

doubtless have been greater. As it is, nations shrink, and will shrink, from making the experiment. When each has it in its power to inflict such terrible injury on the other, who will assume the responsibility of commencing a struggle? I refer not now to warfare between unequal forces, but to a contest between the great monarchies of the Old World, armed with all the appliances of war, equal in skill, energies and resources. Surely where so much is at risk, we may expect something from a common feeling of instinct and prudence, as well as from moderation and reason. If it could be said of gunpowder that it was the grave of valour, how much more must it be the case with the inventions that modern science has given birth to? If we are to believe all that we hear roused for, there are no limits to the powers of destruction. Whole armies may be swept away with an invisible stroke, and the tall admiral that but a few moments since rode proudly on the deep, sink down a shattered wreck ere the eye can well trace the ruin that has been made. The stories of enchanters and goblins damned seem almost realized in the discoveries that modern science has made, and in the terrible application those discoveries have received. The sea-girt shores of England are no longer free from invasion, nor the strongest fortress or the highest tower secure against the war-impeiled missile. The knowledge of this fact must render even the most reckless desirous to avoid creating grounds for quarrel: and thus from the fears, as well as from the intelligence of nations, may we hope to see a better and more rational future educed.

But whilst such are some of the results we may expect to find springing from the new direction given to man's genius, they would have but little permanent influence on society were there not a moral agent to carry them out. It would signify little that knowledge was conveyed from one country to another, and out and civilization exchanged, if the people still remained bound down by the tyranny of old institutions. The multiplication of material comforts and conveniences is, after all, as I observed before, a matter of but minor importance. What is required is, that man should bring the knowledge he has attained to bear against himself, to the extinction of old errors and the building up of better systems than he has yet enjoyed. This he can only do by union—by combining with his fellow-men against every species of abuse, whether it spring from the power of Governors or Governments, whether it be the plague spot of the individual, sin-born and demoralizing, or whether it be involved in the machinery of systems, rendered almost sacred by ages, and protected by the interests and prejudices of classes. The progress of union is as much a science now as the discovery of steam, and both must go hand in hand in working out the moral and political reformation of society. In England and Scotland we have seen this power very lately employed in effecting most important changes in the political, religious, and commercial condition of the people; and we should be doing injustice to the boasted intelligence of the nineteenth century were we to suppose that the work is going to stop there. Nor need we fear that this new discovery will be badly employed. The human mind is not so perverse as wilfully to choose a wrong direction. Give the people education and they will do well enough. If they ever threw aside the garments of humanity, and roved over the face of the earth like hideous beasts, it was because those whose duty it was to have reared them up to a knowledge of their dignity, and to have taught them their position in the State, erred, shamefully erred in their duty. The French Revolution, to which allusion has often been made, is a too painful instance of a people whom tyranny had made terrible, and union strong. Blame not the people altogether for the excesses of that period. If they erred much, they had suffered much. Pent up like wild beasts in a cage, scarcely taught to believe that they were of the same form and mould as the men who misgoverned them—now the objects of oppression, and now the instruments of oppression towards others—can you wonder that they used their power so fearfully, can you be surprised that they exercised their newly-acquired strength so wrongfully? And I would observe, moreover, that had history been as careful to note the tyrannical acts of despots as it has been to mark down the crimes of an infuriated and much-wronged people, it may be a question whether ages of oppression would not blot out the crimes of years. Let us then, I repeat, have no fear that the people will become too strong,—or that their combinations will be directed otherwise than for good. But that it will be used, and extensively used, and powerfully used, and successfully used to the pulling down of abuses, and to the improvement of the social and political fabric we may be satisfied. It is the concentrated intelligence of the age, and what shall withstand it? Already it has helped to strike the fetters from the slave—to cast down religious intolerance—to extend political right—to open the flood-gates of commerce, and as in the past so for the future its march will be a triumph. There exists not an error, however deep shrouded in the mists of antiquity—there is not a right, however sacred it may have been held—that shall not be examined by the intelligent searching of public opinion. Combination, union, strength; this is the motto of the people. It is the same spirit that fostered our trade, when it took refuge from feudal tyranny in the early Corporations—it is the same spirit that wrested the Charter of English rights from the Plantagenet on the plain of Runnymede—it is the same spirit that resisted the extravagant pretensions of a Charles and gave exile to a James—it is the spirit, in fact, of English freedom, fostered by Saxon institutions, and to maintain which Hampden fought and Sydney died. Socially it is the spirit which carries out great public works—makes railroads—builds up literary institutions—forms capital, and creates wealth. Simple in its operation, its power is almost unlimited. It enters into manufactures, and the world is supplied with cloth—it takes the wealth of a few men, and a bank springs into existence—it invokes the assistance of a Corn Law League, and a mighty commercial change is the consequence. But it was never so powerful—never so intellectual as now. In former ages it was too often a physical struggle which attended a great reform: but our revolutions are moral ones. The age works by the influence of mind—it has thrown aside (for ever, I trust,) the sword. Science—physical science—and moral science—these are the instruments of the age, and to these, if we will but trust to them, we may confidently look to carry us far on the way to happiness, and something (I would fain hope) on the way to heaven.

