.50
 2.43 2.25 3.13
 2.26 1.25 2.75 3.19 4.00
 2.05 2.50 2.41 3.72 3.00
 2.46 1.50 2.30 3.53 3.10
 2.98 3.25 4.08
 3.43 4.00 3.63
 2.61 2.50 2.92 3.72 3.50
 2.26 2.50 2.65 3.52 3.10

1.56 1.58 2.00 2.94 3.38
 1.69 3.00 1.58 2.67 2.50
 2.00 2.50 2.67 2.75 2.50
 2.26 2.50 2.18 3.59 3.50
 2.00 2.00
 2.05 3.50 4.00
 2.24 3.1 3.75
 3.00 1.5
 2.97 2.60 2.4
 2.45 2.33 3.53 3.27 3.42

3.82 4.95 4.68 5.00
 4.75 4.00 7.00 6.04 6.00
 3.50 3.50 5.49 5.00 5.00

4.00 6.00 6.00 5.00
 4.83 5.87 6.21
 3.25 3.00 4.00
 4.09 4.25 11.00 5.00
 5.67 8.50
 7.00 4.00 9.00 8.00
 4.00 2.50 4.00 4.00 3.00

2.42 2.41 2.22 3.54 3.55
 2.21 2.20 1.96 3.41 2.86
 2.58 2.11 2.69 3.50 3.26
 2.41 2.27 2.51 3.29 3.36

2.41 2.25 2.35 3.43 3.36
 4.2 3.75 5.78 5.24 5.33
 4.96 3.44 5.29 6.96 5.25
 4.49 3.59 5.51 6.10 5.29

LABOR IN THE UNITED STATES.

Table showing the average daily wages paid, &c.—Continued.

States.	Tailors.			Tanners.			Thosmiths.			Wheelwrights.		
	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.	1860.	1870.	1874.
NEW ENGLAND STATES.												
Maine.....	\$1.86	\$2.64	\$3.50	\$2.09	\$2.61	\$2.50	\$1.82	\$2.50	\$2.25	\$1.80	\$2.75	\$2.50
New Hampshire.....	1.75	2.67	3.75	1.80	2.81	3.25	1.50	2.24	3.10	1.75	2.67	3.12
Vermont.....	1.65	2.31	3.50	1.70	2.62	3.75	1.88	2.75	2.88	1.81	2.82	3.00
Massachusetts.....	1.80	2.48	3.37	1.94	2.75	3.38	1.85	2.56	3.95	2.01	2.91	3.47
Rhode Island.....	2.00	3.00	.....	1.50	2.25	.....	1.75	3.00	.....	2.00	3.00	.....
Connecticut.....	1.37	2.45	.....	2.09	2.75	.....	1.67	2.83	.....	1.50	3.00	.....
MIDDLE STATES.												
New York.....	1.60	2.47	2.26	1.71	2.74	2.92	1.71	2.78	2.52	1.90	2.95	2.95
New Jersey.....	1.32	2.55	2.25	1.59	2.55	2.08	1.41	2.25	2.50	1.35	2.35	2.30
Pennsylvania.....	1.31	2.07	2.14	1.40	2.08	2.05	1.37	2.17	2.15	1.39	2.27	1.92
Delaware.....	(*)	(*)	2.50	1.50	2.00	2.00	2.00	2.25	2.50	2.00	2.51	2.50
Maryland.....	2.25	1.75	2.00	2.00	2.00	1.50	2.00	2.25	2.25	2.00	2.51	2.50
West Virginia.....	1.42	2.20	2.72	1.50	2.10	2.44	1.75	2.48	2.35	1.86	2.61	2.75
WESTERN STATES.												
Ohio.....	1.59	2.28	2.30	1.71	2.45	2.16	1.72	2.42	2.00	1.96	3.22	2.39
Indiana.....	1.76	2.32	1.92	1.61	2.35	2.08	1.90	2.47	2.17	1.96	2.78	2.21
Illinois.....	1.80	2.30	2.33	1.95	2.50	2.59	2.01	2.61	2.25	2.25	3.04	3.75
Michigan.....	1.69	2.35	.....	1.79	2.55	.....	1.79	2.59	.....	2.08	3.06	.....
Wisconsin.....	2.30	2.38	1.51	2.36	2.61	2.00	2.24	2.50	.....	2.50	2.24	2.00
Minnesota.....	1.61	2.48	2.50	1.94	2.85	.....	1.54	2.81	2.50	1.78	3.11	2.81
Iowa.....	1.95	2.60	1.75	2.00	2.80	.....	1.86	2.70	2.00	2.51	2.81	2.50
Kansas.....	3.25	3.23	.....	3.50	3.15	.....	3.17	3.10	.....	2.50	3.56	.....
Nebraska.....	2.75	3.38	.....	3.50	.....	.....	2.87	3.50	.....	2.88	3.88	.....
Missouri.....	2.10	2.61	2.50	2.00	2.88	.....	2.00	3.17	2.61	2.75	2.97	2.75
Kentucky.....	2.13	2.64	2.95	1.83	2.40	2.75	2.00	2.67	2.25	2.15	2.81	3.43
SOUTHERN STATES.												
Virginia.....	1.74	2.09	2.00	1.67	1.94	1.75	1.66	2.30	1.75	1.61	2.31	2.29
North Carolina.....	1.25	1.91	3.40	1.17	2.04	.....	2.00	2.17	2.75	1.54	2.45	2.50
South Carolina.....	2.10	2.17	2.50	2.38	2.51	.....	1.65	2.18	2.50	3.15	2.50	2.00
Georgia.....	2.00	2.40	3.50	2.50	2.75	.....	2.27	2.43	2.50	2.28	3.91	2.75
Florida.....	.....	1.75	.....	.....	1.75	.....	.....	1.75	.....	.....	2.37	.....
Alabama.....	1.91	2.61	.....	2.50	2.71	.....	2.50	2.90	.....	2.12	2.83	.....
Louisiana.....	2.12	2.84	2.00	.....	3.08	2.38	2.87	2.50	2.51	3.12	2.50	.....
Texas.....	1.92	2.67	.....	3.12	2.73	.....	2.51	3.19	2.75	1.75	2.81	2.50
Mississippi.....	1.50	2.83	.....	1.50	3.17	.....	1.89	3.19	.....	3.01	3.61	.....
Arkansas.....	1.81	2.80	3.00	1.90	3.25	.....	2.17	3.14	4.01	2.17	3.25	.....
Tennessee.....	2.03	2.51	3.22	1.75	2.38	2.59	1.75	2.73	2.62	1.85	3.00	2.50
PACIFIC STATES.												
California.....	3.60	3.88	.....	4.00	3.97	.....	4.01	4.00	3.00	1.75	4.19	.....
Nevada.....	6.00	4.31	3.01	5.60	.....	.....	6.01	5.31	5.00	8.75	6.09	7.00
Oregon.....	3.20	3.50	3.50	4.10	3.31	4.00	4.25	3.61	4.50	4.67	4.01	5.00
TERRITORIES.												
Washington.....	.....	4.25	3.09	.....	5.00	3.09	6.00	4.75	2.59	6.00	5.00	5.00
Colorado.....	.....	4.69	.....	.....	6.00	.....	4.59	5.69	.....	5.01	5.75	.....
Dakota.....	4.00	4.69	.....	.....	6.00	.....	5.69	3.01	.....	4.00	3.00	.....
Idaho.....	.....	8.40	3.10	3.00	.....	.....	.....	3.01	.....	.....	4.00	3.00
Arizona.....	.....	6.00	.....	.....	8.00	.....	7.01	4.25	.....	7.00	3.50	.....
Montana.....	.....	8.00	4.00	.....	7.00	.....	7.31	.....	.....	6.75	.....	.....
New Mexico.....	.....	4.90	3.50	.....	4.00	.....	7.50	5.50	.....	8.00	5.00	.....
AVERAGES.												
New England States.....	1.71	2.60	3.03	1.84	2.72	2.72	1.75	2.71	2.81	1.82	2.88	2.75
Middle States.....	1.59	2.31	2.27	1.62	2.35	2.05	1.61	2.41	2.38	1.74	2.21	2.19
Western States.....	2.09	2.60	2.22	1.97	2.71	2.25	2.02	2.73	2.31	2.21	3.00	2.70
Southern States.....	1.84	2.41	2.75	2.06	2.59	2.25	2.07	2.69	2.67	2.11	2.87	2.42
General average.....	1.82	2.49	2.57	1.87	2.60	2.32	1.87	2.62	2.55	1.99	2.81	2.59
Pacific States (gold).....	4.47	3.91	3.25	4.57	3.61	4.00	4.76	4.31	4.17	6.06	4.73	6.00
Territories (gold).....	4.00	5.42	3.37	3.03	6.09	3.03	5.25	5.59	3.70	5.50	5.79	4.30
Average.....	4.24	4.67	3.31	3.78	4.82	3.50	5.00	4.85	3.93	5.78	5.26	5.13

* Piecework.

III.—FACTORY LABOR.

COTTON MILLS.

Before giving the rates of wages paid in the cotton-mills of the United States it may be well to present a statement showing the number and capacity of cotton-mills in the country and the consumption of cotton in the year ended July 1, 1874, which is condensed from an article in the Commercial and Financial Chronicle of November 21, 1874.

States.	Number of mills.	Number of looms.	Number of spindles.	Average size of yarn.	Average running time.	Average consumption of cotton per spindle.	Quantity of cotton used.	Quantity of cotton used.
NORTHERN STATES.								
Maine	91	12,415	609,598	25.23	50.71	59.67	36,414,517	75,607
New Hampshire	42	20,422	855,489	24.43	51.46	60.89	50,739,468	128,792
Vermont	19	4,374	58,948	29.75	46.31	46.31	2,744,166	5,295
Massachusetts	191	71,202	3,769,632	28.55	48.89	53.93	304,325,299	468,204
Rhode Island	115	24,706	1,336,842	35.20	48.10	44.51	58,146,985	125,317
Connecticut	101	18,470	908,202	31.40	48.45	53.43	48,544,613	101,557
New York	55	12,476	580,917	32.	47.70	42.22	24,536,219	52,880
New Jersey	17	2,070	130,068	29.30	51.	53.59	2,078,617	17,411
Pennsylvania	60	0,752	452,064	17.54	42.80	84.	37,989,736	81,872
Delaware	8	796	47,956	22.21	49.66	66.11	3,174,174	6,841
Maryland	21	2,229	110,260	11.50	47.35	174.31	19,222,703	41,438
Ohio	5	236	20,410	11.83	36.80	89.49	1,826,304	3,936
Indiana	4	618	22,988	14.56	47.41	159.	3,671,227	7,912
Minnesota	1		3,400	3.	52.	99.41	338,000	728
Total Northern	660	176,480	8,927,751	28.56	49.33	56.86	507,790,099	1,094,377
SOUTHERN STATES.								
Alabama	16	1,369	57,594	10.50	48.37	142.83	6,490,079	13,772
Arkansas	2	28	1,256	12.	51.	124.69	136,000	24
Georgia	42	2,931	137,339	12.71	47.77	134.57	18,522,899	39,929
Kentucky	4	42	10,500	6.26	49.24	178.56	1,878,020	4,067
Louisiana	3	300	15,000	12.	47.02	86.31	1,291,560	2,730
Mississippi	11	318	15,450	11.33	41.29	73.17	1,138,894	2,615
Missouri	4	322	18,059	10.75	41.66	183.25	3,481,573	7,288
North Carolina	30	1,045	55,498	12.08	46.52	124.10	6,812,673	14,726
South Carolina	18	1,238	62,872	13.36	34.67	113.25	7,131,558	15,366
Tennessee	42	1,014	47,058	12.32	51.10	133.38	6,274,458	13,518
Texas	4	250	10,225	12.	47.02	127.89	1,278,125	2,753
Virginia	11	1,514	56,499	16.	47.57	95.24	5,334,045	11,446
Total Southern	187	10,495	487,620	12.5	47.02	122.54	59,793,774	128,523
RECAPITULATION.								
Total Northern	660	176,480	8,927,751	28.56	49.33	56.86	507,790,099	1,094,377
Total Southern	187	10,495	487,620	12.5	47.02	122.53	59,793,774	128,523
Grand total	847	186,975	9,415,383	27.73	48.26	60.29	567,583,873	1,222,901

cotton-mills of the United
showing the number and
consumption of cotton
lensed from an article
November 21, 1874.

Average con- sumption of cotton per spindle.	Quantity of cotton used.	Quantity of cotton used.
Pounds.	Pounds.	Bales.
59.67	303,413,577	78,607
63.89	59,730,468	128,792
46.31	2,741,167	5,895
53.94	204,325,299	438,201
43.51	58,146,985	125,317
53.43	48,511,613	104,557
42.22	21,536,219	52,880
51.50	8,078,617	17,401
81.	37,989,736	81,812
66.11	3,174,171	6,811
171.31	19,222,703	41,434
89.49	1,826,301	3,916
153.	3,651,227	7,914
99.41	338,000	728
56.86	507,790,099	1,091,257
112.83	6,490,079	13,772
121.69	136,000	294
133.57	18,522,899	39,629
178.86	1,878,030	4,017
86.31	1,294,560	2,739
75.17	1,138,894	2,315
133.25	3,451,573	7,382
121.10	6,842,673	14,736
113.25	7,131,558	15,466
133.38	6,272,458	13,518
137.89	1,278,125	2,755
95.23	5,331,025	11,496
122.51	59,733,774	128,256
56.86	507,790,099	1,091,257
132.52	59,733,774	128,256
60.29	567,583,873	1,222,913

LABOR IN THE UNITED STATES.

749

It will be seen that the number of spinning-spindles in the United States on the 1st day of July, 1874, was 9,115,383, against 7,114,000 at the same date of 1870, and 6,763,557 at the same date of 1869, as follows:

Year.	Looms.	Spindles.	Yarn av- erage.	Average per spin- dle.
1874.				
North.....	176,480	8,927,754	93.56	56.86
South.....	10,495	487,629	12.5	122.53
Total, 1874.....	186,975	9,415,383	97.73	60.29
1870.				
North.....	147,682	6,551,779	93.1	50.87
South.....	5,892	362,221	12.1	124.23
Total, 1870.....	153,574	7,114,000	92.3	52.91
1869.				
North.....		6,538,491	93	60.70
South.....		225,063	12.7	132.12
Total, 1869.....		6,763,557	97.1	61.83

The above records a very rapid progress since 1870, being about 33 per cent. in the number of spinning-spindles.

COTTON MANUFACTURES IN 1870.

The number of establishments engaged in the manufacture of cotton in the United States, as appears from the census-returns of 1870, was 956, employing 135,369 hands; capital invested, \$140,706,291; wages paid, \$39,014,132; value of materials used, \$111,736,936. The principal products were as follows:

Sheetings, shirtings, and twilled goods.....	yards.	478,204,513
Lawns and fine muslins.....	do..	31,533,462
Print cloths.....	do..	489,250,053
Warp.....	do..	73,018,045
Flannel.....	do..	8,390,050
Ginghams and checks.....	do..	39,275,244
Cassimeres, cottonades, and jeans.....	do..	13,910,895
Spool-thread.....	do..	11,569,211
Table-cloths, quilts, and counterpanes.....	dozen.	493,892
Seamless bags.....	do..	2,767,060
Yarn, not woven.....	do..	30,301,087
Bats, wicking, and wadding.....	pounds.	11,118,127
Cordage, lines and twines.....	do..	5,657,454
Thread.....	do..	906,068
Cotton waste.....	do..	7,921,419
Tape and webbing.....	do..	484,400
Seamless bags.....	do..	405,585
Other products.....	do..	10,811,028

Total quantity of all products 319,314,592 pounds, valued at \$177,489,739.

WAGES IN COTTON-MILLS.
 Table showing the average weekly wages paid to persons employed in the cotton-mills of the following States in 1839 and 1874.

Occupation.	Maine.		New Hampshire.		Massachusetts.	Rhode Island.	Connecticut.	New York.	Pennsylvania.	Delaware.
	1839.	1874.	1839.	1874.	1839.	1874.	1839.	1874.	1839.	1874.
CARDING.										
Oversetters.....	\$24 50	\$22 50	\$18 00	\$20 25	\$23 40	\$22 50	\$17 00	\$17 00	\$25 00	\$12 25
Drawers.....	6 50	4 50	1 70	8 47	8 35	7 50	7 80	6 75	7 00	7 95
Backs-rollers.....	4 00	11 50	4 41	14 15	4 31	14 35	2 50	4 47	4 00	4 00
Drawers-frame tenders.....	5 55	17 12	5 65	6 69	6 50	12 00	6 12	7 49	5 00	13 25
Speeder-rollers.....	3 50	16 00	4 75	6 65	5 80	15 15	6 25	7 03	5 00	4 72
Picker-boy.....	10 00	10 32	8 84	9 55	9 80	9 75	9 05	9 10	8 00	7 25
Grinders.....	4 25	6 35	7 27	7 42	7 70	7 56	7 50	7 00	7 50	8 70
Strippers.....									7 00	7 92
SPINNING.										
Oversetters.....	22 00	22 50	16 83	20 25	21 00	23 50	15 00	17 00	15 00	15 25
Mule-spinners.....	10 87	10 75	11 64	10 52	11 75	9 50	9 50	10 16	10 50	10 00
Mule-jacksie piecers.....	2 50	2 60	3 21	2 76	3 11	2 75	2 50	2 70	2 50	1 80
Framespinners.....	4 40	15 12	5 20	15 30	6 75	15 10	5 00	13 70	3 50	2 12
DRESSING.										
Oversetters.....	20 00	21 00	17 00	17 00	21 00	23 50	13 75	14 80	13 50	15 00
Second hand.....	11 75	13 50	10 66	10 32	13 10	13 29	9 00	14 40	9 00	12 00
Drawers.....	4 50	4 34	4 64	4 56	6 50	16 06	5 00	7 32	4 25	5 25
Winders.....	5 25	6 12	6 21	6 36	6 00	16 00	5 75	7 98	4 68	5 25
Drawers and twistors.....	5 25	6 12	6 21	6 36	6 00	16 00	5 75	7 98	4 68	5 25
Dressers.....	11 10	10 67	11 43	11 94	14 00	13 50	11 25	13 11	7 50	4 60
WEAVING.										
Oversetters.....	21 00	22 50	15 52	17 75	22 50	22 50	18 33	18 05	15 00	18 00
Weavers.....	2 00	7 30	2 33	7 75	7 00	7 00	7 50	7 25	9 00	7 34
Drawers in hands.....	6 00	6 00	4 62	6 50					10 00	12 00
REPAIRS-SHOP, ENGINE-ROOM, ETC.										
Trepan.....	23 00	22 50	15 87	22 50	23 66	18 75	18 00	18 33	15 00	15 00
Winders.....	13 12	13 50	12 33	13 50	12 50	13 50	10 50	11 25	13 50	15 00
Iron-workers.....	13 12	13 50	12 33	13 50	12 50	13 50	10 50	11 25	13 50	15 00
Engineers.....	8 00	8 35	9 08	9 62	8 75	8 75	8 50	8 60	10 00	9 00
Laborers.....	17 50	20 25	11 67	16 00	17 75	16 50	15 00	12 42	12 50	9 60
Oversetters in cloth-room.....										

* Boys.

† Females.

‡ Part females.

[illegible]

Including Missouri.	† Boys.
1870	1,000
1880	1,000
1890	1,000
1900	1,000
1910	1,000
1920	1,000
1930	1,000
1940	1,000
1950	1,000
1960	1,000
1970	1,000
1980	1,000
1990	1,000
2000	1,000
2010	1,000
2020	1,000
2030	1,000
2040	1,000
2050	1,000
2060	1,000
2070	1,000
2080	1,000
2090	1,000
2100	1,000
2110	1,000
2120	1,000
2130	1,000
2140	1,000
2150	1,000
2160	1,000
2170	1,000
2180	1,000
2190	1,000
2200	1,000
2210	1,000
2220	1,000
2230	1,000
2240	1,000
2250	1,000
2260	1,000
2270	1,000
2280	1,000
2290	1,000
2300	1,000
2310	1,000
2320	1,000
2330	1,000
2340	1,000
2350	1,000
2360	1,000
2370	1,000
2380	1,000
2390	1,000
2400	1,000
2410	1,000
2420	1,000
2430	1,000
2440	1,000
2450	1,000
2460	1,000
2470	1,000
2480	1,000
2490	1,000
2500	1,000
2510	1,000
2520	1,000
2530	1,000
2540	1,000
2550	1,000
2560	1,000
2570	1,000
2580	1,000
2590	1,000
2600	1,000
2610	1,000
2620	1,000
2630	1,000
2640	1,000
2650	1,000
2660	1,000
2670	1,000
2680	1,000
2690	1,000
2700	1,000
2710	1,000
2720	1,000
2730	1,000
2740	1,000
2750	1,000
2760	1,000
2770	1,000
2780	1,000
2790	1,000
2800	1,000
2810	1,000
2820	1,000
2830	1,000
2840	1,000
2850	1,000
2860	1,000
2870	1,000
2880	1,000
2890	1,000
2900	1,000
2910	1,000
2920	1,000
2930	1,000
2940	1,000
2950	1,000
2960	1,000
2970	1,000
2980	1,000
2990	1,000
3000	1,000
3010	1,000
3020	1,000
3030	1,000
3040	1,000
3050	1,000
3060	1,000
3070	1,000
3080	1,000
3090	1,000
3100	1,000
3110	1,000
3120	1,000
3130	1,000
3140	1,000
3150	1,000
3160	1,000
3170	1,000
3180	1,000
3190	1,000
3200	1,000
3210	1,000
3220	1,000
3230	1,000
3240	1,000
3250	1,000
3260	1,000
3270	1,000
3280	1,000
3290	1,000
3300	1,000
3310	1,000

	♂	♀	Total
Parasitizing	100	100	200
Eggs	100	100	200
Larvae	100	100	200
Pupa	100	100	200
Adults	100	100	200
Dead	100	100	200
Survived	100	100	200
Total	100	100	200

WOOLEN-MILLS.

The following statement, condensed from the census returns, shows the magnitude of the woolen industry in the United States in 1870.

States and Territories.	Establishments.	Cards.	Broad looms.	Narrow looms.	Spindles.	Hands employed.			Wages.	Value of products.
						Males above 16.	Females above 15.	Youth.		
	No.	No.	No.	No.	No.				Dollars.	Dollars.
Alabama.....	11	21			530	38	1	2	1,841	89,498
Arkansas.....	13	17				29			6,370	78,490
California.....	5	16	161	22	3,880	581	31	41	239,200	1,102,711
Connecticut.....	108	669	1,190	1,763	178,470	4,257	2,381	659	2,899,350	17,374,018
Delaware.....	11	50	53	171	8,756	186	110	103	115,137	576,067
Florida.....	1	1								703
Georgia.....	46	72	6	389	11,065	231	191	121	122,134	471,521
Illinois.....	109	220	210	421	36,884	1,040	468	228	533,183	2,849,211
Indiana.....	175	316	232	918	57,084	1,420	711	308	738,113	4,439,711
Iowa.....	89	169	133	241	31,462	685	233	110	229,432	1,617,606
Kansas.....	9	21	9	20	1,616	26	21	11	30,682	153,151
Kentucky.....	125	208	31	288	16,599	451	137	92	159,373	1,312,458
Louisiana.....	2	12	40	70	4,000	24	3	1	8,900	30,750
Maine.....	107	334	962	199	65,219	1,582	1,230	210	1,017,131	6,398,881
Maryland.....	31	60	57	91	12,348	217	67	11	82,009	427,866
Massachusetts.....	185	1,367	3,169	3,351	470,785	10,761	7,429	2,350	7,298,302	39,502,512
Michigan.....	51	116	71	158	15,650	408	208	51	202,811	1,201,808
Minnesota.....	10	19	17	22	2,061	77	60	9	45,592	219,802
Mississippi.....	11	17		30	311	31	31	51	28,800	147,321
Missouri.....	156	228	68	115	10,371	548	55	85	137,108	1,246,211
New Hampshire.....	77	351	900	639	117,057	1,832	1,519	369	1,332,117	8,769,101
New Jersey.....	29	81	182	431	23,457	521	402	168	331,612	1,993,855
New Mexico.....	1	1	1	1	210	20			2,000	21,000
New York.....	592	815	1,311	1,127	162,510	4,498	2,999	1,315	2,811,326	14,391,786
North Carolina.....	52	78	11	86	2,806	531	81	17	39,101	238,688
Ohio.....	223	334	399	752	54,789	1,319	669	231	559,411	3,287,010
Oregon.....	9	21	65	35	4,320	129	8	42	112,213	265,375
Pennsylvania.....	457	1,317	2,226	6,394	316,877	5,825	5,066	1,873	4,373,028	27,589,086
Rhode Island.....	65	474	652	1,710	155,089	3,351	2,198	811	2,228,402	12,558,117
South Carolina.....	15	25	2	7	350	32	13	8	3,815	31,670
Tennessee.....	118	177	20	60	3,611	342	61	25	62,780	696,811
Texas.....	20	29	11	16	1,050	89	16	4	29,278	152,908
Utah.....	15	19	11	20	1,140	58	39	9	46,000	199,000
Vermont.....	65	175	359	291	47,419	930	754	189	611,551	3,619,110
Virginia.....	68	116	61	76	6,266	190	56	32	58,765	488,302
West Virginia.....	71	132	50	70	6,347	297	79	31	59,828	455,791
Wisconsin.....	64	131	112	110	16,445	506	205	64	229,306	1,250,466
Total.....	2,891	8,366	14,639	20,141	4,845,496	42,788	27,682	9,613	26,877,575	135,403,458

The principal products of woolen mills in 1870 were as follows:

Beavers, 261,208 yards; cloth, cassimeres, and doeskins, 63,310,612 yards; cloth, felted, 1,941,865 yards; cloth, negro, 1,922,382 yards; cottonade, 75,000 yards; dannels, 58,965,286 yards; jeans, 21,489,985 yards; kerseys, 5,506,002 yards; linseys, 11,130,274 yards; repellents, 2,663,767 yards; satinets, 14,072,559 yards; tweeds and twills, 2,853,458 yards; number of shawls, 2,312,761; blankets, 2,029,715 pairs; yarn, 16,070,237 pounds.

the census returns, shows
United States in 1870.

Occupations.	Employed.		Value of products.	
	Male.	Female above 15.	Dollars.	Dollars.
Wool-sorters	121	191	124,133	471,521
Wool-washers	46	46	555,185	2,410,211
Rivers	31	31	7,231,711	1,192,711
Oversers	2,284	653	2,293,200	17,371,012
Cards	110	103	115,137	556,007
Combing and spinning	137	92	1,417,666	1,417,666
Carders	3	3	153,151	153,151
Spinners	7,129	210	1,312,458	40,750
Warpers and beamers	1,250	210	1,017,151	6,370,851
Overlookers	67	11	1,417,666	1,417,666
Overseers	31	9	1,417,666	1,417,666
Assistants	1,519	369	1,417,666	1,417,666
Weaving	402	402	1,417,666	1,417,666
Wool-sorters	2,999	1,315	1,417,666	1,417,666
Wool-washers	81	17	1,417,666	1,417,666
Rivers	699	27	1,417,666	1,417,666
Oversers	2,006	421	1,417,666	1,417,666
Cards	2,198	112	1,417,666	1,417,666
Combing and spinning	13	25	1,417,666	1,417,666
Carders	751	169	1,417,666	1,417,666
Spinners	56	32	1,417,666	1,417,666
Warpers and beamers	79	31	1,417,666	1,417,666
Overlookers	205	64	1,417,666	1,417,666

0 were as follows:

ins, 63,310,612 yards; cloth,
ottomade, 75,000 yards; flans-
s, 5,506,902 yards; linsees,
4,072,559 yards; tweeds and
nkets, 2,029,715 pairs; gau,

Table showing the average weekly wages paid to persons employed in the woolen-mills of the following States in 1869 and in 1874.

Occupations.	Maine.		New Hampshire and Vermont.		Massachusetts.		Rhode Island.		Connecticut.		New York.		New Jersey.		Maryland.		West Virginia and Virginia.		Ohio and Ind.		Wisconsin, Iowa, and Kansas.		Minnesota.		California.		Oregon.		General average.	
	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.
Wool-sorters	\$12.00	8.00	\$11.00	10.00	\$10.00	9.00	\$10.00	9.00	\$10.00	9.00	\$10.00	9.00	\$10.00	9.00	\$10.00	9.00	\$10.00	9.00	\$10.00	9.00	\$10.00	9.00	\$10.00	9.00	\$10.00	9.00	\$10.00	9.00	\$10.00	9.00
Wool-washers	9.00	8.00	8.00	7.00	7.00	6.00	6.00	5.00	5.00	4.00	4.00	3.00	3.00	2.00	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Rivers	10.00	9.00	9.00	8.00	8.00	7.00	7.00	6.00	6.00	5.00	5.00	4.00	4.00	3.00	3.00	3.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Oversers	11.00	10.00	10.00	9.00	9.00	8.00	8.00	7.00	7.00	6.00	6.00	5.00	5.00	4.00	4.00	4.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Cards	12.00	11.00	11.00	10.00	10.00	9.00	9.00	8.00	8.00	7.00	7.00	6.00	6.00	5.00	5.00	5.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Combing and spinning	13.00	12.00	12.00	11.00	11.00	10.00	10.00	9.00	9.00	8.00	8.00	7.00	7.00	6.00	6.00	6.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Carders	14.00	13.00	13.00	12.00	12.00	11.00	11.00	10.00	10.00	9.00	9.00	8.00	8.00	7.00	7.00	7.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Spinners	15.00	14.00	14.00	13.00	13.00	12.00	12.00	11.00	11.00	10.00	10.00	9.00	9.00	8.00	8.00	8.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00
Warpers and beamers	16.00	15.00	15.00	14.00	14.00	13.00	13.00	12.00	12.00	11.00	11.00	10.00	10.00	9.00	9.00	9.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00	8.00
Overlookers	17.00	16.00	16.00	15.00	15.00	14.00	14.00	13.00	13.00	12.00	12.00	11.00	11.00	10.00	10.00	10.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00
Overseers	18.00	17.00	17.00	16.00	16.00	15.00	15.00	14.00	14.00	13.00	13.00	12.00	12.00	11.00	11.00	11.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
Assistants	19.00	18.00	18.00	17.00	17.00	16.00	16.00	15.00	15.00	14.00	14.00	13.00	13.00	12.00	12.00	12.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00	11.00
Weaving	20.00	19.00	19.00	18.00	18.00	17.00	17.00	16.00	16.00	15.00	15.00	14.00	14.00	13.00	13.00	13.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
Wool-sorters	21.00	20.00	20.00	19.00	19.00	18.00	18.00	17.00	17.00	16.00	16.00	15.00	15.00	14.00	14.00	14.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00	13.00
Wool-washers	22.00	21.00	21.00	20.00	20.00	19.00	19.00	18.00	18.00	17.00	17.00	16.00	16.00	15.00	15.00	15.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00	14.00
Rivers	23.00	22.00	22.00	21.00	21.00	20.00	20.00	19.00	19.00	18.00	18.00	17.00	17.00	16.00	16.00	16.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00	15.00
Oversers	24.00	23.00	23.00	22.00	22.00	21.00	21.00	20.00	20.00	19.00	19.00	18.00	18.00	17.00	17.00	17.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00
Cards	25.00	24.00	24.00	23.00	23.00	22.00	22.00	21.00	21.00	20.00	20.00	19.00	19.00	18.00	18.00	18.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00	17.00
Combing and spinning	26.00	25.00	25.00	24.00	24.00	23.00	23.00	22.00	22.00	21.00	21.00	20.00	20.00	19.00	19.00	19.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
Carders	27.00	26.00	26.00	25.00	25.00	24.00	24.00	23.00	23.00	22.00	22.00	21.00	21.00	20.00	20.00	20.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00	19.00
Spinners	28.00	27.00	27.00	26.00	26.00	25.00	25.00	24.00	24.00	23.00	23.00	22.00	22.00	21.00	21.00	21.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00
Warpers and beamers	29.00	28.00	28.00	27.00	27.00	26.00	26.00	25.00	25.00	24.00	24.00	23.00	23.00	22.00	22.00	22.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00	21.00
Overlookers	30.00	29.00	29.00	28.00	28.00	27.00	27.00	26.00	26.00	25.00	25.00	24.00	24.00	23.00	23.00	23.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00	22.00
Overseers	31.00	30.00	30.00	29.00	29.00	28.00	28.00	27.00	27.00	26.00	26.00	25.00	25.00	24.00	24.00	24.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00	23.00
Assistants	32.00	31.00	31.00	30.00	30.00	29.00	29.00	28.00	28.00	27.00	27.00	26.00	26.00	25.00	25.00	25.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00	24.00
Weaving	33.00	32.00	32.00	31.00	31.00	30.00	30.00	29.00	29.00	28.00	28.00	27.00	27.00	26.00	26.00	26.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00	25.00
Wool-sorters	34.00	33.00	33.00	32.00	32.00	31.00	31.00	30.00	30.00	29.00	29.00	28.00	28.00	27.00	27.00	27.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00	26.00
Wool-washers	35.00	34.00	34.00	33.00	33.00	32.00	32.00	31.00	31.00	30.00	30.00	29.00	29.00	28.00	28.00	28.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00	27.00
Rivers	36.00	35.00	35.00	34.00	34.00	33.00	33.00	32.00	32.00	31.00	31.00	30.00	30.00	29.00	29.00	29.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00	28.00
Oversers	37.00	36.00	36.00	35.00	35.00	34.00	34.00	33.00	33.00	32.00	32.00	31.00	31.00	30.00	30.00	30.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00
Cards	38.00	37.00	37.00	36.00	36.00	35.00	35.00	34.00	34.00	33.00	33.00	32.00	32.00	31.00	31.00	31.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
Combing and spinning	39.00	38.00	38.00	37.00	37.00	36.00	36.00	35.00	35.00	34.00	34.00	33.00	33.00	32.00	32.00	32.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00	31.00
Carders	40.00	39.00	39.00	38.00	38.00	37.00	37.00	36.00	36.00	35.00	35.00	34.00	34.00	33.00	33.00	33.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00	32.00
Spinners	41.00	40.00	40.00	39.00	39.00	38.00	38.00	37.00	37.00	36.00	36.00	35.00	35.00	34.00	34.00	34.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00
Warpers and beamers	42.00	41.00	41.00	40.00	40.00	39.00	39.00	38.00	38.00	37.00	37.00	36.00	36.00	35.00	35.00	35.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00	34.00
Overlookers	43.00	42.00	42.00	41.00	41.00	40.00	40.00	39.00	39.00	38.00	38.00	37.00	37.00	36.00	36.00	36.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
Overseers	44.00	43.00	43.00	42.00	42.00	41.00	41.00	40.00	40.00	39.00	39.00	38.00	38.00	37.00	37.00	37.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00	36.00
Assistants	45.00	44.00	44.00	43.00	43.00	42.00	42.00	41.00	41.00	40.00	40.00	39.00	39.00	38.00	38.00	38.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00	37.00
Weaving	46.00	45.00	45.00	44.00	44.00	43.00	43.00	42.00	42.00	41.00	41.00	40.00	40.00	39.00	39.00	39.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.00	38.

IRON AND STEEL INDUSTRIES OF THE UNITED STATES.

The following interesting article, prepared by James M. Swank, Esq., secretary of the American Iron and Steel Association, exhibits the origin and development of the iron and steel industries in the United States:

FORGES AND BLOOMARIES.

The first iron made in America was forged at a bloomery of the Virginia Company, in 1621, on the James River, twelve miles below the present site of Richmond. The Indians destroyed the forge in 1622. In 1631 the people of Massachusetts Bay built an iron-mill at Lynn; in 1641, a blast-furnace at Hammersmith; in 1652, a furnace and forge at Raynham, (Taunton;) and other iron-works followed in succeeding years, until in 1745 there were many furnaces and forges in Maryland, Virginia, and Massachusetts. At some of these forges the ore was converted into bar-iron by hammering, and all sorts of merchantable shapes were made, while at others the bar was hammered from the pig. Maryland hammered bar-iron was exported to England from 1732 to the Revolution, although in 1750 England endeavored to prohibit the production of bar-iron, as a common nuisance, in America. The Revolution stimulated the production of hammered iron, and forges sprung into existence in many parts of the colonies, but principally in Pennsylvania. Slitting-mills, for slitting hammered plate into rail-roads, became quite numerous. After the Revolution great changes took place. The puddling-furnace was invented by Cort, a native of England, in 1783 and 1784, and he also introduced the use of rolls. From 1780 to 1810 rolling-mills were gradually erected in this country to take the place of the forges, and at the present time only a very few forges in Virginia, North Carolina, and Tennessee make hammered bar-iron in small quantities, while the few forges and bloomaries making blooms from ore are found in New York and North Carolina, using the Catalan forge. Many forges, making blooms for boiler-plate from charcoal pig-iron, still exist in Pennsylvania. The following table shows the production of blooms from ore during late years:

Years.	Net tons.	Years.	Net tons.
1865.....	63,977	1870.....	62,270
1866.....	73,555	1871.....	63,000
1867.....	73,673	1872.....	58,000
1868.....	75,200	1873.....	62,561
1869.....	69,500	1874 (about).....	50,000

PIG-IRON.

The first furnace in the United States, of which we have any knowledge, is that built by a London company, represented by John Winthrop, jr., at Hammersmith, Mass., in 1641.* In Plymouth County, Massachusetts, Lambert Despard built a furnace in 1702 at the outlet of Mattakeeset Pond. In 1715 there were many furnaces in the colonies, all of which used charcoal for fuel. In 1747 pig-iron was exported to England. Most of these furnaces made castings, such as iron pots, direct from the furnace, as they still do in some parts of North Carolina and Tennessee. Coke was first used in the blast-furnace by F. H. Oliphant, of Fayette County, Pennsylvania, in 1836, and anthracite coal at Mauch Chunk, Carbon County, Pennsylvania, by Bangham, Giteau & Co., in July, 1839, though Mr. Lyman, at Pottsville, first succeeded in keeping a furnace in blast for three months on anthracite, running from October, 1839, to January, 1840. The Mauch Chunk furnace was small, being 21½ feet high and 5½ feet across the bosh, while the Pottsville furnace was 35 feet by 8½ feet. In August, 1846, the raw bituminous coal was first used in smelting iron at Lowellville, Mahoning County, Ohio, in a furnace specially built for raw coal, though, in 1845, a charcoal-furnace in Mercer County, Pennsylvania, (Clay Furnace,) had, during a scarcity of fuel, run a short time on raw coal alone. In 1810 there were 153 furnaces, all charcoal, which made in that year 51,000 net tons of pig-iron. In 1874 there were 701 furnaces, including charcoal, coke, raw coal, and anthracite, and 46 more were in course of construction. These figures do not include the large number of charcoal and other furnaces that have been abandoned. The following are statistics of production of pig-iron in net tons:

* For a more detailed account of the Colonial industry in metals see Bishop's *History of American Manufactures*, vol. I, pages 463-631.

James M. Swank, Esq., Association, exhibits the industries in the United

ary of the Virginia Company, present site of Richmond. The of Massachusetts Bay built an smith; in 1652, a furnace and followed in succeeding years, Maryland, Virginia, and Massa- into bar-iron by hammering, e at others the bar was ham- exported to England from 1732 to prohibit the production of slation stimulated the produe- in many parts of the colonies, ing hammered plate into nail- changes took place. The land, in 1783 and 1784, and ne g-mills were gradually erecte- present time only a very few hammered bar-iron in small blooms from ore are found in Many forges, making blooms Pennsylvania. The following te years:

Years.	Net tons.
.....	62,279
.....	61,000
.....	58,000
.....	62,561
.....	50,000

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" see Bishop's History of American

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1810.....	54,000	1870.....	1,865,000
1828.....	130,000	1871.....	1,912,608
1840.....	315,000	1872.....	2,874,558
1860.....	650,000	1873.....	2,868,278
1865.....	919,770	1874.....	2,689,413
.....	931,582		

In 1874 there were produced 552,817 net tons of charcoal pig-iron; 881,872 tons of raw coal and coke; 1,392,144 anthracite, and 29,580 mixed fuel; total 2,669,413 net tons. RAILS.—The first mills in this country which made railroad-iron were the Mount Savage Works, Maryland; Montour Iron-Works, Danville, Pa.; and the Great Western Works, Brady's Bend, Pa.; all of which were put in operation from 1840 to 1843. The made inverted T rails, of the shape of the letter U inverted, while the others in that year 44,083 net tons of rails. In 1874 there were 6 mills which made following are statistics of rail-production, including steel rails, in net tons:

1830.....	205,038	1872.....	1,000,000
1870.....	620,000	1873.....	820,077
1871.....	775,733	1874, (about).....	750,000

BAR-IRON, SHEET, PLATE, AND NAILS.—Bar, sheet, and plate iron were first made in forges by the slow process of hammering. Plates were slit into rods, which were after- well was built at Milton, Mass., in 1710. The first slitting-

From 1790 to 1810, rolling-mills gradually made their appearance, and in 1810 there were 330 forges and 34 rolling and slitting mills, which made 24,511 net tons of bar and plate iron, and 7,861 tons of nails. The first rolling-mill in Pittsburgh was built in 1812. In 1874 there were 353 rolling-mills making rails, bar, sheet, and plate iron, and nails. They made about 1,660,000 net tons of rolled iron, including Bessemer rails, and 245,000 tons of nails. The statistics of production are as follows, in net tons:

Year.	Blooms from ore.	Rails.	Other bar-iron, sheet, and plate iron.	Nails.	Total.
1810.....	24,511	7,861	32,372
1811.....	30,000	.....	30,000
1812.....	31,000	.....	31,000
1813.....	31,000	.....	31,000
1814.....	31,000	.....	31,000
1815.....	31,000	.....	31,000
1816.....	31,000	.....	31,000
1817.....	31,000	.....	31,000
1818.....	31,000	.....	31,000
1819.....	31,000	.....	31,000
1820.....	31,000	.....	31,000
1821.....	31,000	.....	31,000
1822.....	31,000	.....	31,000
1823.....	31,000	.....	31,000
1824.....	31,000	.....	31,000
1825.....	31,000	.....	31,000
1826.....	31,000	.....	31,000
1827.....	31,000	.....	31,000
1828.....	31,000	.....	31,000
1829.....	31,000	.....	31,000
1830.....	31,000	.....	31,000
1831.....	31,000	.....	31,000
1832.....	31,000	.....	31,000
1833.....	31,000	.....	31,000
1834.....	31,000	.....	31,000
1835.....	31,000	.....	31,000
1836.....	31,000	.....	31,000
1837.....	31,000	.....	31,000
1838.....	31,000	.....	31,000
1839.....	31,000	.....	31,000
1840.....	31,000	.....	31,000
1841.....	31,000	.....	31,000
1842.....	31,000	.....	31,000
1843.....	31,000	.....	31,000
1844.....	31,000	.....	31,000
1845.....	31,000	.....	31,000
1846.....	31,000	.....	31,000
1847.....	31,000	.....	31,000
1848.....	31,000	.....	31,000
1849.....	31,000	.....	31,000
1850.....	31,000	.....	31,000
1851.....	31,000	.....	31,000
1852.....	31,000	.....	31,000
1853.....	31,000	.....	31,000
1854.....	31,000	.....	31,000
1855.....	31,000	.....	31,000
1856.....	31,000	.....	31,000
1857.....	31,000	.....	31,000
1858.....	31,000	.....	31,000
1859.....	31,000	.....	31,000
1860.....	31,000	.....	31,000
1861.....	31,000	.....	31,000
1862.....	31,000	.....	31,000
1863.....	31,000	.....	31,000
1864.....	31,000	.....	31,000
1865.....	31,000	.....	31,000
1866.....	31,000	.....	31,000
1867.....	31,000	.....	31,000
1868.....	31,000	.....	31,000
1869.....	31,000	.....	31,000
1870.....	31,000	.....	31,000
1871.....	31,000	.....	31,000
1872.....	31,000	.....	31,000
1873.....	31,000	.....	31,000
1874.....	31,000	.....	31,000

* These figures are for rails alone; it is uncertain how much other iron was rolled in 1860.

BESSEMER STEEL.—The first Bessemer-steel works in America were built at Wyandotte, Michigan, in 1855. The ingot from which the first rail was made was taken to Chicago from Wyandotte and rolled into a rail at the North Chicago Rolling-Mill in 1855. In a short time afterward the "plant" was taken to Chicago from Wyandotte. The first rails made upon order were rolled at Johnstown, Pa., from ingots made at Harp- rburgh, Pa., in 1857. There are now 8 Bessemer works in operation, 2 soon to be com- pleted, and 1 about to be built. The following are statistics of production in net tons:

Year.	Total steel.	Steel rails.
1867.....	3,000	2,770
1868.....	8,300	7,225
1869.....	12,000	9,650
1870.....	40,000	34,000
1871.....	45,000	38,250
1872.....	110,500	96,050
1873.....	155,000	129,015
1874, (about).....	190,000	165,000

STEEL, OTHER THAN BESSEMER.—From the best information we have, we believe cast-steel was first made in this country during the decade 1830-40. Blister-steel was made very much earlier, dating far back into colonial times. In 1850 there were five cast-steel establishments; in 1860, thirteen; in 1870, twenty-seven; and in 1874 about forty. The following are statistics of production, including cast-steel, open-hearth, and blister-steel, in net tons:

1860.....	11,838	1872.....	38,000
1870.....	35,000	1873.....	50,000
1871.....	37,000	1874, (about).....	50,000

IMPORTATIONS.—Until very recently, the United States has been a large purchaser of foreign iron and steel. So many new iron and steel making establishments were built in the period embraced in the years 1860 to 1871, that we are now, for the first time in the history of the country, in possession of complete facilities and full capacity to manufacture all the country needs of these articles, although it is probable that some special brands of iron and steel may continue to be imported for some time. The following table shows the quantity of leading iron and steel manufactures imported during a series of fiscal years in net tons, except steel ingots, &c., for which values only are given:

Fiscal years.	Iron rails.	Pig-iron.	Steel rails.	Steel ingots, bars, sheets, and wire.	Bar, boiler, band, hoop, sheet, and scroll.
	Tons.	Tons.	Tons.		Tons.
Ended September 30—					
1821.....		918		\$131,231	49,339
1830.....		1,130		361,412	42,149
1839.....		12,508		829,477	99,529
1840.....		3,516		541,671	64,121
Ended June 30—					
1850.....		71,874		1,414,022	39,152
1851.....		67,249		1,030,535	27,131
1852.....		91,871		1,801,146	25,522
1853.....		114,257		3,111,124	37,965
1854.....		140,423		2,689,345	29,560
1855.....	127,516	98,324		2,539,675	141,461
1856.....	156,146	59,612		2,513,215	116,168
1857.....	173,305	51,791		2,632,782	125,778
1858.....	155,715	41,985		1,454,673	93,667
1859.....	69,765	72,518		2,662,029	122,320
1860.....	122,174	71,498		2,735,818	175,566
1861.....	74,391	71,036		2,563,236	125,110
1862.....	8,611	22,247		1,469,354	11,286
1863.....	17,688	31,007		2,195,415	87,831
1864.....	118,711	102,323		2,308,166	121,820
1865.....	77,518	59,655		1,652,189	66,344
1866.....	53,510	101,261		1,992,562	81,712
1867.....	96,252	112,042		2,830,240	105,510
1868.....	151,097	112,131		2,352,393	83,528
1869.....	266,228	153,412		3,201,016	107,662
1870.....	313,338	151,677		2,712,408	109,529
1871.....	173,024	109,515		3,750,702	130,333
1872.....	432,266	217,232	122,956	4,033,508	113,814
1873.....	230,505	211,355	130,041	4,155,214	107,221
1874.....	20,379	103,086	146,411	2,960,655	41,981

*Quantity of bar-iron not given; value was \$2,733,674.

†Including some steel rails.

