

The Evolution of Industry

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The Factory System.

By the time the last quarter of the 18th Century was reached, all the conditions were in being for the rise of the factory system—except motive power. Merchants with capital, specialised craftsmen, large numbers of "free" workers and a market of world-wide dimensions calling for the goods which only the machine could provide. Attempts had been made in an earlier day to set up a kind of factory, and John Winchcombe, of Newbury, who died about 1520, and was said to have a hundred looms in his house, was not the only one to attempt to gather a body of workers under one roof. Indeed the Weavers' Act of 1555 complained that "certain clothiers had set up divers looms in their houses and worked them by journeymen and unskilful persons." These early attempts were not successful, partly because legislation hampered such enterprises, but mainly because much greater profits could be made out of overseas commerce, and little appears to have been done in that direction until immediately prior to the Industrial Revolution, when many hand-loom and water-driven factories were in operation. As an instance of the kind of development that took place during the early days of the Factory System, the well-known textile firm, Barlow and Jones, may be cited. The founder of the firm, James Barlow, commenced business as a merchant travelling between the villages of South Lancashire, collecting the "pieces" woven by the Domestic Craftsmen. Later he set up a hand-loom factory at Bolton, which subsequently was converted into a steam-driven factory. This case is typical, and could be multiplied by numerous other such examples. Indeed, it is only by a study of what actually took place during the evolution of individual concerns, that the full significance of the Industrial Revolution can be appreciated.

With the introduction of the steam engine and the resultant great expansion in the demand for coal and iron, industry changed its character with astonishing rapidity. The great inventions of the late 18th and early 19th Centuries were applied at first to the cotton manufacturing process. Cotton weaving and spinning was a new industry, and it cannot be said to have passed through the same process of development as the woollen industry. But the new machines were quickly adapted to the working up of wool, and it is in this adaptation that the full effect of the social changes brought about by the mechanical and technical development is most clearly seen.

First Effects of the Industrial Revolution.

Compared with the old hand-loom and spinning frames, the new machinery was simple to operate and required no high degree of manipulative skill or training in craftsmanship extending over a period of years. Women and children were brought into the factories in large numbers, regardless of health or age considerations. They were employed in filthy sheds, old barns and such like places that had been transformed into hives of industry—and death traps for the workers. The story of the enslavement of infant boys and girls, of the buying and selling of pauper children, of their violent deaths and secret burials, has been told many times, but it cannot be told too often. Many of the captains of industry who today levy toll upon the labour of the workers, and who, perchance, adorn the gilded precincts of the Upper House, laid the foundations of their family fortunes (or their fathers did for them) during those days of the people's degradation.

The handicraftsmen could not compete with the tireless machine, worked by relays of an abundant supply of cheap labour. Hence they were obliged to seek employment in the factories or alternatively remain unemployed and take such advantage as was possible of a poor law, which, whatever the intentions of its various framers, had become little more

than a subsidising medium for the encouragement of low wages. Moreover, they could not own the machines, the engines and the factories that the new manufacturing system required. These could only be possessed by those who had large amounts of capital at their disposal, and the merchants who had exploited labour at home, or maybe the natives of India, or, possibly had made money by selling slaves to the planters in the New World, were able to turn their attention to industry, with its possibilities for unbounded profits, with the means ready to their hands.

Free competition and non-intervention by the State, the doctrines of Adam Smith, were taken up with avidity by his disciples who gave to them their most liberal interpretation. The reaction from the medieval guild, and later, state regulations created a new philosophy, in which competition was defied and enthroned. Each new profit-seeker was a law unto himself, and would brook no interference with his right to "do what he liked with his own." Production increased by leaps and bounds, and great fortunes were amassed out of the labour of the helpless workers, who, ground between the factory wheels, were used up as fuel to feed the hungry machines. The death rate increased alarmingly, disease was rife in the industrial centres, and men, women, and children were deformed and struck down as if a hideous blight had spread over the land. Thousands of families left the countryside and settled in the towns, making the conditions still more difficult for those already there. Towns that had grown but little in a century now increased in size with incredible rapidity. Factories and warehouses sprang up in a night, old buildings were transformed and filled with machinery, and side by side with them grew the foul slum districts that stand to this day, as a fitting monument to the coming of the industrial capitalist into his own.