PRODUCTION AND EXPORT OF BREAD-STUFFS.

A VIEW OF THE QUANTITY OF BREAD-CORN WHICH THE UNITED STATES MAY EXPORT THIS YEAR, WITHOUT IMPAIRING THE SUPPLY NECESSARY FOR HOME CONSUMPTION.

From Hunt's Merchant's Magazine.

The astounding cry of destitution and of famine, wafted by every breeze from Europe to our shores, stirs the sympathies of every Christian heart, and turns our thoughts from the waste of war to the more benign consideration of alleviating the distress of starving multitudes. The bare idea that not only health, but life itself, is perilled, and that we may possibly see the skeletons of famine waiting, like the carcasses of Jews at Jaffa, for interment, is enough to check the pride of prosperity, and restrain the cold calculations of avarice.

The alarm disclosed by the most recent accounts from Europe, seems far more general than previous advices had taught us to anticipate; and, coming so early in October, renders an investigation of the measure of our ability to supply our own, and the wants of other nations, as interesting to ourselves as to those who seek relief from our abundance;—not that we have the slightest apprehension that the unusual draft upon the products of this country will exhaust our stock, and endanger a full domestic supply for the necessary wants of the country; because we believe it will appear, upon examination, that the diversity of our products, the fertility of our soil, and the industry of our population, will furnish ample supplies beyond the claims for domestic consumption, to meet the demands which temporary insufficient agricultural products may occasion in Europe.

The Commissioners of the Patent Office, in their official reports for 1844 and 45, although they do not and cannot pretend to perfect accuracy in calculations upon a subject of so wide a scope, and of so many minute particulars, have, nevertheless, by the most indefatigable industry, in availing themselves of greater facilities than any individual or any Department of State can possess, furnished us with results of the agricultural productions of the country that approximate to accuracy, and lay the best and only satisfactory foundation for the development of our resources.

The evidence of substantial accuracy is fortified and confirmed by the fact that the two reports do not vary, in essential degree, in the amount of production, more than the change of seasons and the course of husbandry would occasion. Assuming, therefore, the average result of the two reports as the basis of inquiry, we may proceed to consider, in the first place, the aggregate amount of production as applicable in its various forms to the supply of bread; the quantity that may suffice for domestic use in the second; and the surplus stock that remains to meet the demand of foreign nations in the third.

To avoid repetition, the quantities noted in the following table will always be in bushels:—

	Prod. for 1844.	Prod. for 1845.	Av. prod. per ann. for 2 ys.
Wheat.....	95,607,000	106,543,000	101,077,500
Rye.....	26,400,000	27,175,000	26,812,500
Indian Corn....	421,353,000	417,893,000	419,920,000
Buckwheat.....	9,071,000	10,258,000	9,664,500
Barley.....	3,627,000	5,160,000	4,393,800
Oats.....	172,247,000	163,208,000	167,227,500
Rice.....	1,862,650	1,496,150	1,679,400
Potatoes.....	93,453,000	85,392,000	93,442,500
Total.....			824,717,700

Hence it appears that the gross produce of the United States, convertible into sustenance for the human family, is, per annum, 824,717,700 bushels. The most remarkable thing observable in this tabular sketch, is the fact that nearly one-half of the whole bread-stuff product of the United States is Indian corn.

Assuming the population of the United States to be twenty millions, we come now to consider the quantity of grain, or its equivalent, necessary for stock, seed, and domestic consumption.

In England the quantity of wheat necessary for home consumption is generally estimated at the rate of six bushels for each individual. In France, where animal food is less used, and bread more than in England, the consumption is far greater; and ten bushels of wheat, for the supply of each individual, is necessary. If, therefore, the consumption of wheat in the United States were equal to what it is in England, we should, instead of having any surplus for exportation, be actually 60,000,000 short for the supply of our own wants. But we shall soon see that the food of this country is spread over such a diversity of articles, and that the adaptation of soil and climate to such a result prevents, and always will prevent, the concentration of consumption upon any one product of the soil.

The export of wheat, and its equivalent in flour, in 1841, was 5,170,636 bushels—a fraction more than 5 per cent of the crop. It would appear, therefore, that, supposing the balance of the crop to have entered into domestic use, each individual consumes about four bushels and three pecks of wheat annually. If the consumption be reduced to four bushels, equal to a gross consumption of 80,000,000, we shall then have 21,077,500 surplus. Reserving 7,000,000 of this quantity for seed, we have 14,077,500 bushels of wheat, or its equivalent in flour, for exportation. This, it may be presumed, is the largest quantity that can be spared from this country, without placing the population upon short allowance.

Rye.—Rye is of small consumption in England. During a residence of thirty-eight years in that country, I have no recollection of ever seeing a loaf of rye-bread. But it is more extensively cultivated and used upon the continent. The export of rye-meal in 1845 was equal to 141,484 bushels, only. In consequence of the scarcity of grain upon the continent, an unusual demand for rye, for shipment to that quarter, has sprung up in our markets. Our average crop being 26,812,500 bushels, we may reserve 7 per cent for seed, 187,875 bushels.