EXPORTS.—The exports of raw iron and steel have always been insignificant. In colonial times pig-iron and bar-iron were for many years, from 1717 to the Revolution, exported to England. In 1722-29, 1,127 gross tons of pig were thus exported; in 1732-33, 2,204 tons of pig and 11 of bar were exported; in 1745, 2,254 tons of pig and 136 of bar; in 1771, 5,303 tons of pig and 2,222 of bar, and 1776, 316 tons of pig and 28 of bar. Since the Revolution no iron has been exported until very recently; but iron and steel in various manufactured forms, such as agricultural and mechanical implements and edge-tools have for a long time been largely exported. The currency-values of exports of iron and steel, and manufactures thereof, in 1872 and 1873, were \$11,360,617 and \$16,677,551, respectively. The quantity of pig-iron exported was, in 1872, 1,319 net tons; in 1873, 9,022 net tons; in 1874, 11,321 net tons. Bar, plate, rails, and sheet-iron, in 1872, 1,554 net tons; in 1873, 829 net tons; in 1874, 5,321 net tons. Nails and spikes, in 1872, 2,685 net tons; in 1873, 3,490 net tons; in 1874, 5,138 net tons. Steel ingots, bars, sheets, and wire, in 1872, 81 net tons; in 1873, 26 net tons; in 1874, 343 net tons. The years given are all calendar years.

IRON-ROLLING MILLS.

Table showing the average weekly earnings of workmen employed in the Iron-Rolling Mills of Massachusetts and the Middle States (with the price per ton) in the year 1874.

Occupation.	Massachusetts.		New York.		New Jersey.		Pennsylvania.		Delaware.		Average in Middle States.	
	Per week.	Per ton.	Per week.	Per ton.	Per week.	Per ton.	Per week.	Per ton.	Per week.	Per ton.	Per week.	Per ton.
Puddlers	\$22.76	\$1.25	\$22.65	\$3.97	\$17.19	\$5.03	\$21.15	\$5.22	\$12.10	\$5.25	\$20.75	\$1.57
Puddlers' helpers	11.40		10.36	1.60	10.21		11.09		10.35	1.07	10.26	1.64
Shinglers												
Shinglers' helpers					10.00		14.27	96			11.63	1.96
Roll-mill roller											9.40	
Roll-mill roller's helpers	11.25		21.60	13.3	14.04	17	16.26	11	11.53	61	25.79	3.43
Forge-rollers	15.00		39.15	11.1			27.50	66.45			15.60	13
Merchant-mill rollers	20.00		27.50	11							38.65	4.66
Roll-mill rollers	15.00		45.96	11.7			36.83	51	26.00	74	38.65	11
Sheet and plate rollers			35.10		17.93	15	16.00				23.59	1.74
General rollers			25.00		15.39	10.3	16.11		30.00		15.00	1.63
Turners												
Turners' assistants or helpers	20.61		14.53	39	8.40	30	13.29	39.8	12.00	40	11.64	35
Skinner	9.30		9.15		9.46		9.67		10.00		10.72	
Rollers											7.00	
Catchers	8.35		27.15	0.5	12.03	11.1	17.94	19	7.00		7.25	
Brachers	17.00		50.84	69.249	12.00		20.15	66.140	17.50	95	10.12	1.33
Foremen or superintendents	23.25		25.08	57	16.89	60	21.59	64	24.07	85	21.53	66.3
Machinists	17.25		15.00		21.01		27.29				21.83	
Engineers	15.00		15.02		12.52		15.56		14.00		11.70	
Carpenters	19.00		15.00		15.00		11.25		13.25		13.91	
Blacksmiths	15.50		15.00		12.50		11.25		11.50		13.91	
Laborers and unskilled workmen	9.00		9.00		7.86		13.49		11.33		13.91	
Transports	9.00		4.30		4.50		8.58		7.57		7.31	
Apprentices and boys	4.75		4.30		4.50		10.79		8.41		9.41	
Hours of labor	54		60		60		60		60		60	

IRON-ROLLING MILLS.
Table showing the average weekly earnings of workmen employed in the Iron-Rolling Mills in the following Western States in the year 1874.

Occupation.	Ohio.		Illinois.		Indiana.		Kansas.		Average in preceding Western States.	
	Per week.	Per ton.	Per week.	Per ton.	Per week.	Per ton.	Per week.	Per ton.	Per week.	Per ton.
Puddlers.	\$21 39	\$6 25	\$24 20	\$5 21	\$22 50	\$5 50			\$25 87	\$5 95
Rollers.	11 92		30 00	2 08	14 25				13 31	2 05
Shinglers.			12 00						30 00	
Blacksmiths.	25 65	76	25 70	18 210	21 00	90			24 00	3 75
Labors and unskilled workmen.	1 00		36 58	18 410					30 52	08 10
Transfers.	48 10								18 00	
Apprentices and boys.	37 50	60	40 55	12 310					48 00	10
Hours of labor.	57		28 05	07 710	\$24 50	80 07			37 02	07 710
			16 52						28 05	
			11 72	12 810					14 10	21
			22 57	09 110					15 00	12 810
			26 00	10 410					21 46	08 110
			43 75	52 810					24 20	08 210
			23 70		25 00				31 08	65 35
			19 47		18 00				33 32	
			19 00		16 00				19 35	
			12 37		10 80				18 05	
			12 60		10 00				18 20	
			4 85						9 80	
			60						14 25	
					54				60	57

IRON-ROLLING MILLS.

Table showing the average weekly earnings of workmen employed in the Iron-Rolling Mills in the following States in the year 1874; also the general average of the United States.

Occupation.	California.		Tennessee.		Kentucky.		Average in two South- ern States.		General average.	
	Per week.	Per ton.	Per week.	Per ton.	Per week.	Per ton.	Per week.	Per ton.	Per week.	Per ton.
Rollers.	\$48.00	\$7.00	\$60.00	\$6.50			\$36.00	\$6.50	\$32.44	\$5.72
Drawers.			12.00				12.00		11.84	1.74
Stringers.	18.00		18.00		12.00		18.00		20.91	1.96
Stringers' helpers.									10.70	48
Punch-mill roller.	18.00								18.50	10
Top and bottom roller.	39.00				20.00		30.00		27.00	10
Rollers' assistants.		1.5							27.00	10
Roll-mill rollers.	40.50	45	30.00		40.00		35.00		31.80	54
Roll-mill rollers' assistants.	42.00	11			21.00		21.00		33.92	11
Second rollers.									26.10	30
Third rollers.									24.13	12
Financemen or heaters' helpers.									12.10	12
Financemen.			15.00						12.00	15
Buttlers.			15.00		12.00		15.00		12.00	15
Cutlers.	17.10		15.00		15.00		15.00		15.00	15
Boilers.	31.50	35	18.00		9.00		10.50		15.43	13
Heaters.	32.80	80	35.00		12.00		35.00		27.23	10
Financemen or superintendents.			40.00		25.00		30.00		29.23	70
Mechanics.	31.00		40.00		30.00		35.00		30.00	23
Engineers.	19.50		16.00		13.50		15.75		18.15	15
Carriers.	21.00		15.00		18.00		18.00		17.15	15
Blacksmiths.	21.00		15.00		18.00		18.00		17.32	15
Blacksmiths' assistants.	12.00		7.50		18.00		18.00		14.50	15
Labors and unskilled workmen.			3.50		6.40		7.95		9.00	15
Apprentices and boys.	7.50		3.50		3.00		3.45		4.00	15
Hours of labor.			59		60		59		57 13/16	

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IRON-FOUNDRIES AND MACHINE-SHOPS.
Average rates of weekly wages paid in the Iron-Foundries and Machine-Shops in the New England States in the respective years 1869 and 1874.

Occupation.	Maine.		New Hampshire.		Vermont.		Massachusetts.		Rhode Island.		Connecticut.		Average in New England States.	
	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.	1869.	1874.
Iron-molders.														
Machinists, (first class.)	\$12 54	\$13 27	\$17 00	\$14 64	\$13 50	\$15 00	\$16 50	\$15 00	\$19 86	\$21 00	\$20 70	\$15 25	\$16 73	\$15 69
Machinists, (second class.)	15 43	15 43	15 50	16 05	15 00	15 00	15 00	15 00	18 50	17 50	18 50	15 00	16 73	16 63
Machinists, (inferior.)	11 41	11 41	11 80	12 48	12 00	12 00	11 77	11 75	16 50	14 52	16 50	15 50	13 92	13 43
Boilermakers.	6 00	6 00	2 33	11 00	8 25	8 25	10 00	11 25	10 00	12 00	12 00	10 86	10 86	10 86
Riveters.	10 50	9 50	7 94	8 29	8 25	8 25	10 25	10 25	9 00	8 50	9 00	10 25	10 25	10 25
Holders.	6 00	5 00	10 50	10 50	13 00	13 00	13 00	15 75	9 00	8 50	9 00	10 25	10 25	10 25
Flangers.	16 50	16 50	16 50	16 50	14 00	12 00	9 75	10 45	36 25	17 40	36 25	17 40	15 24	15 24
Blacksmiths.	12 00	12 00	10 00	10 00	10 00	10 00	10 00	10 00	15 50	16 50	15 50	15 50	15 50	15 50
Pattern-makers.	16 00	16 00	18 00	18 00	10 25	20 00	10 25	20 00	34 00	21 00	34 00	21 00	15 25	15 00
Engineers.	13 05	16 50	5 15	16 50	15 00	16 50	16 50	16 50	3 00	10 50	10 50	15 00	15 00	15 00
Assistants.	20 00	19 00	19 50	23 29	12 00	9 00	10 45	10 15	4 00	19 25	16 50	18 00	17 25	17 88
Laborers, cutters.	14 25	13 50	13 50	18 00	18 00	18 00	36 31	23 82	23 12	11 19	10 50	10 50	10 63	10 41
Apprentices.	11 25	12 75	15 00	15 00	15 00	15 00	15 00	14 00	15 00	23 70	23 70	23 70	21 77	22 16
Millwrights.	10 50	9 42	16 00	17 11	16 50	17 11	16 50	18 49	18 50	18 50	18 50	18 50	11 43	11 43
Trassfounders.	6 00	6 00	9 00	9 35	9 00	9 00	9 00	10 20	9 00	10 00	12 00	16 67	16 67	16 67
Fitters.	21 00	18 00	18 00	16 00	4 50	5 80	6 20	6 00	6 00	10 00	9 50	11 47	11 47	11 47
Turners.									5 95	7 50	7 50	6 00	6 33	6 33
Hours of labor per week.	50	50	60	60	60	60	59	59	56	56	56	56	56	56

IRON-FOUNDRIES AND MACHINE-SHOPS.

Average rates of wages paid in the Iron-Foundries and Machine-Shops in the Middle States in the respective years 1859 and 1874.

Occupation.	New York.		New Jersey.		Pennsylvania.		Delaware.		Maryland.		Average in Middle States.	
	1859.	1874.	1859.	1874.	1859.	1874.	1859.	1874.	1859.	1874.	1859.	1874.
Iron-molders (best).....	\$10.50	\$15.50	\$17.75	\$20.50	\$17.25	\$14.00	\$14.50	\$14.00	\$15.50	\$14.50	\$15.00	\$14.95
Iron-molders (ordinary).....	15.00	12.50	11.81	.....	13.50	12.71	13.50	13.00	14.50	14.50	13.50	13.50
Machinists (inferior).....	10.12	10.25	13.42	.....	11.29	10.43	10.62	11.00	11.50	11.50	11.44	10.40
Machinists (helpers).....	9.60	7.65	10.46	.....	10.18	9.02	15.00	15.00	.....	9.00	9.50	8.42
Tool-makers.....	13.84	15.00	15.48	.....	15.00	16.00	15.00	15.00	.....	15.75	15.07	15.44
Helpers.....	13.37	9.30	12.74	.....	11.00	7.50	8.50	8.50	.....	9.50	10.07	9.03
Triv. Hammers.....	14.43	15.00	12.50	.....	14.00	12.50	14.00	14.00	.....	15.00	15.00	14.00
Triv. Hammers.....	9.37	9.00	9.87	.....	9.60	9.80	9.60	9.60	.....	9.00	9.50	9.22
Hangers.....	16.12	15.00	.....	.....	.....	17.00	18.00	17.50	.....	16.50	17.00	16.50
Helpers.....	9.00	9.00	.....	.....	.....	10.31	10.00	8.75	.....	9.00	9.50	9.42
Blacksmiths.....	16.12	15.75	16.97	.....	14.15	15.38	15.00	14.00	.....	14.50	15.40	14.91
Helpers.....	13.16	12.50	13.48	.....	12.00	12.00	12.00	12.00	.....	12.00	12.00	12.00
Foundrymen.....	30.00	29.25	24.00	.....	23.33	22.97	25.00	24.50	.....	23.25	21.42	23.12
Engineers.....	12.50	13.50	13.00	.....	12.91	11.31	11.75	12.00	.....	10.00	11.23	13.01
Pattern-makers and carpenters.....	17.25	15.00	18.00	.....	14.92	11.38	15.00	14.00	.....	15.00	16.16	14.90
Assistants.....	9.00	12.00	.....	.....	9.25	11.38	6.00	8.50	.....	12.00	8.00	10.97
Laborers, carters.....	9.00	8.81	10.35	12.00	9.25	11.38	8.50	7.75	.....	9.00	9.41	9.41
Apprentices.....	9.00	8.41	5.25	.....	4.67	7.50	5.00	4.50	.....	4.00	4.00	4.00
Shovelers.....	15.00	.....	.....	.....	.....	10.02	15.00	14.50	.....	18.00	16.50	16.37
Assistants.....	.....	.....	.....	.....	.....	8.25	8.00	7.75	.....	.....	8.00	8.00
Heads-foundrymen.....	.....	.....	.....	.....	.....	13.28	17.00	14.00	.....	.....	19.00	13.64
Lifters.....	21.00	.....	.....	15.00	14.50	14.57	16.00	14.00	.....	.....	15.55	14.52
Turners.....	.....	.....	.....	.....	.....	12.81	13.00	14.00	.....	.....	13.00	13.19
Hours of labor per week.....	.....	60	.....	50	.....	50	.....	60	.....	60	.....	59.55

Average rates of weekly wages paid in the Iron-Foundries and Machine-Shops in the Western States in the respective years 1869 and 1874.

LABOR IN THE UNITED STATES.

IRON-FOUNDRIES AND MACHINE-SHOPS.

Average rate of weekly wages paid in the Iron-Foundries and Machine-Shops in the Southern and Pacific States in the year 1874, and the general average in the United States.

Occupation.	Virginia.	West Virginia.	Kentucky.	Tennessee.	North Carolina.	Georgia.	Alabama.	Louisiana.	Arkansas.	Texas.	Average in Southern States.	California.	Oregon.	Nebraska.	Montana.	Average in Pacific States.	General average of United States.
Iron molders.	17 00	25 00	20 25	16 75	15 00	25 00	13 50	8 75	10 00	10 00	55 50	10 00	15 00	25 00	10 00	10 00	10 00
Mechanics, (wood.)	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Mechanics, (ordinary.)	13 50	11 00	15 00	12 75	15 00	13 75	12 50	15 00	12 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Mechanics, (motive.)	8 25	9 00	12 75	10 00	15 00	13 75	10 00	12 00	12 00	10 00	11 00	15 00	15 00	15 00	15 00	15 00	15 00
Mechanics, (helpers.)	7 00	8 17	10 00	7 75	15 00	13 75	6 13	6 00	10 00	10 00	11 00	15 00	15 00	15 00	15 00	15 00	15 00
Boilermakers.	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Helpers.	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Riveters.	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Holders.	10 50	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00
Planers.	25 00	12 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00
Helpers.	10 50	9 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00
Blacksmiths.	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Helpers.	10 50	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00	10 00
Foundries.	13 50	22 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00
Engineers.	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Pattern-makers and carpenters.	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Laborers.	8 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Laborers, (assistants, &c.)	8 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Millwrights.	4 25	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00
Apprentices.	4 25	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00
Millwrights.	4 25	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00	5 00
Assistants.	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Boys, foundries.	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Boys, foundries.	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Turners.	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00
Hours of labor per week.	60	58	60	54	60	50	55	50	60	60	55	60	60	60	60	60	59 44 10

LABOR IN THE UNITED STATES.

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MISCELLANEOUS IRON AND STEEL MANUFACTURES.

Table showing the average weekly wages of persons employed in iron and steel works in Pittsburgh, Pa., in the year 1874.

[Average hours of labor per week, 54.]

Average num- ber employed.	Occupation.	Wages.	Average num- ber employed.	Occupation.	Wages.
IRON-WORKS.			IRON-WORKS—Continued.		
1	Manager	\$28 00	1	Catchers	\$14 70
1	Shipping clerk	15 00	1	Roughers-up	15 00
1	Mill clerk	23 00	1	Straighteners	4 80
1	Weigh-master	6 00	1	Shear-men	10 00
2	Forge-carpenter	21 10	1	Refractors	10 50
4	Blacksmiths	15 75	1	Stockers	21 00
4	Night-watchmen	12 75	1	Draggers-down	9 30
1	Master-engineer	25 00	1		10 00
3	Assistant engineers	15 00	STEEL-WORKS.		
1	Machinist	21 00	1	Converter	12 00
70	Steel-shear-men	13 50	1	Helper	9 00
2	Common laborers	8 40	2	Brokers	9 00
4	On-stokers	14 25	3	Scrap-shearers	9 00
3	Ash-wheelers	10 50	1	Steel-melters	7 50
3	Metals-tuckers	10 25	1	Helpers	64 00
41	Boilers, (fudillers)	20 35	1	Gas-producer	15 75
2	Muck-rollers	12 60	1	Inspector	15 75
2	Roughers-down	30 25	1	Welder	10 00
2	Catchers	11 00	1	Cooling-hammer men	30 00
2	Helpers	12 00	1	Helpers	12 00
2	Hookers-up	12 00	1	Heaters	15 00
2	Draggers-out	8 25	1	Engineer	9 00
2	Weighers	13 75	1	Finishing-hammer man	42 00
2	Shear-men	22 00	1	Inspectors	15 00
1	Bar-roller	10 50	1	Manager	20 00
1	Bar-roller heaters	29 00	STEEL-MILLS.		
1	Rougher	20 00	1	Stockers	10 00
1	Catcher	19 50	1	Heaters	18 00
1	Helper	22 00	1	Helpers	10 50
1	Hooker-up	11 40	1	Helpers	10 50
1	Stocker	10 00	1	Catchers	16 50
1	Dragger-down	11 10	1	Heaters-up	10 50
1	Puller-up	11 10	1	Straighteners	9 00
1	Straighteners	2 75	1	Shear-man	18 00
1	Shear-men	11 10			
1	Weigher	10 50			
1	Cold-mill rollers	12 00			
1	Roughers-down	30 00			
1		15 60			

Table showing the average weekly wages of persons employed in steel-works in Pittsburgh, Pa., in the year 1872.

[Hours of labor per week, 60.]

Average num- ber employed.	Occupation.	Wages.	Average num- ber employed.	Occupation.	Wages.
12	Steel-melters	\$17 83	1	Engineer	\$24 00
30	Helpers	17 75	4	Engineer's helpers	13 87
1	Machinist, best	15 00	1	Converter	24 00
1	Machinist, ordinary	13 00	1	Pattern-maker and carpenter	18 00
1	Machinist, inferior	10 75	3	Assistants	14 53
6	Puddlers	31 33	130	Laborers, carters, &c., (men)	11 53
6	Puddlers' helpers	22 00	25	Apprentices, (boys)	5 00
8	Rollers	41 75	2	Gas-makers	12 00
35	Rollers' helpers	33 00	4	Inspectors	12 00
10	Hammer-men	27 50	1	Shear-men	18 00
22	Hammer-men's helpers, (men and boys)	36 80	4	Millwrights	24 00
3	Blacksmith	29 12	2	Assistants	18 00
1	Blacksmith's helpers	19 50	1	Roll-turner	22 00
		10 50	1	Roll-turner's helper, (boy)	10 00

Table showing the average weekly wages of persons employed in the *Neutral Foundry (forge and Bessemer pig-iron) in Harrisburgh, Pa.*

Occupation.	Wages.	Occupation.	Wages.
Clerk	\$12 00	Keepers' helpers	\$10 08
Foreman or founder	28 00	Fillers and cinder-men	9 45
Engineer	17 36	Iron-weighter	10 15
Engineer's assistant	11 97	Carters	7 56
Blacksmith	12 18	Laborers	7 34
Carpenter	12 18	Conductors on ore-trains	9 73
Keepers	11 97		

NOTE.—All the above wages, except clerk's, blacksmith's, carpenter's, and conductors', are calculated at 7 days per week, which furnace-men usually make. The exceptions are calculated at 6 days per week.

Table showing the average weekly wages of persons employed by the *Corrugated Iron Company of Chicago, Ill.*

[Hours of labor per week, 60.]

Occupation.	Wages.	Occupation.	Wages.
Iron-shutter makers	\$12 00	Apprentices or boys	\$5 00
Engineers	18 00	Foremen or overseers	18 00
Laborers or unskilled workmen	9 00		

Table showing the average weekly wages of persons employed in malleable iron-fittings works in *Branford, Conn.*

[Hours of labor per week, 63.]

Occupation.	Wages.	Occupation.	Wages.
Iron-molders, including apprentices	\$13 00	Foremen	\$19 00
Machinists, best	19 25	Engineers	13 50
Machinists, ordinary	15 00	Pattern-makers and carpenters	18 00
Machinists, inferior, attending tapping machines	11 00	Assistants	13 00
Boys	4 50	Laborers, carters, &c.	9 00
		Boys and girls, making cores	5 00

HARDWARE MANUFACTORIES.

Table showing the average weekly wages of persons employed in hardware-manufactories in Connecticut in the years 1872 and 1874.

Occupation.	Wages in—		Occupation.	Wages in—	
	1872.	1874.		1872.	1874.
Molders, iron	\$14 75	\$15 00	Press-workmen		\$12 00
Apprentices	9 00		Rollers		16 50
Molders, brass	12 00		Welders		15 00
Capola-tenders	12 00		Joiners		13 50
Amalgam-furnace tenders	12 00		Stampers		11 25
Edgers	9 75		Graduators		15 00
Japanners	13 50		Finishers	\$13 69	12 00
Forgers	18 00		Pattern-makers	20 03	21 00
Helpers	11 00		Carpenters		15 00
Grinders	11 00		Trip-hammer men		18 00
Polishers	13 50		Fitters-up		12 00
Turners	12 00		Screw-cutters		15 00
Machinists, (best)	21 75	18 66	Blacksmiths	17 25	15 00
Machinists, (ordinary)	15 00		Helpers	12 00	9 75
Engineers	15 75	13 66	Foremen	18 00	19 00
Furnace-men		13 50	Apprentices or boys	5 78	6 00
Laborers and carters	10 00	9 00	Girls and women	5 71	4 50
Packers	13 73	13 50	Brass-founders	15 13	
Die-makers	18 00	18 00	Turners	11 10	

* And upward.

he Neutral Foundry (Forge
Pa.

Occupation.	Wages.
men.....	\$10 00
.....	9 45
.....	10 15
.....	7 50
.....	7 34
.....	9 74

and conductors', are calculated at 6 days per week,
calculated at 6 days per week.

e Corrugated Iron Company

Occupation.	Wages.
.....	85 00
.....	18 00

malleable iron-fittings works

Occupation.	Wages.
.....	\$19 00
.....	13 50
carpenters.....	18 00
.....	13 00
.....	9 00
ing cores.....	5 00

hardware-manufactories in

Wages in—		
	1873.	1874.
.....	\$12 00	
.....	16 50	
.....	15 00	
.....	13 50	
.....	11 25	
.....	15 00	
.....	12 00	
.....	20 93	24 00
.....	15 00	
.....	18 00	
.....	12 00	
.....	15 00	
.....	17 25	17 00
.....	12 00	3 75
.....	12 00	19 00
.....	5 75	6 00
.....	5 87	4 50
.....	15 14	
.....	11 10	

LABOR IN THE UNITED STATES.

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Table showing the average week's earnings of persons employed on brass and tinners' hardware in Meriden, Conn.

(Hours of labor per week, 60.)

Occupation.	Wages.	Occupation.	Wages.
Machinists.....	\$21 00	Engineer and helper.....	\$37 50
Prop-men.....	15 00	Splitter-testers.....	20 00
Press-men.....	14 00	Men in rolling mill.....	12 00
Press-girls.....	7 50	Foreman of rooms.....	20 00
Solderers, girls.....	7 50	Superintendent.....	40 00
Ordinary-work girls.....	6 00	Plasterers.....	33 00

Table showing the average weekly wages of persons employed in iron and brass works in Chicago, Ill.

(Hours of labor per week, 60.)

Occupation.	Wages.	Occupation.	Wages.
Blacksmiths.....	\$18 21	Painters.....	\$14 70
Cabinet-makers.....	17 61	Pattern-makers.....	16 50
Carpenters.....	16 71	Steam-fitters.....	17 34
Fitters, brass.....	14 64	Webbers, pipe.....	11 56
Machinists.....	16 32	Engineers.....	18 72
Masons.....	18 66	Laborers.....	10 11
Molders, gray-iron.....	17 54	Apprentices.....	5 40
Molders, malleable-iron.....	12 12	Foremen.....	25 80
Millwrights.....	21 75		

Table showing the average weekly wages of persons employed in the umbrella-frame manufactory in New York City.

(Hours of labor per week, 50.)

Occupation.	Wages.	Occupation.	Wages.
Machinists.....	\$21 00	Grinders.....	
Scotch-hands.....	6 00	Frame-makers.....	85 00
Molders.....	20 00	Japanners.....	12 00
Runners and notchers.....	18 00	Packers.....	9 00
Cup and ferrule makers.....	15 00	Labelers.....	10 00
Rib-makers.....	5 00	Engineers.....	5 00
Punchers and tippers.....	5 00	Laborers.....	25 00
Hard-ners.....	6 00	Apprentices.....	11 00
Temperers.....	6 00	Foremen.....	7 00
Stingers and testers.....	5 00	Watchmen and carmen.....	15 00
Lappers.....	7 00	Book-keeper.....	25 00
Drillers.....	6 00		

Table showing the average weekly wages of persons employed in corset-steel works in New Haven, Conn.

Average num- ber employed.	Occupation.	Wages.	Average num- ber employed.	Occupation.	Wages.
1	Overseer.....	\$39 00	1	Japan-carrier.....	\$19 00
1	Assistant.....	9 00	5	Japan-dippers.....	4 50
2	Steel-temperers.....	15 00	80	Press-hands.....	4 50
3	Steel-temperers' assistant.....	10 00		Packers.....	5 00
1	Steel-cutters.....	7 50	20	Esters.....	4 00
3	Turner-boys.....	6 00	140	Rid-sewers.....	3 00
1	Japan-overseer.....	15 00			

Table showing the average daily wages of persons employed in a bank-brook factory in Stamford, Conn., in the year 1872.

[Hours of labor per week, 60.]

Occupation.	Wages.	Occupation.	Wages.
Machinists, best.....	\$1 00 to \$1 00	Engineers.....	\$2 50
Machinists, ordinary.....	2 25 to 3 00	Pattern-makers and carpenters.....	\$1 50 to 2 50
Machinists, inferior.....	1 50 to 2 25	Laborers, carters, &c.....	1 50 to 2 00
Machinists' helpers.....	1 00 to 1 50	Apprentices.....	*70 to 1 25
Blacksmiths.....	3 50	Brass-founders.....	2 75 to 4 00
Blacksmiths' helpers.....	1 75		

* Apprentices receive 50 cents per day for the first year, 80 cents for the second, \$1.15 for the third, and \$1.50 for the fourth.

Table showing the average weekly wages of persons employed in iron-safe manufactories in Cincinnati, Ohio, in the year 1872, and in Chicago, Ill., in the year 1871.

[Hours of labor per week, 60.]

Occupation.	Wages in—		Occupation.	Wages in—	
	Cincinnati in 1872.	Chicago in 1871.		Cincinnati in 1872.	Chicago in 1871.
Machinists, best.....	\$20 00 to \$25 00	.....	Engineers.....	\$16 00	\$15 00
Machinists, ordinary.....	15 00 to 21 00	\$15 00	Pattern-makers and carpenters.....	\$20 00 to 25 00	18 00
Machinists, inferior.....	12 00 to 15 00	.....	Assistants.....	12 00 to 15 00	9 00
Machinists' helpers.....	10 00 to 12 00	.....	Laborers, carters, &c.....	.....	8 00
Blacksmiths.....	24 00 to 25 00	12 00	Apprentices.....	3 00 to 8 00	5 00
Blacksmiths' helpers.....	12 00 to 15 00	.....	Turners.....	15 00 to 20 00	.....
Foremen.....	25 00 to 30 00	38 50			

Table showing the average weekly wages of persons employed in scale-making and steam-heating works in Chicago, Ill.

[Hours of labor per week, 60.]

SCALE-MAKERS' WORKS.		STEAM-HEATING WORKS.	
Occupation.	Wages.	Occupation.	Wages.
Scale-makers.....	\$18 00	Foremen.....	\$20 00
Beam-makers.....	20 00	Fitters.....	18 00
Blacksmiths.....	15 00	Fitters' helpers.....	12 00
Carpenters.....	15 00	Carpenters.....	12 00
Laborers.....	10 00	Masons.....	12 00
Apprentices.....	4 00	Engineers.....	12 00
Foremen.....	30 00	Blacksmiths.....	12 00

Table showing the average weekly wages of persons employed in sheet-iron works in Galveston, Tex.

[Hours of labor per week, 60.]

Occupation.	Wages.	Occupation.	Wages.
Tinners.....	\$2 00	Machinists.....	\$18 00
Gas-fitters.....	18 00	Sheet-iron workers.....	15 00
Coppersmiths.....	21 00	Apprentices.....	5 00
Blacksmiths.....	21 00		

a bank-lock factory in Stan-

Occupation.	Wages.
and cut-penters	\$1.50 to 2.00
&c.	1.50 to 2.00
	1.50 to 1.50
	2.50 to 4.00

or the second, \$1.15 for the third.

in iron-safe manufactories in Ill., in the year 1874.

	Wages in—	
	Chicago in 1874.	Chicago in 1874.
	\$16.00	\$15.00
and	\$20.00 to 25.00	18.00
	12.00 to 15.00	10.00
&c.	3.00 to 8.00	5.00
	15.00 to 20.00	

scale-making and steam-boil-

M-HEATING WORKS.

Occupation.	Wages.
	\$20.00
	10.00
	10.00
	10.00
	10.00
	12.00

sheet-iron works in Galveston,

Occupation.	Wages.
	\$18.00
	15.00
	5.00

LABOR IN THE UNITED STATES.

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Table showing the average weekly wages of persons employed in a nail mill in Belleville, Ill.
[Hours of labor per week, 60.]

Occupation.	Wages.	Occupation.	Wages.
Nailers	\$15.00	Hookers-up	\$12.00
Feeders	8.00	Briggers-out	12.00
Rollers	30.00	Briggers-out	12.00
First helpers	15.00	Shovers-under	12.00
Second helpers	6.00	Engineers	17.00
Heaters	35.00	Laborers	10.00
Heaters' helpers	12.00	Apprentices	2.40
Shear men	25.00	Foremen	35.00
Rollers	40.00	Mason and helper	18.00
Catefers	20.00		

Table showing the average weekly wages of persons employed on the Marine Railway, Madison, Ind.

[Hours of labor per week, 60.]

Occupation.	Wages.	Occupation.	Wages.
Ship-carpenters	\$18.00	Transfers	\$10.00
Calkers	18.00	Engineers	18.00
Rollers	15.00	Laborers	9.00
Blacksmiths	18.00	Apprentices	4.00
Joiners	15.00	Foremen	22.50
Mill-hands	12.00		

Table showing the average weekly wages of persons employed in bridge and car works in Chicago, Ill.

[Hours of labor per week, 60.]

Average number employed.	Occupation.	Wages.	Mean rate.
15	Machinists	\$15.50 to \$18.00	\$16.75
20	Drillers	9.00 to 12.00	10.80
10	Bolt-cutters	8.40 to 10.50	9.45
5	First-class blacksmiths	13.00 to 16.50	15.75
25	Blacksmiths' helpers	9.50	9.50
30	First-class carpenters	15.00	15.00
50	Second-class carpenters	13.50	13.50
20	First-class helpers	12.00	12.00
30	Second-class helpers	9.00	9.00
5	Pattern-makers	13.00 to 16.50	15.75
1	Engineer	18.00 to 20.00	19.00
75	Laborers or unskilled workmen	9.00 to 10.50	9.75
20	Apprentices or boys	4.00 to 6.00	5.00
10	Foremen or overseers	15.00 to 29.00	22.00

IRON-SHIP BUILDING.

Average rate of wages (per week of 60 hours) paid to persons employed in the ship-building yard and iron-works of Messrs. W. Cramp & Sons, Philadelphia, at the close of 1874.

ENGINEERING AND BOILER WORKS.			SHIP-BUILDING YARD.		
Average number.	Occupation.	Wages.	Average number.	Occupation.	Wages.
16	Machinists:		16	Fitters	\$17 00
24	Best	\$18 00	7	Helpers	9 00
17	Ordinary	15 00	5	Angle-iron smiths	18 00
21	Interior	12 00	12	Helpers	10 00
52	Helplers	10 50	14	Ship-smiths	18 00
23	Pattern-makers and joiners	16 50	22	Helpers	10 50
34	Engine-fitters	16 00	115	Riveters	12 00
47	Blacksmiths	16 50	68	Holders-on	10 50
4	Apprentices	4 00	235	Rivet-boys	4 00
21	Laborers	9 00	28	Calkers	10 50
67	Riggers	10 50	11	Drillers	11 00
115	Boiler-makers	19 50	47	Joiners	16 00
68	Riveters and culkers	13 50	3	Apprentices	4 00
		12 10	14	Pattern-makers	16 50
		10 50	57	Machinists	16 00
125	Holders-on	22 00	70	Carpenters	15 00
229	Rivet-boys	4 00	20	Painters	10 50
4	Laborers and helpers	9 00	21	Riggers	9 00
1	Foremen, (engineer, &c.)	30 00	6	Laborers	10 00
9	Foremen, (sundry)	25 00	6	Carters	10 00
			229	Furnace-men	10 50
885	Average	14 08	13	Foremen	25 00
			903	Average	12 42

Average rate of wages (per week of 60 hours) paid to persons employed in the ship-building yard and iron works of Messrs. Pusey, Jones & Co., Wilmington, Del., at the close of 1874.

ENGINEERING AND BOILER WORKS.		SHIP-BUILDING YARD.	
Occupation.	Wages.	Occupation.	Wages.
Machinists:		Fitters	\$12 00
Best	\$17 00	Helpers	8 00
Ordinary	14 50	Angle-iron smiths	16 00
Interior	11 00	Helpers	8 50
Helplers	7 50	Ship-smiths	15 00
Pattern-makers and joiners	14 50	Helpers	8 50
Turners	15 00	Riveters	10 00
Engine-fitters	15 00	Holders-on	8 50
Blacksmiths	14 00	Rivet-boys	3 00
Hammer-men, (at steam-hammer)	20 00	Calkers	10 00
Millwrights	13 00	Drillers	13 50
Apprentices*		Joiners	13 50
Laborers	7 50	Apprentices*	
Brass-founders	14 50	Cannon-makers	15 00
Foundry dressers	7 50	Pattern-makers	14 50
Foundry laborers	7 50	Block-makers	13 50
Brass-finishers	14 00	Machinists	13 50
Coppersmiths	13 50	Carpenters	16 00
Crane-men	7 50	Boat-builders	12 00
Riggers	13 00	Iron-finishers	13 50
Boiler-makers	12 50	Brass-finishers	14 00
Riveters and culkers	11 00	Mechanics	15 00
Holders-on	9 00	Plumbers	12 50
Flangers	17 00	Tinsmiths	12 50
Blacksmiths	13 50	Painters	12 50
Rivet-boys	3 25	Red-leaders	10 50
Laborers and helpers	7 75	Riggers	13 00
Foremen, (engineer, &c.)		Laborers	8 00
Foremen, (sundry)		Carters	8 00
		Furnace-men	8 75
		Foremen	
Average, including laborers and apprentices	11 00	Average	9 50

* Taken for a term of 5 years—1st year, \$2 per week; 2d year, \$3; 3d year, \$4; 4th year, \$5; 5th year, \$6; \$100 and \$125 per month. \$100 per month.

is employed in the ship-building
Philadelphia, at the close of 1874.

SHIP-BUILDING YARD.

Occupation.	Wages.
.....	\$17 00
.....	9 00
smiths	18 00
.....	10 00
hs	18 00
.....	10 00
.....	11 50
.....	12 00
.....	10 50
.....	4 00
.....	11 00
.....	10 50
.....	16 00
.....	4 00
akers	16 50
.....	16 00
.....	16 00
.....	15 00
.....	10 50
.....	9 00
.....	10 00
men	10 50
.....	25 00
age	12 42

is employed in the ship-building
ton, Del., at the close of 1874.

SHIP-BUILDING YARD.

Occupation.	Wages.
.....	\$12 00
.....	8 00
hs	16 00
.....	6 50
.....	15 00
.....	2 50
.....	10 00
.....	2 50
.....	3 00
.....	15 00
.....	10 00
.....	13 50
.....	15 00
.....	14 50
.....	13 50
.....	13 50
.....	16 00
.....	12 00
.....	13 50
.....	14 00
.....	14 00
.....	15 00
.....	12 50
.....	12 50
.....	10 50
.....	13 00
.....	8 00
.....	8 50
.....	9 50

year, \$1; 4th year, \$5; 5th year, \$6.
per month.

LABOR IN THE UNITED STATES.

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Average rate of wages (per week of 60 hours) paid in 1874 to persons employed in the machine-shop, iron-ship yard, and car-works of the Harlan & Hollingsworth Company, Wilmington, Delaware.

Average number.	Occupation.	Wages.	Leading articles produced.
18	Machinists:		
46	Best		
6	Ordinary	\$16 50	
7	Inferior	15 00	
8	Helpers	14 00	
10	Boiler-makers	8 50	
30	Helpers	15 00	
15	Riveters	8 50	
3	Holders-on	15 00	
25	Flangers	9 00	
20	Blacksmiths	17 00	Iron steamships.
20	Helpers	9 00	Iron steamboats.
60	Iron-bull-builders	15 00	Iron sailing-vessels.
200	do	8 50	Engines.
15	Foremen	12 00	Boilers.
4	Engineers	8 50	Tanks.
230	Pattern-makers, car-builders, and shipjoiners	12 60	Machine-work generally.
20	Assistants	15 00	Cars of every description.
40	Laborers, carters, &c.	9 00	
18	Apprentices	8 50	
20	Painters	5 00	
60	Ship-carpenters	15 00	
8	Millwrights	15 00	
10	Assistants	14 00	
		8 50	

IRON-FOUNDRY AND MACHINE SHOP IN CALIFORNIA.

Average rate of wages paid to persons employed in the Union Iron Foundry, in the city of San Francisco, California, in the year 1874.

(Hours of labor per day, 10; 60 hours per week.)

Occupation.	Weekly wages or earnings.	Leading articles.
Iron-molders	\$18 00 to \$24 00	
Machinists { Best	21 00 to 21 00	Engines; boilers; mining-machinery, consisting of hoisting-works, quartz-mills, saw-mills, flour-mills, and all kinds of heavy iron-work for milling and manufacturing purposes.
Ordinary	18 00 to 21 00	
Inferior	15 00 to 18 00	
Helpers	10 00 to 13 50	
Boiler-makers	18 00 to 21 00	
Helpers	10 00 to 13 50	
Riveters	18 00 to 21 00	
Holders-on	12 00 to 13 50	
Flangers	21 00 to 27 00	
Helpers	12 00 to 13 50	
Blacksmiths	12 00 to 21 00	
Helpers	12 00 to 14 50	
Foremen	30 00 to 35 00	
Pattern makers and carpenters	18 00 to 21 00	
Assistants	12 00 to 13 50	
Laborers &c.	10 00 to 13 50	
Apprentices	4 00 to 10 00	

CLOTHING.

Table showing the average weekly earnings of persons employed in the manufacture of clothing in the following States, in the year 1874.

Occupation.	New York.	New Jersey.	West Virginia.	Virginia.	Kentucky.	North Carolina.	Georgia.	Louisiana.	Texas.	Tennessee.
Head cutters for custom clothing	\$40 00	\$30 00	\$40 00	\$25 00	\$20 33		\$20 00	\$18 00	\$25 00	\$22 00
Cutters for ready-made clothing	21 50	20 00		12 00	18 75	\$3 50		12 00		18 00
Bushelmen	15 00	12 00	15 00	12 00	10 00		14 00	11 40	15 00	
Machine-operators	8 00	7 50	6 00	6 00	10 00	2 50	20 00	6 00		6 00
Finishers	8 00	7 50	6 00	6 00	10 00	2 50	20 00	6 00		4 50
Laborers or packers	15 00	12 00			10 00		3 50	10 00		6 00
Apprentices or boys	7 00	5 00	3 00		5 00	2 00		3 00		
Ready-made clothing:										
On sack overcoats { Fine				12 00	12 00			7 00		
On sack overcoats { Cheap				12 00	10 00			6 00		
Broadcloth frock-coats				12 00	10 50			7 50		
Cassimere business-coats				12 00	10 00			6 00		
Cassimere sack-coats				10 00	10 00			6 75		
Vests, woolen				3 00	4 75			5 00		
Pantaloon, woolen				3 00	4 75			7 50		
Shirts. { Muslin				3 00				4 00		
Shirts. { Woolen				3 00						
Custom-made clothing:										
On sack overcoats				26 00	18 00			24 00		
Broadcloth dress-coats				25 00	15 54			30 00		
Cassimere business-coats				25 00	10 50			30 00		
Cassimere sack-coats				25 00	16 50			16 00		
Vests				9 00	8 50			15 00		
Pantaloon				13 00	15 25			16 50		

Occupation.	Ohio.	Illinois.	Indiana.	Iowa.	Wisconsin.	Minnesota.	Montana.	Wyoming.	California.	Washington Territory.	General average.
Head cutters for custom clothing	\$25 00	\$15 00	\$35 00	\$40 50	\$30 00	\$25 00	\$30 00	\$20 00	\$34 37	\$25 00	\$23 34
Cutters for ready-made clothing	12 00				12 00	18 00					15 02
Bushelmen	15 00	15 00	15 00		11 00	15 00	25 00	15 00	21 87		15 37
Machine-operators	8 00		15 00				25 00		21 87		9 56
Finishers	12 00				12 00				28 12		11 22
Laborers or packers	12 00				10 00		25 00		18 75		10 66
Apprentices or boys			3 00						10 00		4 75
Ready-made clothing:											
On sack overcoats { Fine											10 33
On sack overcoats { Cheap											9 33
Broadcloth frock-coats											10 00
Cassimere business-coats											9 34
Cassimere sack-coats											8 92
Vests, woolen											4 41
Pantaloon, woolen											4 23
Shirts. { Muslin											3 50
Shirts. { Woolen											3 00
Custom-made clothing:											
Sack overcoats										21 00	22 25
Broadcloth dress-coats										21 00	20 36
Cassimere business-coats										18 00	20 62
Cassimere sack-coats										18 00	18 87
Vests										18 00	12 62
Pantaloon										18 00	15 69

* Day.

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Table showing the rates paid to operatives in clothing establishments, for piecework, in 1874.

North Carolina.		Georgia.		Louisiana.		Texas.		Tennessee.	
1	1	2	2	1	1	1	1	1	1
2	2	3	3	2	2	2	2	2	2
3	3	4	4	3	3	3	3	3	3
4	4	5	5	4	4	4	4	4	4
5	5	6	6	5	5	5	5	5	5
6	6	7	7	6	6	6	6	6	6
7	7	8	8	7	7	7	7	7	7
8	8	9	9	8	8	8	8	8	8
9	9	10	10	9	9	9	9	9	9
10	10	11	11	10	10	10	10	10	10
11	11	12	12	11	11	11	11	11	11
12	12	13	13	12	12	12	12	12	12
13	13	14	14	13	13	13	13	13	13
14	14	15	15	14	14	14	14	14	14
15	15	16	16	15	15	15	15	15	15
16	16	17	17	16	16	16	16	16	16
17	17	18	18	17	17	17	17	17	17
18	18	19	19	18	18	18	18	18	18
19	19	20	20	19	19	19	19	19	19
20	20	21	21	20	20	20	20	20	20
21	21	22	22	21	21	21	21	21	21
22	22	23	23	22	22	22	22	22	22
23	23	24	24	23	23	23	23	23	23
24	24	25	25	24	24	24	24	24	24
25	25	26	26	25	25	25	25	25	25
26	26	27	27	26	26	26	26	26	26
27	27	28	28	27	27	27	27	27	27
28	28	29	29	28	28	28	28	28	28
29	29	30	30	29	29	29	29	29	29
30	30	31	31	30	30	30	30	30	30
31	31	32	32	31	31	31	31	31	31
32	32	33	33	32	32	32	32	32	32
33	33	34	34	33	33	33	33	33	33
34	34	35	35	34	34	34	34	34	34
35	35	36	36	35	35	35	35	35	35
36	36	37	37	36	36	36	36	36	36
37	37	38	38	37	37	37	37	37	37
38	38	39	39	38	38	38	38	38	38
39	39	40	40	39	39	39	39	39	39
40	40	41	41	40	40	40	40	40	40
41	41	42	42	41	41	41	41	41	41
42	42	43	43	42	42	42	42	42	42
43	43	44	44	43	43	43	43	43	43
44	44	45	45	44	44	44	44	44	44
45	45	46	46	45	45	45	45	45	45
46	46	47	47	46	46	46	46	46	46
47	47	48	48	47	47	47	47	47	47
48	48								

Articles.	New York.	New Jersey.	West Virginia.	Virginia.	Kentucky.	North Carolina.	Georgia.	Louisiana.	Texas.
Ready-made clothing:									
Sack overcoats { Fine each.	\$5 00	\$4 00	.....	\$4 00	\$3 50	.....	.....	\$3 50	.....
{ Cheap each.	2 25	2 00	.....	2 00	2 75	.....	.....	2 25	.....
Broadcloth frock-coats each.	4 50	4 00	.....	4 00	.....	.....	.....	4 50	.....
Cassimere business-coats each.	6 66	2 00	.....	3 00	4 00	.....	.....	3 75	.....
Cassimere sack-coats each.	6 00	1 50	.....	2 00	2 50	.....	.....	3 00	.....
Vests, woolen each.	87	75	.....	50	67	80 25	.....	2 25	.....
Pantaloon, woolen each.	94	75	.....	35	67	85	.....	80	.....
Shirts. { Muslin per dozen.	.....	.....	.....	2 50	.....	1 00	.....	2 00	.....
{ Woolen per dozen.	.....	.....	.....	2 50	.....	.....	.....	.....	.....
Custom-made clothing:									
Sack overcoats each.	8 00	\$10 00	13 00	7 00	5 00	\$13 00	9 00	\$11 00	.....
Broadcloth dress-coats each.	8 00	12 00	12 00	7 17	10 00	10 00	11 00	12 00	.....
Cassimere business-coats each.	5 00	10 00	10 00	6 33	3 00	8 50	10 00	8 00	.....
Cassimere sack-coats each.	5 00	8 00	9 00	4 75	3 00	8 00	8 00	8 00	.....
Vests each.	1 50	2 00	1 50	1 12	2 50	1 50	2 00	3 00	.....
Pantaloon each.	2 00	2 40	2 25	1 75	2 50	2 00	2 50	3 00	.....
Shirts, muslin per dozen.	.....	.....	.....	.....	.....	.....	.....	.....	.....

Articles.	Tennessee.	Ohio.	Illinois.	Indiana.	Wisconsin.	Minnesota.	Wyoming.	California.	Washington Territory.	General average.
Ready-made clothing:										
Sack overcoats { Fine each.	\$4 00	.....	.....	.....	\$2 50	.....	.....	\$6 00	.....	\$4 00
{ Cheap each.	1 25	.....	.....	.....	1 50	.....	.....	4 00	.....	2 34
Broadcloth frock-coats each.	4 50	.....	.....	.....	2 75	.....	.....	6 00	.....	4 06
Cassimere business-coats each.	1 50	.....	.....	.....	1 00	.....	.....	5 00	.....	2 52
Cassimere sack-coats each.	1 00	.....	.....	.....	20	.....	.....	4 00	.....	1 82
Vests, woolen each.	50	.....	.....	.....	32	.....	.....	2 00	.....	70
Pantaloon, woolen per pair.	50	.....	.....	.....	50	.....	.....	2 00	.....	74
Shirts. { Muslin per dozen.	.....	.....	.....	.....	1 44	.....	.....	6 00	.....	2 59
{ Woolen per dozen.	.....	.....	.....	.....	1 44	.....	.....	6 00	.....	2 65
Custom-made clothing:										
Sack overcoats each.	8 00	\$8 00	\$6 00	\$10 00	\$8 00	\$9 00	\$12 50	17 00	\$10 00	9 42
Broadcloth dress-coats each.	10 00	9 00	8 00	10 00	10 00	12 00	.....	16 00	14 00	10 89
Cassimere business-coats each.	4 50	7 00	6 00	2 00	8 00	10 00	.....	13 00	8 50	7 94
Cassimere sack-coats each.	4 00	6 75	5 50	6 00	6 00	8 00	.....	10 00	8 50	7 09
Vests each.	1 50	1 25	2 25	2 50	2 00	3 50	.....	11 00	8 00	6 97
Pantaloon each.	2 00	1 25	2 25	3 00	2 50	3 50	.....	3 50	3 50	2 14
Shirts, muslin per pair.	.....	.....	.....	.....	.....	3 75	.....	4 00	3 75	2 58
per dozen.	.....	.....	10 00	.....	4 20	.....	.....	13 50	.....	9 23

LEATHER.