The Rise of Trade Unionism

It was not unnatural that the hand-workers who found themselves thus displaced by machines, in many cases operated by their own children, whom they carried to the factories in the early hours of the morning, should regard the machines with suspicion and hatred. Their resentment took the form of rioting, machine smashing and attempts to set fire to the mills and the houses of the factory owners. They had been violently displaced, and violence seemed the only remedy, particularly as every attempt at combination to protect their interests was suppressed as being in the nature of an illegal conspiracy. The iron-masters sat on the local benches and fined their own workmen or sent them to prison. Others of their class legislated in their own economic interests, and forbade, under the severest penalties, any combinations for the purpose of securing better conditions. But the wiser capitalists saw the fatuity of killing off the workers in the mad quest for profits, and the pressure they brought to bear upon their class, together with the feeling of alarm at the possibility of revolutionary movements abroad being imitated at home, produced the first Factory Acts. The workers were inveigled into supporting political agitations for extensions of the franchise, only to find that their strength had been used to increase the political power of their masters. A growing recognition of the hopelessness of contending against the machine, side by side with increased opportunities for employment as the demand for machinery and machine-made goods increased, caused a sullen acceptance of the situation, and the workers turned their attention to attempts to improve their position within the new order, by securing shorter hours of labour and increased wages. To this end they commenced to form their trade unions.

The repeal of the Combination Acts in 1824 was by no means a sign that the unions were to be permitted to develop unhindered, for in 1834 the Dorset

Labourers were transported to Australia for the offence of forming a union. Still the repeal of the Act removed some of the difficulties, and a new period of industrial activity and organisation showed that the workers were beginning to realise that what they could not do individually, they might attempt in concert. For a few years—a period which is of particular interest to present-day workers—the unions were relatively successful in their operations. The employers were not organised to any extent, and where unions were formed the workers were able to make and enforce many demands upon them. The form of working-class organisation was in keeping with the industrial conditions. A new race of craftsmen had come into being as the machines were improved in character, and as the children were either withdrawn altogether or had their hours of labour within the factory greatly reduced. The isolated employer fared ill before the determination of an organised body of workers. But that condition of things did not last for long. The employers took a leaf out of the workers' book and proceeded to organise themselves, with such success that ere long they were in a position to impose terms upon the workers. The struggle changed its character. It was no longer a contest between groups of workers and an isolated employer, but between associations of workers and associations of employers. A strike that might have put an industrial capitalist out of business could either be broken down by a general lock-out or be allowed to drag on until the workers' funds or patience, or both, were exhausted. The employer could either send his work to be done elsewhere (sometimes by other members of the union to which the strikers belonged) or be subsidised out of a fund provided by levy subscribed by the other employers.

As a result of this combination on the part of the employers, the workers, except for the activity on the part of the labourers, from 1889, the year of the London Dock Strike, onwards, have been placed on the defensive, and obliged to tread very warily if anything in the nature of a strike was to be successfully carried through.

Ultimate Effects of the Industrial Revolution upon the Workers.

The greater specialisation which the introduction of the machine into industry made possible enormously increased the productivity of the individual worker, but that increase did not materially improve his position. Certain commodities cheapened in price, but each new invention increased the competition between the workers for employment and their price cheapened also. Substantially the hours of labour remained the same, notwithstanding that under the new conditions one man could produce as much as twenty, or, perhaps indeed, a hundred, had produced before. Indeed, the use of better illuminants meant that whereas, in an earlier time, the coming of darkness enforced a cessation of work, it was now possible for night to be turned into day and for production to continue unabated. The Industrial Revolution completed the proletarianising of the workers. Henceforth, they could neither own tools nor product, but must sell their labour power to the owners of the means of production. The great amounts of capital needed for successful industrial operation widened the chasm between "master and man." Once a worker always a worker became a reality. Landless, propertyless and tending more and more to become specialised industrial units, fitting each into one niche, the workers became as much a part of the plant as the machines they tended—while their enhanced productivity produced wealth in copious streams—streams which flowed from them and made possible the creation of that industrial monstrosity—the millionaire industrial magnate.

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