Table showing the average weekly wages paid to persons employed in the manufacture of leather in the following States in the year 1874.

Occupation.	New Hampshire.	New York.	Maryland.	West Virginia.	Ohio.	Indiana.	Illinois.	Kentucky.	Tennessee.	Louisiana.	California.	Oregon.	General average.
<i>Sole leather.</i>													
Tanners		\$12 00	\$12 00	\$12 50	\$12 50	\$10 00	\$12 50	\$15 00	\$11 00	\$15 00	\$15 00	\$15 00	\$13 75
Brandy-makers		10 00	10 00	12 00	12 50	9 00	11 50	15 00	15 00	15 00	14 00	14 00	12 75
Yard		10 00	10 00	12 00	12 50	9 00	10 00	9 00	7 50	10 50	10 50	10 50	9 75
Rollers & spongers		7 50	9 00	9 00	9 00	9 00	8 00	9 00	6 00	10 50	13 00	13 00	9 00
Barl-grinders		10 00	9 00	9 00	9 50	8 00	9 50	9 00	6 00	10 50	12 00	12 00	9 15
Common laborers		10 00	9 00	8 00	9 50	8 00	9 50	9 00	6 00	10 50	12 00	12 00	9 15

Average weekly wages paid to persons employed in manufacture of leather, &c.—Continued.

Occupation.	New Hampshire.	New York.	Maryland.	West Virginia.	Ohio.	Indiana.	Illinois.	Kentucky.	Tennessee.	Louisiana.	California.	Oregon.	General average.
<i>Upper leather and calf-skin.</i>													
Tanners.....	\$12 00	.....	\$12 00	.....	\$12 50	.....	\$11 00	\$12 00	.....	\$12 50	\$15 00	\$17 00	\$13 00
Curriers.....	.....	.....	15 00	\$12 00	13 50	\$13 50	13 00	12 00	\$20 00	16 50	16 50	32 00	15 40
Splitters.....	18 00	.....	15 00	12 00	12 00	.....	.....	13 00	18 00	16 50	16 50	24 00	14 70
Shavers.....	15 00	.....	18 00	15 00	12 00	.....	.....	16 00	25 00	20 00	16 50	23 00	17 83
Table-hands, scorers.....	.....	.....	10 00	10 00	10 00	.....	11 00	10 00	9 00	12 00	16 50	15 00	11 50
Blackers.....	.....	.....	12 00	12 00	10 00	.....	.....	11 00	9 00	12 00	16 50	15 00	12 18
Finishers.....	.....	.....	15 00	13 00	12 00	.....	.....	12 00	20 00	15 00	16 50	17 00	15 06
<i>Morocco, patent and enameled leather.</i>													
Tanners.....	.....	.....	.....	.....	.....	.....	.....	10 00	.....	.....	15 00	.....	12 50
Beam-hands.....	.....	.....	.....	.....	.....	.....	.....	14 00	.....	.....	15 00	.....	14 50
Shavers.....	.....	.....	.....	.....	.....	.....	.....	18 00	.....	.....	16 50	.....	17 25
Sewing girls.....	.....	.....	.....	.....	.....	.....	.....	4 00	.....	.....	9 00	.....	6 50
Finishers.....	.....	.....	.....	.....	.....	.....	.....	20 00	.....	.....	16 50	.....	18 25
Colorers.....	.....	.....	.....	.....	.....	.....	.....	18 00	.....	.....	16 50	.....	17 13
<i>Sheep-skins, skivers, &c.</i>													
Engineers.....	\$8 00	12 00	11 25	10 00	12 00	.....	.....	16 00	15 00	.....	13 50	.....	12 27
Laborers or unskilled workmen.....	9 00	9 00	.....	.....	7 50	.....	.....	9 25	9 00	.....	10 50	12 00	9 46
Apprentices or boys.....	.....	.....	.....	.....	4 50	.....	.....	5 00	.....	.....	.....	.....	4 75
Foremen or overseers.....	13 00	12 00	14 50	.....	20 00	.....	.....	20 50	20 00	.....	18 00	.....	16 85

BOOT AND SHOE FACTORIES.

Table showing the average weekly wages of persons employed in boot and shoe factories in the following States in the year 1874.

Occupation.	New York.	Massachusetts.	Illinois.	California.	General average.
Cutters.....	\$24 00	\$16 00	\$18 00	\$20 00 to \$25 00	\$21 37
Stock-fitters.....	19 00	15 00	12 00	15 00 to 26 00	16 62
Sole-sewing-machine operators.....	24 00	15 00	10 00	.....	16 33
Other sewing-machine operators.....	9 50	10 00	.....	20 00 to 25 00	14 00
Lasters.....	24 00	10 00	.....	20 00 to 25 00	18 83
Second lasters.....	21 00	10 00	.....	.....	17 00
Heelers.....	21 00	.....	.....	20 00 to 25 00	23 25
Trimmers.....	25 50	10 00	.....	20 00 to 25 00	19 34
Burnishers.....	24 00	10 00	.....	20 00 to 25 00	18 83
Finishers.....	23 50	10 00	30 00	20 00 to 25 00	19 50
Hand-sewers.....	.....	.....	.....	25 00 to 30 00	27 50
Shoe-cleaners.....	.....	12 00	.....	22 00 to 27 00	18 25
Packers.....	10 00	.....	.....	20 00 to 21 00	16 00
Laborers or unskilled workmen.....	18 50	.....	.....	.....	18 50
Apprentices or boys.....	6 00	5 00	.....	5 00 to 15 00	7 00
Foremen or overseers.....	35 00	20 00	.....	25 00 to 35 00	27 50
Crimpers.....	.....	.....	20 00	.....	.....
Triers.....	.....	.....	20 00	.....	.....
Bottomers.....	.....	.....	15 00	.....	.....

Tennessee.	Louisiana.	California.	Oregon.	General average.
0	\$12 50	\$15 00	\$17 00	\$13 00
0	\$20 00	16 50	16 50	15 40
0	18 00	16 50	16 50	14 75
0	25 00	20 00	16 50	17 83
0	9 00	12 00	16 50	15 00
0	9 00	12 00	16 50	15 00
0	20 00	15 00	16 50	15 06

0	15 00	13 50	12 27
0	9 00	10 50	9 46
0	9 00	18 00	4 75
0	20 00	18 00	16 85

S.
boot and shoe factories in the

Illinois.	California.	General average.
\$18 00	\$30 00 to \$35 00	\$21 37
12 00	15 00 to 20 00	16 62
10 00	20 00 to 25 00	16 33
20 00	20 00 to 25 00	11 00
20 00	20 00 to 25 00	18 83
20 00	20 00 to 25 00	17 00
20 00	20 00 to 25 00	23 25
20 00	20 00 to 25 00	19 33
20 00	20 00 to 25 00	18 83
20 00	20 00 to 25 00	19 50
25 00	25 00 to 30 00	27 50
22 00	22 00 to 27 00	18 25
20 00	20 00 to 24 00	16 00
20 00	20 00 to 25 00	18 50
20 00	20 00 to 25 00	7 00
20 00	25 00 to 35 00	27 50
15 00		

LABOR IN THE UNITED STATES.

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TOBACCO.

Table showing the average earnings of persons employed in the tobacco-manufactories of the undermentioned States in the year 1874.

Occupation.	New York.		Delaware.		Virginia.		W. Virginia.		Ohio.		Indiana.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
FINE-CUT TOBACCO.												
Stripping.....		\$1 00			\$7 00	\$3 75	\$6 00		\$4 50	\$1 00		
Casing.....	\$15 00											
Cutting.....	14 00				5 75		6 00					
Dressing.....					6 50							
Grinding.....	15 50											
Packing.....		7 50										
Spreading.....	12 00	7 50			7 00				9 00			
Picking.....	8 00				8 25	4 25	12 00		7 00			
SMOKING.												
Cutting.....					6 75	6 37	6 00					
Granulating.....	12 50				6 75							
Laborers.....					5 50		4 00					
SNUFF.												
Packing.....			\$12 16	\$5 00	7 50							
Laborers.....			10 49	6 60								
											9 00	

Occupation.	Wisconsin.		Iowa.		Missouri.		Kentucky, Louisiana.		Georgia.		Average.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
FINE-CUT TOBACCO.												
Stripping.....	\$1 67*		\$2 25				\$3 33	\$2 00	\$5 00	\$5 00	\$1 84	\$3 60
Casing.....	9 00		9 00		\$9 00		8 67	11 00	7 50		8 99	
Cutting.....	16 50		12 00				11 50	12 00	10 00		11 74	
Dressing.....							9 00	10 00			9 50	
Grinding.....	18 00						9 00	10 00			13 12	
Packing.....	8 33		4 00		10 00		6 33	9 00	7 50		7 61	7 50
Spreading.....	4 50		4 00				4 50	5 00			3 00	7 50
Picking.....						\$4 50	8 00		10 00		8 67	4 37
SMOKING.												
Cutting.....							12 00					
Granulating.....							12 00	10 00			8 25	6 37
Laborers.....			5 00				7 50				7 20	
SNUFF.												
Packing.....								10 00			9 88	5 00
Laborers.....	7 60						1 50*		7 50		7 02	

* Children.

CIGARS.

Table showing the average earnings of persons employed in the manufacture of cigars in the undermentioned States in the year 1874.

States.		Occupation.				
		Cigar-makers	Strippers.	Chasers.	Packers.	Laborers.
New Hampshire.....	Per 1,000.....	\$14 00				
	Weekly earnings..	16 00	\$3 00		\$7 00	
Vermont.....	Per 1,000.....	9 00				
	Weekly earnings..	12 00	2 50			
New York.....	Per 1,000.....	12 00				
	Weekly earnings..	17 50	7 10	17 00	23 50	12 00
New Jersey.....	Per 1,000.....	8 40				
	Weekly earnings..	10 35	2 75		15 00	1 28
Delaware.....	Per 1,000.....	5 10				
	Weekly earnings..	6 55	2 25		7 50	
Maryland.....	Per 1,000.....	8 00				
	Weekly earnings..	5 46	2 00	\$2 00	17 00	
Ohio.....	Per 1,000.....	9 50				
	Weekly earnings..	9 50	2 58	10 00	13 50	\$6 50
Indiana.....	Per 1,000.....	10 00				
	Weekly earnings..	8 63	3 00		1 00	
Illinois.....	Per 1,000.....	10 75				
	Weekly earnings..	11 50	2 50	7 50	12 67	1 00
Wisconsin.....	Per 1,000.....	13 75				
	Weekly earnings..	12 00	4 37	5 00	1 50	10 00
Minnesota.....	Per 1,000.....	12 50				
	Weekly earnings..	10 25	3 25		20 00	
Iowa.....	Per 1,000.....	11 00				
	Weekly earnings..	15 00	3 00	7 50	1 06	
Arkansas.....	Per 1,000.....	12 00				
	Weekly earnings..	9 50			13 88	
Kentucky.....	Per 1,000.....	12 17				
	Weekly earnings..	10 25	3 00		17 00	6 00
Virginia.....	Per 1,000.....	13 00				
	Weekly earnings..	6 50	2 00		10 00	
West Virginia.....	Per 1,000.....	13 00				
	Weekly earnings..	16 00	3 00			6 00
North Carolina.....	Per 1,000.....	11 50				
	Weekly earnings..	15 00	3 50		1 50	
Georgia.....	Per 1,000.....	11 75				
	Weekly earnings..	14 00	2 50		20 00	
Tennessee.....	Per 1,000.....	17 00				
	Weekly earnings..	7 50	8 50	10 00	22 50	8 00
Louisiana.....	Per 1,000.....	10 57				
	Weekly earnings..	12 15	3 54	9 25	13 65	7 25
California.....	Per 1,000.....	7 50				
	Weekly earnings..	10 57	31		1 16	
Average.....	Per 1,000.....	12 15	3 54	9 25	13 65	7 25
	Weekly earnings..					

FURNITURE.

Table showing the average weekly wages of persons employed in furniture-manufactories in the following States in the year 1874.

Occupation.	Massachusetts.	New York.	Illinois.	Tennessee.	Alabama.	Louisiana.	General average.
Cabinet-makers.....	\$16 00	\$15 00	\$15 75	\$19 00	\$16 00	\$10 00 to \$12 00	\$15 45
Chair-makers.....						10 00 to 12 00	11 00
Carvers.....	18 00					15 00	16 50
Turners.....	16 00			12 00	15 00	10 00 to 12 00	13 50
Painters.....	18 00	16 00	25 00	10 00			10 00
Upholsterers.....	12 00	13 00			15 00	12 00 to 15 00	17 50
Varnishers.....	15 50			10 00		12 00 to 15 00	13 50
Scroll-sawyers.....	7 25	16 00	15 00	10 00	16 00	6 00 to 9 00	11 95
Laborers and unskilled workmen.....	4 50	3 50	5 00			3 00	16 00
Apprentices or boys.....							25 00
Foremen or overseers.....			25 00				

manufacture of cigars in the
4.

Occupation.	Chasera.	Pickers.	Laborers.
Strippers.			
\$5 00		\$7 00	
2 50			
7 10	17 00	23 50	12 00
		1 28	
		15 00	
2 25		14 00	
2 00	\$2 00	17 00	
	10 00		\$6 50
3 00		15 00	
		1 00	
2 50	7 50	12 67	
		1 50	
4 37	5 00	20 00	10 00
3 25		20 00	
3 00	7 50	13 88	
3 00		17 00	6 00
61			
3 00		10 00	
20			
2 00		15 00	6 00
3 00			
3 50		1 50	
		15 00	
2 50		20 00	
8 50	10 00	22 50	8 00
5 00		10 00	
41		1 16	
3 54	9 25	15 05	7 25

urniture-manufactories in the

Alabama.	Louisiana.	General av- age.
16 00	\$10 00 to \$12 00	\$15 45
	10 00 to 12 00	11 00
		15 00
5 00	10 00 to 12 00	13 50
		10 00
5 00	12 00 to 15 00	17 50
	12 00 to 15 00	13 50
6 00	10 00 to 12 00	12 16
	6 00 to 9 00	11 95
		3 00
		25 00

LABOR IN THE UNITED STATES.

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AGRICULTURAL-IMPLEMENT FACTORIES.

Table showing the average weekly wages of persons employed in agricultural-implement factories in the following States in the year 1874.

Occupation.	New York.	Ohio.	Minnesota.	Iowa.	Kentucky.	Virginia.	General av- erage.
Molders		\$22 50	\$21 00				
Machinists	\$13 00 to \$21 00	12 87	18 00			\$18 00	\$20 50
Blacksmiths	12 00 to 21 00	11 25	12 00	\$15 00		18 00	16 37
Blacksmith's helpers	9 00	9 75	10 50	9 00	\$15 00	15 00	11 54
Grinders		10 00	10 50	13 50	8 00	7 00	8 81
Wood-workers	12 00 to 15 00	15 75	13 50	16 00			11 33
Pattern-makers		15 00		18 00	15 00	12 00	14 15
Carpenters	12 00 to 15 00	14 63	13 50		22 00	15 00	15 00
Painters	12 00 to 15 00	12 75	12 00	12 00	12 00	18 00	14 40
Engineers	15 00	16 00	15 00	12 00	7 00	9 00	13 25
Watchmen							14 00
Teamsters							14 00
Laborers or unskilled workmen				9 00		6 00	9 00
Apprentices or boys	9 00	9 50	9 00			5 00	8 16
Foremen or overseers	6 00	5 50	4 00	8 00	7 00	5 00	7 91
	30 00	25 00	24 00	12 00	15 00	20 00	5 12
							22 00

GLASS-WORKS.

Table showing the average weekly wages of persons employed in the window glass works of Messrs. Thomas Wightman & Co., in the city of Pittsburgh, Pa., in the year 1874.

[Hours of labor per week, 60.]

Occupation.	Wages.	Occupation.	Wages.
Glass-blowers, window	\$30 00	Packers	
Vial-blowers	25 00	Blacksmiths	\$10 50
Assistants window-glass blowers	20 00	Carpenters	25 00
Batch-mixers	10 50	Dem John-coverers	12 00
Master tappers	25 00	Skilled boys	12 00
Assistant tappers	12 00	Laborers or unskilled workmen	6 00
Pot-makers	25 00	Apprentices or boys	10 50
Assistant pot-makers	19 50	Foremen or overseers	10 00
			33 33

Table showing the average weekly wages paid to persons employed in glass works in Berkshire, Massachusetts.

[Hours of labor per week, 60.]

Average num- ber employed.	Occupation.	Wages.	Average num- ber employed.	Occupation.	Wages.
30	Blowers	\$25 00	10	Pot-makers and workers in pot- room	\$10 00
30	Gatherers	16 00	2	Engineers	12 00
6	Flatteners	30 00	10	Laborers or unskilled workmen	9 00
6	Cutters	28 00	8	Apprentices or boys	8 00
6	Master tappers	25 00	2	Foremen or overseers	25 00
6	Subtappers	13 00			

NOTE.—The principal impediment to the successful competition with the Belgian manufacturers is the unwillingness of the employes to act independent of trade-unions. We are isolated, being the only establishment for window-glass in New England, but our men are controlled by a union ruled in Pitts-
burgh. Our men will not do what the Belgian workmen do, and it is impossible for us to turn out more
than 75 per cent. as much product as they do.

Table showing the average monthly wages of best window-glass blowers in Pittsburgh, Pa.

Occupation.	Wages.	Occupation.	Wages.
Large double glass, say	\$250 to \$300	Best gatherers	\$130 to \$140
Second class, or, rather, single strength		Second-class gatherers	175 to 200
Blowers of best	150 to 175	Master teasers	150
Second-rate same	125 to 150	Second teasers	130
Third-rate same	100 to 140	Glass-cutters	150 to 200

Six blowers will average in one calendar month 105,000 square feet.

CARRIAGES.

Table showing the average weekly wages of persons employed in carriage-making and car-building in the following States in the years 1872 and 1873, respectively.

Occupation.	New Hampshire, 1872.	Massachusetts, 1872.	Connecticut, 1873.	New York, 1872.	New Jersey, 1873.	Pennsylvania, 1873.	Delaware, 1872.	Maryland, 1872.	Ohio, 1872.
Body-makers	\$18 00	\$15 00	\$21 00	\$22 50	\$15 00	\$12 42	\$18 00	\$13 50	\$17 00
Carriage-part makers	15 00	13 50	17 00	17 00	18 00	14 50	18 00	13 50	13 50
Wheelwrights	15 00	15 00	17 00	17 00	12 00	18 00	18 00	15 00	15 00
Coach-smiths	17 00	18 00	18 00	25 51	13 00	18 00	18 00	15 00	15 75
Helpers	9 00	11 00	15 00	9 50	9 40	7 00	7 00	5 00	8 00
Finishers	14 00	12 00	15 00	15 00	12 00	13 50	12 00	13 50	18 00
Ornamenters	18 00	18 00	18 00	15 00	14 00	15 00	15 00	14 00	15 50
Painters	17 00	15 00	19 50	16 50	18 00	12 00	15 00	14 00	18 00
Trimmers	13 00	12 00	12 50	12 50	12 00	12 00	12 00	12 00	15 00
Stitchers	13 00	12 00	12 50	12 50	12 00	12 00	12 00	12 00	15 00
Engineers	12 00	12 00	11 00	11 00	7 00	4 00	8 00	6 00	4 50
Laborers or unskilled workmen	7 50	5 00	5 00	5 00	4 00	4 00	5 00	4 50	16 00
Apprentices or boys	18 00	21 00	30 00	45 00	20 00	20 00	20 00	20 00	16 00
Foremen	18 00	21 00	30 00	45 00	20 00	20 00	20 00	20 00	16 00
CAR-BUILDERS.									
Wood-workers							15 38		
Blacksmiths							13 00		
Helpers							7 75		
Painters							14 37		
Hours of labor per week	60		59	59½	60	60	60		60
Occupation.	Illinois, 1872.	Wisconsin, 1873.	Wisconsin, 1872.	Minnesota, 1872.	Iowa, 1872.	Missouri, 1873.	Virginia, 1872.	West Virginia, 1872.	Kentucky, 1872.
Body-makers		\$19 00	\$13 50	\$20 00	\$15 00	\$16 00	\$15 75	\$21 00	\$19 00
Carriage-part makers		14 00	15 50	15 00	12 00	13 50	15 50	15 00	13 00
Wheelwrights		19 00	20 00	20 00	16 00	17 00	17 00	25 00	15 50
Coach-smiths	\$14 00	19 00	20 00	20 00	16 00	17 00	17 00	25 00	15 50
Helpers	6 50	9 00	10 00	10 00	5 50	6 75	8 70	8 75	8 75
Finishers	10 00	10 00	10 00	10 00	10 00	6 00	15 00	9 50	9 50
Ornamenters	12 00	15 00	10 50	15 50	15 00	16 00	19 00	20 00	20 00
Painters	12 00	15 00	10 50	15 50	15 00	15 00	16 50	15 00	15 00
Trimmers	12 00	15 00	10 50	15 50	15 00	15 00	16 50	15 00	15 00
Stitchers	12 00	15 00	10 50	15 50	15 00	15 00	16 50	15 00	15 00
Engineers	12 00	15 00	10 50	15 50	15 00	15 00	16 50	15 00	15 00
Laborers or unskilled workmen	12 00	15 00	10 50	15 50	15 00	15 00	16 50	15 00	15 00
Apprentices or boys	12 00	15 00	10 50	15 50	15 00	15 00	16 50	15 00	15 00
Foremen	12 00	15 00	10 50	15 50	15 00	15 00	16 50	15 00	15 00
CAR-BUILDERS.									
Wood-workers				15 00			12 00	15 00	16 50
Blacksmiths				13 50			14 00	18 00	16 50
Helpers				9 00			6 00	9 00	10 50
Painters				14 00			15 00	18 00	12 00
Hours of labor per week	60	60	59	57	60	60	60	60	57

Occupation.	Wages.
.....	\$120 to \$140
.....	100
.....	175 to 200
.....	150
.....	130
.....	150 to 200

in carriage-making and car-
l 1873, respectively.

Missouri, 1873.	Virginia, 1872.	West Virginia, 1872.	Kentucky, 1872.
\$16 00	\$15 75	\$21 00	\$19 00
16 00	13 50	15 50	13 00
	13 50	17 00	14 00
	17 00	23 00	15 50
	6 75	8 50	6 75
	6 00	15 00	9 00
	16 00	19 00	20 00
	15 00	16 50	15 00
	15 00	17 00	16 00
		9 00	12 00
		9 00	25 00
	6 37	7 00	9 00
3 00	3 00	5 40	3 00
	18 00	21 50	5 75
	12 00	15 00	16 50
	14 00	18 00	16 50
	6 00	9 00	10 50
	15 00	18 00	20 00
60	60	60	55

Table showing the average weekly wages of persons employed in carriage-making, &c.—Con'd.

Occupation.	Tennessee, 1872.	Arkansas, 1872.	Louisiana, 1872.	Alabama, 1872.	Georgia, 1873.	North Carolina, 1872.	California, 1872.	Oregon, 1872.	Average in 1872.	Average in 1873.
Body-makers	\$19 25	\$19 50	\$18 00	\$15 00	\$21 00	\$12 85	\$24 00	\$18 00	\$17 32	\$16 45
Carriage-part makers	16 50	18 00	17 00	.....	.....	10 00	22 00	18 00	15 31	.....
Wheelwrights	.....	16 50	13 00	.....	.....	10 00	32 00	18 00	15 61	.....
Coach smiths	20 50	10 50	13 00	.....	12 00	10 00	22 50	18 00	16 43	15 50
Helpers	7 25	8 25	8 00	18 00	.....	10 00	22 50	12 00	8 62	13 75
Fenders	9 50	10 50	15 00	5 00	.....	5 00	15 00	.....	.....	.....
Ornamenters	.....	.....	.....	.....	.....	10 00	15 00	14 50	.....	12 20
Painters	21 00	16 50	18 00	.....	.....	12 00	27 50	21 00	19 27	.....
Trimmers	14 25	16 50	12 50	15 00	.....	12 25	25 00	21 00	15 40	13 00
Stitchers	18 00	15 00	15 00	15 00	.....	12 55	21 00	21 00	16 15	16 50
Engineers	.....	.....	12 00	.....	.....	.....	.....	.....	21 81	.....
Laborers or unskilled workmen	.....	.....	.....	.....	.....	20 00	25 00	.....	13 00	.....
Apprentices or boys	5 00	7 50	8 00	.....	8 50	5 00	12 00	13 00	9 07	8 50
Foremen	.....	5 00	3 00	.....	3 50	2 50	5 00	6 00	5 14	4 30
CAR-BUILDERS.	.....	.....	18 00	.....	21 00	18 00	40 00	21 00	23 50	25 50
Wood-workers	18 00	.....	12 50	.....	.....	12 00	21 00	.....	15 26	.....
Blacksmiths	20 00	.....	15 00	.....	.....	11 50	27 00	.....	16 50	.....
Helpers	.....	.....	9 00	.....	.....	6 00	19 00	.....	9 53	.....
Painters	15 00	.....	12 50	.....	.....	12 00	19 00	.....	4 65	.....
Hours of labor per week	60	60	60	60	60	60	.....	60	59 6-10	59 6-10

Table showing the average weekly wages of persons employed in carriage-making and car-building in the following States in the year 1874.

[illegible]

MISCELLANEOUS OCCUPATIONS.

The following tables show the average wages or earnings of persons employed in various occupations in the year 1874.

Place and occupation.	Wages.	Hours per week.	Place and occupation.	Wages.	Hours per week.
BUILDERS' MATERIALS.			SCHOOL AND OFFICE FURNITURE.		
Port Madison (Oregon) mills:			Chicago, Ill.:		
Engineers { First-class, per wk. \$14 00 72			Machine-hands.....per week \$15 00 60		
Engineers { Second-class, do.. 20 00 72			Bench-hands.....do.. 10 50 60		
Foremen.....do.. 25 00 72			Cabinet-makers.....do.. 22 00 60		
Sawyers.....do.. 20 00 72			Finishers.....do.. 10 50 60		
Filers.....do.. 18 00 72			Packers.....do.. 10 50 60		
Edgers and screw-turners.....do.. 10 00 72			Pattern-makers.....do.. 15 00 60		
Teamsters.....do.. 15 00 72			Engineers.....do.. 18 00 60		
Choppers.....do.. 12 00 72			Laborers.....do.. 9 00 60		
Carpenters.....do.. 18 00 72			Apprentices.....do.. 3 00 60		
Blacksmiths.....do.. 20 00 72			Foremen.....do.. 24 00 60		
Firemen.....do.. 9 00 72					
Laborers.....do.. 7 00 72					
BUILDING-TRADE.			SASH, DOOR, AND BLIND FACTORY.		
Oregon:			Chicago, Ill.:		
Carpenters or joiners, per day. 3 50			Engineers.....per week 18 00 60		
Stone-masons.....do.. 5 00			Foremen.....do.. 21 00 60		
Brick-layers.....do.. 6 00			Machine-hands.....do.. 12 00 60		
Plasterers.....do.. 5 00			Carpenters.....do.. 12 00 60		
Plasterers { per sq. yd. 28			Men and boys on piecework do.. 8 54 60		
Lathers { per M. 2 00			Teamsters.....do.. 10 55 60		
Painters { per day 45			Laborers.....do.. 8 35 60		
Common laborers.....do.. 2 00			Boys.....do.. 3 45 60		
Excavating cellars, per cu. yd. 20			Lebanon, N. H.:		
San Antonio, Tex.:			Foremen.....per week 17 50 60		
Masons.....per week 15 00 60			Carpenters.....do.. 12 00 60		
Stone-cutters.....do.. 15 00 60			Laborers.....do.. 7 50 60		
Plasterers.....do.. 18 00 60			Apprentices.....do.. 3 50 60		
Quarrymen.....do.. 9 00 60			Chicago, Ill.:		
Teamsters.....do.. 18 00 60			Machine men.....per week 21 00 60		
Carpenters.....do.. 15 00 60			Stair-builders.....do.. 10 00 60		
Blacksmiths.....do.. 15 00 60			Carvers.....do.. 21 00 60		
Laborers.....do.. 7 50 60			Joiners.....do.. 10 00 60		
Apprentices.....do.. 7 50 60			Blind-makers.....do.. 10 00 60		
Chicago, Ill.:			Engineers.....do.. 18 00 60		
Watchmen.....per week 9 00 60			Laborers.....do.. 14 75 60		
Firemen.....do.. 12 00 60			Apprentices.....do.. 7 50 60		
Machinists.....do.. 15 00 60			Foremen.....do.. 30 00 60		
Turners.....do.. 18 00 60					
Carpenters.....do.. 10 00 60			PLANING-MILLS.		
Sawyers.....do.. 10 00 60			Wheeling, W. Va.:		
Stair-builders.....do.. 15 00 60			Carpenters.....per week 13 60 50		
Tallymen.....do.. 12 00 60			Other mechanics.....do.. 13 60 50		
Glaziers.....do.. 10 00 60			Turners.....do.. 16 50 50		
Painters.....do.. 9 00 60			Box-makers.....do.. 7 60 50		
Shippers.....do.. 20 00 60			Teamsters.....do.. 7 00 50		
Teamsters.....do.. 9 10 60			Watchmen.....do.. 7 00 50		
Dry-kilnmen.....do.. 9 00 60			Engineers.....do.. 15 00 50		
Engineers.....do.. 25 00 60			Laborers.....do.. 9 00 50		
Laborers.....do.. 6 00 60			Apprentices.....do.. 3 00 50		
Foremen.....do.. 2 50 60			Foremen.....do.. 18 00 50		
Carve s.....do.. 30 00 60			Salesmen.....do.. 12 50 50		
Grafton, W. Va.:					
Carpenters.....per week 12 00 60			RUB AND SPOKE FACTORY.		
Plasterers.....do.. 18 00 60			Metropolis, Ill.:		
Stone masons.....do.. 15 00 60			Turners.....per week 18 00 60		
Painters.....do.. 18 00 60			Engineers.....do.. 15 00 60		
Blacksmiths.....do.. 12 00 60			Machine-turners.....do.. 15 00 60		
Millers.....do.. 12 50 60			Machinists.....do.. 12 00 60		
Brick molders.....do.. 12 00 60			Sawyers.....do.. 10 00 60		
Brick-layers.....do.. 18 00 60			Porters.....do.. 10 00 60		
Laborers.....do.. 9 00 60			Watchmen.....do.. 10 00 60		
Boys.....do.. 4 10 60			Day-laborers.....do.. 9 00 60		
Teamsters.....do.. 9 00 60			Laborers.....do.. 7 50 60		
Clerks.....do.. 12 00 60			Boys.....do.. 2 00 60		
			Foremen.....do.. 45 00 60		

NOTE.—The rate of wages for the State of Oregon is computed in United States gold.

Table showing the average wages or earnings of persons employed, &c.—Continued.

employed in various occu-

Place and occupation.	Wages.	Hours per week.	Place and occupation.	Wages.	Hours per week.
HUB AND SPOKE FACTORY—Cont'd.			PAINTING AND GILDING.		
Portsmouth, Ohio:			San Francisco, Cal.:		
Engineers.....per week.	\$15 00	60	Gilders.....per week.	\$11 00	.....
Wheel-makers.....do.	15 00	60	Painters.....do.	21 00	.....
Hub-turners.....do.	15 00	60	Grainers.....do.	25 00	.....
Spike-turners.....do.	13 00	60	Carpenters.....do.	24 00	.....
Felloe-benders.....do.	14 00	60	Composition and ornament- ing.....per week.	21 10	.....
Hub-mortisers.....do.	12 00	60	Boys.....do.	6 50	.....
Sawyers.....do.	10 00	60			
Laborers.....do.	9 00	60			
Boys.....do.	3 00	60			

NOTE.—Hours of labor per week, 60 and 54.

Table showing the average weekly wages or earnings of persons employed in different occupations, with average number employed in each establishment named, in the year 1874.

ND FACTORY.			No.	Place and occupation.	Wages.	Hours per week.	No.	Place and occupation.	Wages.	Hours per week.
..... per week	18 00	60								
..... do.	21 00	60								
..... do.	12 00	60								
..... do.	12 40	60								
..... do.	8 54	60								
..... do.	10 55	60								
..... do.	8 35	60								
..... do.	3 45	60								
..... per week	17 50	60								
..... do.	12 00	60								
..... do.	7 50	60								
..... do.	3 50	60								
..... per week	21 00	60								
..... do.	16 00	60								
..... do.	21 00	60								
..... do.	16 06	60								
..... do.	16 00	60								
..... do.	18 00	60								
..... do.	11 75	60								
..... do.	7 50	60								
..... do.	30 00	60								
ILLS.										
..... per week	13 60	59								
..... do.	13 60	59								
..... do.	16 50	59								
..... do.	7 60	59								
..... do.	7 00	59								
..... do.	7 00	59								
..... do.	15 00	59								
..... do.	9 00	59								
..... do.	3 00	59								
..... do.	18 00	59								
..... do.	12 50	59								
FACTORY.										
..... per week.	18 00	60								
..... do.	15 00	60								
..... do.	15 00	60								
..... do.	12 00	60								
..... do.	10 00	60								
..... do.	10 00	60								
..... do.	10 00	60								
..... do.	9 00	60								
..... do.	7 50	60								
..... do.	2 00	60								
..... do.	45 00	60								
n United States gold.										
CORSET-FACTORY.										
New Haven, Conn.:										
2	Overseers.....male	\$50 00		4	Accountants.....	\$30 00	60			
10	Cutters.....female	12 00		6	Salesmen.....	20 00	60			
450	Machine-operators.....male	12 00		6	Porters and packers.....	12 00	60			
50	Bowers.....female	4 50		4	Teamsters.....	15 00	60			
6	Trimmers.....do.	3 00		5	Paper-rulers.....	15 00	60			
20	Binders.....do.	6 00								
120	Finishers.....do.	6 00								
6	Eyeleters.....do.	5 00								
35	Ironers.....male	12 00		10	Trunk-makers.....	10 00	60			
65	Embroiderers.....female	7 00		10	do.....	5 00	60			
12	Lacers.....do.	4 00		15	do.....	3 00	60			
12	Examiners.....do.	3 00		15	do.....	1 50	60			
3	Packers.....male	12 00								
2	Porters.....do.	6 00								
1	Watchman.....do.	12 10								
1	Drayman.....do.	10 00								
1	Tool-maker.....do.	24 00		1	Foreman printer.....	24 00	59			
1	Engineer.....do.	18 00		9	Compositors, (Union).....	21 00	59			
1	Fireman.....do.	12 00		1	Apprentice, second year.....	10 00	59			
750				1	Head pressman.....	21 00	59			
				1	Second pressman.....	15 00	59			
				6	Boys.....	4 00	59			
UMBRELLA-FACTORY.										
New York City, N. Y.:										
36	Sewing machines.....female	10 00	58	1	Foreman bindery, (blank- books only).....	21 00	59			
2	Foremen.....male	15 00	58	1	Head finisher.....	21 00	59			
7	Boys.....	8 00	58	2	Second finisher.....	18 00	59			
2	Apprentices.....	3 00	58	3	Rulers.....	21 00	59			
1	Cutter.....	18 00	58	1	Forwarders.....	18 00	59			
OIL-MILLS AND FERTILIZER COM- PANY.										
Selma, Ala.:										
2	Pressmen.....	10 50	72	2	Engineer, (printing-office and bindery).....	15 00	59			
1	Foreman.....	9 00	72	6	Blank-book sewers, (girls).....	7 50	59			
1	Foreman and engineer.....	12 00	72	3	Miscellaneous work, (small girls).....	3 00	59			
1	Assistant cooper.....	9 00	72	3	Boys, apprentices { 1st year.....	4 00	} 59			
9	Ginners.....	6 00	72	3	Boys, apprentices { 2d year.....	7 00				
10	Laborers.....	6 00	72	1	Boys, apprentices { 3d year.....	10 00				
PRINTING-PRESSES AND PRINTERS' FURNITURE, MANUFACTORY OF.										
Chicago, Ill.:										
	Skilled workmen.....	15 00		2						
PUBLISHING COMPANY.										
Portland, Oreg.:										
	Editor.....	50 00	60	1	Manager.....	40 00	60			
	Manager.....	30 00	60	2	Reporters.....	25 00	60			
	Pressman.....	30 00	60	1	Pressman.....	30 00	60			
	Engineer.....	25 00	60	1	Engineer.....	25 00	60			
	Foreman.....	35 00	60	1	Foreman.....	35 00	60			
	Printers.....	27 50	60	8	Printers.....	27 50	60			
	Apprentices.....	7 00	60	2	Apprentices.....	7 00	60			

in United States gold.

Table showing the average weekly wages of persons employed in the following occupations in the years named.

(Hours of labor per week, 60.)

Place and occupation.	Wages.	Place and occupation.	Wages.
HARDWARE MANUFACTORY.		AGRICULTURAL-IMPLEMENT FACTY—Cont'd.	
Berlin, Conn.—1874:		New Madrid, Mo.—1872:	
Molders, iron	\$15 00	Blacksmiths	\$18 00
Molders, brass	18 00	Blacksmith-helpers	9 00
Cupola-tenders	12 00	Plow-makers	21 00
Assembling-furnace-tenders	12 00	Carpenters	24 00
Filets	10 50	Painters	24 00
Forgers	15 01	Teamsters	24 00
Forgers	18 00	Apprentices or boys	3 00
Helpers	10 50		
Grinders	12 00	TOBACCO AND CIGAR MANUFACTORY.	
Polishers	15 00	Louisiana—1874:	
Turners	12 00	Cigar-makers	15 00
Machinists	18 00	Strippers	15 00
Engineers	12 00		
Furnace-men	9 00	COTTON-GINNING.	
Laborers	12 00	Louisiana—1874:	
Packers	12 00	Ginners and balers	12 00
Press-workmen	12 00	Engineers	15 00
Rollers	15 00	Laborers	9 00
Welders	15 00	Foremen	20 00
Joiners	12 00		
Stampers	15 00	CORNICE-MANUFACTORY.	
Gradinators	12 00	Ohio—1873:	
Painters	12 00	Cornice-manufacturers	18 00
Pattern-makers	24 00	Turners	15 00
Carpenters	18 00	Slate-roofers	21 00
Tripp-hammer-men	12 00	Laborers	11 00
Filter-ship	15 00	Apprentices	5 00
Street-sweepers	15 00	Foremen	30 00
Blacksmiths	15 00		
Helpers	9 00	PAPER-MAKING MACHINERY.	
Foremen	18 00	Vermont—1874:	
Apprentices or boys	7 50	Iron-molders	30 00
Girls	4 50	Machinists { Best	15 00
Waterbury, Conn.—1874:		{ Ordinary	12 00
Annvelling-furnace-tenders	12 00	Helpers	9 00
Filets	9 00		
Forgers	18 00	SCALE-MANUFACTORY.*	
Helpers	10 50	Vermont—1874:	
Machinists	18 00	Iron-molders	15 00
Engineers	17 00	Mechanics	13 50
Furnace-men	18 00	Joiners	13 50
Laborers	9 00	Painters	12 00
Packers	15 00	Engineers	12 00
Die-makers	12 00	Laborers	9 00
Press-workmen	12 00	Foremen	25 00
Rollers	18 00		
Joiners	15 00	HARNES-MAKING.	
Stampers	10 50	Vermont—1874:	
Carpenters	12 00	Harness-makers	10 00
Blacksmiths	15 00	Harness-fitters	14 00
Helpers	20 00	Harness-stitchers	8 50
Foremen	20 00	Apprentices	6 50
Apprentices or boys	4 50		
AGRICULTURAL-IMPLEMENT FACTORY.		COOPERAGE.	
Phillipsburgh, N. J.—1873:		Indiana—1874:	
Molders	15 00	Coopers	11 55
Machinists	15 00	Machine-hands	12 00
Blacksmiths	9 00	Machine-boys	5 00
Blacksmith-helpers	9 00	Draymen	10 00
Grinders	15 00	Engineers	13 50
Wood-workers	15 00	Laborers	2 00
Plow-makers	15 00	Foremen	22 00
Pattern-makers	16 50		
Carpenters	16 50	CIGAR-MANUFACTORY.	
Painters	13 00	Vermont—1874:	
Engineers	12 00	Cigar-makers, (\$11 to \$15 per M)	18 00
Watchmen	10 50	Strippers	20 00
Teamsters	9 00	Cases	20 00
Laborers or unskilled workmen	5 00	Packers	20 00
Apprentices or boys	18 00		
Foremen or overseers	18 00		

* Hours of labor per week, 59.

WAGES IN CALIFORNIA IN 1869 AND 1874.

*Statement showing the wages paid in San Francisco and vicinity in the years 1869 and 1874,
for the following kinds of labor,*

[The table of wages for the year 1874 was prepared for this report by Mr. W. H. Martin, general agent of the California Immigrant Union, January, 1875.]

Occupation.	Wages.	Occupation.	Wages in 1873.	Wages in 1874.
ST FACT'Y—Cont'd.				
	\$18 00	Apothecaries.....	per month, with board.	
	4 00	Architects, (special rates or commission.)	\$10 00 to \$50 00	
	24 00	Bakers.....	30 00 to 50 00	\$10 00 to \$60 00
	24 00	Barbers.....	per month, with board.	40 00 to 60 00
	24 00	Bar-tenders.....	per month.	40 00 to 60 00
	24 00	Bed-makers.....	per month, with board.	
	3 00	Bell-ringers.....	do. do.	
MANUFACTORY.		Belt-makers.....	per day.	
		Bleeksmiths.....	do.	
	15 00	Blacksmiths' helpers.....	do.	
	15 00	Boat-builders.....	do.	
		Boiler-makers.....	do.	
		Boiler-makers, flange-turners.....	do.	
		Book-binders.....	do.	
		Book-binders' helpers, boys and girls.....	per week.	
	12 00	Book-keepers.....	per month.	
	15 00	Book-keepers in bank and brokers' offices.....	35 00 to 100 00	
	9 00	Boot and shoe making, (see Shoemakers.)	do.	
	20 00	Boot-blacks.....	do.	
		Butlers.....	do.	
		Box-makers.....	45 00 to 40 00	
		Bricklayers.....	per day.	
		Brick layers, foremen.....	do.	
	18 00	Butchers.....	4 50 to 6 00	
	15 00	Brewers.....	per month, with board.	
	21 00	Broom-makers.....	do.	
	11 00	Butter-makers.....	per month and board.	
	5 00	Brick-makers.....	per month and board.	
	30 00	Boys in officers' and stores.....	do.	
		Carpenters, house.....	per month.	
		Carpenters, foremen.....	per day.	
		Carpenters, ship.....	do.	
		Carpenters, ship, foremen.....	do.	
	30 00	Cabinet-makers.....	do.	
	15 00	Carriage-makers.....	do.	
	12 00	Wheelwrights.....	do.	
	9 00	Wagon-makers.....	do.	
		Wagon-makers, trimmers.....	do.	
		Painters.....	do.	
		Painters, strippers.....	do.	
FACTORY.*		Carvers.....	do.	
	15 00	Calkers.....	do.	
	13 50	Coppers.....	do.	
	13 50	Confectioners.....	do.	
	12 00	Coppersmiths.....	do.	
	12 00	Cotton-makers.....	do.	
	9 00	Clerks.....	do.	
	25 00	Charcoal-burners.....	per month, with board.	
		Cheese-makers.....	per day.	
		Coachmen.....	do.	
	10 00	Cooks.....	per month, with board.	
	14 00	Cooks in private families.....	do.	
	8 50	Cooks in hotels.....	do.	
	6 50	Cigar-makers.....	do.	
		Conductors, horse-cars.....	per day.	
		Conductors, steam-cars.....	do.	
		Chambermaids in families.....	per month, with board.	
		Chambermaids in hotels.....	do.	
	11 55	Dress-makers in stores.....	per week.	
	12 00	Dress-makers in families.....	per day.	
	5 00	Dairymen.....	per month, with board.	
	10 00	Drivers, horse-cars.....	do.	
	13 50	Drivers, drays and trucks.....	do.	
		Drivers express.....	do.	
		Drivers, hacks.....	do.	
	22 00	Drum and snare makers.....	do.	
		Druggists.....	per month, with board.	
		Dyers.....	do.	
		Deck-hands.....	do.	
	18 00	Editors, first-class.....	do.	
	8 50	Editors, second-class.....	do.	
	20 00	Engravers.....	per month.	
	20 00	Engineers, mill.....	per day.	
		Engineers, railroads.....	do.	

Statement showing the wages paid in San Francisco and vicinity, &c.—Continued.

Occupation.	Wages in 1863.	Wages in 1874.
Engineers, steamships, &c. per day .....	.....	\$4 00 to \$5 00
..... per month, with board	\$30 00	25 00 to 30 00
Farm-laborers { Winter do per month	\$10 00 to 50 00	40 00 to 50 00
..... { Summer do per month .....	.....	35 00 to 50 00
Florists do per day	2 00 to 2 50	3 00 to 4 50
Foundrymen do per day	3 50 to 4 00	4 50 to 5 00
Foundrymen, molders do per day .....	.....	3 00 to 3 50
Foundrymen, stove-molders do per day .....	.....	3 00 to 4 00
Foundrymen, brass do per day .....	.....	3 00 to 4 00
Gardeners do per month, with board	30 00 to 40 00	45 00 to 60 00
Gardeners, short jobs do per day .....	.....	2 50 to 3 00
Gas-fitters do per day	3 50 to 4 50	3 00 to 4 50
Gunsmiths do per day	3 00 to 5 00	3 00 to 5 00
Gilders do per day .....	.....	3 50 to 5 00
Glaziers do per day .....	.....	2 00 to 3 50
Harness-makers do per day .....	.....	2 50 to 5 00
Hatters do per day .....	.....	3 00 to 4 00
Hatters do per month, with board .....	.....	30 00 to 40 00
Hosiers do per day .....	.....	3 50 to 4 00
Jewelers do per month, with board	30 00 to 45 00	30 00 to 40 00
Laundrymen do per month, with board .....	.....	30 00 to 40 00
Laundry women do per day	3 00 to 4 00	3 00 to 4 00
Locksmiths do per day	3 00 to 4 00	3 00 to 4 00
Lithographers, draughtsmen, and engineers do per day	4 00 to 4 50	4 00 to 4 50
Lithographers, printers do per day .....	.....	30 00 to 50 00
Lumbermen do per month, with board	35 00 to 70 00	3 00 to 5 00
Machinists do per day	3 50 to 4 50	3 00 to 5 00
Masons do per day	4 00 to 5 00	4 00 to 5 00
Masons, foremen do per day .....	.....	6 00 to 7 50
Model or pattern makers do per day	4 00 to 4 50	4 00 to 5 00
Millers do per day	3 00 to 4 00	3 00 to 4 00
Millwrights do per day	3 00 to 5 00	3 00 to 5 00
Miners do per day	2 00 to 3 50	3 00 to 4 00
Milliners do per day .....	.....	1 50 to 3 50
Nurses do per day .....	.....	1 00 to 5 00
Painters, house do per day	2 50 to 4 00	3 50 to 4 00
Painters, ship do per day .....	.....	3 00 to 4 00
Paper-hangers do per day	2 50 to 3 50	2 50 to 3 50
Plasterers do per day	4 00 to 6 00	4 00 to 5 00
Plumbers do per day	3 50	4 00 to 5 00
Porters do per month, with board	30 00 to 55 00	30 00 to 50 00
Piano-makers do per day .....	.....	4 00 to 5 00
Printers, job do per day .....	.....	3 50 to 4 00
Printers, foremen do per day .....	.....	4 50 to 5 00
Police-men do per month .....	.....	125 00
Riggers do per day .....	.....	4 00 to 5 00
Saddlers do per day .....	.....	3 00 to 5 00
Sail-makers do per day .....	.....	3 00 to 4 00
Sailors, long-voyage do per month .....	.....	30 00 to 35 00
Sailors, coasters do per month .....	.....	40 00 to 45 00
Salesmen do per day .....	.....	2 50 to 4 50
Shipsmiths do per day	4 00	3 00 to 4 00
Servants, general housework do per month .....	.....	15 00 to 20 00
Sawyers do per month	40 00 to 100 00	40 00 to 70 00
Shoemakers do per day .....	.....	2 00 to 4 00
Shepherds do per month, with board	25 00 to 35 00	25 00 to 35 00
Soap-makers do per day	35 00 to 40 00	35 00 to 45 00
Stone-cutters do per day	4 00 to 5 00	4 00 to 5 00
Straw-workers do per day .....	.....	1 50 to 3 00
Tailors, pants do per day .....	.....	3 00 to 5 00
Tailors, vests do per day .....	.....	2 00 to 3 50
Tailors, coats do per day .....	.....	6 00 to 10 00
Turners do per day	3 50 to 4 00	3 50 to 4 00
Trunk-makers do per day	2 50 to 3 00	2 50 to 4 00
Tinsmiths do per day	3 00 to 4 00	2 50 to 3 50
Teamsters owning teams do per day .....	.....	2 50 to 4 00
Teachers, (full supply male and female from our own schools) do per month .....	.....	30 00 to 50 00
Upholsterers do per day	3 00 to 4 00	4 00 to 5 00
Vineyard-men do per month, with board	30 00 to 40 00	40 00 to 50 00
Wagon-makers do per day	3 00 to 4 00	3 00 to 4 00
Watchmen do per month	50 00 to 75 00	50 00 to 75 00
Wood-choppers do per day	40 00 to 70 00	40 00 to 50 00
Waiters do per month, with board	20 00 to 40 00	20 00 to 40 00
Watch-makers do per day .....	.....	3 00 to 4 50
Whip-makers do per day	3 00	.....
Whitewashers do per day	3 00	.....

Young men of energy, not afraid of work, can almost always get employment in the country at from \$25 to \$30 per month.

The foregoing prices are in gold coin.

REMARKS.—It is much easier to get employment in rough or mechanical work than in clerking, keeping books, or in school-teaching; and persons who have no money and

, &c.—Continued.

In 1869. Wages in 1874.

\$1 00 to \$5 00	\$5 00 to \$10 00
25 00 to 30 00	30 00 to 40 00
40 00 to 50 00	50 00 to 60 00
60 00 to 70 00	70 00 to 80 00
80 00 to 90 00	90 00 to 100 00
100 00 to 110 00	110 00 to 120 00
120 00 to 130 00	130 00 to 140 00
140 00 to 150 00	150 00 to 160 00
160 00 to 170 00	170 00 to 180 00
180 00 to 190 00	190 00 to 200 00
200 00 to 210 00	210 00 to 220 00
220 00 to 230 00	230 00 to 240 00
240 00 to 250 00	250 00 to 260 00
260 00 to 270 00	270 00 to 280 00
280 00 to 290 00	290 00 to 300 00
300 00 to 310 00	310 00 to 320 00
320 00 to 330 00	330 00 to 340 00
340 00 to 350 00	350 00 to 360 00
360 00 to 370 00	370 00 to 380 00
380 00 to 390 00	390 00 to 400 00
400 00 to 410 00	410 00 to 420 00
420 00 to 430 00	430 00 to 440 00
440 00 to 450 00	450 00 to 460 00
460 00 to 470 00	470 00 to 480 00
480 00 to 490 00	490 00 to 500 00
500 00 to 510 00	510 00 to 520 00
520 00 to 530 00	530 00 to 540 00
540 00 to 550 00	550 00 to 560 00
560 00 to 570 00	570 00 to 580 00
580 00 to 590 00	590 00 to 600 00
600 00 to 610 00	610 00 to 620 00
620 00 to 630 00	630 00 to 640 00
640 00 to 650 00	650 00 to 660 00
660 00 to 670 00	670 00 to 680 00
680 00 to 690 00	690 00 to 700 00
700 00 to 710 00	710 00 to 720 00
720 00 to 730 00	730 00 to 740 00
740 00 to 750 00	750 00 to 760 00
760 00 to 770 00	770 00 to 780 00
780 00 to 790 00	790 00 to 800 00
800 00 to 810 00	810 00 to 820 00
820 00 to 830 00	830 00 to 840 00
840 00 to 850 00	850 00 to 860 00
860 00 to 870 00	870 00 to 880 00
880 00 to 890 00	890 00 to 900 00
900 00 to 910 00	910 00 to 920 00
920 00 to 930 00	930 00 to 940 00
940 00 to 950 00	950 00 to 960 00
960 00 to 970 00	970 00 to 980 00
980 00 to 990 00	990 00 to 1000 00

get employment in the

mechanical work than
who have no money and

no friends in California able to assist them, and no special knowledge that will certainly command employment, should not come here in the expectation of an easy life. Men who expect to make their living by the shovel, plow, and ax are wanted.

Teachers should disabuse their minds in reference to our educational affairs. We have the best schools and teachers in the Union. Our teachers are mostly graduates of our high schools and State normal schools, and we get a new supply from these sources every year. These are well paid, and as long as they keep up to the standard it would be folly in us to advise our friends in the East to come here expecting to get positions as teachers.

Chinamen work willingly for 75 cents to \$1 per day. We have a large supply, and they soon learn and perfect themselves in any department of business. They are a necessary evil at present, for the reason that most of the young men of our State, and new-comers generally, will not work for small wages. As soon as this is remedied by an importation of Eastern and European labor willing to work for \$1 to \$1.50 per day, the employment of Chinese will gradually be diminished.

W. H. M.

WAGES PAID BY RAILROAD COMPANIES.

Statement showing the average weekly wages of persons employed by railroad companies in the following States in the year 1874.

Occupation.	Maine.	Massachusetts.	Pennsylvania.	Illinois.	Indiana.	Kentucky.	Missouri.	General average.
Machinists.....	\$12 00	\$14 25	\$15 00	\$19 50	\$16 50	\$15 00	\$16 20	\$15 49
Boiler-makers.....	12 00	15 50	13 00	13 00	14 25	14 00	16 80	11 35
Blacksmiths.....	12 00	16 00	13 00	13 00	17 25	15 75	18 80	15 45
Car-builders.....	13 50	11 50	13 42	15 00	16 50	11 40	15 00	14 61
Painters.....	16 50	11 50	13 30	17 41	16 50	11 40	15 00	14 24
Engineers.....	15 00	23 00	13 00	25 00	23 79	32 00	21 75	19 83
Pattern-makers.....	10 00	12 00	.....	10 50	.....	.....	.....	16 27
Laborers.....	12 00	.....	.....	19 56	10 50	.....	.....	8 86
Apprentices.....	7 50	.....	9 00	10 00	10 50	17 25	7 50	7 13
Conductors.....	15 00	.....	4 80	9 00	.....	9 00	.....	16 33
Baggage-masters.....	9 60	.....	.....	17 00	.....	23 00	.....	11 20
Brakemen.....	9 60	.....	.....	12 30	15 50	12 00	12 00	12 36
Hours of labor per week.....	4 50 to 5 00	.....	60	50	.....	.....	.....	.....

Occupation.	Saint Louis, and Iron Mountain Railroad Company.	New York, Providence and Boston.	Rome, Watertown and Ogdensburg Railroad.	Occupation.	Saint Louis, and Iron Mountain, and Southern Railroad Company.	New York, Providence and Boston.	Rome, Watertown and Ogdensburg Railroad.
Machinists.....	\$18 00	\$16 50	\$18 00	Pattern-makers.....	\$17 00	.....	.....
Boiler-makers.....	18 00	.....	18 00	Laborers.....	10 00	\$9 00	\$9 00
Blacksmiths.....	17 00	.....	15 00	Apprentices.....	7 50	.....	.....
Car-builders.....	18 00	.....	.....	Conductors.....	21 00	.....	.....
Painters.....	14 76	.....	.....	Baggage-men.....	12 50	.....	.....
Engineers.....	21 51	.....	19 50	Brakemen.....	12 00	.....	.....
Firemen.....	12 30	.....	.....	.....	.....	.....	.....

Statement showing the average weekly wages of persons employed in the Baltimore and Ohio Railroad Company's rolling-mills at Cumberland, Md., in the year 1874.

[Hours of labor per week, 60.]

Occupation.	Wages.	Occupation.	Wages.
Puddlers.....	\$20 00	Baggymen.....	\$16 00
Puddlers' helpers.....	11 50	Dragouts.....	11 50
Heaters.....	22 00	Chargers and pull-outs.....	11 50
Heaters' helpers.....	11 00	Punchers.....	11 50
Rollers.....	11 00	Straighteners.....	19 00
Boughers.....	22 00	Engineers.....	13 50
Catchers.....	20 50	Laborers or unskilled workmen.....	9 00
Hookers.....	13 00	Sawyers.....	12 50

Table showing the average weekly wages of persons employed by railroad companies in the following States in the years 1874 and 1875.

[Hours of labor per week, 60.]

Department and occupation.	Wages paid by railroad companies in Pennsylvania, Tennessee, Iowa, and Oregon in the years 1874 and 1875.				Wages paid in railroad, locomotive, and car shops in Kansas in the year 1874.			
	Pennsylvania, 1874.	Tennessee, 1874.	Iowa, 1875.	Oregon, 1875.	Kansas City, Saint Joseph and Council Bluffs Railroad.	Atchison and Nebraska Railroad.	Missouri River, Fort Scott and Gulf Railroad.	Lawrence and Galveston Railroad.
LOCOMOTIVE DEPARTMENT.								
Machinists.....	\$12 00	\$28 00	\$15 99	\$19 50	\$16 08	\$16 20	\$16 50	\$16 95
Fire-setters.....	12 00				10 50	16 20		
Tanks.....	12 00	8 75						
Air-brakes.....	12 50							
Wipers.....	6 00	7 50	9 00	*14 00	*10 50	8 40	2 10	8 10
Water-house.....	None.		10 00	*10 00				
Stationary engineers.....	9 60	15 00	12 00	15 00		12 00	12 00	11 70
Watchmen.....	8 40	10 00	9 00	*17 50	*11 77		10 00	10 00
Oilers.....	10 00						10 20	
Laborers.....	7 00	6 00	9 00	10 50	9 00	6 60	7 50	7 50
Blacksmiths.....	14 00	22 50	15 30	21 00	17 70	13 50	16 80	19 20
Blacksmiths' helpers.....	7 00	13 30	11 10	13 50	10 60	10 80	10 50	10 50
Forgers.....	18 00							
Heaters.....	18 00		10 50					
Boiler-makers.....	12 00	24 00	15 00		13 50	16 20	17 40	15 30
Stack-makers.....	12 00		15 00					
Coppersmiths.....	14 00	15 00	18 00			15 00		
Carpenters.....	11 00	13 75	11 64				16 20	
Pattern-makers.....	12 00	24 00	16 80			None.	18 00	
CAR DEPARTMENT.								
Carpenters.....	11 50	16 50	14 88	21 00	15 40	16 20	16 20	15 37
Repairers.....	10 00	19 50	11 40	18 00	13 86	15 60	11 10	
Laborers and car-cleaners.....	7 00	6 00	9 00	10 50	9 00		7 50	7 50
Cabinet-makers.....	12 00			21 00				
Oilers.....	10 00	11 40	9 00		12 00		10 20	9 50
Machinists.....	13 00			19 50			16 50	
Locksmiths.....								
Timbers.....	11 25	19 50			12 75		15 00	
Pattern-makers.....	12 00	24 00		21 00	20 00	None.	18 00	
Blacksmiths.....	11 60	18 00	16 50	21 00			16 80	
Blacksmiths' helpers.....	6 50	11 40	9 00	13 50			10 50	
Painters.....	11 00	18 00	13 14	24 00	14 08	18 00	14 40	15 37
Gliders.....	12 00							
Upholsterers.....	11 50	18 00			18 00	None.	19 50	
Apprentices or boys.....							5 70	3 60
TRACK DEPARTMENT.								
Yard-laborers.....	6 00	6 00	7 50	15 16	8 15	6 60		6 90
Yard-section laborers.....	6 00	4 80	7 50	10 50	8 15	6 30	6 60	6 60
Construction-train.....	6 00	3 90	9 00	6 00	9 30	6 60		
Extra gang.....	6 00		9 00		9 30	6 60		
BRIDGE DEPARTMENT.								
Bridge-carpenters.....		13 50	15 00	18 00	14 65	13 50	15 30	15 30
Engineer pile-drivers.....				18 00				6 00
STATIONS.								
Station-laborers.....	9 00	5 40		12 00	9 00	8 40		
Stewards.....	None.							
Scullerymen.....	None.							
Laborers at small stations.....	8 00	5 40			9 00	10 00		
Apprentices or boys.....		7 02						
Foremen or overseers.....		24 00				45 00		

* Seven days.

† One foreman.

road companies in the fol-

ages paid in railroad, locomotive, and car shops in Kansas for the year 1874.

	Burlington Railroad.	Atchafalpa and Nebraska Railroad.	Missouri River, Fort Scott and Gulf Railroad.	Lawrence and Galveston Railroad.
08	\$16 20	\$16 50	\$16 35	
50	16 20			
50	8 40	8 10	8 10	
	12 00	12 00	11 50	
77	12 00	10 30		
00	6 00	7 50	7 50	
70	13 50	16 80	19 20	
80	10 80	10 50	10 50	
4 50	16 20	17 40	15 30	
	15 00			
	None.	16 20		
		12 00		
5 40	16 20	16 20	15 37	
8 86	15 00	11 10		
0 00		7 50	7 50	
		10 20	9 50	
		16 50		
2 75		15 00		
0 00	None.	18 00		
		16 80		
4 08	18 00	14 40	15 37	
8 00	None.	19 50		
		5 70	3 80	
8 15	6 60		6 90	
8 15	6 30	6 00	6 00	
9 30	6 60			
9 30	6 60			
4 65	13 50	15 30	15 30	
			6 00	
9 00	8 40			
9 00	10 00			
	45 00			

LABOR IN THE UNITED STATES.

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Table showing the number of persons employed and the average rate of wages per annum paid employed by the following railroad companies for the year ending June 30, 1874.

Occupation.	Cairo and Saint Louis Railroad Company.		Cairo and Vincennes Railroad Company.		Carbondale and Shawneetown Railroad Company.		Chicago and Alton Railroad Company.	
	No.	Wages.	No.	Wages.	No.	Wages.	No.	Wages.
Superintendents	4	\$750 00	2	\$949 98	1	\$500 00	4	\$2,575 00
Clerks	1	1,200 00	1	1,500 00	1	1,500 00	125	624 00
Master mechanics	9	860 40	5	1,080 00	1	1,300 00	2	1,500 00
Conductors	14	898 50	6	896 00	1	1,300 00	111	975 00
Engineers	22	542 70	8	525 00	2	500 00	139	1,008 00
Brakemen	4	474 00	4	645 00	1	500 00	232	540 00
Flagmen, switch-tenders, gate-keepers, and watchmen	14	637 30	28		2	600 00	76	455 00
Station-agents	85	562 80	25	*17 00	7	345 00	122	634 00
Section-men	51	629 60	162	11 25			1,354	327 00
Laborers	47	538 80	65				500	600 00
Other employes							1,137	696 60

Occupation.	Chicago and Illinois Southern Railroad Company.		Chicago and Iowa Railroad Company.		Chicago and Pacific Railroad Company.		Chicago, Pekin and Northwestern Railroad Company.	
	No.	Wages.	No.	Wages.	No.	Wages.	No.	Wages.
Superintendents			1	\$900 00	1	\$2,500 00		
Clerks			5	750 00	3	1,500 00		
Master mechanics			6	765 00	1	1,300 00	2	\$540 00
Conductors	1	\$960 00	10	954 00	4	700 00	2	940 00
Engineers	1	1,380 00	14	1,042 65	4	1,300 00	2	780 00
Brakemen	2	460 00	18	515 00	7	540 00	2	1,000 00
Flagmen, switch-tenders, gate-keepers, and watchmen			4	675 00	7	800 00	4	540 00
Station-agents	1	460 00	15	660 00	10	600 00	2	540 00
Section-men	6	480 00	91	440 00	40	500 00	13	450 00
Laborers	20	460 00	18	480 00	50	500 00	50	420 00
Other employes			34	501 23	20	600 00	2	540 00

Occupation.	Chicago, Rock Island and Pacific Railroad Company.		Evansville, Terre Haute and Chicago Railroad Company.		Illinois and Saint Louis Railroad and Coal Company.		Indianapolis, Bloomington & Western Railroad Company.	
	No.	Wages.	No.	Wages.	No.	Wages.	No.	Wages.
Superintendents	2	\$3,000 00					1	\$2,400 00
Clerks	131	828 72	2	\$900 00			27	635 00
Master mechanics	12	1,500 00	1	918 00	6	\$485 00	3	1,346 00
Conductors	92	825 00	4	800 00	3	1,000 00	35	900 00
Engineers	155	1,030 00	4	1,315 00	4	1,002 00	62	1,080 00
Brakemen	223	540 00	6	540 00	7	624 00	76	540 00
Flagmen, switch-tenders, gate-keepers, and watchmen	152	680 00	3	360 00			40	480 00
Station-agents	96	731 75	14	422 50			63	570 00
Section-men	904	375 00	21	481 30			421	430 00
Laborers	625	436 68	15	485 00	14	626 00	430	540 00
Other employes	1,528	600 78	34	736 40				

*Per month.

†Per day.

Table showing the number of persons employed and the average rate of wages, &c.—Continued.

Occupation.	Indianapolis and Saint Louis Railroad Company.		Lafayette, Bloomington and Mississippi Railroad Company.		Lake Shore and Michigan Southern Railroad Company.		Paris and Danville Railroad Company.	
	No.	Wages.	No.	Wages.	No.	Wages.	No.	Wages.
Superintendents	5	\$410 81	1	\$280 80	9	\$4,254 00		
Clerks	290	512 76	5	324 26	404	712 00		
Master mechanics	40	\$20 28	5	612 79	331	915 00	2	\$800 00
Conductors	54	1,173 72			467	1,021 00	2	1,200 00
Engineers	97	375 21	9	291 76	536	540 00	4	510 00
Brakemen								
Flagmen, switch-tenders, gate-keepers, and watchmen	86	461 04			591	496 00		
Station-agents	46	651 06	12	635 17	200	728 00	6	41 66
Section-men	378	342 21			4,215	413 00	20	420 00
Laborers	38	694 76	6	459 00				
Other employés	173	548 40	2	453 00	1,533	513 00	6	500 00

Occupation.	Paris and Decatur Railroad Company.		Peoria and Rock Island Railroad Company.		Quincy, Alton & Saint Louis Railroad Company.		Rockford, Rock Island and Saint Louis Railroad Company.	
	No.	Wages.	No.	Wages.	No.	Wages.	No.	Wages.
Superintendents	1	\$1,200 00	1	\$1,200 00			1	\$2,500 00
Clerks	5	720 00	6	670 00	1	\$200 00	7	\$100 to 1,800
Master mechanics	6	1,000 00	11	935 40	1	750 00	4	1,200 to 1,800
Conductors	6	840 00	6	972 00	3	1,000 00		900 to 1,000
Engineers	10	1,200 00	8	1,100 00	3	1,000 00		1,000 to 1,500
Brakemen	12	600 00	8	600 00	6	550 00		600
Flagmen, switch-tenders, gate-keepers, and watchmen	2	480 00	4	396 00	1	500 00		500 to 600
Station-agents	19	600 00	17	730 00	7	600 00		500 to 600
Section-men	110	540 00	63	404 45	35	405 00		\$1.25 per day.
Laborers	10	540 00	18	313 33				
Other employés	30	750 00	22	500 00	15	510 00		

Occupation.	Saint Louis, Alton and Terre Haute Railroad Company.		Sycamore and Cortland Railroad Company.		Western Union Railroad Company.		General average.	
	No.	Wages.	No.	Wages.	No.	Wages.	No.	Wages.
Superintendents	2	\$1,500 00			1	\$1,380 00		\$1,802 23
Clerks	3	230 00	1	\$600 00	41	691 70		735 77
Master mechanics	43	698 00			3	1,500 00		1,130 33
Conductors	7	1,115 00	1	600 00	30	868 00		906 04
Engineers	11	1,030 00	1	600 00	31	1,098 88		1,081 25
Brakemen	18	613 00	1	600 00	60	565 00		536 30
Flagmen, switch-tenders, gate-keepers, and watchmen	6	760 00	1	600 00	17	534 66		542 81
Station-agents	20	570 00	1	600 00	43	686 65		593 25
Section-men	100	336 00	6	600 00	215	416 25		404 33
Laborers	24	476 00			68	469 17		422 35
Other employés	20	534 00			168	702 60		554 30

of wages, &c.—Continued.

Shore and Michigan Southern Railroad Company.		Parks and Danville Railroad Company.	
Wages.	No.	Wages.	No.
\$2,254 00	.....	.....	.....
712 00	.....	.....	.....
1,860 00	.....	.....	.....
915 00	2	800 00	.....
1,021 00	2	1,200 00	.....
540 00	4	540 00	.....
496 00	.....	.....	.....
728 00	6	41 66	.....
413 00	20	420 00	.....
543 00	6	500 00	.....

y, Alton and St. Louis Railroad Company.		Rockford, Rock Island and Saint Louis Railroad Company.	
Wages.	No.	Wages.	No.
.....	1	\$2,500	.....
800 00	7	\$100 to 1,800	.....
750 00	4	1,800 to 1,800	.....
1,000 00	.....	1,000 to 1,000	.....
1,000 00	.....	1,000 to 1,500	.....
550 00	.....	600	.....
500 00	.....	500 to 600	.....
600 00	.....	500 to 600	.....
405 00	.....	\$1.25 per day.	.....
540 00	.....	.....	.....

Western Union Railroad Company.		General average.	
Wages.	No.	Wages.	No.
.....
\$1,320 00	\$1,202 23	.....
691 70	735 7	.....
1,500 00	1,130 34	.....
808 00	906 04	.....
1,098 88	1,051 22	.....
565 00	536 50	.....
534 60	542 24	.....
650 05	503 25
416 85	404 33
469 17	482 35
702 60	554 30

LABOR IN THE UNITED STATES.

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Table showing the average weekly wages or earnings of railroad-employees in the cities of Bangor, Me., and Chicago, Ill.

Occupation.	Bangor, Me.	Chicago, Ill.	Occupation.	Bangor, Me.	Chicago, Ill.
Locomotive department:			Car department—Continued.		
Machinists.....	\$12 00	\$13 25	Machinists.....	.....	.....
Fire-setters.....	.....	14 50	Locksmiths.....	\$12 00	\$13 95
Men at tanks.....	.....	14 25	Timbers.....	.....	16 32
Men at air-brakes.....	.....	8 40	Pattern-makers.....	.....	14 60
Wipers.....	7 50	7 50	Blacksmiths.....	.....	14 85
Men at water-house.....	.....	10 50	Helpers.....	13 50	15 00
Stationary engineers.....	10 30	11 25	Painters.....	.....	8 55
Watchmen.....	12 00	8 25	Gilders.....	12 75	13 20
Oilers.....	.....	9 00	Upholsters.....	10 50	18 50
Laborers.....	.....	7 50	.....	.....	16 04
Blacksmiths.....	13 50	16 50	Track department:		
Helpers.....	.....	9 45	Yard-laborers.....	7 50	7 50
Forgers.....	.....	24 00	Yard section-laborers.....	7 50	7 50
Heaters.....	.....	18 00	Construction-train.....	.....	8 25
Boiler-makers.....	.....	14 70	Extra gang.....	.....	8 25
Stack-makers.....	.....	12 47	Bridge department:		
Coppersmiths.....	.....	13 50	Bridge-carpenters.....	13 50	12 00
Carpenters.....	10 50	13 50	Engineer pile-drivers.....	.....	15 00
Pattern-makers.....	.....	11 40	Stations:		
Brass-molders.....	.....	15 30	Station-laborers.....	9 00	9 00
Car department:			Stewards.....	.....	10 50
Carpenters.....	10 50	12 00	Seamen.....	.....	10 50
Repairs.....	.....	12 45	Laborers at small stations.....	7 50	8 25
Laborers.....	.....	8 40	Station-agents.....	19 00	.....
Cabinet-makers.....	.....	11 25	.....	.....	.....
Oilers.....	.....	11 40	.....	.....	.....

IRON-FOUNDRY AND MACHINE-SHOP.

Table showing the average weekly wages or earnings of persons employed in an iron-foundry and machine-shop at Salt Lake City, Utah, in the year 1875.

[All persons employed in this factory are paid by the hour, and work from 58 to 60 hours per week.]

Occupation.	Wages.	Articles produced.
Iron-molders.....	\$18 00, \$21 00 to \$24 00	General machinery; smelting-furnace castings; iron-work for mines; any machine-work that parties are willing to pay for at about 25 per cent. above Eastern cost and freight.
Machinists. { Ordinary.....	21 00	
{ Interior.....	18 00	
Blacksmiths.....	15 00	
Helpers.....	21 00	
Firemen.....	12 00	
Pattern-makers and carpenters.....	22 50	
Apprentices.....	15 00, 18 00 to 21 00	
.....	3 00 to 12 00	
.....	

FURNITURE-MANUFACTURE.

Table showing the average weekly wages or earnings of persons employed in the manufacture of furniture in Vermont and in Utah in the year 1874.

Occupation.	Vermont.	Utah.	Occupation.	Vermont.	Utah.
Cabinet-makers.....	\$15 00	\$18 00	Varnishers.....	\$15 00	\$18 00
Chair-makers.....	.....	18 00	Scroll-sawyers.....	18 00	18 00
Carvers.....	18 00	18 00	Laborers.....	12 00	13 00
Turners.....	16 00	18 00	Apprentices.....	7 50	10 00
Painters.....	16 00	18 00	Clerks.....	.....	25 00
Upholsters.....	18 00	18 00	.....	.....	.....

PAPER-MANUFACTURING.

Table showing the average weekly wages of persons employed in paper-mills in the following towns in the year 1873.

Occupation.	Bellast, Me., (working 72 hours per week.)	New Haven, Conn., (working 72 hours per week.)	Dorland's Mills, Pa., (working 40 hours per week.)	Niagara Falls, N. Y., (working 60 to 72 hours per week.)	Cuyahoga Falls, Ohio.	Dayton, Ohio, (working 60 hrs. per week.)	Average.
Machine-tenders	\$18 00	\$18 00	\$12 00	.....	\$11 00	\$15 00	\$14 80
Assistant tenders	12 00	.....	.....	.....	.....	.....	12 00
Machinists	18 00	15 00	.....	\$15 00	.....	.....	15 00
Engineers	12 00	15 00	12 00	12 00	15 00	.....	13 20
Foremen .....	.....	.....	.....	15 00	15 00	25 00	18 33
Cutters	10 50	.....	.....	10 00	.....	.....	10 25
Bleachers	10 50	.....	.....	10 00	.....	.....	10 25
Firemen	10 00	.....	.....	12 00	.....	.....	11 00
Laborers	9 00	10 50	6 00	9 00	10 00	12 00	9 42
Boys	7 00	.....	.....	6 00	5 00	5 00	5 75
Rag-cutters .....	.....	5 00	.....	.....	.....	.....	5 00
Rag-sorters, (women and girls) .....	.....	4 75	.....	5 00	5 00	5 00	4 94

PIANO-FORTE MANUFACTURE.

Table showing the average weekly wages or earnings of persons employed in piano-forte manufactories in Boston, Mass., and St. Louis, Mo.

[Hours of labor per week, 60.]

Occupation.	Boston, Mass.	St. Louis, Mo.	Occupation.	Boston, Mass.	St. Louis, Mo.
Case-makers	\$20 00	\$25 00	Gilders	\$19 00	\$20 00
Action-makers	20 00	24 00	Regulators	24 00	30 00
Key-makers	22 00	30 00	Packers	12 00	14 00
Tuners of reeds	28 00	31 00	Chisawyers	18 00	20 00
Fly-finishers	22 00	26 00	Engineers	18 00	20 00
Varnishers	13 00	18 00	Laborers	10 00	12 00
Reed-makers	20 00	25 00	Apprentices	6 00	5 00
Reed-board makers	19 00	22 00	Foremen	40 00	40 00
Carvers	24 00	30 00	Teamsters	13 00	15 00
Trimming-makers	18 00	30 00	Clerks	14 00	18 00
Blacksmiths	18 00	19 00	Book-keepers	14 00	18 00

per-mills in the following

60 to 72 hours per week.)	Cuyahoga Falls, Ohio.	Dayton, Ohio (reeling 60 hrs. per week.)	Average.
.....	\$11 00	\$15 00	\$14 80
.....	.....	.....	12 00
.....	.....	.....	16 40
.....	15 00	.....	13 20
.....	.....	25 00	18 33
.....	.....	.....	10 25
.....	.....	.....	10 25
.....	.....	.....	11 00
.....	10 00	12 00	9 42
.....	5 00	5 00	5 45
.....	5 00	5 00	4 94

employed in piano-forte manu-
Mo.

on.	Boston, Mass.	St. Louis, Mo.
.....	\$19 00	\$20 00
.....	24 00	30 00
.....	12 00	14 00
.....	18 00	20 00
.....	18 00	20 00
.....	10 00	12 00
.....	6 00	5 00
.....	40 00	40 00
.....	13 00	15 00
.....	14 00	18 00
.....	14 00	18 00

THE SILK INDUSTRY IN AMERICA.

As the rapid growth and great importance of the silk industry seem to require that some account be given of its rise and development in the United States, the following article, prepared by Franklin Allen, esquire, secretary of the Silk Association of America, is presented:

Silk is of Chinese origin; and the silk-worm is indigenous to China and Japan, where it doubtless fed and spun for ages unlearned by man. The annals of the former country attribute its discovery to the Emperor Fan Hsi, who is said to have first employed silk in the manufacture of a musical instrument of his own invention 3,400 years previous to the Christian era. The Empress Si Ling Chi, it is alleged, invented silk tissues 2650 years B. C.; and so important were her services considered, that she was placed among the Chinese divinities, and sacrifices annually made to her memory. At a very early day the Chinese had a large traffic in silk with Persia, Greece, and Arabia. It is about fourteen centuries since the production of silk was originally introduced into Europe. A few silk-worm eggs were concealed in the hollow of a bamboo by two monks and brought to Constantinople; but its cultivation was at first slow, as the Chinese were forbidden to reveal the secrets of its production under the penalty of death.

The principal seats of the silk industry in this country are Hartford, Manchester, and Willimantic, Conn.; Paterson, N. J.; New York City; and Philadelphia, Pa. There are also factories at Mansfield, Middletown, Rockville, Watertown, and Norwich, Conn.; Florence, Northampton, Holyoke, and Canton, Mass.; Yonkers, on the Hudson, Oneida, and Saugquoit, near Utica, N. Y.; College Point, Williamsburgh, and Brooklyn, Long Island; Scranton, Pa.; Antrim, N. H.; Brattleborough, Vt.; Williamsburgh, Kans.; San Francisco, Cal.; and in several other localities.

Within the last thirty-five years there have been many vicissitudes attending the silk manufacture in the United States, commencing with the disastrous and mad speculation in mulberry-trees and silk cocoons in 1830 and 1840. But the domestic silk trade of America is now sufficiently established to afford every encouragement for its expansion and greatly-increased prosperity in the future. We already find that its have the highest authority for stating that there are now employed in its production and distribution more hands than were engaged in the same line of trade in France after two hundred years of its existence; while its accelerated progress here is far in advance of that made in any European country for a corresponding length of time. The statistics also show that the importations of China silk into the United States are larger than those of Great Britain for the ten years ending with 1845, and fully equal to those of the same country for the ten years ending with 1850.

The State of Connecticut early became identified with the silk trade. Barber's History of Connecticut (published in 1836) contains the following, under the head of "Mansfield?":

"A larger quantity of silk is manufactured here than at any other place in the United States. This branch of industry was introduced into this country by Dr. Aspinwall, of this place, about 1766, who established the raising of silk-worms in New Haven, Long Island, and Philadelphia. At this period (1766) half an ounce of mulberry-seed was sent to every parish in Connecticut, and the legislature for a time offered a bounty on mulberry-trees and raw silk. Two hundred and sixty-five pounds were raised in 1793, and the quantity has been increasing ever since. In 1830, 3,200 pounds were raised. Two small silk-factories have been established in this town by an English manufacturer. The double wheel-head was invented by Mr. Horace Hanks, about the year 1800, for the purpose of spinning silk. It was first used in the family of Mr. Wright. The first silk reeled from cocoons was the work of the wife of the Rev. Mr. Martin, who had been in France, and had seen the operation in that country."

The growth of silk-culture in Mansfield, as indicated above, steadily rising from 265 pounds, in 1793, to 3,200 pounds in a period of thirty-seven years, was continuous until 1843-44, when a blight of the mulberry-trees and other concurrent misfortunes led to an abandonment of silk-culture, not only in that locality, but throughout the country. The three thousand pounds of raw silk which were then (1830) annually produced in Mansfield could only be disposed of when converted by hand-manufacture into sewing-silk, and for the most part had to be offered in barter. It was hoped that by means of machinery a sewing-silk could be made equal to the Italian, and, like it, capable of being sold for cash instead of being exchanged for goods at irregular valuations. When the machinery was put in motion, about 1831, the serious difficulties of manufacture soon

became manifest. The machinery was very crude, and a Yankee "throwster" of seventeen to-day would scarcely recognize it as bearing any relation to the work. It was capable of doing all that had been claimed for it, but it proved inadequate for the manufacture of American silk, as that was then reeled.

Among those who closely observed the principles of the machinery employed in the silk-mill was Nathan Rixford. He had just established himself as a builder of machinery at Mansfield Hollow. Scarcely was the machinery of the mill complete, when this young man projected considerable improvements upon it, and began construction accordingly. Doubling and winding frames and a spinner made upon his plans were a notable advance on the English machinery of Golding, and many marked features then introduced by Mr. Rixford are retained among the improvements of the silk manufacture of to-day. His success attracted attention. He soon began to receive orders from different parts of the country, and for several years was the principal builder of silk machinery. Prominent among the earlier silk culturists and manufacturers in the New England States were Jonathan H. Cobb, of Dedham, Mass.; the Nantucket Silk Company, of Nantucket, Mass.; Samuel Whitmarsh, of Northampton, Mass.; and Cheney Brothers, of Manchester, Conn. Mr. Whitmarsh and others introduced new varieties of mulberry-trees, prominent among which was the much-valued *Multicaulis*, and of less celebrity, though more value, the Alpine and the Brussia, the two latter being really worthy of cultivation in this country, while the former, by its utter and wide-spread failure, after being absurdly overrated, brought loss and disgrace on the entire silk industry of the United States.

This industry in America began, as we have seen, with home growth and a home manufacture; the latter originally depended upon the native product, but gained sufficient foothold to survive the extinction of American silk culture.

The yearly value of silk goods now made in this country is over \$20,000,000, and there is a constant improvement in style, quality, and mode of finish. Prominent among the leading manufacturers may be mentioned Messrs. Cheney Brothers, at South Manchester, Conn., who, though destruction overtook their earlier efforts in raw-silk culture, have been eminently successful in spinning, weaving, dyeing, and all the branches of the manufacture.

The silk manufacture was early undertaken in other States; by Mr. William H. Dorstmann, at Philadelphia, in 1815; by Mr. B. B. Tilt, at Boston, in 1834; by the Nonotuck Silk Company, at Florence, in 1834; by Messrs. Murray & Ryle, Paterson, N. J., in 1840; by Mr. Hirsch Heinemann, at New York, in 1842; by Mr. E. De Boisson, at Williamsburgh, Kans., in 1869, and in San Francisco, by the California Silk Manufacturing Company, in 1870, for the manufacture of tram, organzine, fringe-silk, sewing-silk, and twist; and in 1871, by the Union Pacific Silk Manufacturing Company, who have undertaken to establish silk-weaving on the Pacific coast.

An interesting feature of the latter enterprise is the proposed employment of Chinese help, for the supply of which the company has made advantageous contracts. As the company presents this feature, and the cheapness of such labor, as one of its conditions of success, the employment of the Chinese in American silk manufacture may be said to be inaugurated. Recent reports state that their labor proves to be very satisfactory, that they are very quick to learn, and that already many are able to take care of their looms, and are in fact equal to the best white employes.

The importance of the silk manufacture in the single item of affording healthy, clean, and remunerative employment to women and girls is attested in all the States where the manufacture is carried on. While a few persons may be startled by the introduction of Chinese cheap labor in the silk industry as an element of financial success, because the rewards paid to labor form the largest item in the manufacture of textile fabrics, we believe that fears on this subject are groundless. It is not unreasonable to expect that before long the higher wages of the Caucasian will affect rather than be affected by the rate paid to the Mongolian. At least the experiment is interesting, and the result will be watched with attention.

The representative houses now engaged in the silk business in this country are classified as follows, namely:

Broad-silk weaving.—Cheney Brothers, South Manchester and Hartford, Conn.; W. A. Machie, West Hoboken, N. J.; P. G. Givernaud & Sons, West Hoboken, N. J.; Herman Simon, Union, N. J.; the Phoenix Silk Manufacturing Company, B. B. Tilt, president, Paterson, N. J.; Hamill & Booth, Paterson, N. J.; John Ryle & Sons, Paterson, N. J.; Frederick Bâaré, Paterson, N. J.; C. Chalfonjon, Hudson City, N. J., and John S. Stearns & Co., East Forty-second street, New York.

Ribbons, &c.—William Strange & Co., Paterson, N. J.; Dexter, Lambert & Co., Paterson, N. J.; A. Solchac & Sons, Paterson, N. J.; Pelgram & Meyer, Paterson, N. J.; Werner Itschner & Co., Philadelphia; Silbermann, Heinemann & Co., New York; College Point Silk Mills, Long Island; Hobbey Brothers, Williamsburgh, L. I., and the Norwich Loom Company, Norwich, Conn.

Thrown-silks, (silk threads.)—Besides many of the above firms who are throwsters as well as broad-silk weavers, the following named make a specialty of the manufacture of tram and organzine: George B. Skinner & Co., Yonkers on the Hudson, N. Y.;

or "throwster" of seven-
on to the work. It was
adequate for the man-

chinery employed in the
self as a builder of ma-
the mill complete, when
and began construction
de upon his plans were a
ny marked features then
ents of the silk manufac-
an to receive orders from
principal builder of silk
and manufacturers in the
Mass.; the Nantucket Silk
orthampton, Mass.; and
others introduced new
anch-vanted *Multicaulis*,
e Brussa, the two latter
former, by its utter and
loss and disgrace on the

ome growth and a home
product, but gained suffi-
ere.

is over \$20,000,000, and
le of finish. Prominent
srs. Cheney Brothers, at
their earlier efforts in raw-
ving, dyeing, and all the

ates; by Mr. William H.
Boston, in 1834; by the
urray & Ryle, Paterson,
1812; by Mr. E. De Bois-
y, by the California Silk
m, organize, fringe-silk,
ilk Manufacturing Com-
Pacifie coast.

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advantageous contracts.
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merican silk manufacture
their labor proves to be
at already many are able
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ntested in all the States
may be startled by the in-
element of financial suc-
m in the manufacture of
dness. It is not unreason-
easian will affect inter-
t the experiment is inter-

s in this country are clas-

and Hartford, Conn.; W. A.
Hoboken, N. J.; Herman
ary, B. B. Tipton, president,
& Sons, Paterson, N. J.;
City, N. J., and John N.

acter, Lambert & Co., Pat-
& Meyer, Paterson, N. J.;
mann & Co., New York;
Hainsburgh, L. L., and the

irms who are throwsters as
specially of the manufacture
s on the Hudson, N. Y.;

Wm. Macfarlane, and Wm. H. Copeutt & Co., Yonkers on the Hudson, N. Y.; D. A. Barnes; P. & J. Bannagan, and J. H. Booth & Co., Paterson, N. J.; the Scranton Silk Company, Scranton, Pa.; the Saquoit Silk Manufacturing Company, Saquoit, near Utica, N. Y., and Philadelphia, Pa.

Sewing-silks and machine-tricot.—The Nonotuck Silk Company, Florence, Mass.; Warner & Lathrop, Northampton, Mass.; William Skinner, Holyoke, Mass.; Seavey, Foster & Bowman, Canton, Mass.; Belding Brothers, Rockville, Conn.; O. S. Chalfee & Waring Company, Meriden, Conn.; Macfarlane Brothers, Mansfield, Conn.; the Holland Manufacturing Co.; J. H. Hayden, Windsor Locks, Conn.; P. W. Turner & Co., Turnerville, Conn.; the Heminway Silk Company, Watertown, Conn.; the Excelsior Manufacturing Company, Paterson, N. J.; John Dunlop, Paterson, N. J.; E. J. Watson & Co., Paterson, N. J.; John Lovatt's Sons, Tarrytown, N. Y.; the Singer Manufacturing Company, Newark, N. J.; the Oneida Community, Connecticut and New York; Messrs. Aub, Hackenbush & Co., B. Hooley & Son, Philadelphia, Pa., and the California Silk Manufacturing Company, San Francisco, Cal.

Braids and bindings.—The Dale Manufacturing Company, Paterson, N. J., and the Novelty Weaving and Braiding Company, Hartford, Conn.

Patent sewing-silk reels.—S. M. Meyenberg, and Prall Brothers, Paterson, N. J.

Ladies' dress-trimmings.—Louis Franke, New York; Bernstein & Mack, New York; J. C. Graham, Philadelphia; Hensel, Colladay & Co., Philadelphia, and M. W. Lipper & Co., Philadelphia. Prominent in this department also is the house of William H. Horstmann & Sons, Philadelphia, who add coach-laces, military goods, and regalia to their varied assortment of silk manufactures.

Gauze, blonde, and Brussels laces.—A. G. Jennings, Nottingham Laco Works, Park avenue, Brooklyn.

The great middle classes are the patrons of these manufactures, and the time is not far distant when domestic dress silks will be in all respects so perfect in material and color as to come in direct competition with the most finished and costly productions of the looms of Brussels, Lyons, and Paris. In the line of twills and fancy silks, ribbons, sewing-silks, dress-trimmings, and bindings, our manufacturers have already attained deserved distinction; and, in respect to material and finish, these goods will compare favorably with the best imported.

On this point a speaker at a recent banquet of the Silk Association of America said:

"When our countrymen learn that silks are being manufactured in their midst to the value of from \$16,000,000 to \$20,000,000 every year, they want to give them a trial; and that gentlemen, is all we ask. We do not ask our neighbors to buy inferior silks because they have been told they were not made abroad. And, in my judgment, nothing can so further the interests of this industry as to publish far and wide throughout the land the figures representing the extent to which silk goods of American manufacture are actually consumed."

The silk trade of America has suffered for many years from the overimportation of foreign goods; but people have slowly been made aware of the fact that the cheap and inferior silks of European production are very heavily weighted and adulterated, and they are now supplanting them with the rich and handsome products of our own looms. The rapid strides we have made in supplying our home requirements are seen by a comparison of the value of product and the amount of capital invested in this business in 1869 and 1871. In the former year, the capital was reported at \$2,926,980, which had increased in the succeeding fourteen years to \$14,145,392; amount of wages paid to employes, \$1,050,224, against \$417,041; number of operatives, 5,435 for the former year, and 17,310 for the latter; while the value of product was \$6,507,771 in 1869, to be compared with \$19,027,482 at the more recent date.

The total imports of raw-silk in all the ports of the United States were, in the fiscal year ending June 30, 1864, 374,973 pounds; June 30, 1873, 1,159,420 pounds; June 30, 1875, 1,101,681 pounds.

The total imports of foreign silks were, in the fiscal year ending June 30, 1860, foreign gold-cost, \$33,065,820; June 30, 1873, foreign gold-cost, \$29,990,935; June 30, 1875, foreign gold-cost, \$24,380,916.

The American manufacturers have declared their utter independence of foreign makers, keeping their own designers and cutting their own cards for Jacquard patterns. The Jacquard process was invented years ago, by Joseph Marie Jacquard, and, after superseding hand labor in the manufacture of figured goods, is now doing its works and wonders on both sides of the Atlantic, being now in extensive use among our own manufacturers. The dyeing of silk is a process requiring the greatest care, in connection with both theoretic and practical skill. Great progress has been made in this art in the past few years. The following firms and individuals make a special business of dyeing silk, in addition to the chemists and dyers attached to the principal silk establishments: C. Grippio, Jacob Weidman, Morlot & Stettheimer, and See & Shean, Paterson, N. J.; Randolph Klauer, and Wm. Derbyshire, Philadelphia, Pa.; Jas. Heidenreich, New York.

A great difficulty has long been experienced by importers and manufacturers by reason of the deterioration in the quality and irregularity in the size of the raw material produced in China and other countries. This evil has led the Silk Association of America to consider the expediency of establishing, at New York, a silk-conditioning house, after the manner of those now in successful operation at Lyons and St. Etienne, France. More than half the supply of silk is obtained from North China, and sufficient care should be given to the assortment of sizes, and to the protection afforded by a conditioning process in testing the true weight of silk, which is often fictitiously increased by the absorption of moisture from the atmosphere or from reservoirs of water near which silk may be conveniently placed or stored.

To establish a safeguard in this respect belongs to the province of what is termed "conditioning." The utility of the proposed measure is confirmed by reference to tabular statements of the average result of silk-conditioning for a period covering several years, as received from some of the principal silk markets of Europe. By these reports, we find that between the worst and best samples of raw silk, when properly tested, there is a difference of 3 per cent. in the moisture contained, and that the worst sample of organzine conditioned contained six per cent. more moisture than the best.

Looking back to so many triumphs in the past, it is but fitting that we should take into consideration the establishing of a permanent museum of art and design, like the India House in London. Here might be gathered specimens of manufactured goods of great variety from the varied climes in the lands of the Orient and the Occident, and here might be found scope and verge sufficient to stimulate the hopes and aims of the most ambitious. To imitate these treasures of inventive industry should be the true passport to position and hereditary fame.

SILK MANUFACTURES.

Table showing the rates of weekly wages paid the various class of operatives employed in the silk-industry in the following States in the year 1873.

Occupation.	New York.	New Jersey.	Pennsylvania.	Connecticut.	Massachusetts.	California.
FEMALES.						
Hard silk:						
Bunters.....	\$5 50 to \$7 50	\$5 00 to \$7 00	\$5 50 to \$6 50	\$6 50	\$7 00	\$9 00
Winders.....	5 00 to 7 00	4 50 to 6 00	5 00 to 6 00	\$6 00 to 7 00	6 50	4 50
Doublers.....	5 00 to 7 00	4 50 to 6 00	5 50 to 6 50	6 00 to 7 00	6 50	5 40
Cleaners.....	3 00 to 4 00	2 00 to 3 00	2 50 to 3 50	3 00 to 5 00	5 00	1 50
Reelers.....	4 00 to 6 00	5 00 to 7 00	4 50 to 5 50	6 00 to 7 00	6 50	5 40
Soft silk:						
Winders.....	7 00 to 10 00	6 50 to 8 50	6 00 to 6 50	6 00 to 7 00	\$6 50 to 7 00	6 60
Doublers.....	6 00 to 8 00	5 00 to 7 00	5 50 to 6 50	6 00	6 50	5 00
Cleaners.....	3 00 to 4 00	2 00 to 3 00	2 50 to 3 50	3 00 to 5 00	5 00	1 50
Quill-fillers.....	4 00 to 5 00	3 00 to 5 00	3 50 to 5 00	5 00	4 00 to 5 00	5 40
Spoolers.....	7 00 to 8 00	7 00 to 8 00	6 50 to 7 50	6 50	7 00	5 00
Weavers.....	7 50 to 10 00	7 00 to 12 00	7 00 to 8 00	8 00	7 50 to 8 50	.....
Tassel-makers.....	7 50	.....	.....	.....	.....	.....
MALES.						
Hard silk:						
Mill men and boys.....	7 00 to 9 00	5 75 to 8 00	6 00 to 7 50	6 00 to 12 00	10 00 to 11 00	6 60
Cleaners.....	3 00 to 4 00	2 00 to 3 00	2 50 to 3 50	3 00 to 5 00	5 00	1 50
Weavers.....	12 00 to 16 00	12 00 to 15 00	13 00 to 15 00	12 00 to 18 00	.....	24 00
Dyers.....	15 00 to 18 00	12 00 to 15 00	12 00 to 15 00	12 00 to 18 00	16 00 to 25 00	.....
Stringers.....	12 00 to 15 00	13 00 to 16 00	12 00 to 15 00	12 00 to 15 00	15 00	\$12 00 to 16 00
Laborers.....	10 00 to 12 00	9 00 to 10 00	8 00 to 10 00	9 00 to 10 00	10 00	.....
Lace-machine men.....	12 00 to 30 00	.....	.....	.....	.....	.....

NOTE BY THE SECRETARY.—The rates of wages above given are the average of returns received from a number of silk manufacturers in the several States. The returns were received in the spring of the year 1874, and related to the year 1873, during the last four months of which the average rewards of labor were lowered by the consequences of the commercial panic commencing in September of that year.

The rates given may, therefore, be considered the standard of wages earned by the silk operatives in America, so far as they can be expressed in a table of this character.

* In many instances operatives will earn much more than the above rates; especially is this the case with soft-silk winders, weavers, and reavers who work by the piece or by the pound. The wages for these will vary according to the skill of the operative and the quality of silk employed, frequently running as high as \$12 per week for soft-silk winders, and \$20 for male weavers.

PRINTING-OFFICES.

Table showing the rates of weekly earnings, also the price per 1,000 ems, paid to compositors in printing-offices in the following cities in the year 1873.

Cities.	Weekly wages.	Per 1,000 ems—				Cities.	Weekly wages.	Per 1,000 ems—			
		On book-wk.	On morning papers.	On evening papers.				On book-wk.	On morning papers.	On evening papers.	
Albany, N. Y.	Dollars.	Cents.	Cents.	Cents.		Milwaukee, Wis.	Dollars.	Cents.	Cents.	Cents.	
Annapolis, Md.	18	50	(a)	(b)		Mobile, Ala.	15 to 18	.....	40	35	
Baltimore, Md.	15	50	.....	.....		Montgomery, Ala.	21	.....	60	60	
Boston, Mass.	18	65	50	50		Nashville, Tenn.	22	45	40	40	
Buffalo, N. Y.	15 to 20	45	45	40		Newark, N. J.	20	50	50	.....
Cambridge, Mass.	15	40	38	35		New Orleans, La.	18	.....	45	40	
Charleston, S. C.	18	d15	.....	.....		New York, N. Y.	20	.....	50	50	
Chicago, Ill.	20	50	50	50		Philadelphia, Pa.	20	50	50	45	
Cincinnati, Ohio.	21	50	47	42		Pittsburgh, Pa.	18	50	50	48	
Cleveland, Ohio.	21	.....	45	42		Portland, Me.	15	.....	35	30	
Columbia, S. C.	15	60	40	37		Providence, R. I.	14 to 18	.....	35	30	
Columbus, Ohio.	16	.....	50	50		Richmond, Va.	11	33	42	38	
Dayton, Ohio.	16	.....	40	37		Rochester, N. Y.	18	50	50	50	
Denver, Colo.	25	55	55	50		Salt Lake City, Utah.	14 to 18	.....	50	50	
Des Moines, Iowa.	15	35	35	35		San Francisco, Cal.	21	50	55	50	
Detroit, Mich.	16	40	40	35		Savannah, Ga.	30	60	60	60	
Harrisburgh, Pa.	15	.....	35	35		Seranton, Pa.	.....	.....	50	50	
Hartford, Conn.	18 to 20	40	45	40		Saint Louis, Mo.	15	.....	35	33	
Indianapolis, Ind.	18	.....	45	40		Syracuse, N. Y.	15	45	45	45	
Jackson, Miss.	27	.....	65	65		Topeka, Kans.	20	.....	35	32	
Kansas City, Mo.	18	.....	45	45		Troy, N. Y.	19	.....	40	40	
Little Rock, Ark.	25	60	60	50		Waco, Tex.	18	.....	45	40	
Louisville, Ky.	21	.....	50	50		Washington, D. C.	14	38	40	36	
Memphis, Tenn.	25	.....	60	60		Wilmington, Del.	21	60	60	60	
							12 to 18	35	35	35	

a \$18 per week.

b \$17 per week.

c 50 cents for reprint.

d 43 cents for reprint.

e 37½ cents for reprint. f 47 cents for reprint. g 4c cents for reprint.

* Gold prices.

operatives employed in the 1873.

Masachu- setts.	California.
4 00	\$9 00
6 50	4 80
6 50	5 40
5 00	1 80
6 50	5 40
\$6 50 to 7 00	6 00
6 50	.....
5 00	1 80
4 00 to 5 00	5 40
7 00	.....
7 50 to 8 50	.....
10 00 to 11 00	6 00
5 00	1 80
10 00 to 25 00	24 00
15 00	\$12 00 to 18 00
10 00	.....

age of returns received from received in the spring of the which the average rewards of ing in September of that year. ened by the silk operatives in

as, especially is this the case by the pound. The wages for of silk employed, frequently eavers.

IV.—EXPENSES

COST OF PROVISIONS, GROCERIES,

Table showing the average retail prices of provisions, groceries, and other leading articles of States, in the respective years

Articles.	Maine.		New Hampshire.			Vermont.		
	1867.	1869.	1867.	1869.	1871.	1867.	1869.	1871.
PROVISIONS.								
Flour, wheat, superfine.....per bbl	\$13 35	\$9 15	\$13 10	\$9 32	\$7 17	\$13 25	\$10 12	\$8 06
Flour, wheat, extra family.....do..	13 10	9 40	14 40	9 41	8 75	13 00	9 75	7 67
Flour, rye.....do..	7 00	6 33	8 50	7 30	5 77	.....	7 00	5 87
Corn-meal.....do..	3 04	2 38	3 52	2 91	3 92	6 50	5 20	3 25
Beef, fresh, roasting-pieces.....per lb.	15	14	20	20	16	20	18	14
Beef, fresh, soup-pieces.....do..	06	06	07	08	07	11	13	07
Beef, fresh, rump-steaks.....do..	21	23	26	21	20	20	20	16
Beef, corned.....do..	15	13	15	15	10	13	11	10
Veal, fore quarters.....do..	11	10	13	13	11	13	10	10
Veal, hind quarters.....do..	12	11	18	17	15	16	12	12
Veal, cutlets.....do..	15	15	22	22	20	20	20	16
Mutton, fore quarters.....do..	11	09	12	13	11	15	13	13
Mutton, legs.....do..	12	11	18	17	16	16	15	16
Mutton, chops.....do..	13	12	19	19	17	20	14	19
Pork, fresh.....do..	16	16	17	18	14	20	16	13
Pork, corned and salted.....do..	19	22	19	21	14	22	23	11
Pork, bacon.....do..	20	22	20	22	14	21	21	16
Pork, hams, smoked.....do..	20	21	21	23	16	21	21	16
Pork, shoulders.....do..	16	18	17	17	13	18	17	13
Pork, sausages.....do..	21	19	19	21	16	25	25	16
Lard.....do..	19	24	21	25	16	22	25	18
Cod-fish, dry.....do..	07	08	09	09	07	09	09	08
Mackerel, pickled.....do..	13	13	13	14	11	15	16	10
Butter.....do..	37	43	38	41	37	46	42	32
Cheese.....do..	19	21	18	20	18	19	18	17
Potatoes.....per bush	75	54	84	67	67	62	55	50
Rice.....per lb.	13	13	11	13	10	15	13	11
Beans.....per qt	14	12	15	14	11	11	13	10
Milk.....do..	07	07	07	07	04	07	07	04
Eggs.....per doz.	27	28	30	31	31	25	27	27
GROCERIES, ETC.								
Tea, Oolong or good black.....per lb	1 06	1 00	1 30	1 18	77	1 40	1 28	1 37
Coffee, Rio, green.....do..	30	27	32	30	32	29	30	27
Coffee, Rio, roasted.....do..	37	34	41	40	36	39	40	34
Sugar, good brown.....do..	15	15	14	15	09	14	14	09
Sugar, yellow C.....do..	15	15	15	15	09	15	15	10
Sugar, coffee B.....do..	16	17	16	17	11	18	17	11
Molasses, New Orleans.....per gall.	90	93	1 00	88	86	1 00	1 07	90
Molasses, Porto Rico.....do..	79	84	90	89	70	84	84	71
Sirup.....do..	1 00	1 00	1 28	1 15	83	1 25	1 16	87
Soap, common.....per lb.	14	12	16	12	08	13	13	08
Starch.....do..	17	16	16	18	12	1	15	12
Fuel, coal.....per ton	9 50	11 20	10 29	11 33	10 50	15 00	11 75	6 77
Fuel, wood, hard.....per cord	5 55	6 00	6 90	7 35	6 22	5 06	5 50	6 09
Fuel, pine, wood.....do..	3 15	3 15	4 41	4 81	3 89	4 00	4 00	4 75
Oil, coal.....per gall.	66	40	61	46	22	60	48	17
DOMESTIC DRY-GOODS, ETC.								
Shirtings, brown, 4-4, standard quality.....per yd	17	17	18	18	14	17	18	10
Shirtings, bleached, 4-4, standard quality.....per yd	17	17	20	20	14	16	18	13
Sheetings, brown, 9-8, standard quality.....per yd	16	16	19	19	13	12	17	13
Sheetings, bleached, 9-8, standard quality.....per yd	20	21	22	21	15	22	25	16
Cotton, flannel.....do..	25	25	24	24	17	25	25	17
Ticking, good quality.....do..	33	33	37	36	29	39	39	29
Prints, Merrimac.....do..	14	14	16	15	10	14	15	10
Mouseline de laine.....do..	20	21	24	23	22	21	22	20
Stimets, medium quality.....do..	71	50	77	65	93	58	58	72
Boots, men's heavy.....per pair	5 00	4 83	4 85	4 37	4 34	5 00	4 50	3 92
HOUSE-RENT.								
Four-roomed tenements.....per mo	4 50	4 45	4 25	5 30	6 85	4 00	5 00	9 52
Six-roomed tenements.....do..	6 40	6 45	7 25	7 70	9 52	6 50	7 60	10 33
BOARD.								
For men.....per week	3 70	3 72	4 00	3 80	4 02	4 66	4 50	4 60
For women.....do..	2 50	2 70	3 06	2 85	2 91	3 00	2 82	3 33

IV.—EXPENSES

VISIONS, GROCERIES,

and other leading articles of
States, in the respective years

	Vermont.			
	1867.	1869.	1874.	
17	\$12 95	\$10 12	\$8 96	
75	10 00	9 75	7 67	
77	.....	7 00	5 87	
02	6 50	5 20	3 25	
16	20	18	14½	
07	14	13	10½	
20	20	20	16½	
10½	13	11	10	
11	13	10	10	
15	16	12	12	
20½	20	20	16½	
11½	15	12	14½	
17	16	15	16½	
17½	20	16	19	
14½	20	16	13	
14½	22	23	14½	
14½	.....	17	16	
10	23	18	17	
10½	25	25	16½	
07	22	25	18	
07	09	09	08	
114	15	16	10½	
37½	46	42	32	
18	19	18	17	
07½	62	55	50	
104	15	13	11	
11	11	13	10	
04½	07	07	08	
31½	25	27	27½	
77	1 40	1 28	1 37	
324	29	33	27½	
304	30	40	34	
094	14	14	004	
103	15	15	10½	
14	18	17	14	
86	1 00	1 07	90	
704	84	74	71	
814	1 25	1 16	87½	
004	13	13	08	
12½	1	15	12	
0 50	15 00	11 75	6 77	
6 22	5 66	5 50	6 08	
3 20	4 00	.....	4 75	
22	60	48	17	
1½	17	18	10½	
14	16	18	13½	
13	12	17	13½	
154	22	25	16	
17½	25	25	15½	
22½	20	22	22½	
10	14	15	10	
224	21	22	24½	
93	58	58	74	
4 03	5 00	4 50	3 92	
6 55	4 00	5 00	9 52	
9 52	6 50	7 60	10 33	
4 02	4 66	4 50	4 60	
2 41	3 00	2 82	3 33	

LABOR IN THE UNITED STATES. OF LIVING.

DRY-GOODS, HOUSE-RENT, ETC.

consumption, also prices of house-rent and board, in the towns of the several New England
1867, 1869, and 1874.

Massachusetts.				Rhode Island.			Connecticut.			Average in New Eng- land.		
1867.	1869.	1874.		1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.
\$11 66	\$9 28	\$8 64	\$12 27	\$9 70	\$8 21	\$14 00	\$9 41	\$8 12	\$12 53	\$9 53	\$7 82	
13 65	10 51	9 47	13 19	10 30	9 10	.....	10 92	9 12	13 10	10 12	8 80	
8 75	6 47	6 30	8 60	5 50	4 35	10 24	7 75	6 75	10 12	8 74	5 74	
4 74	4 23	3 92	3 80	3 01	3 19	4 20	3 75	4 12	4 30	3 58	3 83	
36	24	22½	20	21	18	22	21	20	20	20	18	
27	08	10	09	09	09	09	12	11	09	09	08½	
15	15	12½	21	23	22	23	23	23	23	23	23	
13	14	12½	15	15	15	11½	16	16	12	15	13	
15	19	17½	21	21	21	14½	16	16	11	11	11	
30	27	21	23	23	22	22	19	19	17	17	16	
13	11	13	13	15	13	13	15	15	13	13	12	
19	20	18	22	22	18	21	21	21	17	16	15	
19	20	17½	19	19	21½	22	22	23	21	19	17½	
18	20	15½	19	20	14	20	21	15	18	18	15	
20	20	20½	20	20	11	20	22	17	21	22	13	
23	23	21	22	21	16½	21	21	15	20	21	17	
18	18	17½	17	17	14	14	21	25	19	22	16½	
19	22	16½	21	21	13½	19	20	15	18	19	16	
20	23	17½	22	22	15	21	23	17	21	21	17	
13	11	13	12	13	10½	14	10	0½	09	09	07½	
01	09	08	08	07	07	09	10	17	20	21	17	
13	11	13	12	13	10½	14	10	0½	09	09	07½	
39	20	20	22	47	38	46	48	41	42	43	44	
07	79	81½	94	21	19	22	24	20	21	20	21	
13	12	11	12	12	10	10	14	11	14	13	11	
07	14	12	15	13	10½	15	14	11	11	11	11	
07	07	06½	06	07	06½	07	07	08	07	07	07	
38	37	34½	30	39	33	34	34	36	31	33	34	
1 23	1 25	84	1 20	1 11	74	1 22	1 26	92	1 23	1 17	94	
33	30	29	37	32	33½	21	21	21	32	31	22	
43	41	38½	45	40	37½	26	30	30	40	38	35	
15	15	29½	15	12	094	15	13	10½	11	11	10	
15	15	10	16	15	10½	16	16	10½	15	15	10½	
16	16	10½	16	16	11	18	18	11	17	17	11	
83	1 15	84	1 05	1 03	86	1 04	1 00	89	1 03	87	87	
1 34	1 28	76½	89	88	73½	90	90	76	84	81	73½	
13	13	09	1 11	1 11	92½	1 21	1 21	1 10	1 18	1 15	164	
16	15	13	14	11	09	13	13	09	13	12	60	
10 00	11 06	9 17	8 50	10 50	7 1	15	15	15	13	15	12½	
8 55	8 72	7 72	7 25	7 21	12	10 55	10 55	8 83	10 59	11 06	8 95	
6 17	6 72	6 25	6 66	6 71	5 02	7 00	7 00	7 33	6 84	6 96	6 95	
62	47	20½	62	49	23½	5 20	5 20	4 60	4 99	5 38	4 96	
21	17	11½	18	17	11	18	18	10	18	18	11	
21	18	14½	22	20	12½	21	21	13	20	19	13	
21	19	13½	25	20	15½	20	20	14	19	19	13½	
24	22	14½	30	25	19	23	23	16	24	23	16	
30	22	18½	35	33	12½	30	30	20	28	27	134	
36	20	24½	40	38	24	34	34	25	36	35	24	
17	15	10	16	15	10	15	15	10	15	15	10	
25	23	24½	24	23	25	25	25	21	23	23	22½	
67	68	58	87	70	67½	80	80	50	71	69	69	
5 02	4 88	4 03	4 50	4 50	3 79	4 90	4 90	3 55	4 84	4 66	3 87	
8 77	9 70	5 10	3 39	3 20	4 45	4 65	5 12	3 98	4 90	5 47	5 85	
11 74	13 08	6 95	3 91	3 92	5 70	6 25	7 00	4 75	6 84	7 62	7 45	
4 68	4 70	4 12	3 70	3 95	4 04	4 79	4 72	3 81	4 34	4 23	4 00	
3 41	3 69	3 10	3 09	3 25	2 87	3 71	3 71	2 62	3 14	3 02	2 97	

Table showing the average retail prices of provisions, groceries, and other leading articles of in the respective years

Articles.	New York.			New Jersey.			Pennsylvania.		
	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.
PROVISIONS.									
Flour, wheat, superfine.....per bbl.	\$12 50	\$7 85	\$7 50	\$14 12	\$9 66	\$8 00	\$12 68	\$7 53	\$7 60
Flour, wheat, extra family.....do.	11 35	7 80	9 12	13 50	9 00	10 17	12 44	7 75	7 88
Flour, rye.....do.	8 16	6 58	6 25	9 40	7 25	4 25	8 65	6 75	5 25
Corn-meal.....do.	5 18	3 65	4 24	5 50	5 50	5 35	5 18	4 32	4 52
Beef, fresh, round-pieces.....per lb.	19	19	15	23	23	20	16	17	17
Beef, fresh, soup-pieces.....do.	10	09	08	14	14	08	12	12	12
Beef, fresh, rump-steaks.....do.	21	20	15	23	22	20	17	18	17
Beef, corned.....do.	14	14	11	16	16	13	13	14	14
Veal, fore quarters.....do.	14	13	17	17	17	15	11	11	12
Veal, hind quarters.....do.	15	16	13	22	22	23	13	13	14
Veal-cutlets.....do.	18	20	18	26	27	23	19	21	18
Mutton, fore quarters.....do.	14	12	10	14	13	11	12	11	12
Mutton, leg.....do.	16	16	14	18	18	18	13	13	16
Mutton-chops.....do.	16	17	16	21	20	21	15	16	16
Pork, fresh.....do.	17	18	14	19	20	15	15	17	14
Pork, corned or salted.....do.	17	19	14	18	19	14	12	19	13
Pork, bacon.....do.	20	22	14	18	19	17	17	18	14
Pork, hams, smoked.....do.	20	24	16	23	24	17	23	24	16
Pork, shoulders.....do.	18	19	12	20	21	13	18	18	13
Pork, sausages.....do.	22	23	16	22	22	16	20	20	16
Lard.....do.	19	24	17	20	24	17	18	22	16
Cod fish, dry.....do.	09	09	08	11	11	08	10	10	08
Mackerel, pickled.....do.	16	15	12	14	15	12	13	11	12
Butter.....do.	35	42	35	47	52	45	36	40	35
Cheese.....do.	21	20	18	26	26	19	22	21	19
Potatoes.....per bus.	1 03	69	77	1 32	1 23	1 00	1 00	69	97
Rice.....per lb.	13	13	11	14	12	10	14	13	12
Beans.....per qt.	17	12	09	13	12	11	11	12	10
Milk.....do.	08	08	07	09	10	09	09	09	08
Eggs.....per doz.	25	31	24	36	39	36	26	25	30
GROCERIES, ETC.									
Tea, Oolong or other good black per lb.	1 26	1 12	99	1 24	1 53	90	1 50	1 35	91
Coffee, Rio, green.....do.	31	20	29	33	31	25	31	28	26
Coffee, Rio, roasted.....do.	36	33	34	45	38	23	33	31	32
Sugar, good brown.....do.	14	15	09	14	14	09	16	16	09
Sugar, yellow C.....do.	15	16	10	15	15	10	17	17	11
Sugar, coffee B.....do.	16	17	11	16	16	11	18	17	11
Molasses, New Orleans.....per gall.	1 09	1 09	80	1 04	1 04	96	1 12	1 12	97
Molasses, Porto Rico.....do.	1 60	88	77	67	89	73	81	77	78
Sirup.....do.	1 26	1 18	97	1 14	1 18	1 00	1 26	1 16	89
Soap, common.....per lb.	12	12	08	11	11	07	09	08	08
Starch.....do.	13	13	12	15	14	13	13	13	11
Fuel, coal.....per ton.	7 85	8 10	7 88	7 00	8 24	6 92	4 25	4 41	5 60
Fuel, wood, hard.....per cord.	6 30	6 30	5 87	6 60	5 40	0 00	4 50	4 00	5 46
Fuel, wood, pine.....do.	4 00	4 12	4 18	7 00	6 50	9 60	2 75	2 72	4 31
Oil, coal.....per gall.	63	46	18	58	55	23	55	50	28
DOMESTIC DRY-GOODS, ETC.									
Shirtings, brown, 4-4, standard quality.....per yard.	18	18	12	19	17	13	21	20	12
Shirtings, bleached, 4-4, standard quality.....per yard.	24	20	15	25	20	16	24	21	13
Sheetings, brown, 9-8, standard quality.....per yard.	26	21	18	28	21	15	32	28	17
Sheetings, bleached, 9-8, standard quality.....per yard.	28	28	20	32	28	16	35	34	19
Cotton-dannel, medium quality.....do.	39	28	21	28	25	18	26	23	19
Tickings, good quality.....do.	35	34	26	44	37	26	42	28	26
Prints, Merrimac.....do.	15	11	11	16	15	10	16	15	11
Monsefine de laines.....do.	24	24	20	27	22	19	24	23	21
Satinets, medium quality.....do.	77	67	20	1 00	65	65	91	82	54
Boots, men's heavy.....per pair.	4 62	4 40	4 22	4 44	5 07	4 50	5 64	5 12	4 40
HOUSE-RENT.									
Four-roomed tenements.....per mo.	8 50	8 40	6 76	7 70	10 46	16 60	6 16	4 40	9 37
Six-roomed tenements.....do.	11 20	11 20	10 58	11 50	14 95	20 60	9 74	9 30	12 50
BOARD.									
For men, (mechanics, &c.).....per week.	4 75	4 50	4 29	4 74	4 72	5 00	5 12	4 40	4 75
For women in factories.....do.	3 75	3 50	3 21	4 12	3 93	3 75	3 16	3 00	3 50

and other leading articles of
in the respective years

consumption, with prices of house-rent and board, in the towns of the several Middle States,
1867, 1869, and 1874.

Maryland.	Pennsylvania.			
	1867.	1869.	1874.	1874.
09.	1874.	1867.	1869.	1874.
06	\$8 00	\$12 68	\$7 53	\$7 00
00	10 17	12 44	7 75	7 88
25	4 25	8 65	6 75	5 85
50	3 55	5 18	4 82	4 52
23	20 1	16	17	17
14	08 1	12	12	12
22	20	17	18	17
16	13 1	13	14	14
17	15 1	11	11	11
23	19	13	13	14 1
27	23 1	19	21	18
13	11	12	11	13 1
12	18	13	13	16
20	21	15	16	16 1
20	15	15	17	14
19	14	18	10	13 1
19	17	17	18	14 1
23	17	23	24	16 1
21	13 1	18	12	13
22	16	20	20	16 1
24	17 1	18	22	16 1
15	12 1	13	11	12 1
52	45 1	36	40	35 1
26	10	22	21	19
23	1 00	1 00	09	97
12	10	14	13	12
12	11 1	11	12	10 1
10	09	09	09	08 1
39	36 1	26	25	30 1

Delaware.	Maryland.			West Virginia.			Average of the Middle States.		
	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.
\$14 00	\$7 00	\$6 19	\$12 00	\$7 00	\$6 41	\$11 47	\$6 11	\$12 60	\$7 60
15 00	8 00	7 69	14 00	8 00	8 04	14 25	8 14	13 42	8 11
5 00	4 00	4 43	5 00	5 00	5 88	8 14	5 25	7 86	5 98
19	4 00	15	15	15	4 37	4 09	3 27	4 99	4 29
15	15	15	15	15	12	12	11	11	11
18	18	18	18	18	10	08	08	08	08
12	12	12	12	12	13	14	12	12	12
14	14	14	14	14	10	11	11	11	11
16	16	16	16	16	10	11	11	11	11
18	18	18	18	18	10	11	11	11	11
15	15	15	15	15	17	15	14	13	12
17	17	17	17	17	11	08	07	09	14
18	18	18	18	18	15	11	09	12	16
20	20	20	20	20	11	14	12	13	17
25	25	25	25	25	11	11	11	11	11
25	25	25	25	25	13	14	11	11	11
22	22	22	22	22	13	14	11	11	11
21	21	21	21	21	17	22	22	16	21
25	25	25	25	25	12	16	16	11	19
25	25	25	25	25	11	19	19	13	22
08	08	08	08	08	16	16	13	21	22
10	10	10	10	10	18	19	15	20	23
50	50	50	50	50	12	12	12	10	10
22	22	22	22	22	27	27	27	29	30
1 00	60	1 00	75	1 00	23	23	23	24	24
12	10	12	13	13	91	61	97	1 00	70
10	08	10	10	10	15	13	11	14	12
05	05	09	10	10	09	11	10	12	10
35	40	34	28	22	09	09	08	08	08
1 25	1 00	73	1 50	1 25	1 10	1 69	1 40	1 01	1 41
28	30	29	36	30	27	31	28	22	32
30	35	34	35	35	31	35	32	32	32
16	17	09	16	15	12	17	16	12	16
16	16	10	17	18	11	18	17	12	16
14	13	11	19	19	11	16	19	12	16
1 00	20	92	75	60	1 05	1 12	1 02	09	17
1 30	1 20	83	1 25	1 00	83	88	88	73	1 02
10	08	06	08	06	09	1 35	1 21	92	1 26
08	08	10	12	12	09	10	09	09	10
9 00	6 10	8 50	8 50	3 18	3 41	3 28	3 89	6 65	7 02
5 00	5 00	6 50	4 00	3 83	3 05	3 87	4 10	4 89	4 60
4 00	4 00	5 25	3 50	3 50	3 50	3 50	3 16	4 25	4 17
60	50	25	75	60	22	66	51	27	63
35	30	19	28	25	13	21	18	11	23
32	25	13	40	28	18	25	21	13	28
35	30	13	33	25	32	28	24	13	28
35	30	21	45	37	35	30	26	17	34
30	25	15	31	28	16	29	24	17	29
50	40	34	65	50	32	49	39	33	47
31	18	11	22	18	16	19	15	11	19
37	20	24	28	25	23	27	25	20	28
1 25	90	40	60	50	90	1 02	81	73	1 09
6 75	6 00	3 25	6 00	5 25	4 50	6 13	5 41	4 33	5 61
4 00	4 00	8 50	6 00	6 00	9 00	7 16	6 96	11 70	6 59
5 00	5 00	11 12	10 60	10 60	13 25	10 32	10 27	19 10	9 66
5 00	5 00	4 62	4 00	4 00	3 87	4 3	4 16	4 33	4 66
3 00	4 00	3 50	3 50	3 50	3 25	3 9	3 81	3 29	3 59

Table showing the average retail prices of provisions, groceries, and other leading articles of States, in the respective years

Articles.	Virginia.			North Carolina.			South Carolina.		
	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.
PROVISIONS.									
Flour, wheat, superfine.....per bbl.	\$9 95	\$6 61	\$6 59	\$10 72	\$9 50	\$6 50	\$13 25	\$9 62	\$9 00
Flour, wheat, extra family.....do..	11 86	8 08	7 81	12 11	10 64	8 83	15 50	10 75	11 00
Flour, rye.....do..	7 96	6 27	3 60	6 00	6 66	.....	13 00	6 83	.....
Corn-meal.....do..	4 29	4 14	3 94	5 25	5 11	4 23	7 08	5 18	6 00
Beef, fresh, roasting-pieces.....per lb	13	12	11	09	07	07	12	09	15
Beef, fresh, soup-pieces.....do..	09	08	09	07	06	.....	08	06	12
Beef, fresh, rump-steaks.....do..	14	12	12	08	07	12	12	11	12
Beef, corned.....do..	11	12	11	07	06	15	14	12	20
Veal, fore quarters.....do..	14	11	11	07	06	.....	12	09	12
Veal, hind quarters.....do..	15	13	14	08	07	.....	13	10	19
Veal-cutlets.....do..	10	14	12	08	07	.....	17	12	12
Mutton, fore quarters.....do..	12	10	13	07	05	05	12	10	12
Mutton, leg.....do..	12	12	14	08	07	.....	12	10	12
Mutton-chops.....do..	12	12	15	08	09	.....	15	13	12
Pork, fresh.....do..	14	12	13	11	11	10	16	15	15
Pork, corned or salted.....do..	16	16	16	13	14	12	20	20	15
Pork, bacon.....do..	18	21	11	19	20	12	29	23	18
Pork, hams, smoked.....do..	23	21	15	22	22	17	25	25	23
Pork, shoulders.....do..	17	18	16	18	19	10	20	19	15
Pork, sausages.....do..	19	20	14	19	21	16	20	21	20
Lard.....do..	20	22	15	22	22	16	21	25	20
Cod-fish, dry.....do..	11	11	08	12	10	.....	17	17	06
Mackerel, pickled.....do..	15	13	12	11	11	10	17	15	10
Butter.....do..	32	33	35	27	28	38	32	29	35
Cheese.....do..	25	26	22	26	25	22	28	25	20
Potatoes.....per bus	89	91	86	70	73	1 17	1 65	1 20	.....
Rice.....per lb	15	13	12	15	15	10	13	13	7
Beans.....per qt	09	10	08	07	06	10	08	08	15
Milk.....do..	09	09	09	09	07	.....	14	11	10
Eggs.....per doz.	21	23	24	14	13	15	23	23	22
GROCERIES, ETC.									
Tea, Oolong or other good black per lb.	1 56	1 45	1 27	1 89	1 94	1 00	2 70	1 77	1 25
Coffee, Rio, green.....do..	28	27	26	29	30	26	30	29	20
Coffee, Rio, roasted.....do..	31	27	31	33	33	40	35	30	35
Sugar, good brown.....do..	16	16	16	18	17	12	21	17	08
Sugar, yellow C.....do..	18	17	14	17	19	13	21	18	10
Sugar, coffee B.....do..	20	19	12	20	20	13	21	19	10
Molasses, New Orleans.....per gall.	1 09	1 04	90	99	98	86	1 36	1 22	1 25
Molasses, Porto Rico.....do..	84	83	60	84	79	75	1 12	84	1 00
Syrup.....do..	97	89	85	1 16	1 14	66	1 35	1 03	1 25
Soap, common.....per lb	11	10	07	09	09	07	14	11	08
Starch.....do..	17	16	12	18	19	11	21	17	12
Fuel, coal.....per ton	10 03	10 78	8 29	.....	.....	8 00	.....	.....	12 70
Fuel, wood, hard.....per cord.	3 81	3 54	4 44	2 53	2 05	3 17	5 33	4 81	5 00
Fuel, wood, pine.....do..	3 43	2 86	3 75	2 19	1 89	3 50	3 33	3 25	4 00
Oil, coal.....per gall.	67	59	33	77	72	41	1 04	69	20
DOMESTIC DRY-GOODS, ETC.									
Shirtings, brown, 4-4, standard qual- ity.....per yard.	22	19	11	19	19	13	23	19	.....
Shirtings, bleached, 4-4, standard qual- ity.....per yard.	26	23	13	24	22	15	26	25	.....
Sheetings, brown, 9-8, standard qual- ity.....per yard.	34	23	24	50	38	10	33	31	.....
Sheetings, bleached, 9-8, standard quality.....per yard.	36	24	25	50	39	11	38	31	.....
Cotton-flannel, medium quality.....do..	32	24	21	29	27	19	33	27	.....
Tickings, good quality.....do..	40	34	33	38	35	28	47	38	.....
Prints, Merino.....do..	18	15	11	16	14	10	21	16	.....
Mousseline de laine.....do..	29	26	31	29	27	25	34	28	.....
Satinets, medium quality.....do..	80	66	52	84	79	60	79	72	.....
Boots, men's heavy.....per pair	5 47	4 96	4 58	4 78	4 47	4 00	6 50	5 25	.....
HOUSE-RENT.									
Four-roomed tenements.....per mo.	9 57	9 10	17 17	6 25	6 06	14 75	12 33	10 56	10 00
Six-roomed tenements.....do..	13 64	12 97	24 83	9 00	8 56	20 00	16 66	15 62	25 00
BOARD.									
For men, (mechanics, &c.).....per week.	4 56	4 47	5 06	3 31	3 40	3 75	6 06	4 87	4 00
For women in factories.....do..	4 20	3 87	3 63	3 06	2 90	2 83	6 41	4 50	.....

*Other leading articles of
utes, in the respective years*

consumption, with prices of house-rent and board, in the towns of the following Southern

Alabama.				South Carolina.				Georgia.				Florida.				Alabama.				Mississippi.				
1874.	1867.	1869.	1874.	1874.	1867.	1869.	1874.	1874.	1867.	1869.	1874.	1874.	1867.	1869.	1874.	1874.	1867.	1869.	1874.	1874.	1867.	1869.	1874.	
86 50	813 25	89 62	89 00	\$12 03	89 51	86 75	86 12	811 11	84 38	86 68	\$12 20	88 27	87 75	812 20	88 27	87 75	812 20	88 27	87 75	812 20	88 27	87 75	812 20	88 27
8 83	15 50	10 75	11 00	11 56	10 37	8 50	9 30	14 00	10 01	8 18	13 40	10 72	8 54	13 40	10 72	8 54	13 40	10 72	8 54	13 40	10 72	8 54	13 40	10 72
4 23	7 08	5 18	6 00	5 10	8 00	4 47	8 00	10 00	10 00	8 00	10 00	10 00	8 00	10 00	10 00	8 00	10 00	10 00	8 00	10 00	10 00	8 00	10 00	10 00
073	08	06	15	14	11	11	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
123	12	11	12	16	13	15	10	08	10	08	05	12	10	12	10	08	10	08	10	08	10	08	10	08
15	14	12	20	18	15	13	10	13	12	12	10	13	12	12	10	13	12	12	10	13	12	12	10	13
.....	12	09	12	13	12	10	15	15	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
.....	13	10	12	17	15	13	20	16	14	12	11	12	12	12	12	12	12	12	12	12	12	12	12	12
.....	17	12	12	11	10	13	25	18	14	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
05	12	10	12	14	13	15	20	16	14	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
.....	15	13	12	15	13	15	25	13	12	11	10	11	11	11	11	11	11	11	11	11	11	11	11	11
10	16	15	15	18	16	18	30	16	14	12	11	12	12	11	12	12	11	12	12	11	12	12	11	12
124	20	20	15	20	20	15	14	18	17	13	10	10	10	10	10	10	10	10	10	10	10	10	10	10
124	22	23	18	21	21	17	14	18	17	13	10	10	10	10	10	10	10	10	10	10	10	10	10	10
17	25	25	23	25	24	15	15	23	23	14	24	24	18	24	24	18	24	24	18	24	24	18	24	24
104	20	19	15	17	17	10	10	25	24	16	27	27	16	27	27	16	27	27	16	27	27	16	27	27
164	20	21	20	21	21	20	25	27	27	19														
164	21	25	20	21	21	20	25	27	27	19														
.....	17	17	06	15	13	12	20	16	14	12	11	12	12	11	12	12	11	12	12	11	12	12	11	12
10	17	15	10	15	15	25	09	11	12	14	13	25	18	14	12	14	13	25	18	14	12	14	13	25
38	32	29	35	30	39	40	19	22	19	10	17	17	13	11	17	13	11	17	13	11	17	13	11	17
22	28	25	20	21	25	24	15	23	23	14	24	24	18	24	24	18	24	24	18	24	24	18	24	24
117	1 65	1 20	.....	1 15	1 30	80	1 50	1 14	35	32	44	37	23	44	37	23	44	37	23	44	37	23	44	37
108	13	12	.....	13	13	11	1 50	1 14	1 14	1 36	1 50	1 28	1 25	1 50	1 28	1 25	1 50	1 28	1 25	1 50	1 28	1 25	1 50	1 28
10	08	08	15	18	15	12	1 50	1 14	1 14	1 36	1 50	1 28	1 25	1 50	1 28	1 25	1 50	1 28	1 25	1 50	1 28	1 25	1 50	1 28
15	23	21	22	23	21	27	20	17	13	10	17	13	10	17	13	10	17	13	10	17	13	10	17	13
.....
1 00	2 30	1 77	1 25	1 80	1 71	1 25	1 00	1 14	2 03	1 21	1 50	1 87	1 12	1 50	1 87	1 12	1 50	1 87	1 12	1 50	1 87	1 12	1 50	1 87
265	30	29	30	30	27	29	25	31	26	29	26	29	24	26	29	24	26	29	24	26	29	24	26	29
40	35	30	35	36	34	31	47	16	35	25	34	30	34	35	25	34	30	34	35	25	34	30	34	35
124	21	17	08	20	13	11	10	10	16	10	17	11	11	16	10	17	11	16	10	17	11	16	10	17
113	21	18	10	20	19	17	12	19	18	19	12	14	14	19	12	14	14	19	12	14	14	19	12	14
123	21	19	10	20	19	17	12	19	18	19	12	14	14	19	12	14	14	19	12	14	14	19	12	14
86	1 36	1 22	1 25	1 36	1 24	91	1 50	1 18	1 08	1 21	1 25	1 06	1 03	1 25	1 06	1 03	1 25	1 06	1 03	1 25	1 06	1 03	1 25	1 06
75	1 12	84	1 00	1 15	1 12	80	1 50	1 18	1 08	1 21	1 25	1 06	1 03	1 25	1 06	1 03	1 25	1 06	1 03	1 25	1 06	1 03	1 25	1 06
66	1 35	1 03	1 25	1 15	1 12	80	1 50	1 18	1 08	1 21	1 25	1 06	1 03	1 25	1 06	1 03	1 25	1 06	1 03	1 25	1 06	1 03	1 25	1 06
074	14	11	08	18	15	15	10	09	10	09	10	09	10	10	09	10	09	10	09	10	09	10	09	10
11	11	11	12	12	12	12	10	21	18	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
8 00	.....	.....	12 10	12 00	12 80	8 25	3 50	3 29	3 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47
3 17	5 33	4 81	5 60	4 11	3 93	3 50	3 50	3 29	3 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47
3 50	5 33	3 25	4 40	3 93	3 92	4 00	3 50	3 29	3 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47
411	1 04	60	2 60	24	24	45	30	3 50	3 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47	12 47	4 20	16 00	12 47
.....
13	20	19	.....	19	18	11	60	20	19	10	25	21	11	25	21	11	25	21	11	25	21	11	25	21
151	26	25	.....	24	22	14	10	22	21	15	30	23	15	30	23	15	30	23	15	30	23	15	30	23
107	33	33	.....	24	24	16	15	47	33	12	32	31	15	32	31	15	32	31	15	32	31	15	32	31
114	38	31	.....	28	25	15	15	59	39	17	43	36	17	43	36	17	43	36	17	43	36	17	43	36
194	33	27	.....	30	29	22	12	33	27	24	39	27	24	39	27	24	39	27	24	39	27	24	39	27
28	47	28	.....	32	32	11	18	41	41	31	44	34	31	44	34	31	44	34	31	44	34	31	44	34
114	16	16	.....	14	16	11	09	17	16	10	22	17	10	22	17	10	22	17	10	22	17	10	22	17
25	34	28	.....	31	27	41	18	33	31	20	35	30	20	35	30	20	35	30	20	35	30	20	35	30
60	79	72	.....	5 54	4 26	4 58	5 50	5 60	4 55	4 42	6 40	5 05	3 45	6 40	5 05	3 45	6 40	5 05	3 45	6 40	5 05	3 45	6 40	5 05
4 00	6 50	5 28	.....	13 50	15 92	25 00	21 50	24 43	20 60	16 75	21 00	18 62	9 00	21 00	18 62	9 00	21 00	18 62	9 00	21 00	18 62	9 00	21 00	18 62
14 75	12 33	10 56	10 40	20 00	22 50	35 00	27 50	32 43	29 00	21 87	28 00	21 87	15 00	28 00	21 87	15 00	28 00	21 87	15 00	28 00	21 87	15 00	28 00	21 87
3 75	6 41	4 87	1 00	5 82	1 72	4 00	5 00	5 41	4 63	3 75	6 33	4 24	3 75	6 33	4 24	3 75	6 33	4 24	3 75	6 33	4 24	3 75	6 33	4 24
2 63	6 06	1 50	.....	5 82	4 58	2 15	3 50	5 10	4 60	2 95	4 83	4 43	2 50	4 83	4 43	2 50	4 83	4 43	2 50	4 83	4 43	2 50	4 83	4 43

Table showing the average retail prices of provisions, groceries, and other leading

Articles.	Louisiana.			Texas.			Arkansas.		
	1867.	1869.	1874.	1867.	1869.	1871.	1867.	1869.	1874.
PROVISIONS.									
Flour, wheat, superfine.....per bbl.	\$12 03	\$7 64	\$6 00	\$9 90	\$8 95	\$8 06	\$13 00	\$9 00	\$5 00
Flour, wheat, extra family.....do.	15 55	10 05	7 75	11 37	9 65	9 75	15 00	10 65	6 50
Flour, rye.....do.			5 50			8 50	16 00	9 00	
Corn meal.....do.	6 03	5 22	4 12	3 06	3 46	3 62	2 95	2 92	4 50
Beef, fresh, roasting-pieces.....per lb.	11	12	17 $\frac{1}{2}$	04	01	09 $\frac{1}{2}$	11	08	12
Beef, fresh, soup pieces.....do.	09	08	13 $\frac{1}{2}$	03	03	04	11	07	08
Beef, fresh, rump-steaks.....do.	11	10	25 $\frac{1}{2}$	01	04	12	12	08	12
Beef, corned.....do.	11	13	15	10	06	09 $\frac{1}{2}$	08	06	13 $\frac{1}{2}$
Veal, fore quarters.....do.	14	13	15	05	05	10 $\frac{1}{2}$	11	06	12 $\frac{1}{2}$
Veal, hind quarters.....do.	13	15	20	08	07	14	14	07	15
Veal-cutlets.....do.	15	16	24 $\frac{1}{2}$	09	07	14	14	07	15
Mutton, fore quarters.....do.	14	15	15	06	05	09 $\frac{1}{2}$	15	12	12 $\frac{1}{2}$
Mutton, leg.....do.	19	18	17 $\frac{1}{2}$	08	07	11	18	15	15
Mutton-chops.....do.	19	18	17 $\frac{1}{2}$	08	07	11	18	15	15
Pork, fresh.....do.	16	16	16 $\frac{1}{2}$	07	07	11 $\frac{1}{2}$	12	11	12 $\frac{1}{2}$
Pork, corned or salted.....do.	21	19	15	17	12	13 $\frac{1}{2}$	22	21	12 $\frac{1}{2}$
Pork, bacon.....do.	20	18	13 $\frac{1}{2}$	13	15	15 $\frac{1}{2}$	23	21	12 $\frac{1}{2}$
Pork, hams, smoked.....do.	27	24	16 $\frac{1}{2}$	17	19	16 $\frac{1}{2}$	21	22	15
Pork, shoulders.....do.	16	17	17 $\frac{1}{2}$	08	06	11 $\frac{1}{2}$	18	13	15
Pork, sausages.....do.	23	20	20	17	15	17 $\frac{1}{2}$		20	12
Lard.....do.	23	23	16 $\frac{1}{2}$	13	17	16	25	22	15
Cod-fish, dry.....do.	14	12	09	10	15	09 $\frac{1}{2}$	13	27	08
Mackerel, pickled.....do.	17	13	10	08	17	09	15	13	12
Butter.....do.	52	49	45	22	20	33	40	31	32
Cheese.....do.	34	28	22 $\frac{1}{2}$	29	31	34	30	25	27
Potatoes.....per bush.	1 46	1 23	1 50	50	61	1 83	1 40	1 91	2 00
Rice.....per lb.	13	11	08 $\frac{1}{2}$	45	14	11	18	14	10
Beans.....per qt.	17	17	15	12	15	22 $\frac{1}{2}$	17	15	12
Milk.....do.	16	13	17 $\frac{1}{2}$	10	10	15	20	17	15
Eggs.....per doz.	35	33	27	15	14	31	35	29	20
GROCERIES, ETC.									
Tea, Oolong, or other good black per lb.	2 29	1 92	70	1 81	1 66	1 04	2 42	2 17	75
Coffee, Rio, green.....do.	30	28	35	25	24	27 $\frac{1}{2}$	23	29	25
Coffee, Rio, roasted.....do.	38	34	38 $\frac{1}{2}$	40	40	31 $\frac{1}{2}$			28
Sugar, good brown.....do.	21	15	09 $\frac{1}{2}$	16	16	10 $\frac{1}{2}$	21	19	10
Sugar, yellow C.....do.	20	17	11	18	18	12 $\frac{1}{2}$	21	18	10
Sugar, coffee B.....do.	19	17	11 $\frac{1}{2}$	18	19	13 $\frac{1}{2}$	23	20	13 $\frac{1}{2}$
Molasses, New Orleans.....per gal.	1 15	90	65	90	90	85	1 10	98	75
Molasses, Porto Rico.....do.	93	82	47 $\frac{1}{2}$	61	84	87 $\frac{1}{2}$	1 02	1 00	
Sirup.....do.	1 53	1 27	85	1 19	1 24	1 09 $\frac{1}{2}$	1 52	1 38	75
Sa.p. common.....per lb.	13	19	06	12	11	07 $\frac{1}{2}$	11	10	08
Starch.....do.	18	14	05 $\frac{1}{2}$	17	17	10	10	17	10
Fuel, coal.....per ton.	7 50		6 00			12 00	3 05	5 00	8 00
Fuel, wood, hard.....per cord.	6 66	6 00	5 00	3 12	2 90	5 81	4 37	3 31	4 06
Fuel, wood, pine.....do.	3 25	5 00	3 50	2 58	2 12	5 75	6 00	4 70	6 00
Oil, coal.....per gal.	82	59	24 $\frac{1}{2}$	93	95	52 $\frac{1}{2}$	90	78	27 $\frac{1}{2}$
DOMESTIC DRY GOODS, ETC.									
Shirtings, brown, 4-4, standard qual-ity.....per yd.	26	23	20	19	18	11 $\frac{1}{2}$	27	22	12 $\frac{1}{2}$
Shirtings, bleached, 4-4, standard qual-ity.....per yd.	27	23	22 $\frac{1}{2}$	26	22	12 $\frac{1}{2}$	25	29	14
Sheetings, brown, 9-8, standard qual-ity.....per yd.	46	32	30	30	26	11	27	32	14
Sheetings, bleached, 9-8, standard quality.....per yd.	48	41	32 $\frac{1}{2}$	34	30	15	27	39	16
Cotton-cloth, medium quality.....do.	36	27	20	26	25	14	38	32	18
Pickings, good quality.....do.	40	32	30	30	25	14	45	48	25
Prints, Merino.....do.	19	10	12 $\frac{1}{2}$	18	15	10	21	17	10
Mousseline de laines.....do.	37	33	23 $\frac{1}{2}$	39	28	22 $\frac{1}{2}$	47	36	25
Satinets, medium quality.....do.	66	63	9 $\frac{1}{2}$	84	83	67 $\frac{1}{2}$	1 26	90	1 00
Boots, men's heavy.....per pair.	5 80	5 20	2 25	5 20	4 37	3 87	6 56	5 40	4 00
HOUSE-RENT.									
Four-roomed tenements.....per month.	16 17	17 28	22 50	11 00	16 40	20 83	20 00	19 19	30 00
Six-roomed tenements.....do.	22 00	24 25	32 50	21 00	24 25	31 66	37 00	23 23	40 00
BOARD.									
For men, (mechanics, &c.).....per week.	4 70	5 52	4 50	3 50	3 82	5 02	7 00	5 06	5 50
For women in factories.....do.	4 00	5 20	3 25	3 30	3 61			4 71	

articles of consumption, with prices of board and horse-rent, &c.—Continued.

Arkansas.			
1871.	1867.	1869.	1871.
88 06	\$13 00	39 00	35 00
9 75	15 00	10 65	6 50
8 50	16 00	9 60	
3 62	2 05	2 92	4 50
09 1	11	08	12
01	11	07	08
12	12	08	12
09 1	08	06	12 1/2
10 1	11	06	12 1/2
11	11	07	15
11	11	07	15
09 1	15	12	12 1/2
11 1/2	18	13	15
11	18	15	15
11 1/2	12	11	12 1/2
13 1/2	22	21	12 1/2
15 1/2	23	21	12 1/2
16 1/2	21	22	15
10 1/2	22	17	08 1/2
17 1/2	20	19	12
17 1/2	25	22	15
09 1	13	27	08
09 1	15	18	12
32	40	31	32
34	30	25	25
1 83	1 40	1 01	2 00
11	18	14	10
22 1/2	17	15	12
15	20	17	15
31	35	29	20
1 04	2 42	2 17	75
27 1/2	33	29	25
31 1/2	28	25	28
10 1/2	21	18	10
13 1/2	23	20	12 1/2
88	1 10	98	75
87 1/2	1 02	1 00	
1 09 1/2	1 52	1 38	55
07 1/2	11	10	08
10	19	17	10
12 00	3 05	5 00	8 00
5 8 1/2	4 37	3 31	4 00
5 15 1/2	6 00	4 70	6 00
52 1/2	90	78	27 1/2
11 1/2	27	22	12 1/2
12 1/2	25	20	11
11	27	32	14
15	27	39	16
18	34	32	18
25	55	48	25
10	21	17	10
21 1/2	47	36	25
67 1/2	1 26	90	1 00
3 87	6 56	5 40	4 00
20 83	20 00	19 19	30 00
31 66	37 00	29 28	10 00
5 05	7 09	5 06	5 50
		4 71	

Kentucky.			Tennessee.			Missouri.			Average of the South-ern States.		
1867.	1869.	1871.	1867.	1869.	1871.	1867.	1869.	1871.	1867.	1869.	1871.
\$10 86	\$6 50	\$5 00	\$10 15	\$9 72	\$6 30	\$10 24	\$6 25	\$5 50	\$11 29	\$8 08	\$6 56
12 56	7 70	6 21	11 44	8 09	6 53	11 72	7 80	6 75	13 29	9 61	8 10
6 40	5 55	5 75	4 83	4 58	6 31	4 00	6 31	4 59	9 12	7 02	6 31
3 42	3 03	3 05			3 78	4 00	3 63	3 00	4 90	4 42	4 29
11	11	12 1/2			10	12	11	11 1/2	11	10	11
07	07	06	09	08	07	09	08	07	09	08	08
12	12	11 1/2	09	08	07	11	12	11 1/2	11 1/2	11 1/2	12
09	09	10	08	07	09	10	10	10	10	10	10
11	10	09	08	07	09	11	12	11 1/2	11 1/2	11 1/2	12 1/2
09 1	15	12	10	09	10	11	13	11 1/2	11 1/2	11 1/2	12 1/2
11 1/2	18	15	15	10	12	15	11	11 1/2	13	13	14
11	18	15	15	10	12	15	11	11 1/2	13	13	14
11 1/2	12	11	12 1/2	09	10	09	08	09	10 1/2	09 1/2	10 1/2
13 1/2	22	21	12 1/2	11	10	12	11	11	12	11	12 1/2
15 1/2	23	21	12 1/2	10	10	11	10	10	12 1/2	12	13 1/2
16 1/2	21	22	15	11	12	13	12	10	13	12 1/2	13 1/2
10 1/2	22	17	12	10	10	11	11	10	12 1/2	12	13 1/2
17 1/2	20	19	17	12 1/2	17	17	19	16 1/2	17	16	13
17 1/2	25	22	15	15	11 1/2	21	21	13 1/2	25	20	13
09 1	13	27	08	14	15	15	15	06	14 1/2	17 1/2	16
09 1	15	18	12	17	17	15	11	10	20 1/2	19 1/2	16 1/2
32	40	31	32	20	20	15 1/2	10	10	20 1/2	19 1/2	16 1/2
34	30	25	25	13	13	08 1/2	2	11	16 1/2	22	16 1/2
1 83	1 40	1 01	2 00	28	14	09	13	12	21	13 1/2	10
11	18	14	10	10	20	25	31	32	15	14	12
22 1/2	17	15	12	25	25	24	21	25	20	27	33
15	20	17	15	11	10	13	13	12	12 1/2	15	13 1/2
31	35	29	20	10	10	10	10	08	13	12 1/2	12
			16	15	17	15	18	21	11 1/2	23	21
2 00	1 91	1 00	2 40	1 93	1 10	1 60	1 65	78	2 00	1 83	1 04
30	28	29	33	30	24	30	28	26 1/2	30	28	26
37	31	31	32	30	33	31	32	33 1/2	33	32	34
18	17	10	20	17	12	18	17	17	19	17	16 1/2
18	18	11	20	17	12	17	18	17 1/2	18	18	17
19	18	12	21	18	13	21	20	17 1/2	20	19	12
1 08	1 07	91	1 12	1 02	99	1 15	1 04	85 1/2	1 10	1 02	85
07	00	09	01	07	07	05	09	08	09	08	08
1 47	1 26	08	1 58	1 41	10	07	1 38	1 31	1 31	1 22	80
11	10	07 1/2	11	10	07	09	08	07 1/2	11 1/2	10 1/2	80
14	12	08	18	17	09 1/2	13	13	13	18	16	10
7 47	7 18	3 08	7 27	7 00	5 00	5 75	6 12	12 00	8 75	8 80	8 35
3 85	3 76	4 02	3 21	2 80	3 80	3 87	3 77	5 00	4 11	3 70	4 17
3 17	3 37	4 50	3 03	2 75	4 50	2 09	2 00	4 00	3 21	3 11	4 10
71	61	20	88	70	36 1/2	69	56	22 1/2	85	69	33
20	18	13	21	19	12	22	18	11 1/2	22	20	12
26	20	11	26	22	11	27	25	13 1/2	25	23	15
31	31	23	29	30	14	31	28	35	35	30	19
35	33	25 1/2	35	32	15	41	27	40	39	34	20
33	28	19	39	32	19	37	29	20	33	28	19
46	34	32	51	40	30	54	42	25	47	40	28
16	11	10	29	16	10	17	14	11 1/2	19	16	11
32	28	21	35	29	27	32	26	25	34	30	26
1 03	87	66	89	73	95	86	87	65	72	64	64
5 36	4 97	3 83	5 58	4 73	3 90	5 62	5 10	4 25	5 70	4 90	4 03
13 02	12 79	6 90	13 25	12 18	12 10	11 80	13 00	16 00	15 20	14 20	17 10
17 72	17 45	9 80	17 52	17 12	19 87	19 80	16 14	20 00	21 05	20 15	17 15
4 43	4 28	3 93	4 75	3 80	3 62	5 80	4 92	4 25	5 17	4 47	4 60
4 12	4 01	3 09	3 95	3 35	3 09	4 50	3 81	3 50	4 40	4 14	3 03

Table showing the average retail prices of provisions, groceries, and other leading articles of
in the respective years

Articles.	Ohio.			Indiana.			Michigan.		
	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.
PROVISIONS.									
Flour, wheat, superfine.....per bbl.	\$12 71	\$6 41	\$5 70	\$10 87	\$5 06	\$6 12	\$10 87	\$6 17	\$6 00
Flour, wheat, extra family.....do.	12 88	6 82	6 37	12 16	6 38	6 50	11 67	7 14	6 75
Flour, rye.....do.	7 70	4 90	5 19	8 28	5 37	5 37	8 42	6 49	6 00
Corn-meal.....do.	3 63	3 52	3 03	4 05	3 75	3 30	4 84	4 18	3 60
Beef, fresh, roasting-pieces.....per lb.	15	11	12	13	12	13	15	14	16
Beef, fresh, soup-pieces.....do.	10	09	08	13	12	13	15	14	16
Beef, fresh, rump-steaks.....do.	16	15	12	09	08	10	10	08	11
Beef, corned.....do.	11	10	10	11	12	12	16	15	15
Veal, fore quarters.....do.	11	10	10	11	12	12	11	10	10
Veal, hind quarters.....do.	08	08	07	10	09	10	10	08	15
Veal-cutlets.....do.	11	10	10	12	12	12	12	11	18
Mutton, fore quarters.....do.	13	11	12	13	13	13	14	16	18
Mutton, leg.....do.	12	08	09	09	08	08	08	07	09
Mutton-chops.....do.	11	10	12	10	09	10	11	14	10
Pork, fresh.....do.	12	11	13	11	10	11	12	12	12
Pork, corned or salted.....do.	14	14	11	13	14	12	16	15	15
Pork, bacon.....do.	17	17	13	15	16	13	18	19	13
Pork, hams, smoked.....do.	16	17	16	18	19	13	19	18	18
Pork, shoulders.....do.	21	20	16	21	22	16	23	21	21
Pork, sausages.....do.	17	16	12	16	17	12	16	16	16
Lard.....do.	18	18	14	16	17	13	19	18	18
Cod-fish, dry.....do.	19	21	15	19	21	18	21	23	23
Mackerel, pickled.....do.	15	14	09	11	11	10	11	10	10
Butter.....do.	33	31	27	33	33	32	36	32	18
Cheese.....do.	18	20	17	22	23	12	23	23	13
Potatoes.....per bush.	96	44	92	79	42	1 12	72	42	75
Rice.....per lb.	11	12	10	14	13	10	15	13	13
Beans.....per qt.	12	09	09	12	11	10	18	09	09
Milk.....do.	06	05	06	07	07	08	08	07	06
Eggs.....per doz.	23	24	20	17	22	24	23	23	28
GROCERIES, ETC.									
Tea, Oolong or other good black per lb	1 64	1 44	1 01	1 60	1 64	04	1 60	1 46	1 00
Coffee, Rio, green.....do.	33	30	30	32	28	30	34	31	25
Coffee, Rio, roasted.....do.	36	32	31	36	32	37	37	34	30
Sugar, good brown.....do.	16	15	10	17	16	11	16	15	11
Sugar, yellow O.....do.	16	16	11	18	17	11	17	16	16
Sugar, coffee B.....do.	19	17	12	16	18	12	19	18	12
Molasses, New Orleans.....per gal.	1 31	1 12	95	1 14	1 08	92	1 12	1 01	96
Molasses, Porto Rico.....do.	1 07	96	84	1 46	1 33	1 10	1 46	1 33	68
Syrup.....do.	1 44	1 29	96	1 46	1 33	1 10	1 46	1 33	68
Soap, common.....per lb.	12	11	08	10	10	07	12	11	06
Starch.....do.	14	13	10	13	12	05	17	15	15
Fuel, coal.....per ton.	6 59	6 27	3 75	5 03	5 05	3 37	12 66	11 08	11 08
Fuel, wood, hard.....per cord.	3 45	3 43	3 46	3 49	3 42	3 75	3 60	3 26	3 26
Fuel, wood, pine.....do.	.....	4 00	3 50	.....	.....	.....	1 86	1 85	1 85
Oil, coal.....per gal.	60	45	22	61	50	21	67	47	47
DOMESTIC DRY-GOODS, ETC.									
Shirtings, brown, 4-4, standard quality.....per yd.	22	18	11	20	18	12	21	17	12
Shirtings, bleached, 4-4, standard quality.....per yd.	27	22	11	24	20	15	27	22	12
Sheetings, brown, 9-8, standard quality.....per yd.	25	21	17	25	21	25	30	25	10
Sheetings, bleached, 9-8, standard quality.....per yd.	31	29	20	30	25	.....	38	31	10
Cotton-flannel, medium quality.....do.	31	27	17	32	28	15	35	29	15
Tekings, good quality.....do.	43	37	31	45	39	30	44	36	25
Prints, Merrimac.....do.	19	11	10	16	14	11	17	13	10
Morsseline de Indes.....do.	28	21	20	27	24	12	28	23	15
Satinets, medium quality.....do.	1 09	76	81	91	85	75	82	85	65
Boots, men's heavy.....per pair.	5 78	5 10	4 60	5 41	5 05	4 83	5 76	5 16	5 00
HOUSE-RENT.									
Four-roomed tenements.....per month.	8 69	7 53	8 92	9 97	9 20	9 00	8 49	7 95	12 00
Six-roomed tenements.....do.	12 79	10 73	12 77	12 70	12 23	13 16	11 89	11 15	16 00
BOARD.									
For men, mechanics, &c.....per week.	4 50	4 03	4 10	4 31	4 09	4 62	4 73	4 51	5 00
For women in factories.....do.	3 97	3 46	2 84	3 27	3 70	3 33	4 65	4 09	4 59

other leading articles of
in the respective years

LABOR IN THE UNITED STATES.

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consumption; also prices of house-rent and board, in the towns of the following Western States,
1867, 1869, and 1874.

Michigan.				Illinois.			Wisconsin.			Minnesota.			Iowa.		
1874.	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.
\$6 12	\$10 87	\$6 17	\$6 00	\$10 54	\$6 19	\$6 60	\$8 67	\$5 35	\$5 33	\$8 15	\$1 39	\$5 41	\$8 10	\$5 38	\$5 67
6 50	11 67	7 14	6 75	12 50	7 50	6 65	9 66	5 91	6 33	8 85	3 71	7 17	9 32	6 15	7 13
3 30	8 42	6 09	6 60	8 25	6 09	4 12	7 10	4 76	4 62	6 07	4 64	5 67	4 81	4 82	7 13
13	4 84	4 18	3 60	4 10	3 75	4 12	4 47	3 75	4 09	6 03	4 85	4 37	3 34	3 39	2 75
10	15	14	16	12	11	11	12	11	11	12	12	12	11	11	10
13	16	15	15	09	08	08	09	08	07	09	08	07	07	08	08
05	11	10	10	13	12	10	10	09	10	10	10	11	12	13	11
10	10	08	15	10	10	08	10	09	10	09	08	07	09	09	09
12	12	11	18	12	11	13	13	13	11	11	08	08	09	09	11
13	14	16	18	13	12	11	13	13	11	11	08	08	09	09	11
12	11	14	10	10	10	09	12	12	12	11	11	12	12	12	12
11	12	12	12	11	12	12	11	12	12	09	08	08	12	13	13
12	16	15	18	12	12	13	13	11	11	20	11	11	11	10	10
13	18	19	13	13	14	12	14	11	11	14	13	13	11	11	13
13	19	18	18	16	17	12	17	12	12	13	13	13	11	11	13
16	23	21	16	18	19	15	18	17	12	17	12	14	11	11	11
13	23	16	16	19	22	16	20	20	18	19	19	19	15	16	14
12	19	18	18	15	16	11	16	16	13	20	22	17	17	19	14
18	21	29	18	16	17	13	18	18	13	17	16	11	15	21	15
10	21	29	18	19	21	15	20	22	16	19	19	19	15	17	14
12	16	15	18	12	11	09	12	22	16	20	19	19	12	14	14
32	36	32	18	15	14	12	11	11	10	12	12	12	14	16	12
12	23	23	13	23	29	28	30	22	14	14	14	14	12	12	09
12	72	42	75	23	23	18	22	22	22	31	27	25	27	26	14
104	15	13	13	15	11	11	71	52	52	20	21	17	23	23	19
10	18	09	06	13	11	09	10	13	10	15	14	19	61	41	41
06	68	07	06	07	07	06	07	09	05	12	09	12	11	10	10
21	23	23	28	18	23	20	21	20	05	06	06	06	07	07	07
										22	21	19	18	19	13
94	1 60	1 46	1 00	1 65	1 55	1 00	1 60	1 12	1 53	1 45	1 04	1 70	1 56	1 00	1 00
30	34	31	25	30	28	27	31	30	35	34	29	33	29	25	25
37	37	34	30	36	33	33	36	35	39	33	34	36	34	30	30
11	16	15	12	17	16	10	15	15	16	15	11	18	16	10	10
12	19	18	12	18	17	11	17	16	10	17	16	11	19	17	11
92	1 12	1 01	06	19	18	11	17	16	10	17	16	11	19	17	11
75	1 06	06	06	19	18	11	17	16	10	17	16	11	19	17	11
10	1 46	1 33	68	1 04	98	91	1 15	99	1 00	1 30	1 10	1 03	1 19	1 04	90
07	12	11	06	1 47	1 36	97	1 38	1 26	1 03	1 03	89	71	1 00	1 94	75
37	12 66	11 08	00	11	13	08	12	11	09	1 47	1 25	96	1 50	1 11	95
30	3 60	3 26	00	4 47	4 33	6 74	11 08	5 15	4 50	4 44	4 23	12 25	6 31	5 48	5 68
18	1 86	1 85	00	4 71	4 44	5 66	5 25	3 15	2 41	2 96	2 82	3 50	4 52	4 78	4 83
21	67	47	00	4 00	3 62	3 80	3 41	5 55	19	78	57	33	72	3 60	4 50
					52	24	72						56		27
12	21	17	12	20	18	12	22	13	11	22	19	11	22	18	12
15	27	22	12	25	22	15	26	23	15	27	23	13	29	23	15
25	30	25	10	33	27	17	32	27	30	25	20	21	29	23	20
38	31	10		38	33	20	41	34	31	26	24	38	29	24	24
35	29	15		32	33	18	31	27	27	36	30	40	30	30	17
44	38	25		37	32	10	44	38	27	48	40	50	39	39	35
17	14	10		17	14	10	10	14	10	17	14	18	14	10	10
28	23	13		24	21	20	26	21	20	27	24	31	25	21	21
93	5 76	5 16	5 00	99	83	76	88	87	62	1 00	81	70	88	71	71
				5 66	5 07	5 51	6 15	5 28	5 17	4 57	4 80	4 91	5 64	4 96	4 58
0	8 49	7 95	12 00	10 87	10 84	10 60	8 46	8 24	6 33	11 28	10 57	9 75	11 21	11 54	7 00
6	11 89	11 15	16 00	14 98	14 97	15 82	11 41	11 30	10 00	15 78	14 07	17 87	15 32	13 11	10 87
2	4 73	4 51	5 00	4 41	4 26	4 25	4 68	4 41	3 75	4 61	4 22	3 87	4 17	4 17	3 75
3	4 65	4 09	4 50	4 08	3 91	3 66	4 01	3 60	2 92	3 92	3 75	2 75	3 65	3 68	3 25

Table showing the average retail prices of provisions, groceries, and other leading
WESTERN STATES—Continued.

Articles.	Kansas.			Nebraska.			Average for West- ern States.		
	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.
PROVISIONS.									
Flour, wheat, superfine..... per bbl.	89 36	86 39	86 25	812 00	56 75	.....	\$10 11	85 83	35 80
Flour, wheat, extra family..... do.	10 21	7 68	.....	11 00	5 25	.....	10 02	6 43	6 91
Flour, rye..... do.	.....	5 00	.....	.....	.....	.....	.....	5 21	5 42
Corn-meal..... do.	3 70	3 15	3 50	6 00	4 50	.....	4 46	3 89	3 58
Beef, fresh, roasting-pieces..... per lb.	12	12	05	12	05	.....	14	12	11
Beef, fresh, soup-pieces..... do.	08	08	05	12	05	.....	09	08	08
Beef, corned..... do.	13	12	08	20	15	.....	14	13	11
Beef, fore quarters..... do.	10	09	01	12	09	.....	10	10	08
Veal, hind quarters..... do.	12	12	.....	15	11	.....	10	09	10
Veal, hind quarters..... do.	13	13	.....	20	13	.....	13	11	12
Veal-cutlets..... do.	15	14	03	20	17	.....	14	11	12
Mutton, fore quarters..... do.	09	09	.....	15	11	.....	14	08	09
Mutton, leg..... do.	11	11	.....	20	13	.....	13	11	11
Pork, fresh..... do.	11	10	.....	20	15	.....	13	11	12
Pork, corned or salted..... do.	17	16	07	22	17	.....	13	13	11
Pork, bacon..... do.	21	20	12	25	21	.....	16	17	11
Pork, hams, smoked..... do.	22	21	16	30	25	.....	19	19	14
Pork, shoulders..... do.	17	17	10	20	16	.....	16	16	13
Pork, sausages..... do.	16	17	15	20	17	.....	17	17	13
Lard..... do.	19	21	14	23	20	.....	19	21	15
Cod-fish, dry..... do.	14	11	10	10	11	.....	11	11	09
Mackerel, pickled..... do.	17	15	10	15	16	.....	15	14	16
Butter..... do.	32	36	22	50	42	.....	33	31	24
Potatoes..... do.	23	22	25	30	27	.....	21	23	17
Rice..... per lbs.	1 10	38	75	1 50	32	.....	89	51	78
Beans..... per lb.	15	14	12	20	14	.....	15	13	11
Milk..... per qt.	11	11	10	20	07	.....	13	09	09
Eggs..... per doz.	09	09	07	10	07	.....	07	07	06
GROCERIES, ETC.									
Tea, Oolong or other good black, per lb.	1 80	1 56	1 12	1 75	1 50	.....	1 66	1 52	1 15
Coffee, Rio, green..... do.	34	28	21	35	29	.....	33	28	27
Coffee, Rio, roasted..... do.	42	33	33	40	34	.....	37	31	31
Sugar, good brown..... do.	18	16	10	20	15	.....	17	15	10
Sugar, yew O..... do.	21	17	11	21	16	.....	18	16	09
Sugar, coffee B..... do.	23	19	12	22	18	.....	19	18	11
Molasses, New Orleans..... per gall.	1 13	88	55	.....	36	.....	1 17	95	89
Molasses, Porto Rico..... do.	97	89	60	.....	41	.....	1 03	85	71
Sirup..... do.	1 54	1 20	1 03	1 50	1 37	.....	1 47	1 28	95
Soup, common..... per lb.	12	10	10	15	12	.....	11	10	08
Starch..... do.	11	12	20	20	17	.....	15	14	10
Fuel, coal..... per ton	11 54	8 66	4 50	18 60	11 00	.....	9 50	8 30	6 30
Fuel, wood, hard..... per cord	5 71	5 54	4 25	14 00	8 50	.....	5 48	4 74	4 50
Fuel, wood, pine..... do.	7 00	5 09	.....	.....	.....	.....	3 70	3 21	3 61
Oil, coal..... per gall.	76	59	35	75	60	.....	70	55	26
DOMESTIC DRY-GOODS, ETC.									
Shirtings, brown, 4-4, standard qual- ity..... per yard.	25	29	15	25	18	.....	22	18	12
Shirtings, bleached, 4-4, standard qual- ity..... per yard.	30	25	20	30	22	.....	28	22	15
Sheetings, brown, 9-8, standard qual- ity..... per yard.	48	37	17	.....	22	.....	31	25	19
Sheetings, bleached, 9-8, standard quality..... per yard	51	42	23	.....	27	.....	37	30	20
Cotton-fannel, medium quality..... do.	39	27	20	.....	27	.....	34	27	18
Pickings, good quality..... do.	52	37	25	30	33	.....	45	37	26
Fruits, Merrimac..... do.	18	13	11	.....	15	.....	17	11	10
Monsefine de laines..... do.	29	23	15	.....	25	.....	27	21	19
Satinets, medium quality..... do.	1 11	76	75	90	1 01	.....	1 00	84	72
Boots, men's heavy..... per pair	5 50	4 83	3 62	6 50	5 50	.....	5 70	5 20	5 40
HOUSE-RENT.									
Four-roomed tenements..... per mo	16 71	18 43	9 00	49 00	37 50	.....	13 97	12 42	9 12
Six-roomed tenements..... do.	24 44	26 11	15 00	75 00	60 00	.....	21 40	17 10	11 30
BOARD.									
For men, (mechanics, &c.)..... per week.	5 00	4 64	3 75	7 00	5 75	4 81	4 50	4 14
For women in factories..... do.	4 71	4 33	3 63	7 00	5 09	4 35	3 97	3 25

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articles of consumption, with prices of house-rent and board, &c.—Continued.

PACIFIC STATES.

1874.	Average for Western States.			California.			Oregon.			Nevada.			Average for the Pacific States.*		
	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.
\$10 11	\$5 23	\$5 00													
10 02	6 43	6 91													
7 23	5 21	5 42													
4 46	3 89	3 58													
09	08	08													
143	133	113													
103	10	08													
103	091	103													
13	114	121													
13	11	12													
133	083	09													
133	11	113													
13	112	12													
13	133	113													
103	17	114													
10	14	133													
243	14	133													
163	163	133													
173	173	133													
193	21	153													
114	11	093													
15	144														
333	313	243													
243	243														
89	51	77													
15	133														
133	093	093													
073	07	063													
243	24	19													
1 66	1 52	1 15													
31	24	273													
373	333	33													
17	153	10													
18	163	091													
19	18	113													
1 17	95	89													
1 03	853	71													
1 47	1 28	95													
1 12	103	08													
15	11	101													
9 50	8 30	6 30													
5 48	4 74	4 50													
3 70	3 24	3 61													
70	53	26													
223	183	123													
28	22	15													
31	25	194													
37	303	203													
343	29	18													
45	373	293													
273	13	103													
1 00	84	72													
5 70	5 20	5 40													
13 97	12 42	9 12													
21 40	17 10	14 00													
4 81	4 50	4 14													
4 35	3 97	3 25													
1 09	1 04	73	1 14	1 06	873	1 30	1 69	75	1 14	1 06	78				
25	24	26	24	24	273	31	33	33	29	27	29				
36	34	33	33	39	39	57	48	373	46	403	333				
10	11	103	15	15	14	57	48	24	11	183	163				
16	16	12	18	17	163	21	21	14	163	163	14				
18	17	123	17	16	17	21	20	14	163	163	14				
1 32	1 16	1 00	1 12	1 06	50	2 00	1 60	1 00	1 45	1 27	1 43				
1 25	1 06	08	1 11	1 13	87	2 00	1 56	1 00	1 45	1 27	1 00				
1 29	1 25	03	1 11	1 13	2 44	1 94	1 50	1 61	1 41	1 41	1 00				
26	22	15	11	11	11	29	17	03	143	123	09				
30 00	15 60	16 25	20 60	20 00	203	38	28	25	29	24	20				
6 31	6 50	8 67	4 00	4 12	5 99	5 00	8 75	22 50	20 09	17 83	16 25				
5 00	5 18	8 00	3 25	3 25	3 67	14 00	9 43	16 00	5 11	6 46	6 68				
1 12	1 00	40	83	83	50	2 00	1 48	75	1 35	1 12	55				
20	17	123	25	20	143	28	20	123	213	10	13				
24	29	13	27	22	15	29	23	123	263	213	133				
41	30	16	27	22	30	67	47	30	45	36	253				
53	48	17	30	25	31	84	50	33	54	41	28				
30	25	20	32	28	233	39	32	18	333	283	303				
38	33	26	46	39	313	45	38	37	49	363	303				
15	13	19	16	13	11	24	15	10	173	133	103				
31	26	21	28	23	273	40	33	33	28	283	283				
1 00	82	87	1 06	92	803	91	1 01	75	1 60	913	823				
4 92	5 10	4 75	6 43	5 93	5 50	9 20	5 60	6 23	6 18	5 08					
12 00	12 42	17 00	10 28	9 71	13 17	23 00	17 80	15 09	11 86	15 08					
16 30	20 16	31 00	14 66	13 16	18 50	31 20	22 71	22 71	35 34	24 75					
6 86	6 53	5 33	5 86	5 57	5 17	11 83	9 62	8 00	8 18	7 25	6 17				
5 72	6 20	6 00	5 50	5 41	4 00	11 33	9 25	7 52	6 95	5 00					

* In coin.

Table showing the average retail prices of provisions, groceries, and other leading articles of in the respective years

Articles.	Dakota.			Idaho.			Montana.		
	1867.	1869.	1874.	1867.	1869.	1874.	1867.	1869.	1874.
PROVISIONS.									
Flour, wheat, superfine.....per bbl.	\$13 00	\$6 75	\$4 50	\$24 75	\$18 25	\$5 25	\$27 00	\$20 00	\$16 00
Flour, wheat, extra family.....do.	15 00	7 00	5 00	22 00	15 50	6 00	.....	.....	18 00
Flour, rye.....do.	.....	7 00	4 75	.....	19 00	7 00	.....	.....	16 00
Corn-meal.....do.	12 00	6 00	4 50	26 00	18 33	7 50	\$33 00	\$26 00	17 00
Beef, fresh, roasting-pieces.....per lb.	18	13	12½	24	25	12½	18	20	15
Beef, fresh, soup-pieces.....do.	10	08	04	21	20	09	11	13	08
Beef, fresh, rump-steaks.....do.	20	17	10	27	23	12½	14	16	10
Beef, corned.....do.	15	13	08	25	23	12½	18	20	10
Veal, fore quarters.....do.	.....	15	08½	29	23	12½	21	22	13
Veal, hind quarters.....do.	.....	16	09½	33	25	15½	21	22	13
Veal-cutlets.....do.	.....	18	15	33	25	12½	21	22	15
Mutton, fore quarters.....do.	.....	15	07½	29	24	10	21	20	12
Mutton, leg.....do.	.....	22	10	31	23	12½	21	22	15
Mutton-chops.....do.	.....	22	16	12½	33	25	21	22	15
Pork, fresh.....do.	.....	24	16	12½	39	27	15	30	25
Pork, corned or salted.....do.	.....	30	25	15	41	31	17½	35	25
Pork, ham, smoked.....do.	.....	45	27	16	40	41	17	35	27
Pork, shoulders.....do.	.....	45	33	17	47	41	22½	45	42
Pork, sausages.....do.	.....	45	27	12½	35	34	10½	35	35
Lard.....do.	.....	50	27	15	42	42	22½	40	42
Cod-fish, dry.....do.	.....	35	22	10	41	32	21½	30	20
Mackerel, pickled.....do.	.....	40	22	10	45	38	25	.....	25
Butter.....do.	.....	50	37	15	1 21	87	50	1 00	80
Cheese.....do.	.....	30	27	20	63	47	35½	30	45
Potatoes.....per bus.	.....	1 00	1 25	5 67	2 17	1 30	2 40	2 02	90
Rice.....per lb.	.....	30	18	12½	46	28	17½	25	40
Beans.....per qt.	.....	.....	20	06½	55	34	10	52	27
Milk.....do.	.....	10	17	05	45	38	12½	25	10
Eggs.....per doz.	.....	50	42	10	1 87	1 12	43½	1 62	1 12
GROCERIES, ETC.									
Tea, Oolong or other good black, per lb.	2 50	2 15	1 00	1 92	1 65	91	2 50	1 50	1 25
Coffee, Rio, green.....do.	30	28	30	58	46	35½	50	45	35
Coffee, Rio, roasted.....do.	.....	60	35	75	55	50	1 00	75	40
Sugar, good brown.....do.	.....	30	24	10	36	27	17	40	25
Sugar, yellow C.....do.	.....	45	22	11	42	33	18	40	27
Sugar, coffee B.....do.	.....	22	18	12	46	37	17	40	20
Molasses, Porto Rico.....per gall.	2 00	1 95	1 60	5 00	3 00	.....	4 00	2 75	2 00
Syrup.....do.	1 50	1 25	65	.....	.....	.....	4 00	3 00	1 50
Soap, common.....per lb.	.....	3 00	1 00	3 13	2 96	1 62	5 00	3 37	2 06
Starch.....do.	.....	24	19	10	29	26	18½	50	30
Fuel, coal.....per ton	.....	25	20	10	60	45	75	45	25
Fuel, wood, hard.....per cord	.....	7 00	5 50	3 00	11 00	5 00	.....	.....	13 00
Fuel, wood, pine.....do.	.....	.....	3 00	2 50	9 50	8 00	7 50	7 00	7 00
Oil, coal.....per gall.	2 00	1 42	30	3 87	2 62	1 00	2 25	1 25	80
DOMESTIC DRY-GOODS, ETC.									
Shirtings, brown, 4-4, standard quality.....per yard	30	22	12½	33	25	20½	36	26	12½
Shirtings, bleached, 4-4, standard quality.....per yard	30	32	15	47	35	20½	43	30	17
Sheetings, brown, 9-8, standard quality.....per yard	35	30	11	62	62	30	65	35	40
Sheetings, bleached, 9-8, standard quality.....per yard	35	37	12	1 12	70	50	65	35	54
Cotton-blended, medium quality.....do.	50	45	20	75	52	31½	55	40	20
Tickings, good quality.....do.	25	15	30	87	65	37½	69	62	25
Prints, Merino.....do.	20	17	12½	24	25	12½	22	36	12½
Mousseline de laines.....do.	35	27	25	40	33	25½	40	31	22½
Satinets, medium quality.....do.	1 25	1 00	1 00	1 67	1 22	75	1 00	1 00	87½
Boots, men's heavy.....per pair	8 00	6 75	5 00	12 00	9 25	5 75	6 00	6 75	8 00
HOUSE-RENT.									
Four-roomed tenements.....per mo.	30 00	25 00	10 00	62 50	27 50	17 50	.....	50 00	18 00
Six-roomed tenements.....do.	60 00	50 00	15 00	87 50	40 00	30 00	.....	65 00	25 00
BOARD.									
For men, (mechanics, &c.).....per week	4 50	6 50	4 00	16 37	12 12	7 50	20 00	10 00	8 00
For women in factories.....do.	4 00	5 25	.....	15 87	11 62	.....	20 00	8 00	.....

A.

other leading articles of
in the respective years

Montana.				
1874.	1867.	1869.	1874.	
5 35	\$27 00	\$20 00	\$16 00	
6 00	.....	.....	18 00	
7 00	.....	.....	16 00	
7 50	33 00	26 00	17 00	
12 1	18	20	15	
09	11	12	08	
101	18	20	10	
111	14	16	10	
121	21	20	10	
131	21	22	12 1/2	
141	21	22	15	
151	21	22	15	
161	21	22	15	
171	35	25	15	
181	35	27	25	
191	45	42	30	
201	35	35	22 1/2	
211	50	40	42	
221	40	42	25	
231	.....	30	25	
241	1 00	80	50	
251	30	45	35	
261	2 40	2 02	90	
271	25	40	12 1/2	
281	52	27	10	
291	25	25	10	
301	1 62	1 12	60	

LABOR IN THE UNITED STATES.

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consumption, with prices of house-rent and board, in the towns of the following Territories,
1867, 1869, and 1874.

New Mexico.				Arizona.		Colorado.		Washing- ton.	Wyom- ing.	Average for Territories.		
1867.	1869.	1874.		1867.	1869.	1867.	1869.	1874.	1874.	1867.	1869.	1874.
\$12 00	\$14 00			\$25 00		\$17 50	\$12 43	\$5 50	\$20 93	\$16 07	\$7 05	
15 00	15 00	\$10 00	\$31 00	25 00		20 00	12 20	6 00	10 00	17 75	15 00	9 17
9 00	9 00	4 00	14 00	19 50		11 83	12 00	6 50	8 50	29 00	42 00	8 55
08	10	08	21	22		10	13	11	12 1/2	19	17	11
12	07	00	23	22		16	11	01	08	15	17	12
11	10	06	25	21		12	08	11	15	19 1/2	18	10 1/2
12	10	10	25	22		17	13	06	18	16	16	10
12	10	12	23	20		17	13	09	15	22	17	09 1/2
12	10	12	25	23		19	10	10	15	22	19	12
11	09	08	25	19		15	11	12 1/2	15	23	19	14 1/2
11	09	08	28	23		19	14	12 1/2	15	23	19	14 1/2
17	12	08	28	28		20	15	12 1/2	15	23	19	14 1/2
15	12	20	15	33		33	16	12 1/2	15	23	19	14 1/2
40	35	21	50	42		39	20	12 1/2	15	23	19	14 1/2
72	47	25	53	45		40	21	17	20	41	34	17
45	40	25	50	42		42	20	17	20	41	34	17
50	40	30	.....	50		37	27	17	20	41	34	17
40	40	25	47	49		36	29	17	20	41	34	17
45	40	25	42	38		31	27	17	20	41	34	17
1 12	25	20	60	59		36	27	17	20	41	34	17
6 12	45	75	80	1 00		81	46	19	20	41	34	17
45	45	35	30	67		49	32	37 1/2	25	49	37	21
10	10	06	20	50		31	2 04	30	20	41	34	17
13	16	20	40	69		21	26	10	12	42 1/2	33	1 19
50	40	50	1 50	80		17	12	12 1/2	10	25	25	15
						99	56	37 1/2	40	1 17	71	40
1 75	1 75	1 25	1 50	1 25	2 70	2 10		59	1 50	2 14	1 73	1 08
55	50	33 1/2	65	52	48	35		27 1/2	45	51	43	34
40	35	18	37	37	46	41		37 1/2	35	51	43	49
43	38	29	47	49	35	24		10 1/2	12 1/2	38	28	14
47	42	29	47	29	38	25		12 1/2	13	39	27	16
2 50	2 00	2 00	48	41	39	26		12 1/2	14	49	33	16
2 50	2 00	2 00	6 00	4 50	2 60	1 04		50	1 25	3 68	2 58	1 35
4 50	4 00	2 75	3 75	2 45	3 36	2 46		50	1 00	3 31	2 51	1 13
31	25	13	55	42	20	23		50	2 00	3 95	3 00	1 71
50	35	50	60	47	30	23		67 1/2	10	30	28	15
5 00	7 00	4 50	4 75	9 50	7 30	31		25	20	51 1/2	35 1/2	22
5 00	7 00	4 50	4 75	11 50	9 30	40		4 00	8 50	9 50	7 20	0 40
4 50	2 75	1 25	3 75	5 62	4 21	1 35		4 00	7 00	7 85	6 17	3 83
				2 00	1 35			50	40	6 42	5 37	5 20
										3 06	2 06	71
33	22	20	20	20	37	25		12 1/2	18	31 1/2	23	16
33	22	20	25	25	49	27		18	25	36	28 1/2	19
41	30	45	25	25	43	33		10	22	46	37	25
41	30	45	30	37	50	38		10	25	50	40	39
62	43	30	37	48	61	43		30	35	55	43	39
51	33	25	25	25	21	56		25	30	53	50	29
33	33	25	15	15	41	51		10	101	25	28	12
81	57	30	25	25	46	31		20	101	25	31	27
88	62	99	75	75	1 08	77		25	41 1/2	110	89	85
7 75	5 50	9 00	8 00	8 91	7 12			6 00	10 00	8 63	7 23	7 46
23 50	20 00	8 00	.....	20 00	14 94	12 00		30 00	33 75	27 49	14 25	
32 50	27 50	12 00	.....	23 00	20 12	15 00		32 50	52 00	40 50	19 90	
12 00	8 75	6 00	17 50	9 00	11 25	7 41		8 00	13 60	8 97	6 70	
12 00	8 75	.....	17 50	9 00	11 10	7 41		.....	13 40	8 30	.....

Table showing the aggregate average retail prices of provisions, groceries, &c., in the towns of the United States in the respective years 1867, 1869, and 1874.

RECAPITULATION.

Articles.	1867.	1869.	1874.
PROVISIONS.			
Flour, wheat, superfine..... per barrel..	\$12 90	\$9 00	\$8 80
Flour, wheat, extra family..... do.....	13 00	9 50	7 00
Flour, rye..... do.....	11 30	8 60	6 20
Corn-meal..... do.....	8 07	6 55	5 20
Beef, fresh, roasting-pieces..... per pound..	16	15	13
Beef, fresh, soup-pieces..... do.....	11	10	07
Beef, fresh, rump-steaks..... do.....	17	10	10
Beef, corned..... do.....	11	11	10
Veal, fore-quarters..... do.....	11	12	11
Veal, hind-quarters..... do.....	16	15	13
Veal cutlets..... do.....	18	17	15
Mutton, fore-quarters..... do.....	13	13	11
Mutton, leg..... do.....	15	14	11
Mutton chops..... do.....	16	16	15
Pork, fresh..... do.....	17	16	14
Pork, corned or salted..... do.....	20	21	18
Pork, bacon..... do.....	20	22	19
Pork, hams, smoked..... do.....	26	24	17
Pork, shoulders..... do.....	21	20	14
Pork, sausages..... do.....	20	23	16
Lard..... do.....	23	25	15
Cod-fish, dry..... do.....	17	16	11
Mackerel, pickled..... do.....	20	17	13
Butter..... do.....	40	44	35
Cheese..... do.....	20	27	22
Potatoes..... do.....	1 62	1 03	90
Rice..... per bushel..	17	16	11
Beans..... per pound..	0 60	13	10
Milk..... do.....	12	11	15
Eggs..... per dozen..	40	40	30
GROCERIES, ETC.			
Tea, Oolong or other good black..... per pound..	1 60	1 43	90
Coffee, Rio, green..... do.....	30	31	28
Coffee, Rio, roasted..... do.....	41	38	31
Sugar, good brown..... do.....	20	17	11
Sugar, yellow C..... do.....	20	18	12
Sugar, coffee B..... do.....	22	20	13
Molasses, New Orleans..... per gallon..	1 57	1 14	98
Molasses, Porto Rico..... do.....	1 43	1 22	81
Sirup..... do.....	1 80	1 58	1 08
Starch..... per pound..	16	14	09
Fuel, coal..... do.....	22	18	13
Fuel, wood, hard..... per cord..	10 50	10 03	9 11
Fuel, wood, pine..... do.....	5 74	5 41	5 30
Oil, coal..... do.....	5	1 53	5 42
Oil, coal..... per gallon..	1 72	90	38
DOMESTIC DRY-GOODS, ETC.			
Shirtings, brown, 4-4, standard quality..... per yard..	23	20	12
Shirtings, bleached, 4-4, standard quality..... do.....	27	23	15
Sheetings, brown, 9-8, standard quality..... do.....	34	28	20
Sheetings, bleached, 9-8, standard quality..... do.....	40	33	22
Cotton-blend, medium quality..... do.....	35	30	19
Prints, Marseilles..... do.....	45	30	27
Mous-line de laines..... do.....	18	17	10
Satinets, medium quality..... do.....	31	27	21
Boots, men's heavy..... do.....	90	70	73
Boots, men's heavy..... per pair..	6 22	5 56	5 05
HOUSE-RENT.			
Four-roomed tenements..... per month..	14 02	13 52	11 91
Six-roomed tenements..... do.....	22 00	21 80	16 27
BOARD.			
For men, (mechanics, &c.)..... per week..	6 70	5 65	5 01
For women in factories..... do.....	6 06	5 00	3 53

series, &c., in the towns of
and 1874.

	1867.	1869.	1871.
...	\$12.00	\$9.09	\$0.89
...	13.00	9.50	7.00
...	11.33	8.03	6.24
...	8.07	0.55	5.23
...	16	153	131
...	11	10	04
...	17	16	103
...	14	13	103
...	16	15	135
...	183	153	153
...	133	111	111
...	15	14	11
...	103	16	13
...	17	163	14
...	203	211	131
...	213	211	153
...	213	20	11
...	213	233	163
...	213	16	173
...	163	16	11
...	13	17	133
...	43	44	353
...	20	27	223
...	1.03	993	113
...	173	163	103
...	163	13	103
...	12	11	13
...	403	403	30
...	1.60	1.31	99
...	211	31	254
...	41	31	313
...	203	17	113
...	203	18	12
...	223	203	133
...	1.37	1.31	08
...	1.31	1.22	84
...	1.801	1.53	1.034
...	16	131	093
...	10	183	133
...	5.71	10.03	9.11
...	5.5	5.41	5.30
...	1	1.53	5.42
...	90	90	383
...	233	20	133
...	273	23	15
...	31	23	20
...	353	333	223
...	433	303	183
...	183	403	273
...	313	17	103
...	903	27	233
...	6.22	5.56	733
...	13.52	11.93	16.27
...	5.63	5.01	3.53
...	5.60		

Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following New England States, with their average weekly earnings, in the year 1873.

Articles.	MAINE.				NEW HAMPSHIRE.				CONNECTICUT.			
	Leviston.	Camden.	Lisbon.	Portsmouth.	Newmarket.	Kennebec.	Fisherville.	Manchester.	Ashtabula.	Dover.	Berlin.	New Britain.
Flour and bread	\$0.05	\$1.60	\$0.41	\$0.40	\$0.40	\$0.30	\$0.30	\$1.00	\$1.20	\$1.00	\$1.00	\$1.00
Meat, mutton, salted, and smoked meats	1.55	2.00	2.10	1.55	1.40	1.00	1.50	1.51	1.00	1.50	1.50	1.50
Butter	1.55	2.00	2.10	1.55	1.40	1.00	1.50	1.51	1.00	1.50	1.50	1.50
Bacon	2.55	3.00	3.10	2.55	2.40	1.00	2.50	2.51	2.00	2.50	2.50	2.50
Milk	63	63	63	63	63	63	63	63	63	63	63	63
Coffee	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Tea	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fish, fresh and salt	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Starch, soap, pepper, vinegar, &c.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Flour and other vegetables	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fruits, green and dried	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Wheat, corn, and other grain	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Other foodstuffs	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Other foodstuffs	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Stables, beer, and tobacco, (if any)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
House rent	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
For educational, religious, and benevolent objects	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Total weekly expenses	13.69	11.34	7.54	7.09	5.00	11.45	9.75	11.45	10.45	11.35	11.35	11.35
Total expenses per week	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
Weekly earnings	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55
Weekly earnings, (52 weeks)	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00
Yearly earnings	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00	81.00

* Estimated.

Living earnings of 3 children.

Lives in his own house.

Lives in his own house.

LABOR IN THE UNITED STATES.

Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following New England States, &c.—Continued.

Articles.	MASSACHUSETTS.								RHODE ISLAND.				Average.			
	Holden.	Dalton.	Freetown.	Newton.	East Hampton.	Stock-bridge.	Lowell.	Pittsfield.	Providence.	Scituate.	Coxwetry.					
2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.	2 adults and 2 children.
Flour and bread	\$2 20	\$1 00	\$0 65	\$1 20	\$1 60	\$2 60	\$1 60	\$0 50	\$0 65	\$1 60	\$1 60	\$0 65	\$0 65	\$1 60	\$1 60	\$1 13
Fresh, corned, salt, and smoked meats	2 50	2 00	2 00	2 50	2 50	2 50	2 50	2 00	1 25	1 20	1 20	1 25	1 25	1 20	1 20	1 09
Lard	05	10	20	20	25	20	20	20	20	40	40	40	40	40	40	20
Meat	05	50	80	75	80	75	80	15	80	15	15	25	25	25	25	20
Cheese	10	10	10	10	10	10	10	15	10	15	15	15	15	15	15	10
Sugar and molasses	40	40	40	40	40	40	40	82	40	40	40	40	40	40	40	40
Milk	05	21	42	40	45	20	1 50	82	40	1 25	1 25	40	40	1 25	1 25	66
Coffee	10	10	40	40	45	20	1 50	82	40	1 25	1 25	40	40	1 25	1 25	46
Tea	10	10	25	10	50	50	50	25	07	50	50	25	25	50	50	20
Fish, fresh and salt	25	35	30	50	50	50	50	25	25	50	50	25	25	50	50	35
Spice, starch, salt, pepper, vinegar, &c	20	25	17	15	30	20	25	20	25	50	50	25	25	50	50	25
Eggs	50	50	40	30	35	40	30	50	50	40	40	50	50	40	40	57
Potatoes and other vegetables	50	50	40	30	35	40	30	50	50	40	40	50	50	40	40	57
Fruits, green and dried	10	10	95	1 00	35	25	25	50	50	1 00	1 00	50	50	1 00	1 00	29
Fuel	1 00	72	75	55	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	82
Oil for other light	10	06	10	15	20	25	06	10	33	25	25	06	06	25	25	18
Shirts, beer, and tobacco, (if any)	25	25	15	15	20	25	06	10	1 00	33	25	06	06	25	25	18
Non-severe	3 00	1 60	1 25	2 40	3 60	55	3 60	1 13	1 00	1 00	1 00	1 00	1 00	1 00	1 00	45
For educational, religious, and benevolent objects.	1 50	1 50	1 50	75	3 60	75	3 60	1 13	4 00	1 25	1 25	4 00	4 00	1 25	1 25	25
Total weekly expenses.....	12 00	8 40	11 01	14 40	16 65	8 85	12 11	7 94	11 41	14 92	9 30	10 78	10 78	14 92	9 30	10 78
Total expenses 52 weeks.....	624 00	436 80	571 08	753 48	865 80	460 50	635 32	413 13	593 32	775 84	481 00	560 56	560 56	775 84	481 00	560 56
Clothing per year.....	50 00	25 00	30 00	100 00	150 00	30 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00
Taxes per year.....	2 00	2 54	2 60	2 60	2 60	2 60	2 60	2 60	2 60	2 60	2 60	2 60	2 60	2 60	2 60	3 07
Total yearly expenses.....	676 00	461 34	776 08	855 48	1 017 80	513 20	747 32	515 14	701 32	878 44	583 60	670 22	670 22	878 44	583 60	670 22
Weekly earnings.....	15 00	9 00	15 00	16 50	20 00	15 00	17 00	15 60	17 00	17 50	10 00	15 14	15 14	17 50	10 00	15 14
Yearly earnings, (52 weeks).....	780 00	468 00	780 00	858 00	1 040 00	780 00	884 00	780 00	884 00	910 00	520 00	780 00	780 00	910 00	520 00	780 00

* Estimated.

Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following New England States, &c.—Continued.

LABOR IN THE UNITED STATES.

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Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following Middle States, with their average weekly earnings, in the year 1874.

Articles.	NEW YORK.				NEW JERSEY.				DELAWARE.				MARY- LAND.
	Buffalo.		New York.		Little Falls.		Bridgeport.		Wilmington.		Newport.		Baltimore
	Adults and 1 child.	Adults and 2 children.	Adults and 1 child.	Adults and 2 children.	Adults and 2 children.	Adults and 2 children.	Adults and 2 children.	Adults and 2 children.	Adults and 2 children.	Adults and 2 children.	Adults and 2 children.	Adults and 2 children.	
Flour and bread.....	\$2.00	\$3.50	\$2.50	\$4.00	\$1.50	\$2.50	\$1.00	\$2.00	\$2.00	\$3.00	\$2.00	\$3.00	2 adults and 1 child.
Meat, fresh, corned, salted or smoked.....	2.50	4.00	2.50	4.00	1.00	1.50	3.50	2.00	2.00	1.50	1.50	1.50	2 adults and 1 child.
Butter.....	1.00	1.50	1.00	1.50	1.00	1.50	1.00	1.50	1.00	1.50	1.00	1.50	2 adults and 1 child.
Eggs.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Chickens.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Sugar and molasses.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Milk.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Coffee.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Tea.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Fish, fresh and salt.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Soap, starch, salt, pepper, vinegar, &c.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Eggs.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Potatoes and other vegetables.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Fuel, coal, wood, &c.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Oil and other light.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Other articles.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Shirts, beer, and tobacco, (if any).....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
House-rent.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
For educational, religious, and benevolent objects.....	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	1.25	2.00	2 adults and 1 child.
Total weekly expenses.....	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	25.00
Total for 52 weeks.....	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	1,250.00
Weekly earnings.....	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	25.00
Yearly earnings, 52 weeks.....	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	1,250.00
Taxes per year.....	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	25.00
Total yearly expenses.....	765.00	1,275.00	765.00	1,275.00	765.00	1,275.00	765.00	1,275.00	765.00	1,275.00	765.00	1,275.00	1,275.00
Weekly earnings.....	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	15.00	25.00	25.00
Yearly earnings, 52 weeks.....	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	750.00	1,250.00	1,250.00

* Estimated.

† Taxes and interest on property.

* Estimated.

Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following Middle States, &c.—Continued.

Articles.	PENNSYLVANIA.										Average of Middle States.
	Eric. 2 adults and 3 children.	Reading. 2 adults and 3 children.	Xorris- town. 2 adults and 3 children.	Pitts- burgh. 2 adults and 3 children.	Porter- town. 2 adults and 3 children.	South Belle- hem. 2 adults and 3 children.	Philadel- phia. 2 adults and 4 children.	Concho- hocken. 2 adults and 4 children.	Linwood. 2 adults and 4 children.	Pittsburgh. 2 adults and 5 children.	Harris- burgh. 2 adults and 5 children.
Flour and bread.	\$0 75	\$0 80	\$1 00	\$1 15	\$1 00	\$0 85	\$1 25	\$0 40	\$1 00	\$1 70	\$1 00
Fresh, corned, salted, and smoked meats.	1 50	1 00	1 50	2 20	2 25	50	3 50	50	1 50	3 00	80 40
Butter.	1 30	1 00	1 30	1 30	1 30	30	1 30	1 00	2 50	2 50	1 15
Cheese.	1 15	1 00	1 00	1 00	1 00	45	1 00	1 00	2 50	2 00	1 35
Sugar and molasses.	70	1 25	50	50	35	55	50	50	50	70	35
Milk.	45	50	50	50	50	50	50	50	50	50	45
Eggs.	45	50	50	50	50	50	50	50	50	50	45
Fish, fresh and salt.	1 25	50	50	50	50	50	50	50	50	50	45
Soap, starch, salt, pepper, vinegar, &c.	1 00	50	50	50	50	50	50	50	50	50	45
Potatoes and other vegetables.	1 00	1 50	40	1 00	55	20	50	50	50	50	45
Peas, beans, green and dried.	75	50	50	50	50	50	50	50	50	50	45
Fuel or other light.	1 00	50	50	50	50	50	50	50	50	50	45
Other articles.	45	10	50	50	50	50	50	50	50	50	45
Spirits, beer, and tobacco, (if any).	50	50	50	50	50	50	50	50	50	50	45
House-rent.	50	50	50	50	50	50	50	50	50	50	45
Education, religion, and benevolence.	50	50	50	50	50	50	50	50	50	50	45
Total weekly expenses.	10 75	12 75	8 23	13 05	8 41	8 05	15 85	11 00	11 30	20 75	8 73
Total expenses for 52 weeks.	560 25	663 00	427 96	678 60	437 32	416 64	824 72	574 00	589 72	1,079 00	453 16
Clothing per year.	150 00	100 00	80 00	113 00	50 00	40 00	160 00	50 00	55 00	275 00	113 00
Taxes per year.	30 00	30 00	20 00	25 00	25 00	20 00	70 00	20 00	25 00	5 00	8 83
Total yearly expenses.	740 25	793 00	527 96	813 60	492 37	476 64	1,054 72	645 00	669 72	1,359 00	574 99
Weekly earnings.	15 00	16 00	10 00	25 00	15 00	12 00	20 40	20 00	25 00	22 50	18 00
Yearly earnings, (52 weeks)	780 00	832 00	520 00	1,302 00	780 00	624 00	1,060 80	1,040 00	1,300 00	1,170 00	936 00

* Estimated.

† Add about \$30 for medical attendance.

Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following Middle States, &c.—Continued.

Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following Western States, with their average weekly earnings, in the year 1874.

Articles.	INDIANA.										WISCONSIN.		
	Dayton.	Bellefontaine.	Bucyrus.	Mansfield.	Piqua.	Steubenville.	Cincinnati.	Madison.	Evansville.	Cumingsville.	Milwaukee.	Cedarburg.	
Flour and bread.	80 40	80 55	80 30	81 10	81 00	81 00	80 75	80 70	80 30	80 75	80 55	80 55	
Meats fresh, corned, salted, or smoked.	1 15	1 15	1 00	1 15	1 15	1 15	1 00	1 25	1 25	1 50	2 50	2 50	
Butter.	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	15 15	
Sugar and molasses.	20 40	20 15	20 15	20 15	20 15	20 15	20 15	20 15	20 15	20 15	20 15	20 15	
Milk.	25 25	25 25	25 25	25 25	25 25	25 25	25 25	25 25	25 25	25 25	25 25	25 25	
Coffee.	30 30	30 30	30 30	30 30	30 30	30 30	30 30	30 30	30 30	30 30	30 30	30 30	
Tea.	35 35	35 35	35 35	35 35	35 35	35 35	35 35	35 35	35 35	35 35	35 35	35 35	
Fish, fresh and salt.	40 40	40 40	40 40	40 40	40 40	40 40	40 40	40 40	40 40	40 40	40 40	40 40	
Spices, starch, salt, pepper, vinegar, &c.	45 45	45 45	45 45	45 45	45 45	45 45	45 45	45 45	45 45	45 45	45 45	45 45	
Potatoes and other vegetables.	50 50	50 50	50 50	50 50	50 50	50 50	50 50	50 50	50 50	50 50	50 50	50 50	
Fruits, green and dried.	55 55	55 55	55 55	55 55	55 55	55 55	55 55	55 55	55 55	55 55	55 55	55 55	
Oil or other light.	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	60 60	
Spices, beer, and tobacco, (if any).	65 65	65 65	65 65	65 65	65 65	65 65	65 65	65 65	65 65	65 65	65 65	65 65	
Household.	70 70	70 70	70 70	70 70	70 70	70 70	70 70	70 70	70 70	70 70	70 70	70 70	
For educational, religious, and benevolent objects.	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	75 75	
Total weekly expenses.	8 50	7 55	7 12	7 12	7 12	7 12	7 12	7 12	7 12	7 12	7 12	7 12	
Total expenses 52 weeks.	442 00	393 00	371 00	371 00	371 00	371 00	371 00	371 00	371 00	371 00	371 00	371 00	
Clothing per year.	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	100 00	
Taxes per year.	9 00	9 00	9 00	9 00	9 00	9 00	9 00	9 00	9 00	9 00	9 00	9 00	
Total yearly expenses.	551 00	502 00	480 00	480 00	480 00	480 00	480 00	480 00	480 00	480 00	480 00	480 00	
Weekly earnings.	14 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	15 00	
Yearly earnings, (52 weeks).	728 00	780 00	780 00	780 00	780 00	780 00	780 00	780 00	780 00	780 00	780 00	780 00	

• Estimated.

* Estimated.

† Add about \$30 for medical attendance.

* Estimated.

Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following Western States, &c.—Continued.

Articles.	ILLINOIS.						MINNESOTA.		IOWA.		KANSAS.		Average of Western States.
	Belleville. 2 adults and 3 children.	West Palmville. 2 adults and 4 children.	Chicago. 2 adults and 3 children.	Metropoli- tis. 2 adults and 4 children.	Decatur. 2 adults and 5 children.	Stirling. 2 adults and 3 children.	Canon. 2 adults and 1 child.	Rochester. 2 adults.	Bartles- ton. 2 adults and 4 children.	Boone. 2 adults and 3 children.	Grasshopp- er Falls. 2 adults and 3 children.	5 children.	
Flour and bread.....	\$1.00	\$1.25	\$0.97	\$0.65	\$0.95	\$1.00	\$1.00	\$0.75	\$0.75	\$0.50	\$1.00	\$1.00	\$0.50
Meats, fresh, corned, salted, and smoked.....	1.50	2.00	2.00	30	30	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Lard.....	35	50	50	10	30	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Butter.....	35	50	50	30	90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Chickens.....	30	45	50	65	30	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Sausages.....	35	50	50	30	30	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Milk.....	35	50	50	35	35	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Coffee.....	15	25	25	10	25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Tea.....	15	25	25	10	25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fish, fresh and salt.....	30	40	40	20	20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Eggs, starch, salt, pepper, vinegar, &c.....	40	60	60	40	40	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Vegetables.....	40	60	60	40	40	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Potatoes and other veg-ables.....	15	25	25	15	25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fruits, green and dried.....	15	25	25	15	25	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Fuel.....	60	80	80	20	20	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Oil or other light.....	35	50	50	15	15	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Clothes and articles.....	1.50	2.00	2.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Shirts, &c., and tobacco, (if any).....	1.75	2.25	2.25	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
House-rent.....	1.50	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
For educational, religious, and benevolent objects.....	1.50	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Total weekly expenses.....	11.15	14.50	10.58	7.30	13.45	10.35	11.52	10.45	7.35	8.21	10.45	10.50	10.50
Total expenses 52 weeks.....	579.40	758.00	550.16	379.60	699.00	538.20	599.04	539.40	382.20	430.92	543.40	550.00	550.00
Clothing per year.....	100.00	150.00	120.00	105.00	150.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Taxes per year.....	679.40	904.00	628.22	576.10	849.00	638.20	699.04	639.40	282.20	330.92	443.40	450.00	450.00
Total yearly expenses.....	15.00	24.00	18.00	18.00	32.00	15.00	15.00	15.00	17.00	17.00	17.00	17.00	17.00
Weekly earnings.....	936.00	1,218.00	936.00	936.00	1,300.00	750.00	750.00	936.00	824.00	750.00	936.00	936.00	936.00
Yearly earnings, (52 weeks).....	15.00	24.00	18.00	18.00	32.00	15.00	15.00	15.00	17.00	17.00	17.00	17.00	17.00

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Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following Western States, &c.—Continued.

Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following Southern States, with their average weekly earnings, in the year 1874.

THE UNITED STATES.								
Articles.	WEST VIRGINIA.			NORTH CAROLINA.		KENTUCKY.		
	Danville.	Hunting-ton.	Charles-town.	Turbo-ge.	Louisville.	Lancas-ter.	Mayesville.	Coving-ton.
Flour and bread	2 adults and 4 children.	2 adults and 4 children.	2 adults and 4 children.	2 adults and 5 children.	2 adults and 3 children.	2 adults and 3 children.	2 adults and 5 children.	2 adults and 6 children.
Meats, fresh, corned, salted or smoked.	\$1 00	\$0 43	\$1 00	\$1 20	\$1 00	\$1 50	\$1 00	\$1 50
Lard	1 75	1 05	1 00	1 15	1 00	1 50	1 00	1 50
Cheese	2 25	1 30	1 00	1 40	1 00	1 50	1 00	1 50
Butter	2 25	1 30	1 00	1 40	1 00	1 50	1 00	1 50
Sugar and molasses.	3 50	2 40	2 50	3 00	2 50	3 50	2 50	3 50
Milk	4 50	3 00	3 00	3 50	3 00	4 50	3 00	4 50
Coffee	5 00	3 50	3 50	4 00	3 50	5 00	3 50	5 00
Fish, fresh and salt.	7 00	4 50	4 50	5 00	4 50	7 00	4 50	7 00
Soap, starch, salt, pepper, vinegar, &c.	30 00	20 00	20 00	25 00	20 00	30 00	20 00	30 00
Eggs	35 00	25 00	25 00	30 00	25 00	35 00	25 00	35 00
Potatoes and other vegetables.	35 00	25 00	25 00	30 00	25 00	35 00	25 00	35 00
Fruits, green and dried.	50 00	30 00	30 00	35 00	30 00	50 00	30 00	50 00
Fuel	55 00	35 00	35 00	40 00	35 00	55 00	35 00	55 00
Oil or other light.	60 00	35 00	35 00	40 00	35 00	60 00	35 00	60 00
Other articles.	1 00	30 00	30 00	35 00	30 00	1 00	30 00	1 00
Wine, spirits, beer, and tobacco, (if any).	10 00	50 00	50 00	55 00	50 00	10 00	50 00	10 00
Flour, bread, and other necessaries.	2 50	1 50	1 50	2 00	1 50	2 50	1 50	2 50
Educational, religious, and benevolent objects.	2 50	1 50	1 50	2 00	1 50	2 50	1 50	2 50
Total weekly expenses.	10 00	11 04	7 31	11 50	10 80	11 55	8 15	11 50
Total expenses 52 weeks.	520 00	574 08	380 68	608 00	561 60	600 00	424 80	608 00
Clothing per year.	58 00	70 00	45 00	80 00	70 00	80 00	50 00	80 00
Taxes per year.	10 00	3 00	3 00	4 00	3 00	4 00	3 00	4 00
Total yearly expenses.	610 00	647 08	431 68	732 00	634 60	684 00	481 80	692 00
Weekly earnings.	12 50	16 00	9 00	14 00	12 00	14 00	11 00	14 00
Yearly earnings.	650 00	832 00	468 00	728 00	624 00	728 00	572 00	728 00

* Owns land, and pays \$45 taxes in all.

* Owes land, and pays \$15 taxes in all

Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following Southern States, &c.—Continued.

Articles.	TENNESSEE.			ALABAMA.		LOUISIANA.		TEXAS.				Average of Southern States.
	Clintonburg.	Memphis.	Lawrenceburg.	Tallahassee.	Prison.	Galveston.	Dallas.	Austin.	San Antonio.			
	2 adults and 4 children.	2 adults and 2 children.	2 adults and 11 children.	2 adults and 4 children.	2 adults and 12 children.	2 adults and 5 children.	2 adults and 3 children.	2 adults and 4 children.	2 adults and 4 children.			
	\$1.00	\$1.50	\$3.00	\$2.25	\$1.00	\$1.35	\$2.50	\$1.30	\$2.00	Cents.		
Flour and bread.	1.40	2.00	1.70	1.75	3.00	3.00	2.00	1.65	1.55	\$1.31		
Meats, fresh, corned, salted, or smoked.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Lard.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Butter.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Cheese.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Milk.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Sugar and molasses.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Wine.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Coffee.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Tea.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Fish, fresh and salt.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Soap, starch, salt, pepper, vinegar, &c.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Eggs.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Potatoes and other vegetables.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Fruits, green and dried.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Fuel.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Oil or other light.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Other articles.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
Spices, beer, and tobacco, (if any).	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		
House-rent.	2.50	2.00	1.00	75	3.00	6.25	2.50	3.75	1.25	3.75		
Educational, religious, and benevolent objects.	50	50	25	25	50	50	50	50	1.00	1.00		
Total weekly expenses.	11.55	11.00	13.75	10.40	18.20	29.05	7.70	12.30	13.15	13.18		
Total expenses 52 weeks.	621.40	602.40	715.00	540.80	946.40	1,511.00	400.40	639.60	682.20	685.39		
Clothing per year.	10.00	50.00	200.00	3.00	1.00	1.00	40.00	2.00	4.00	128.28		
Taxes per year.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	4.35		
Total yearly expense.	731.40	753.40	915.00	644.80	1,197.40	1,612.00	440.40	741.60	787.20	818.02		
Weekly earnings.	15.00	11.00	18.20	16.00	25.00	31.00	12.00	8.75	15.00	16.09		
Yearly earnings.	780.00	572.00	957.40	832.00	1,300.00	1,612.00	624.00	975.00	780.00	836.76		

Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following Southern States, &c.—Continued.

Spices, beer, and tobacco, (if any).....	25	50	1 00	75	1 00	6 35	2 85	3 75	1 25	3 07	1 05	1 02	13 18
Household objects.....	25	50	2 00	25	3 00	6 35	2 85	3 75	1 25	3 07	1 05	1 02	13 18
Educational, religious, and benevolent objects.....	25	50	2 00	25	3 00	6 35	2 85	3 75	1 25	3 07	1 05	1 02	13 18
Total weekly expenses.....	11 55	11 00	13 75	10 40	18 20	29 05	7 70	12 30	13 12	13 18	13 12	13 18	13 18
Total expenses 52 weeks.....	602 50	572 00	712 50	540 80	946 40	1,511 50	400 40	639 00	682 50	682 50	682 50	682 50	682 50
Weekly earnings.....	100 00	50 00	200 00	150 00	300 00	1,500 00	400 00	600 00	500 00	500 00	500 00	500 00	500 00
Taxes per year.....	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00
Total yearly expense.....	727 50	622 00	762 50	715 80	1,271 40	1,561 50	465 40	704 00	732 50	732 50	732 50	732 50	732 50
Weekly earnings.....	15 00	11 00	18 50	16 00	25 00	31 00	12 00	15 00	15 00	15 00	15 00	15 00	15 00
Yearly earnings.....	780 00	572 00	967 50	832 00	1,300 00	1,612 00	624 00	955 00	780 00	780 00	780 00	780 00	780 00

Table showing the average weekly expenditures of the families of workmen in the manufacturing towns of the following Pacific States and Territories, with their average weekly earnings, in the year 1874.

Articles.	CALIFORNIA.		OREGON.		IDAHO.		MONTANA.		NEW MEXICO.		WASHINGTON.		Average of Pacific States and Territories.	General average for the United States.
	San Fran. and Oresco.	Oakland.	Portland.	Lewisston.	Idaho.	Santa Fe.	Idaho.	Santa Fe.	Idaho.	Santa Fe.	Idaho.	Santa Fe.		
Flour and bread.....	\$9 42	\$1 00	\$8 50	\$9 37	\$1 50	\$1 50	\$1 50	\$1 50	\$1 50	\$1 50	\$1 50	\$1 50	\$1 00	\$1 00
Meats, fresh, salted, or smoked.....	3 50	3 00	1 45	1 40	1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 50	1 97	1 76
Butter.....	1 50	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Eggs.....	1 25	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Sugar and molasses.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Tea.....	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Spices, beer, and tobacco, (if any).....	25	50	25	25	25	25	25	25	25	25	25	25	25	25
Household objects.....	25	50	25	25	25	25	25	25	25	25	25	25	25	25
Educational, religious, and benevolent objects.....	25	50	25	25	25	25	25	25	25	25	25	25	25	25
Total weekly expenses.....	30 12	20 50	13 25	15 75	16 90	16 90	16 90	16 90	16 90	16 90	16 90	16 90	20 85	11 10
Total expenses 52 weeks.....	1,567 50	1,066 00	698 00	817 50	878 00	878 00	878 00	878 00	878 00	878 00	878 00	878 00	1,084 20	581 50
Weekly earnings.....	150 00	100 00	200 00	200 00	300 00	300 00	300 00	300 00	300 00	300 00	300 00	300 00	250 00	132 50
Taxes per year.....	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00	25 00
Total yearly expense.....	1,842 50	1,316 00	948 00	1,067 50	1,128 00	1,128 00	1,128 00	1,128 00	1,128 00	1,128 00	1,128 00	1,128 00	1,329 20	638 50
Weekly earnings.....	15 00	11 00	20 00	20 00	30 00	30 00	30 00	30 00	30 00	30 00	30 00	30 00	25 00	13 25
Yearly earnings.....	780 00	572 00	960 00	960 00	1,800 00	1,800 00	1,800 00	1,800 00	1,800 00	1,800 00	1,800 00	1,800 00	1,325 00	687 50

* Estimated.

Although the foregoing statements indicate, with approximate accuracy, the total weekly expenditures of workmen's families, in the respective places named, yet, in regard to details, proper allowance should be made. It must be borne in mind that the number of laborers, mechanics, or factory hands who keep an accurate account of the amount expended for articles of subsistence is very limited; hence the difficulty in obtaining the desired information.

It will be noticed that those statements have been compiled by States and sections, irrespective of the size of the families. The income of the several workmen affords a fair index of the outgo, and a classification on that basis would have furnished data better suited for purposes of comparison; but, unfortunately, the weekly earnings were not, in all cases, stated in the returns. For example, the family in Maysville, Kentucky, consisting of eight persons, expended in the year but \$534.80, for the sufficient reason that the earnings, at \$11 per week for the whole year, amounted to only \$572; while another family of the same size in the same State was able to expend \$1,693.70, because the yearly income, at \$34 per week, reached \$1,768. It was the author's intention, however, only to include the expenditures of the families of workmen, skilled or unskilled, and not of foremen or superintendents, receiving from \$25 to \$38 per week.

VI. CONDITION OF THE WORKING CLASSES IN THE UNITED STATES.

The great advantages enjoyed by the workingmen in the United States, as compared with those of the same class in the Old World, are sufficiently attested by the deep and steady current of emigration which sets toward our shores. One of the most conspicuous of these advantages consists in the equality of political rights with which the workingman is here invested, and the comparatively high respect and dignity attached to his calling; but not less solid and decided are the advantages connected with abundant employment, good wages, and the substantial comforts of life. It is true that, in common with other countries where the system of credit has been largely developed, our country has had its occasional financial crises, accompanied with serious interruptions to the ordinary course of commerce and industry; but such effects have been comparatively transient in their duration, and the normal condition of the country has been marked by a degree of prosperity rarely if ever enjoyed elsewhere; and rarely, if ever, in the history of the world has national prosperity been so largely shared by those usually denominated the working classes.

In some of the larger cities of our eastern coast, where the labor-supply is receiving constant additions from the ranks of emigrants who lack the means of advancing farther into the country, there is at times considerable complaint of the want of adequate employment; and in such places there is occasionally some privation and suffering among the poor. In the city of New York, owing to its great extent and the lack of adequate communication between its commercial center and its suburbs, large numbers of working people, in order to be conveniently near to their places of employment, are compelled to live in crowded tenement-houses, under conditions which are favorable neither to health, comfort, nor decency.

In some of the manufacturing towns and villages of New England, particularly the seats of the textile industries, the dwellings of the poor are represented to be in a sanitary condition that is far from satisfactory. Such conditions are, however, quite exceptional, and the masses

approximate accuracy, lies, in the respective vance should be made. laborers, mechanics, or the amount expended the difficulty in obtain-

re been compiled by families. The income outgo, and a classifier suited for purely earnings were not, the family in Maysd- at \$11 per week for per family of the same 0, because the yearly he author's intention, families of workmen, intendents, receiving

THE UNITED STATES.

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ges of New England, dwellings of the poor is far from satisfac- onal, and the masses

of working people throughout the country occupy comfortable homes, enjoy an abundance of good food and comfortable clothing, with opportunities for a good common-school education for their children, and possess a degree of personal independence not enjoyed on a large scale by any other laboring population on the face of the globe.

This statement is true not only in regard to the workmen of the rich agricultural regions of our vast interior and the prosperous manufacturing towns with which those regions are dotted, but also to those of Philadelphia (not more famous for its industrial eminence than for the comfort of its workmen's homes) and most of the manufacturing towns of the New England and Middle States. Of these, Lynn, Worcester, Fitchburgh, Taunton, and Springfield, in Massachusetts; Providence and Pawtucket, in Rhode Island; Hartford, New Haven, Bridgeport, Waterbury, and New Britain, in Connecticut; Albany, Troy, Utica, and Rochester, in New York; and Newark, in New Jersey, with various smaller towns in their vicinities, are best known to the author of this report in the States mentioned; while in Ohio and Illinois nearly every town engaged in manufacturing industry may be included in the same category.

The prevailing comfort and independence of the great masses of mechanics and laborers of this country, taking one section with another, being sufficiently verified by general observation, it is deemed superfluous to enter into a detailed descriptive account of their condition and mode of life. With respect to the dwellings of factory operatives in the exceptional localities, it may, however, be said that, wherever their sanitary condition is seriously bad, it is believed to be the fault of manufacturing corporations which own the tenement-houses occupied by their employes, while operatives employed by individual manufacturers, who live among them and take an active and observant interest in their well-being, are far more comfortably situated. In a recent investigation, conducted by the Massachusetts bureau of statistics of labor, it was found that, out of 393 tenements examined in different towns in that State, 288, or upward of 73 per cent., were worthy of being reported "good," while 105, or less than 27 per cent., ranged from "fair" to "very bad." The animadversions on the poorer class of tenements contained in the reports of that bureau have attracted public attention to the subject, and there is a good prospect that, either through the action of the State legislature or by the force of public sentiment, abuses of this kind will soon be remedied.

The Massachusetts bureau of statistics of labor has made careful inquiry into the receipts, expenditures, and general condition of the families of four hundred workmen in that State, and published the results of the investigations. From the detailed statements which appear in the last report of that bureau the tables on the five succeeding pages have been prepared. The first table shows the yearly expenditures of one hundred and twenty-four families for rent, fuel, groceries, meat and fish, milk, wearing apparel, and "sundries," together with their expenditures for books and papers, and their contributions to religious and other societies. It also shows the earnings of the father, (no other member of these families being in receipt of wages,) the number of rooms occupied, number of persons in each family, and number of children attending school, with other information, indicating with sufficient clearness the condition of each family in respect to comfort, thrift, and æsthetic culture.

The second table contains the same information in regard to eighty-one families, and also shows the earnings of children who, in these families, assist the father in providing for the household.

106	Iron-molder.....	192 00	49 70	320 03	110 77	56 50	151 25	29 75	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 00	31 00	38 40	35 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	Yes	No	Yes	No	Yes	No
all	Yes	Yes	Yes	Yes	Yes	Yes
father	Yes	Yes	Yes	Yes	Yes	Yes
mother	Yes	Yes	Yes	Yes	Yes	Yes
22	Yes	Yes	Yes	Yes	Yes	Yes

Table showing the yearly expenditures, the earnings of the father, and the condition of the families of 121 skilled workmen in the State of Massachusetts in 1954.

Number.	Occupation of father.	Expenditures.										Total cost of the family.		Total number of persons in the family.	No. of children at school.	Rooms occupied.	Musical instruments.	Has the family a sewing-machine?	Does the family attend church?
		Rent.	Fuel.	Groceries.	Meat and fish.	Milk.	Clothing, books & shoes.	Dry-goods.	Religion, vacation, and travel.	Sundries.	Total cost of the family.								
1	Brick-layer	124 00	84 00	300 40	800 00	17 50	22 50	18 00	54 00	21 50	510 00	10 00	210 00	1	1	Parlor	Piano	Yes	Yes
2	Brick-layer	150 00	150 00	275 50	364 21	17 00	111 00	21 00	21 00	40 00	652 51	65 50	210 00	1	1	All	Piano	Yes	Yes
3	Carpenter	169 00	42 00	298 19	100 14	28 40	111 00	21 00	21 00	40 00	652 51	65 50	210 00	1	1	All	Piano	Yes	Yes
4	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
5	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
6	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
7	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
8	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
9	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
10	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
11	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
12	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
13	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
14	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
15	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
16	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
17	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
18	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
19	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
20	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
21	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
22	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
23	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
24	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
25	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
26	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
27	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
28	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
29	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
30	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
31	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
32	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
33	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
34	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
35	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
36	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
37	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
38	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
39	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
40	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
41	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
42	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
43	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
44	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
45	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
46	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
47	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
48	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
49	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
50	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
51	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
52	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
53	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
54	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
55	do	144 00	35 00	300 21	99 67	14 22	59 00	24 00	50 00	32 90	746 00	74 00	210 00	1	1	Parlor	Piano	Yes	Yes
56	Ship-car-painter	120 00	33 00	257 59	74 30	17 00	52 00	33 75	23 75	55 00	645 03	64 03	210 00	1	1	All	Piano	Yes	Yes
57	Ship-car-painter	102 00	44 50	313 05	91 35	22 25	97 50	16 00	17 00	55 00	645 03	64 03	210 00	1	1	All	Piano	Yes	Yes
58	Ship-car-painter	102 00	44 50	313 05	91 35	22 25	97 50	16 00	17 00	55 00	645 03	64 03	210 00	1	1	All	Piano	Yes	Yes
59	Ship-car-painter	102 00	44 50	313 05	91 35	22 25	97 50	16 00	17 00	55 00	645 03	64 03	210 00	1	1	All	Piano	Yes	Yes
60	Ship-car-painter	102 00	44 50	313 05	91 35	22 25	97 50	16 00	17 00	55 00	645 03	64 03	210 00	1	1	All	Piano	Yes	Yes

State or other	1850	1860	1870	1880	1890	1900	1910	1920	1930	1940	1950	1960	1970	1980	1990	2000	2010	2020	2030	2040	2050	2060	2070	2080	2090	2100	2110	2120	2130	2140	2150	2160	2170	2180	2190	2200	2210	2220	2230	2240	2250	2260	2270	2280	2290	2300	2310	2320	2330	2340	2350	2360	2370	2380	2390	2400	2410	2420	2430	2440	2450	2460	2470	2480	2490	2500	2510	2520	2530	2540	2550	2560	2570	2580	2590	2600	2610	2620	2630	2640	2650	2660	2670	2680	2690	2700	2710	2720	2730	2740	2750	2760	2770	2780	2790	2800	2810	2820	2830	2840	2850	2860	2870	2880	2890	2900	2910	2920	2930	2940	2950	2960	2970	2980	2990	3000	3010	3020	3030	3040	3050	3060	3070	3080	3090	3100	3110	3120	3130	3140	3150	3160	3170	3180	3190	3200	3210	3220	3230	3240	3250	3260	3270	3280	3290	3300	3310	3320	3330	3340	3350	3360	3370	3380	3390	3400	3410	3420	3430	3440	3450	3460	3470	3480	3490	3500	3510	3520	3530	3540	3550	3560	3570	3580	3590	3600	3610	3620	3630	3640	3650	3660	3670	3680	3690	3700	3710	3720	3730	3740	3750	3760	3770	3780	3790	3800	3810	3820	3830	3840	3850	3860	3870	3880	3890	3900	3910	3920	3930	3940	3950	3960	3970	3980	3990	4000	4010	4020	4030	4040	4050	4060	4070	4080	4090	4100	4110	4120	4130	4140	4150	4160	4170	4180	4190	4200	4210	4220	4230	4240	4250	4260	4270	4280	4290	4300	4310	4320	4330	4340	4350	4360	4370	4380	4390	4400	4410	4420	4430	4440	4450	4460	4470	4480	4490	4500	4510	4520	4530	4540	4550	4560	4570	4580	4590	4600	4610	4620	4630	4640	4650	4660	4670	4680	4690	4700	4710	4720	4730	4740	4750	4760	4770	4780	4790	4800	4810	4820	4830	4840	4850	4860	4870	4880	4890	4900	4910	4920	4930	4940	4950	4960	4970	4980	4990	5000	5010	5020	5030	5040	5050	5060	5070	5080	5090	5100	5110	5120	5130	5140	5150	5160	5170	5180	5190	5200	5210	5220	5230	5240	5250	5260	5270	5280	5290	5300	5310	5320	5330	5340	5350	5360	5370	5380	5390	5400	5410	5420	5430	5440	5450	5460	5470	5480	5490	5500	5510	5520	5530	5540	5550	5560	5570	5580	5590	5600	5610	5620	5630	5640	5650	5660	5670	5680	5690	5700	5710	5720	5730	5740	5750	5760	5770	5780	5790	5800	5810	5820	5830	5840	5850	5860	5870	5880	5890	5900	5910	5920	5930	5940	5950	5960	5970	5980	5990	6000	6010	6020	6030	6040	6050	6060	6070	6080	6090	6100	6110	6120	6130	6140	6150	6160	6170	6180	6190	6200	6210	6220	6230	6240	6250	6260	6270	6280	6290	6300	6310	6320	6330	6340	6350	6360	6370	6380	6390	6400	6410	6420	6430	6440	6450	6460	6470	6480	6490	6500	6510	6520	6530	6540	6550	6560	6570	6580	6590	6600	6610	6620	6630	6640	6650	6660	6670	6680	6690	6700	6710	6720	6730	6740	6750	6760	6770	6780	6790	6800	6810	6820	6830	6840	6850	6860	6870	6880	6890	6900	6910	6920	6930	6940	6950	6960	6970	6980	6990	7000	7010	7020	7030	7040	7050	7060	7070	7080	7090	7100	7110	7120	7130	7140	7150	7160	7170	7180	7190	7200	7210	7220	7230	7240	7250	7260	7270	7280	7290	7300	7310	7320	7330	7340	7350	7360	7370	7380	7390	7400	7410	7420	7430	7440	7450	7460	7470	7480	7490	7500	7510	7520	7530	7540	7550	7560	7570	7580	7590	7600	7610	7620	7630	7640	7650	7660	7670	7680	7690	7700	7710	7720	7730	7740	7750	7760	7770	7780	7790	7800	7810	7820	7830	7840	7850	7860	7870	7880	7890	7900	7910	7920	7930	7940	7950	7960	7970	7980	7990	8000	8010	8020	8030	8040	8050	8060	8070	8080	8090	8100	8110	8120	8130	8140	8150	8160	8170	8180	8190	8200	8210	8220	8230	8240	8250	8260	8270	8280	8290	8300	8310	8320	8330	8340	8350	8360	8370	8380	8390	8400	8410	8420	8430	8440	8450	8460	8470	8480	8490	8500	8510	8520	8530	8540	8550	8560	8570	8580	8590	8600	8610	8620	8630	8640	8650	8660	8670	8680	8690	8700	8710	8720	8730	8740	8750	8760	8770	8780	8790	8800	8810	8820	8830	8840	8850	8860	8870	8880	8890	8900	8910	8920	8930	8940	8950	8960	8970	8980	8990	9000	9010	9020	9030	9040	9050	9060	9070	9080	9090	9100	9110	9120	9130	9140	9150	9160	9170	9180	9190	9200	9210	9220	9230	9240	9250	9260	9270	9280	9290	9300	9310	9320	9330	9340	9350	9360	9370	9380	9390	9400	9410	9420	9430	9440	9450	9460	9470	9480	9490	9500	9510	9520	9530	9540	9550	9560	9570	9580	9590	9600	9610	9620	9630	9640	9650	9660	9670	9680	9690	9700	9710	9720	9730	9740	9750	9760	9770	9780	9790	9800	9810	9820	9830	9840	9850	9860	9870	9880	9890	9900	9910	9920	9930	9940	9950	9960	9970	9980	9990	10000
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LABOR IN THE BRITISH NORTH AMERICAN POSSESSIONS.

In the British North American provinces, which now constitute the Dominion of Canada, manufacturing industry has not until recently been developed to any considerable extent, and is even now chiefly confined to Ontario and Quebec. Since the termination of the Treaty of Reciprocity with the United States there has been a marked increase in the extent of manufactures, not only in Canada proper, but in the maritime provinces.

The following statement, condensed from the report of the Canadian census of 1870-71, shows the capital invested, the number of hands employed, and the total value of the products of the leading industries of the provinces then composing the Dominion of Canada :

Industries.	Capital invested.	Number of hands employed.	Total value of products.
Agricultural implements.			
Bakeries of all sorts.			82,665,393
Blacksmithing.	\$1,161,308	2,516	6,914,469
Hats and shoes.	1,720,638	2,464	5,264,411
Breweries.	3,266,534	10,213	16,134,638
Cabinet and furniture.	1,666,110	18,719	2,111,229
Carding and fulling mills.	2,650,175	4,366	3,350,978
Carpenters and joiners.	752,962	1,224	2,273,791
Carriage-making.	723,667	918	3,726,315
Copper, tin, and brass.	1,859,600	5,408	4,819,234
Distilleries.	450,541	3,112	1,752,663
Dress-making and millinery.	737,290	867	4,092,347
Edge-tool manufactories.	501,868	3,777	2,555,673
Flour and grist mills.	9,621,898	316	4,787,775
Furries and hatters, &c.	1,153,038	4,902	39,135,919
Glass-works.	136,120	1,861	2,875,660
India-rubber factories.	451,600	318	293,130
Iron founding and machine-making.	370,505	491	502,615
Engine building.	203,300	7,653	7,323,534
Iron-rolling mills.	440,000	1,007	1,034,363
Meat curing.	452,000	762	1,600,000
Nail and tack factories.	419,325	621	286,406
Oil-refineries.	362,000	841	3,793,532
Paper-manufactories.	6,000,000	1,175	1,175,000
Printing-offices.	610,450	494	1,691,660
Railway-car factories.	2,158,660	769	1,611,661
Rope and twine making.	108,000	3,417	3,429,202
Saddle and harness making.	210,660	173	512,000
Shoe, boot, and blind factories.	641,866	450	7,290,000
Saw-mills.	967,204	2,067	2,465,321
Sewing-machine factories.	16,010,589	35,911	3,008,631
Ship-yards.	346,440	966	30,226,247
Soap and candle making.	1,084,325	6,016	1,124,464
Spring and axle factories.	259,821	301	4,414,262
Stone and marble establishments.	83,820	361	1,327,861
Sugar refineries.	209,701	1,059	238,412
Tailors and clothiers.	427,000	1,359	1,072,571
Tanneries.	1,721,904	11,092	4,132,570
Tin and sheet-iron working.	2,656,166	9,415	9,415,762
Tobacco-working.	704,006	4,297	9,184,002
Wool-cloth making.	573,145	2,364	2,362,668
	2,776,211	2,216	2,435,311
		4,453	5,297,549
Total of above and all other industries.	77,961,030	187,942	221,617,724
Ontario.	57,874,010	87,941	114,706,799
Quebec.	28,071,866	60,711	73,305,182
New Brunswick.	5,976,176	13,352	17,467,687
Nova Scotia.	6,114,966	15,895	12,338,165
Total.	77,961,030	187,942	221,617,724

RATES OF WAGES.

The tables on the succeeding pages, though not so full as desired, exhibit with approximate accuracy the average rates of wages for mechanical, factory, and farm labor in various portions of the British North American possessions.

1. *Proverbs*. No. 41 has a life-insurance of \$1,000, No. 36, \$2,000, and No. 176 an insurance policy; No. 56 owns a house; Nos. 37, 63, 83, 111, 136, 143, 157, 255, and 357 have money in savings-banks. Nos. 62 and 233 save money. No. 71 works only 8 months, No. 90 only 83, and No. 81 only 9. Nos. 288, 193, and 144 have good libraries. House and surroundings of all are reported well, except Nos. 117, 65, and 118, which are "moderately well," and Nos. 48, 54, 103, 224, and 371 "fair." Towns are all reported "well furnished," except Nos. 2, 403, and 118, which are "moderately well," and 209 "fairly." All are reported "well dressed," except No. 27, which is "moderately well," and 39 "modestly dressed."

[illegible]

Shipsville, Pa, \$2 10 \$2.50; caulkers, \$2.50 10 \$3.

[illegible]

II.—FACTORY LABOR.

Statement showing the average rate of weekly wages paid to persons employed in various industries in Kingston, Cornwall, and Goderich, in the province of Ontario, in the year 1874.

Occupation.	Kingston.		Cornwall.		Goderich.	
	Hours of labor.	Wages.	Hours of labor.	Wages.	Hours of labor.	Wages.
Iron-molders.....	50	\$10 50	60	\$12 00	50	\$9 00 to \$13 50
Machinists { Best.....	50	9 00	60	12 00	50	12 00
{ Ordinary.....	50	8 00	60	10 50	50	9 00
{ Inferior.....	50	7 00	60	7 50	50	7 50
Helpers.....	50	6 10	60	7 00	50	6 00 to 7 50
Boiler-makers.....	50	10 50	60	15 00	50	12 00
Helpers.....	50	6 00	60	7 50	50	7 50
Riveters.....	50	9 00	60	15 00	50	9 00 to 12 00
Holders-on.....	50	7 50	60	7 50	50	7 50
Flangers.....	50	10 50	60	18 00	50	12 00 to 18 00
Helpers.....	50	6 10	60	7 50	50	7 50
Blacksmiths.....	50	10 50	60	12 00	50	10 50
Helpers.....	50	6 00	60	7 50	50	7 50
Foramen.....	50	15 00	60	18 00	50	16 00
Engineers.....	50	9 00	60	10 00	50	7 50
Pattern-makers.....	50	12 00	60	15 00	50	12 00
Assistants.....	50	6 00	60	10 50	50	7 50
Laborers, carters, &c.....	50	6 00	60	6 00	50	6 00
Apprentices.....	50	\$0 50 to 1 25	60	4 00	50	6 00
Carpenters.....	50	9 00	60	21 00	50	12 00
Assistants.....	50	6 00	60	10 50	50	7 50
Brass-founders.....	50	9 00	60	10 50	50	7 50
Fitters.....	50	13 50	60	18 00	50	12 00
Turners.....	50	10 00	60	12 00	50	10 50

Note.—The articles of manufacture in Kingston are locomotives; Cornwall, general manufactures; and Goderich, not stated.

Statement showing the average rate of weekly wages paid to persons employed in agricultural implement factories in Kingston and Whitby, in the province of Ontario, in the year 1874.

(Hours of labor per week, in Kingston, 60; in Whitby, 50.)

Occupation.	Kingston.	Whitby.	Occupation.	Kingston.	Whitby.
Molders.....	\$9 00	\$10 00	Painters.....	\$9 00	\$10 00
Machinists.....	9 00	10 00	Engineers.....	10 50	12 00
Blacksmiths.....	9 00	9 00	Watchmen.....	7 50	12 00
Helpers.....	6 00	7 50	Teamsters.....	6 00	7 50
Grinders.....	7 50	7 50	Laborers or unskilled workmen.....	6 00	7 00
Wood-workers.....	9 00	9 00	Apprentices or boys.....	\$10 00 to 3 00	2 50
Plow-men.....	12 00	15 00	Foremen or overseers.....	18 00	16 50
Pattern-makers.....	12 00	15 00			
Carpenters.....	9 00	9 00			

Statement showing the average weekly wages and daily earnings of persons employed in leather-manufactories in Bellefleur and Goderich, province of Ontario, in the year 1874.

(Hours of labor per week, 50.)

Occupation.	Weekly wages.	Daily earnings.	Occupation.	Weekly wages.	Daily earnings.
Leather:			Upper leather, &c.—Contin'd.		
Tanners.....			Shoers.....	\$7 00	.....
Boon-hands.....		\$1 25	Tailor-hands, (securers).....	6 00	.....
Yarn-hands.....		1 00	Blackers.....	7 00	.....
Ribbons and spongers.....		\$1 to 1 25	Finishers.....	\$8 to 10 00	.....
Bar-grinders.....		75	Engineers.....	7 00	\$1 25
Common laborers.....		1 00	Laborers or unskilled workmen.....	6 00	\$1 to 1 10
Upper leather and calf-skins:			Apprentices or boys.....	12 00	(60 to 75)
Tanners.....	\$7 00	.....	Foremen or overseers.....	12 00	(75 to 100)
Curriers.....	\$8 to 10 00	.....		
Shoers.....	10 00	.....		

* \$5 to \$100 per month.

persons employed in various
Ontario, in the year 1874.

Wages.	Godrich.	
	Hours of labor.	
\$12 00	5 1/2	\$9 00 to \$13 50
12 00	5 1/2	12 00
10 50	5 1/2	9 00
7 50	5 1/2	7 50
6 00	5 1/2	7 50
15 00	6 00 to	12 00
7 50	5 1/2	7 50
15 00	3 00 to	12 00
7 50	5 1/2	7 50
18 00	12 00 to	18 00
12 00	5 1/2	7 50
7 50	5 1/2	7 50
18 00	5 1/2	16 90
10 00	5 1/2	12 00
10 50	5 1/2	7 50
6 00	5 1/2	7 50
4 00	5 1/2	10 50

all, general manufactures;

employed in agricultural
Ontario, in the year 1874.

	Kingston.	Whitby.
.....	\$9 60	\$10 00
.....	10 50	12 00
.....	7 50	12 00
.....	6 00	7 50
.....	6 00	7 00
.....	\$160 63 00	2 50
.....	18 00	16 50

persons employed in leather-
to, in the year 1874.

	Weekly wages.	Daily earnings.
.....	\$7 00
.....	6 00
.....	7 00
.....	8 00
.....	7 00	\$1 25
.....	6 00	\$1 to 1 10
.....	12 00	(to, to 15)
.....	12 00	(*)

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Statement showing the average rate of weekly wages paid to persons employed in carriage-factories in Kingston, Cornwall, and Godrich, in the province of Ontario, in the year 1874.
[Hours of labor per week, 60.]

Occupation.	Kingston.	Cornwall.	Godrich.
Carriage-builders:			
Body-makers			
Carriage-part makers			
Wheelers	\$10 00	\$10 50	\$10 50
Cocksmiths	10 00	9 00	9 00
Helpers	10 00	10 50	9 00
Finishers		6 00	\$10 00 to 12 00
Ornamenters		12 00	
Painters		12 00	
Trimmers	10 00	12 00	
Suit-hewers	\$12 00 to 11 00	12 00	6 00 to 10 50
Labourers, unskilled workmen		12 00	11 00
Apprentices or boys		6 00	
Car-builders:	3 00 to 5 00	3 00	
Blacksmiths		18 00	
Helpers			
Painters		10 50	
		6 00	
		12 00	

Statement showing the average rate of wages paid to persons employed in clothing-establishments in Kingston and Belleville, province of Ontario, in the year 1874.

Occupation.	Kingston.		Belleville.	
	Piecework.	Weekly wages.	Piecework.	Weekly wages.
Cutters for custom-clothing				
Bushmen		\$20 00		\$1 60 to \$20 00
Machine-operators				8 00 to 10 00
Finishers		5 00		5 00
Labourers or packers		15 00		9 00
Apprentices or boys				8 00
Ready-made clothing:		3 00		3 00
Sack overcoats, { Fine	each			
Broadcloth sack-coats, { Cheap	each			
Cassimere business-coats	each		\$1 50	
Cassimere sack-coats	each		1 25	
Vests, wooden	each		1 50	
Pantaloons, wooden	each		1 25	
Shirts, { Muslin	per pair		50	
Custom-made clothing:	per dozen		50	
Sack overcoats	each		3 00	
Broadcloth dress-coats	each	\$1 00	1 75	
Cassimere business-coats	each	6 00	4 00	
Cassimere sack-coats	each	4 00	5 00	
Vests	each	3 50	3 50	
Pantaloons	each	1 25	3 00	
Shirts, muslin	per pair	1 25	1 00	
	per dozen	6 00	1 00	
			6 00	

Statement showing the average rate of weekly wages paid in iron-foundries and machine-shops in Dartmouth, Halifax County, in the province of Nova Scotia, in the year 1874.
[Hours of labor per week, 60.]

Occupation.	Wages.	Occupation.	Wages.
Iron-molders	\$10 00	Blacksmiths' helpers	\$2 00
Machinists, { Best	15 00	Foremen	18 00
Machinists, { Inferior	9 00	Engineers	15 00
Helpers	7 00	Pattern-makers and carpenters	15 00
Boiler-makers	6 00	Assistants	8 00
Helpers	9 00	Labourers, carriers, &c.	7 00
Riveters	7 00	Apprentices	3 00
Holders-on	9 00	Milwrights	15 00
Flamers	7 00	Assistants	3 00
Helpers	12 00	Brass-fitters	10 00
Blacksmiths	8 00	Fitters	8 00
	12 00	Turners	8 00

Statement showing the average weekly wages of persons employed by the Grand Trunk Railway Company, with number employed, in the year 1874.

[Hours of labor per week, about 60, when on full time.]

No.	Occupation.	Wages.	No.	Occupation.	Wages.
Locomotive department:			Car department—Continued.		
34	Mechanists	\$15 00	2	Pattern-makers	\$14 50
64	Enginemen	18 00	10	Blacksmiths	10 50
50	Firemen	19 00	9	Helpers	10 00
38	Wipers or cleaners	10 00	6	Painters	12 00
4	Waterhousemen (pumpmen)	11 00	9	Inspectors	12 00
1	Stationary engineers	10 00	6	Cleaners	9 00
11	Watchmen	11 50	Track department:		
16	Laborers	10 00	Yard-laborers		
7	Blacksmiths	15 00	Section-laborers		
5	Helpers	10 00	Construction-train, (extra gang) ..		
3	Boiler-makers	18 00	Bridge department:		
1	Coppersmith	20 10	Bridge-carpenters		
6	Carpenters	15 00	Engineer pile-drivers		
Car department:			Stations:		
25	Carpenters	14 00	Station-laborers		
42	Repairs	12 50	Stevedores		
7	Laborers	8 50	Scalesmen		
6	Others	10 00	Laborers at small stations		
2	Machinists	10 00	Apprentices or boys		
2	Timers	16 75	Foremen or overseers		

* Contract-work.

AVERAGE EARNINGS OF WORK-PEOPLE.

The number of hands employed in the various industries of Canada in the census year 1870-'71 are indicated on a previous page, but the amount of wages paid annually was not stated.

The following table shows the number of hands employed, the aggregate amount of yearly wages, and the average earnings of each employed in the several provinces and in the Dominion:

Provinces.	Total number of hands employed.	Aggregate yearly wages.	Average yearly earnings.
Ontario	87,281	\$21,415,710	\$245.37
Quebec	60,714	12,389,671	185.71
New Brunswick	18,252	3,863,360	210.81
Nova Scotia	15,595	3,176,265	203.67
Total of the four provinces	187,942	40,851,009	217.36

While the average yearly earnings of work-people in the Dominion are undoubtedly small, it must be borne in mind that the aggregate includes some women and a large number of youths under sixteen years of age.

Occupation.	Wages.
Continued.	
TS	\$14 50
TS	16 50
TS	10 00
TS	12 00
TS	12 00
TS	9 00
TS	6 37
TS	5 70
TS	6 37
TS	5 00
TS	11 25
TS	9 00
TS	8 25
TS	7 50
TS	12 75
TS	6 75
TS	5 00
TS	13 50

industries of Canada
previous page, but the

employed, the aggregate
earnings of each em-

Number employed.	Aggregate yearly wages.	Average yearly earnings.
1	\$24,445,740	\$245 37
14	12,389,673	185 71
52	3,869,360	210 81
55	3,176,265	203 67
12	40,851,000	217 36

able in the Dominion
at the aggregate in-
under sixteen years

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III.—FARM LABOR.

Table showing the average wages paid for farm and other labor in different counties and towns in the provinces of Ontario, Quebec, Nova Scotia, New Brunswick, and Prince Edward's Island, in the Dominion of Canada, in the year 1874.

Province and town.	Experienced hands in—				Ordinary hands in—				Common laborers at other than farmwork.	Female servants.
	Summer.		Winter.		Summer.		Winter.			
	With board.	Without board.	With board.	Without board.	With board.	Without board.	With board.	Without board.		
DAILY WAGES.										
Ontario:										
Belleville	21 25	21 50	21 00	21 25	21 25	21 00	20 80	21 00	21 00	21 25
Carleton	1 00	1 25	80	1 00	75	1 00	75	1 00	75	1 00
Dundas	1 25	1 75	1 00	1 25	1 87	1 00	1 00	1 25	1 25	1 50
Elgin	1 50	1 50	1 00	1 25	1 00	1 00	75	1 00	75	1 00
Frontenac	1 50	1 50	1 00	1 25	1 00	1 00	75	1 00	75	1 00
Grenville	1 50	1 50	1 00	1 25	1 00	1 00	75	1 00	75	1 00
Hastings	1 50	1 50	1 00	1 25	1 00	1 00	75	1 00	75	1 00
Huron, (1874)	1 50	1 50	1 00	1 25	1 00	1 00	75	1 00	75	1 00
Kent	1 25	1 50	1 00	1 00	1 00	1 00	75	1 00	75	1 00
Leeds	1 25	1 50	1 00	1 00	1 00	1 00	75	1 00	75	1 00
Northumberland	1 00	1 25	75	1 00	80	1 00	70	80	1 00	1 00
Prince Edward	1 00	1 25	80	1 00	1 00	1 25	80	1 00	1 00	1 00
Stormont	80	1 25	60	80	70	1 00	50	75	60	1 00
Saint Catharine's	1 25	1 50	75	1 00	75	1 00	50	75	1 00	1 00
Quebec:	75	1 00	67	87	75	1 00	59	75	1 00	1 25
Montreal	1 25	1 50	60	85	1 00	1 25	50	75	50	75
Quebec	70	1 00	50	60	1 00	1 25	50	75	50	75
Stanstead	1 25	1 50	1 00	1 25	1 00	1 25	80	1 00	1 00	1 00
Three Rivers	1 12	1 37	1 00	1 25	1 00	1 25	80	1 00	1 00	1 00
Nova Scotia:										
Halifax	1 00	1 25	60	85	80	1 00	50	75	50	75
Pictou	1 00	1 25	60	85	80	1 00	50	75	50	75
Windsor	1 00	1 30	80	1 10	75	1 25	1 25	1 37	1 25	1 25
New Brunswick:										
Saint John	70	1 50	60	80	70	1 20	60	80	80	1 00
Prince Edward's Island:										
Charlottetown	1 50	30	1 50	30	1 50	30	1 50	30	1 50	30
Newfoundland:										
Saint John's	1 50	30	1 50	30	1 50	30	1 50	30	1 50	30
Kingston	1 50	30	1 50	30	1 50	30	1 50	30	1 50	30
MONTHLY WAGES.										
Ontario:										
Belleville	30 00	13 00								
Carleton	30 00	12 00								
Dundas	30 00	15 00								
Elgin	30 00	13 50								
Frontenac	30 00	15 00								
Grenville	30 00	15 00								
Hastings	30 00	15 00								
Huron	30 00	16 00								
Kent	30 00	16 00								
Leeds	30 00	16 00								
Northumberland	30 00	16 00								
Prince Edward	30 00	16 00								
Stormont	30 00	16 00								
Saint Catharine's	30 00	16 00								
Quebec:										
Montreal	30 00	16 00								
Quebec	30 00	16 00								
Stanstead	30 00	16 00								
Three Rivers	30 00	16 00								
Nova Scotia:										
Halifax	30 00	16 00								
Pictou	30 00	16 00								
Windsor	30 00	16 00								
New Brunswick:										
Saint John	30 00	16 00								
Prince Edward's Island:										
Charlottetown	30 00	16 00								

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3 00

IV.—PRICES OF PROVISIONS, ETC.

Statement showing the retail prices of provisions, groceries, and other leading articles of consumption, and of house-rent and board, in the following towns in the province of Ontario, Dominion of Canada.

Articles.	Belle-ville.	Brock-ville.	Chatham.	Cobourg.	Chatham.
	1872.	1872.	1872.	1873.	1874.
PROVISIONS.					
Flour, wheat, superfine.....per barrel.	\$6 25	\$9 00	\$6 to \$7 00	\$6 50	\$5 50
Flour, wheat, extra family.....do.	6 50	8 00	7 00	7 25	7 00
Flour, rye.....do.	4 00	5 00	-----	4 25	5 00
Corn meal.....do.	3 00	4 00	3 00	3 50	5 00
Beef, fresh, roasting-pieces.....per pound.	10	10	08	10	10
Beef, fresh, soup-pieces.....do.	08	08	06	06	07
Beef, fresh, rump-steaks.....do.	10	10	10	11	12
Beef, corned.....do.	08	10	05	07	10
Veal, fore quarters.....do.	04	05	03	05	06
Veal, hind quarters.....do.	05	05	05	07	07
Veal cutlets.....do.	08	05	08	10	10
Mutton, fore quarters.....do.	05	10	05	06	08
Mutton, leg.....do.	06	10	08	09	10
Mutton chops.....do.	10	10	08	10	10
Pork, fresh.....do.	10	09	08	07	10
Pork, corned or salted.....do.	10	07	10	09	12½
Pork, bacon.....do.	10	10	12½	10	15
Pork, hams, smoked.....do.	12	15	15	12½	17
Pork, shoulders.....do.	10	10	10	11	15
Pork, sausages.....do.	12½	13	13	15	13
Lard.....do.	10	13	12	12½	18
Codfish, dry.....do.	07	05	06	07	07
Mackerel, pickled.....do.	10	10	10	07	08
Butter.....do.	20	25	18	18	25
Cheese.....do.	15	13	15	15	17
Potatoes.....per bushel.	40	25	65	32	40
Rice.....per pound.	10	05	06	05	06
Beans.....per quart.	05	05	05	05	05
Milk.....do.	05	05	05	05	6
Eggs.....per dozen.	15	15	20	12	20
GROCERIES, ETC.					
Tea, Oolong or other good black.....per pound.	70	70	75	50	80
Coffee, Rio, green.....do.	25	25	30	25	30
Coffee, Rio, roasted.....do.	30	30	30	30	33
Sugar, good brown.....do.	09	10	10	10	10
Sugar, yellow C.....do.	10	11	11	11	11
Sugar, coffee B.....do.	11	11	12	12	12½
Molasses, New Orleans.....per gallon.	-----	50	50	50	60
Molasses, Porto Rico.....do.	-----	50	50	50	60
Sirup.....do.	60	75	75	70	75
Soap, common.....per pound.	09	06	08	07	07
Starch.....do.	10	12	12	10	13
Fuel, coal.....per ton.	7 00	7 00	9 00	7 50	9 00
Fuel, wood, hard.....per cord.	4 00	4 00	3 50	5 00	4 00
Fuel, wood, pine.....do.	2 00	2 50	None	2 75	2 50
Oil, coal.....per gallon.	40	50	40	40	40
DOMESTIC DRY GOODS, ETC.					
Shirtings, brown, 4-4, standard quality.....per yd.	10	14	11	12½	15
Shirtings, bleached, 4-4, stand. quality.....do.	12½	15	12½	15	17
Sheetings, brown, 3-8, standard quality.....do.	-----	30	12½	33	40
Sheetings, bleached, 3-8, stand. quality.....do.	-----	40	12½	50	50
Cotton-flannel, medium quality.....do.	30	25	20	20	20
Tickings, good quality.....do.	30	23	32½	35	30
Prints, Metchine.....do.	15	13	12½	17	15
Mousseline de laine.....do.	15	25	10	25	15
Satinets, medium quality.....do.	75	90	50	75	75
Boots, men's heavy.....per pair.	2 50	5 00	2 75	2 75	2 00
HOUSE-RENT.					
Four-roomed tenements.....per month.	4 00	5 00	6 00	6 00 to 8 00	5 00
Six-roomed tenements.....do.	5 00	7 00	10 00	8 00 to 10 00	8 00
BOARD.					
For men, (mechanics, &c.).....per week.	2 50	3 00	3 00	2 25 to 3 00	4 00
For women employed in factories.....do.	-----	2 50	2 25	1 75 to 2 00	2 50

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her leading articles of con-
in the province of Ontario,

LABOR IN CANADA.

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Statement showing the retail prices of provisions, groceries, &c.—Continued.

Cobourg.		Chatham.	Articles.		Cornwall.	Goderich.	Hamilton.	Kingston.
1873.		1871.	PROVISIONS.		1872.	1871.	1873.	1874.
7 00	\$8 50	\$7 50	Flour, wheat, superfine.....	per barrel	\$5 50 to \$9 00			
7 00	7 25	7 00	Flour, wheat, extra family.....	do.		\$5 00	\$7 00	\$5 50
.....	4 25	5 00	Corn meal.....	do.	2 50	4 50	7 00	6 50
3 00	3 50	5 00	Beef, fresh, roasting-pieces.....	per pound	2 50		3 00	4 00
.....	.....	10	Beef, fresh, soup-pieces.....	do.	10	4 25		3 50
.....	06	07	Beef, fresh, rump-steaks.....	do.	07		10	10
10	11	12	Beef, corned.....	do.	10		06	07
05	07	10	Veal, fore quarters.....	do.	05		06	12 1/2
03	05	06	Veal, hind quarters.....	do.	06 1/2		09	07
08	10	07	Veal cutlets.....	do.	04 1/2		08	07
08	10	10	Mutton, fore quarters.....	do.	10		10	10
05	06	08	Mutton, leg.....	do.	10		06	07
02	09	10	Mutton chops.....	do.	10		07	07
08	10	10	Pork, fresh.....	do.	08 to 10		07	08
10	10	10	Pork, corned or salted.....	do.	15 to 18	50 12 to 15	11	09
12 1/2	12 1/2	12 1/2	Pork, bacon.....	do.	12 1/2	15 to 16	12	11
15	15	15	Pork, hams, smoked.....	do.	12 1/2	15 to 16	14	13
12 1/2	12 1/2	12 1/2	Pork, shoulders.....	do.	12 1/2	15 to 16	13	12 1/2
15	15	15	Pork, sausages.....	do.	12 1/2	15 to 16	13	10
12 1/2	12 1/2	12 1/2	Lard.....	do.	12 1/2	15 to 16	13	09
10	11	15	Cod fish, dry.....	do.	12 1/2	15 to 16	13	10
12 1/2	12 1/2	15	Mackerel, pickled.....	do.	07	06 to 08	13	17
12	12 1/2	13	Butter.....	do.	06	20 to 30	07	06
06	07	08	Cheese.....	do.	18	15 to 17	25	06 1/2
18	18	25	Potatoes.....	per bushel	40	50 to 20	61	25
15	15	17	Rice.....	per pound	06	06	60	69
05	05	06	Beans.....	per quart.	06	05	05	05
05	05	05	Milk.....	do.	15	05	07	06
05	05	05	Eggs.....	per dozen	15	05	25	25
20	12	20	GROCERIES, ETC.					
75	50	80	Tea, Oolong or other good black.....	per pound	45 to 75	75 to 1 00	1 00	50
30	25	30	Coffee, Rio, green.....	do.	25 to 35	30	30	20
30	30	33	Coffee, Rio, roasted.....	do.	30 to 40	35	35	27
10	10	10	Sugar, good brown.....	do.	10	10	10	08
11	11	11	Sugar, yellow C.....	do.	11	11	12	10
12 1/2	12 1/2	12 1/2	Sugar, coffee B.....	do.	12 1/2	11	12	10 1/2
50	50	60	Molasses, New Orleans.....	per gallon	40	60	12 1/2	11
50	50	60	Molasses, Porto Rico.....	do.	35 to 40			50
75	70	75	Sirup.....	do.	55 to 75	80 to 1 00	1 00	60
08	07	07	Starch.....	per pound	07 to 10	07 to 10	05	05
13	13	10	Fuel, coal.....	do.	12 to 20	12 1/2	22 1/2	10
9 00	7 50	9 00	Fuel, wood, hard.....	per ton	8 00	7 00 to 10 00	8 00	7 50
5 00	5 00	4 00	Fuel, wood, pine.....	per cord	5 00	2 50 to 2 75	8 00	4 50
2 1/2	2 1/2	2 50	Oil, coal.....	per gallon	3 00	2 50 to 2 75	4 00	3 00
40	40	40	.....	per gallon	50 to 60	40		29
DOMESTIC DRY GOODS, ETC.								
11	12 1/2	15	Shirtings, brown, 4-4, standard quality.....	per yard	15	08 to 15	08 to 16	12 1/2
12 1/2	13	17	Shirtings, bleached, 4-4, standard quality.....	do.	18 to 20	10 to 20	10 to 20	15
12 1/2	13 1/2	17	Sheetings, brown, 2-4, standard quality.....	do.	25 to 30	30 to 45	05 to 16	30
12 1/2	14	20	Sheetings, bleached, 2-4, standard quality.....	do.	20 to 25	45 to 75	10 to 20	30
30	30	30	Cotton-flannel, medium quality.....	do.	30 to 35	20 to 40	16	25
37 1/2	\$0 25 to 35	30	Trunks, Merrimac.....	do.	14 to 20	10 to 10	30	15
12 1/2	17	15	Mousseline de Indes.....	do.	20 to 40	18	25	17
10	25	15	Satinets, medium quality.....	do.	20 to 40	30	25	15
50	50	75	Boots, men's heavy.....	per pair	60 to 1 00	50	62 1/2	50
2 75	2 75	2 00	.....	per pair	2 50 to 3 00	2 40	2 50 to 4 00	2 00
HOUSE-RENT.								
6 00	6 00 to 8 00	5 00	Four-roomed tenements.....	per month	4 00 to 8 00		8 00	4 00
0 00	8 00 to 10 00	8 00	Six-roomed tenements.....	do.	7 00 to 12 00		10 00	7 00
BOARD.								
3 00	2 25 to 3 00	4 00	For men, (mechanics, &c.).....	per week	4 00 to 6 00	3 50 to 4 50	3 00	2 00
2 25	1 75 to 2 00	2 50	For women employed in factories.....	do.	2 50 to 3 00	3 00	2 00	

Statement showing the retail prices of provisions, groceries, &c.—Continued.

Articles.	Morris- burg.	Ottawa.	Pictou.	Port Hope.	Port Stanley.
	1873.	1873.	1873.	1872.	1872.
PROVISIONS.					
Flour, wheat, superfine..... per bbl.	\$6 50	\$6 50	\$6 50	\$5 75	\$4 25
Flour, wheat, extra family..... do..	8 00	7 00	7 00	6 50	3 75
Flour, rye..... do..	4 00	5 00	3 50	Not used...	2 00
Corn meal..... do..	3 00	3 50	3 00	4 00	3 00
Beef, fresh, roasting-pieces..... per lb.	08	10	08	12½	10
Beef, fresh, soup-pieces..... do..	05	06	01	07	06
Beef, fresh, roasting-pieces..... do..	08	13	10	12½	09
Beef, corned..... do..	05	10	05	08	07
Veal, fore quarters..... do..	04	10	04	05	04
Veal, hind quarters..... do..	05	12	05	06	05
Veal cutlets..... do..	05	15	05	04	04
Mutton, fore quarters..... do..	08	06	03	07	07
Mutton, leg..... do..	10	08	07	09	02½
Mutton chops..... do..	10	12	08	10	09
Pork, fresh..... do..	09	12	08	10	08
Pork, corned or salted..... do..	10	10	10	09	08
Pork, bacon..... do..	10	15	10	12½	10
Pork, ham, smoked..... do..	12	17	10	16	12
Pork, shoulders..... do..	10	12	09	12½	11
Pork, sausages..... do..	13	12	10	12½	12
Lard..... do..	10	15	10	11	10
Codfish, dry..... do..	07	06	06	07	06
Mackerel, pickled..... do..	03	07	08	.....	08
Butter..... do..	30	25	17	16	11
Cheese..... do..	30	15	13	14	12½
Potatoes..... per bush	30	35	35	\$0 30 to 50	50
Rice..... per lb.	15	06	05	06	06
Beans..... per lb.	13	10	05	04	05
Milk..... do..	05	06	05	05	05
Eggs..... per doz	15	20	13	15	12½
GROCERIES, ETC.					
Tea, Oolong or other good black..... per lb.	60	60	50	75	75
Coffee, Rio, green..... do..	28	20	40	35	30
Coffee, Rio, roasted..... do..	30	30	40	35	35
Sugar, good brown..... do..	10	10	09	11	10
Sugar, yellow C..... do..	11	11	10	10	12
Sugar, coffee B..... do..	15	12	12	10	11
Molasses, New Orleans..... per gall.	35	50	50	50	00
Molasses, Porto Rico..... do..	40	40	09	40	75
Syrup..... do..	60	09	75	80 to 1 00	1 00
Soap, common..... per lb.	08	08	09	07	08 to 10
Starch..... do..	13	12	15	13	14
Fuel, coal..... per ton.	8 00	9 00	7 50	7 00	6 00 to 8 00
Fuel, wood, hard..... per cord.	3 50	5 50	3 50	5 00	4 00
Fuel, wood, pine..... do..	2 50	2 50	2 50	3 25	None.
Oil, coal..... per gall.	45	50	40	45	40
DOMESTIC DRY GOODS, ETC.					
Shirtings, brown, 4-4, stand. quality..... per yd.	20	14	20	12	25
Shirtings, bleached, 4-4, stand. quality..... do..	15	14	20	12½	12½
Sheetings, brown, 9-8, standard quality..... do..	20	18	13	30	32
Sheetings, bleached, 9-8, stand. quality..... do..	20	18	15	37	55
Cotton-flannel, medium quality..... do..	25	20	40	20	20
Tickings, good quality..... do..	25	30	17	35	37½
Prints, Merrimac..... do..	13	15	15	14	14
Monsieur de laimes..... do..	25	20	20	12	30
Satinets, medium quality..... do..	60	75	80	40	1 00
Boots, men's heavy..... per pair.	3 50	3 50	2 50	2 00 to 3 00	3 00
HOUSE-RENT.					
Four-roomed tenements..... per month.	7 00	8 00	4 50	3 00 to 6 00	3 00
Six-roomed tenements..... do..	8 00	12 00	7 50	4 00 to 7 00	5 00
BOARD.					
For men, (mechanics, &c.)..... per week.	2 50	4 00	3 00	2 50 to 3 50	2 70
For women employed in factories..... do..	2 00	2 50	2 50	1 50 to 2 50	1 50

LABOR IN CANADA.

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Statement showing the retail prices of provisions, groceries, &c.—Continued.

Port Hope.	Port Stanley.
1872.	1872.
\$5 75	\$4 25
6 50	3 75
Not used	2 00
4 00	3 00
12 1/2	10
07	60
12 1/2	08
08	07
05	04
06	05
08	04
07	07
09	23
10	08
10	08
09	08
16	12
12 1/2	11
12 1/2	12
11	10
07	06
05	05
16	12 1/2
14	12 1/2
50 30 to	50
06	04
04	05
05	05
15	12 1/2
75	75
25	30
35	35
11	10
10	12
10	11
50	50
40	75
80 to 1 00	1 00
07	08 to 10
13	14
7 00	6 00 to 8 00
5 00	4 00
3 25	Note.
45	40
12	25
12 1/2	12 1/2
30	30
37	55
20	20
35	37 1/2
14	14
12	30
40	1 00
2 00 to 3 00	3 00
3 00 to 6 00	3 00
4 00 to 7 00	5 00
2 50 to 3 50	2 10
1 50 to 2 50	1 50

Articles.	Present.	St. Catharines.	Average in Province of Ontario, in		
	1873.	1871.	1872.	1873.	1871.
PROVISIONS.					
Flour, wheat, superfine..... per bbl.	\$6 50	\$7 00	\$6 35	\$6 75	\$5 33
Flour, wheat, extra family..... do.	7 50	7 50	5 81	7 12	6 00
Flour, rye..... do.	3 55	1 50	3 50	4 02	4 70
Beef, fresh, roasting-pieces..... do.	10	10	3 21	2 81	4 25
Beef, fresh, soup-pieces..... per lb.	66	\$0 05 to 10	09 1/2	12	10
Beef, fresh, rump-steaks..... do.	10	08	06 1/2	05 1/2	07
Beef, corned..... do.	07	08	07	10 1/2	12 1/2
Veal, fore quarters..... do.	05	04 to 05	04 1/2	07 1/2	08 1/2
Veal, hind quarters..... do.	08	65 to 10	05 1/2	07 1/2	06
Mutton, fore quarters..... do.	10	10	04 1/2	10	10
Mutton, leg..... do.	08	05	07	06	07 1/2
Mutton-chops..... do.	13	10	08	08	09
Pork, fresh..... do.	10	10	09 1/2	10	10
Pork, corned or salt d..... do.	10	10	09	09 1/2	09 1/2
Pork, bacon..... do.	13	10	07	10	12
Pork, hams, smoked..... do.	17	14	11	12	13
Pork, shoulders..... do.	09	12 to 10	11	14	15 1/2
Pork, sausages..... do.	13	10	11	14	14
Lard..... do.	13	10	12 1/2	14 1/2	17
Cod-fish, dry..... do.	06	12	11 1/2	12 1/2	17
Mackerel, pickled..... do.	05	06	06 1/2	06 1/2	06 1/2
Butter..... do.	22	20 to 25	08	06 1/2	08
Cheese..... do.	13	10	14	21 1/2	25
Potatoes..... per bush	30	50	41 1/2	41	16
Rice..... per lb.	05	08	06	05 1/2	50 1/2
Beans..... per qt.	05	06	05	06	06 1/2
Milk..... do.	05	06	05	05 1/2	0 1/2
Eggs..... per doz.	17	18 to 20	15 1/2	17 1/2	21 1/2
GROCERIES, ETC.					
Tea, Oolong or other good black..... per lb.	65	50 to 1 00	60 1/2	60 1/2	72 1/2
Coffee, Rio, green..... do.	23	25	32	27	26 1/2
Coffee, Rio, roasted..... do.	35	30	31	31 1/2	31 1/2
Sugar, good brown..... do.	10	09	10	09 1/2	09 1/2
Sugar, yellow U..... do.	11	10	11	11	11 1/2
Molasses, New Orleans..... do.	13	10	11 1/2	12	11 1/2
Molasses, Porto Rico..... per gall.	50	50	11 1/2	12	11 1/2
Sirup..... do.	70	75	45 1/2	50	56 1/2
Soap, common..... per lb.	10	05	08	50	60
Fuel, coal..... do.	13	12	13	07 1/2	11 1/2
Fuel, wood, hard..... per ton	7 00	8 00	7 57	7 83	8 33
Fuel, wood, pine..... per cord	3 50	6 50 to 7 00	4 11	5 37	3 71
Oil, coal..... per gall.	2 00	2 65	2 65	2 75	2 75
DOMESTIC DRY GOODS, ETC.					
Shirts, brown, 4-4, stand. quality..... per yd.	12	12 1/2	15 1/2	17	15 1/2
Shirts, bleached, 4-4, stand. quality..... do.	14	16	14 1/2	17	15 1/2
Sheetings, brown, 9-8, stand. quality..... do.	35	14	25 1/2	21	35 1/2
Sheetings, bleached, 9-8, stand. quality..... do.	45	17	31	26 1/2	21 1/2
Cotton-hamel, medium quality..... do.	25	18	26	23	21 1/2
Tickings, good quality..... do.	35	30	31 1/2	28 1/2	30
Prints, Merino..... do.	17	15	14	16 1/2	14 1/2
Mousseline de laine..... do.	25	25	21	21 1/2	20 1/2
Satinets, medium quality..... do.	35	75	71	67	66 1/2
Boots, men's heavy..... per pair.	5 00	3 00	2 75	3 46	2 13
HOUSE-RENT.					
Four-roomed tenements..... per month	3 00	6 00 to 5 00	4 41	6 00	4 50
Six-roomed tenements..... do.	4 00	8 00 to 6 00	6 36	8 25	7 50
BOARD.					
For men, (mechanics, &c.)..... per week	3 00	3 00 to 4 00	2 61	3 35	3 50
For women employed in factories..... do.	2 00	3 00	2 29	2 48	2 25



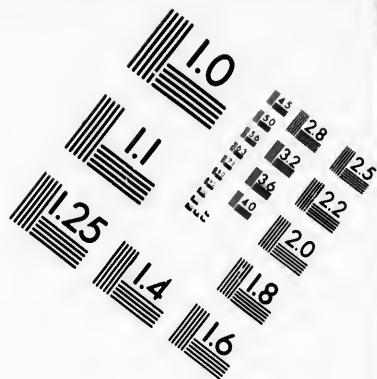
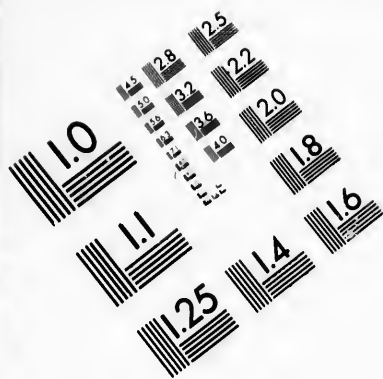
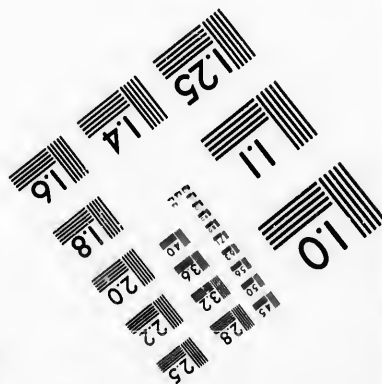
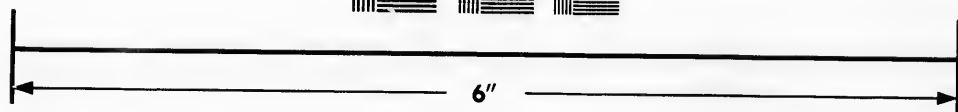
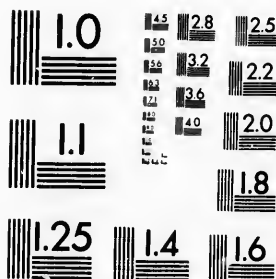


IMAGE EVALUATION TEST TARGET (MT-3)



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statement showing the retail prices of provisions, groceries, and other leading articles of consumption, and of house-rent and board, in the following towns of the province of Quebec, Dominion of Canada.

Articles.	Hemingford.	Quebec.	Stanstead.	Three Rivers.	Average in price of Quebec.
	1873.	1872.	1872.	1873.	
PROVISIONS.					
Flour, wheat, superfine.....per bbl.	\$7 00	\$7 25	\$8 00	\$7 50	\$7 44
Flour, wheat, extra family.....do.	7 25	7 50	9 50	8 50	8 19
Flour, rye.....do.	5 00	4 00			4 50
Corn-meal.....do.		4 00	3 00	5 00	4 27
Beef, fresh, roasting pieces.....per lb.	12	10	12	10	11
Beef, fresh, soup pieces.....do.	05	09	06		06½
Beef, fresh, rump-steaks.....do.	08	09	13	10	10
Beef, corned.....do.	08	09	08	10	08½
Veal, fore quarters.....do.	12	10	05	07	08½
Veal, hind quarters.....do.	12	10	08	12	10½
Veal cutlets.....do.	04	10	12½	10	09
Mutton, fore quarters.....do.	09	08	10	10	09½
Mutton, leg.....do.	09	10	12½	10	10½
Mutton chops.....do.	10	10	12½	15	11½
Pork, fresh.....do.	07	10	11	9	09½
Pork, corned or salted.....do.	10	11	12½	12½	11½
Pork, bacon.....do.	12	15		15	14
Pork, hams, smoked.....do.	14	15	12½	12	13½
Pork, shoulders.....do.	10	12		10	10½
Pork, sausages.....do.	12½	15	15	15	14½
Lard.....do.	10	15	15	15	13½
Codfish, dry.....do.	07	05	07	05	06½
Mackerel, pickled.....do.	10	05	05	05	07
Butter.....do.	22	23	25	20	22½
Cheese.....do.	16	13	15	17	15½
Potatoes.....per bush.	40	35	35	50	40
Rice.....per lb.	05	05	07	05	05½
Beans.....per qt.	07	08	08	05	06½
Milk.....do.	07	05	05	05	05½
Eggs.....per doz.	20	20	17	26	19½
GROCERIES, ETC.					
Tea, Oolong or other good black.....per lb.	65	70	90	75	75
Coffee, Rio, green.....do.	30	15	25	34	26
Coffee, Rio, roasted.....do.	31	19	30		27½
Sugar, good brown.....do.	10	09	10	10	10
Sugar, yellow O.....do.	11	10	12½		10½
Sugar, coffee B.....do.	12	10			11
Molasses, New Orleans.....per gall.	45	25		25	31½
Molasses, Porto Rico.....do.	40	25		35	31½
Sirup.....do.	70	50	75	50	61½
Scap, commed.....per lb.	08	08	10	07	08½
Starch.....do.	12½	15	15	15	14½
Fuel, coal.....per ton.	8 00	5 25		8 75	7 34
Fuel, wood, hard.....per cord.	2 60	4 80		5 50	4 16
Fuel, wood, pine.....do.	1 00	3 20	4 00	4 50	3 17
Oil, coal.....per gall.	50	45	50	50	4½
DOMESTIC DRY GOODS, ETC.					
Shirtings, brown, 4-4, standard quality.....per yd.	23	15	14	12½	16½
Shirtings, bleached, 4-4, standard quality.....do.	15	15	15	12½	15½
Sheetings, brown, 9-8, standard quality.....do.	16	25	17	31	23½
Sheetings, bleached, 9-8, standard quality.....do.	18	35		65	30½
Cotton-flannel, medium quality.....do.	39	25	20	30	29½
Tickings, good quality.....do.	37	30	30	35	34½
Prints, Morrime.....do.	15	20	12½	11	15½
Mousseline de laines.....do.	40	20	25	15	25
Satinets, medium quality.....do.		25			25
Boots, men's heavy.....per pair.	3 00	3 50	3 00	3 50	3 25
HOUSE-RENT.					
Four-roomed tenements.....per month.	3 00	4 50	4 00	5 00	4 13
Six-roomed tenements.....do.	5 00	6 00	7 00	9 00	6 75
BOARD.					
For men, (mechanics, &c.).....per week.	2 50	3 00	3 00	2 50	2 75
For women employed in factories.....do.	2 50	1 50	2 50	2 00	2 12

other leading articles of con-
sumption, and of house-rent and board, in the following towns of the provinces of New Brunswick, Prince Edward's Island, and Newfoundland, and in the town of Kingston, in the year 1873.

LABOR IN CANADA AND WEST INDIES.

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Stanstead	Three Rivers.	Average in prov- ince of Quebec.
1872.	1873.	
\$8 00	\$7 50	\$7 44
9 50	8 50	8 19
3 00	5 00	4 50
12	10	11
06		06
13	10	10
08	10	08
05	07	08
08	12	10
12	10	09
10	10	09
12	10	10
12	15	11
11	9	09
12	12	11
12	15	14
12	12	13
15	10	10
15	15	14
07	05	05
05	05	07
25	20	22
15	17	15
35	50	40
07	05	05
05	05	05
05	05	05
17	20	19
90	75	75
25	34	26
30		27
10	10	10
12		10
	25	11
	35	31
75	50	61
10	07	08
15	15	14
	8 75	7 35
	5 50	4 10
4 00	4 50	3 17
50	50	4 3
14	12	16
15	12	15
17	35	20
	65	39
20	30	20
30	35	30
12	12	13
25	15	25
		25
3 00	3 50	3 25
4 00	5 00	4 12
7 00	9 00	6 75
3 00	2 50	2 75
2 50	2 00	2 12

Statement shewing the retail prices of provisions, groceries, and other leading articles of consumption, and of house-rent and board, in the following towns of the provinces of New Brunswick, Prince Edward's Island, and Newfoundland, and in the town of Kingston, in the year 1873.

Articles.	NEW BRUNSWICK.		PRINCE EDWARD'S ISLAND.	NEWFOUNDLAND.	Average in maritime provinces of Dominion.	JAMAICA.
	St. John.	Fred-erickton.	Charlotte-town.	St. John's.			Kingston.
PROVISIONS.						
Flour, wheat, superfine.....per bbl.	\$9 00	\$7 50	\$7 50	\$9 00	\$8 25	\$11 12
Flour, wheat, extra family.....do.	00	8 75	9 00	10 00	9 00	
Flour, rye.....do.	00	12		8 00	7 00	
Corn meal.....do.	4 00	4 50	4 50	4 75	4 41	
Beef, fresh, roasting-pieces.....per lb.	15	12	12	20	14	6 28
Beef, fresh, soup-pieces.....do.	03	09	08	15	08	12
Beef, corned.....do.	16	13	12	20	15	12
Veal, fore quarters.....do.	12	11	08	20	15	12
Veal, hind quarters.....do.	06	05	04	15	10	12
Veal cutlets.....do.	08	07	05	20	10	15
Mutton, fore quarters.....do.	10	07	05	20	10	15
Mutton, leg.....do.	06	06	05	20	11	15
Mutton chops.....do.	10	09	06	15	08	18
Pork, fresh.....do.	15	11	08	20	11	18
Pork, corned or salted.....do.	15	10	08	20	13	18
Pork, bacon.....do.	16	13	10	15	12	12
Pork, hams, smoked.....do.	13	11	10	13	13	16
Pork, shoulders.....do.	17	15	12	15	12	12
Pork, sausages.....do.	13	11	09	26	17	36
Lard.....do.	15	15	12	15	12	12
Codfish, dry.....do.	20	15	15	20	15	12
Mackerel, pickled.....do.	05	05	04	05	04	12
Butter.....do.	None.	22	22	05	04	
Cheese.....do.	22	22	22	05	04	
Potatoes.....per bush.	19	19	22	30	25	48
Rice.....per lb.	1 00	70	25	20	20	36
Beans.....per qt.	07	07	06	05	05	
Milk.....do.	07	06	12	10	06	
Eggs.....per doz.	25	20	20	20	07	12
GROCERIES, ETC.						
Tea, Oolong or other good black.....per lb.	00	52	40	85	59	1 20
Coffee, Rio, green.....do.	25	26	23	30	24	36
Coffee, Rio, roasted.....do.	34	32	23	35	31	36
Sugar, good brown.....do.	12	10	09	12	10	06
Sugar, yellow C.....do.	11	11	12	13	11	12
Sugar, coffee B.....do.		13		13	13	12
Molasses, New Orleans.....per gall.				50	50	1 44
Sirap.....do.	60	50	50	50	50	1 44
Soap, common.....do.	1 00					
Starch.....per lb.	10	09	09	09	09	06
Fuel, coal.....per ton.	16	17	20	10	15	24
Fuel, wood, hard.....per cord.	7 00	7 50	3 00	8 00	6 37	12
Fuel, wood, pine.....do.	7 00	4 00	5 50	3 50	5 00	
Oil, coal.....per gall.	5 00	2 75			3 87	3 84
DOMESTIC DRY GOODS, ETC.						
Shirts, brown, 4-4, standard quality.....per yd.	13	15	14	15	14	12
Shirts, bleached, 4-4, standard quality.....per yd.	17	17	15	20	17	24
Sheetings, brown, 9-8, standard quality.....per yd.	17	17	28	30	23	12
Sheetings, bleached, 9-8, standard quality.....per yd.	22	17	30	41	28	24
Cotton-flannel, medium quality.....do.	21	45	27	35	30	18
Tickings, good quality.....do.	33	28	32	35	32	18
Prints, Merrimac.....do.	16	15	15	16	15	12
Mousseline de laine.....do.	20	30	20	20	17	36
Satinets, medium quality.....do.	60	80	80	40	60	48
Boots, men's heavy.....per pair	4 50	4 50	4 50	4 00	4 38	9 40
HOUSE-RENT.						
Four-roomed tenements.....per month	6 00	4 00	6 00	4 00	5 00	6 00
Six-roomed tenements.....do.	9 00	5 50	8 00	6 00	7 12	14 52
BOARD.						
For men, (mechanics, &c.).....per week.	4 00	3 00	3 00	6 00	4 00	2 52
For women employed in factories.....do.	3 50		2 00	2 50	2 67	

V.—WEEKLY EXPENDITURES OF WORKINGMEN'S FAMILIES.

Table showing the average weekly expenditures of the families of workmen in the following towns in the province of Ontario, in the Dominion of Canada, with their average weekly earnings, in the year 1873.

Articles.	Bellefleur.	Brookville.	Corwall.	Goderich.	Hamilton.	Ottawa.	Pictou.	Port Hope.	Prescott.	Average in province of Ontario.
Flour and bread	\$0 30	\$0 40	\$1 00	\$1 50	\$0 50	\$0 70	\$0 60	\$1 00	\$0 60	\$0 77½
Meats, fresh, corned, salted, or smoked	1 00	1 10	2 30	4 00	1 50	1 00	75	1 00	90	1 44
Lard	25	15	10	10	1 25	15	10	28	40	19½
Butter	40	75	1 40	1 75	1 25	40	65	28	45	62½
Cheese	20	15	1 50	75	70	25	50	82	65	60
Milk	30	15	1 50	75	70	25	50	82	65	60
Milk and molasses	30	15	1 50	75	70	25	50	82	65	60
Milk	30	15	1 50	75	70	25	50	82	65	60
Coffee	30	15	1 50	75	70	25	50	82	65	60
Tea	30	15	1 50	75	70	25	50	82	65	60
Fish, fresh and salt	10	15	30	30	35	30	30	30	30	30
Soy, starch, salt, pepper, vinegar, &c.	10	15	30	30	35	30	30	30	30	30
Potatoes and other vegetables	30	25	20	1 00	30	30	25	20	30	31
Fruits, green and dried	10	15	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Fuel	10	15	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Oil or other light	10	15	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Other articles	10	15	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Shoes, hats, and tobacco, (if any)	10	15	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Barber, doctor, and miscellaneous	10	15	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Educational, religious, and benevolent objects	10	15	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Total weekly expenses	5 00	7 70	13 78	16 45	13 81	7 27	4 85	12 33	5 50	9 74
Total expenses (52 weeks)	260 00	400 40	718 56	855 40	718 12	375 04	252 20	641 16	286 00	506 65
Clothing per year	30 00	50 00	100 00	300 00	100 21	75 00	75 00	100 00	50 00	100 00
Taxes per year	15 00	4 00	5 00	30 00	24 00	6 00	6 00	5 55	4 75	11 45
Total yearly expenses	325 00	454 40	823 56	1,185 40	842 36	450 04	333 20	746 41	340 75	618 12
Weekly earnings	9 00	9 00	30 00	50 00	15 00	9 00	10 00	15 00	7 00	16 00
Yearly earnings, (52 weeks)	468 00	468 00	1,560 00	2,600 00	780 00	468 00	520 00	780 00	364 00	832 00

Table showing the average weekly expenditures of the families of workmen in the following towns in the province of Ontario, in the Dominion of Canada, with their average weekly earnings, in the year 1873.

Total weekly expenses.....	5 00	7 70	14 78	16 45	13 81	7 27	4 85	12 33	5 50	20	55 1/2
Total expenses (52 weeks).....	260 00	400 40	768 56	855 40	718 12	378 04	252 20	641 16	286 00	106 65	9 74
Clothing per year.....	50 00	50 00	100 00	300 00	100 21	75 00	100 00	100 00	50 00	50 00	10 00
Taxes per year.....	18 00	4 10	5 00	30 00	31 00	6 00	6 00	5 55	4 75	11 45	4 75
Total yearly expenses.....	328 00	454 40	873 56	1,185 40	849 36	459 04	358 20	746 41	390 55	618 12	31 74
Weekly earnings.....	9 00	9 00	50 00	50 00	15 00	9 00	10 00	15 00	7 00	16 00	16 00
Yearly earnings, (52 weeks).....	468 00	468 00	1,440 00	2,600 00	750 00	468 00	520 00	750 00	364 00	832 00	832 00

Table showing the average weekly expenditures of the families of workmen in the following towns of Quebec, Nova Scotia, New Brunswick, and Newfoundland, and in the town of Kingston, Jamaica, West Indies, in the year 1873.

Articles.	QUEBEC.										NOVA SCOTIA.		NEW BRUNSWICK.		NEWFOUNDLAND.		JAMAICA.	
	Huntingdon. 2 adults and 3 children.	Morrisburg. 2 adults and 3 children.	Stamstead. 2 adults and 1 child.	Three Rivers. 2 adults and 3 children.	Woodville. 2 adults and 1 child.	Average in prov. of Quebec.	Pictou. 2 adults and 3 children.	Windsor. 2 adults and 4 children.	St. John's. 2 adults and 5 children.	St. John's. 2 adults and 5 children.	Average in maritime prov. of Newfoundland.	2 adults and 3 children.	2 adults and 5 children.	2 adults and 5 children.	2 adults and 5 children.	2 adults and 5 children.	2 adults and 5 children.	2 adults and 5 children.
Flour and bread.....	\$0 50	\$0 50	\$0 54	\$1 00	\$1 00	\$0 83	\$1 50	\$2 00	\$1 00	\$3 40	\$1 75	\$1 26	\$1 00	\$1 00	\$1 00	\$1 00	\$1 00	\$1 00
Fruit, fresh, corned, salted, and smoked.....	05	75	75	50	1 50	77	36	1 00	1 00	40	69	1 25	1 00	1 00	1 00	1 00	1 00	1 00
Butter.....	05	10	14	50	50	92	50	1 00	50	50	50	50	50	50	50	50	50	50
Cheese.....	35	40	37	75	1 00	55 1/2	1 00	75	1 00	50	50	50	50	50	50	50	50	50
Sugar and molasses.....	35	25	25	15	15	13 1/2	1 00	75	1 00	50	50	50	50	50	50	50	50	50
Molasses or sirup.....	20	10	25	20	70	40	52	50	39	35	35	35	35	35	35	35	35	35
Milk.....	17	10	18	65	25	15 1/2	52	50	1 50	21	65 1/2	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Eggs.....	30	15	03	10	18	11	06	50	50	50	50	50	50	50	50	50	50	50
Fish, fresh and salt.....	30	25	09	25	30	21 1/2	13	16	35	30	29 1/2	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Soap, starch, salt, pepper, vinegar, &c.....	15	20	05	10	15	14 1/2	30	25	60	30	31 1/2	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Produce and other vegetables.....	20	10	04	10	15	14	34	50	20	50	30	30	30	30	30	30	30	30
Fruit, green and dried.....	25	25	10	50	50	14	25	50	50	50	30	30	30	30	30	30	30	30
Oil or other light.....	40	1 40	12	10	50	35	60	50	50	50	40	40	40	40	40	40	40	40
Other articles.....	50	60	61	25	70	59	25	35	30	50	25	75	75	75	75	75	75	75
Spirits, beer, and tobacco (if any).....	50	50	05	15	25	15	40	50	1 00	54	54	54	54	54	54	54	54	54
House-rent.....	25	50	1 00	50	1 00	20 1/2	1 50	1 00	2 50	45	1 00	1 00	1 00	1 00	1 00	1 00	1 00	1 00
Educational, religious, and benevolent objects.....	10	10	10	25	60	22	1 50	55	30	21	10	2 50	2 50	2 50	2 50	2 50	2 50	2 50
Total weekly expenses.....	4 74	5 55	4 73	6 90	9 66	6 31 1/2	9 06	10 70	12 99	8 30	10 42 1/2	1 50	1 50	1 50	1 50	1 50	1 50	1 50
Total expenses (52 weeks).....	246 48	288 60	245 96	358 80	502 32	328 43	502 32	559 52	675 43	431 60	542 33	78 00	78 00	78 00	78 00	78 00	78 00	78 00
Clothing per year.....	50 00	50 00	50 00	30 00	30 00	31 00	100 00	100 00	100 00	100 00	52 33	52 33	52 33	52 33	52 33	52 33	52 33	52 33
Taxes per year.....	2 51	5 00	2 00	4 00	5 00	4 50	10 00	5 00	20 00	10 25	11 31	6 00	6 00	6 00	6 00	6 00	6 00	6 00
Total yearly expenses.....	298 99	343 60	327 96	392 80	537 32	386 71	612 32	614 52	895 43	501 85	663 54	86 00	86 00	86 00	86 00	86 00	86 00	86 00
Weekly earnings.....	7 00	10 00	9 00	7 50	10 00	8 70	9 00	12 00	21 00	9 00	13 50	30 00	30 00	30 00	30 00	30 00	30 00	30 00
Yearly earnings, (52 weeks).....	364 00	520 00	468 00	390 00	520 00	452 40	468 00	624 00	1,092 00	468 00	712 50	1,560 00	1,560 00	1,560 00	1,560 00	1,560 00	1,560 00	1,560 00

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