

Two Revolutions

It was not just ideas that were bringing change to Europe in the 17th and 18th centuries. Other forces were at work. In particular, European exploration and colonization of the New World and Asia brought new sources of wealth to some in Europe and changed relationships of power between the wealthy and those with fewer resources. Those who possessed wealth could use it to take advantage of new scientific discoveries and inventions that led to what history calls the Industrial Revolution. This revolution, centered at first in Great Britain, coupled with the ideals of Liberalism, was destined to have far reaching effects, not only in Europe, but eventually over the entire world.

The Rise of Capitalism

Following the end of what is called the Seven Years War in 1763, Great Britain became the most powerful nation in Europe. In this war, it had won from France all of Canada and France's possessions in India. The war, too, had left Great Britain the mistress of the seas. No European power could vie with the British navy. Great Britain had colonies in the Americas and in Asia, from which ever greater amounts of wealth flowed into the island kingdom.

Trade with these colonies, along with the involvement of British seamen in the African slave trade, the plunder of British privateers (pirates), and the mining and importing of gold and silver, enriched Great Britain (especially England) in the 18th century. Men of modest means won so much wealth in the colonies that they were very wealthy when they returned to Britain. Some were even made peers, as members of the aristocracy were called. Money lending increased, as did the number of banks. London, Bristol, and Liverpool in England as well as Glasgow in Scotland grew into important ports for the Atlantic trade.

capitalism: the large-scale organization of business, where those who possess a store of wealth or *capital* (which includes money, raw materials, tools, land, factories, etc.) hire laborers to engage in activities that increase wealth.

All this new wealth was not spent on the building of palatial mansions or in increasing the luxuries of the rich. Unlike the aristocracy in other lands, who had lived solely off the wealth of their country estates, the British nobility invested their wealth in commerce and trade, by which they increased their already great fortunes. Members of the middle class did the same; and, having become wealthy, they began marrying into aristocratic families. The merchant aristocracy and middle class came to wield great power in Parliament—a power they used to further their own interests.

All this commercial activity represented an economic system called **capitalism**. What is capitalism? It is the large-scale organization of business, where those who

possess a store of wealth or *capital* (which includes money, raw materials, tools, land, factories, etc.) hire laborers to engage in activities that increase wealth. In mining, for instance, the capitalist is the man who has the money to buy the mine, purchase tools, and hire workers. In capitalism, a few own and control wealth-producing enterprises, while the vast majority of the people engaged in those enterprises (the workingmen) control only their labor, which they sell to the capitalists for a wage.

Capitalism had not been the chief economic system of Europe, at least until the 17th century. More typical were the medieval guilds, which organized workers in a single trade (stonemasons, cobblers, weavers, musicians, etc.) and allowed more than just a very few men to own wealth-producing enterprises (businesses). Guilds provided for the spiritual and material needs of members as well. Guilds still existed in the 18th century, but in many cases had themselves become capitalistic by restricting the number of those (called masters) who could actually attain ownership of wealth-producing enterprises.

Revolutionary France abolished guilds. In Great Britain, the guilds were dying out. Without enough capital to obtain raw materials from the colonies, guild masters could not compete with projectors—men possessing the capital not only to purchase raw materials but to fund business enterprises. Projectors, too, had this advantage over guild masters—they were not controlled by guild regulations that discouraged competition between guild members. Nor did projectors have to share new inventions with others, as did individual guild members, who were supposed to offer their inventions for the common use of the guild. Such regulations had originally existed to prohibit one guild member from driving other guild members out of business as well as to make sure that high-quality goods were being produced; but because projectors were not bound by such regulations, it was harder for guild masters to compete with them.

The Industrial Revolution

Among the advantages projectors and capitalists had was their ability to invest in the new inventions that were transforming manufacturing in England and Scotland in the 18th century. More than any other European nation, England excelled in the invention of machinery that could save labor and greatly increase industrial production. Scientists of London's Royal Society, who had always had a more practical bent than scientists on the European continent, had made discoveries about the uses of steam and the properties of gases that would prove to have very practical uses. This, and the discovery in the mid 18th century of less expensive ways of smelting iron, set the stage for what has been called the Industrial Revolution.

textile: cloth; especially, a woven or knit cloth

An important impetus for the development of new machinery was the great demand for **textiles** in mid-18th-century Europe. The traditional ways of manufacturing cotton and wool cloth on looms, in small, often family-owned shops with a few employees, were not meeting the demand

for cotton fabric. To meet this demand, inventors looked for ways to increase production of cloth while reducing the number of weavers employed in its production.

As early as 1733, mechanical weaving devices began to be invented in England. In 1765, James Hargreaves of Blackburn, in Lancashire, had found a way to spin eight threads at one time. Hargreaves continued to develop this Spinning Jenny (as it was called) by adding more power and spindles until he was able to spin 80 threads at once. In 1769, Richard Arkwright developed a machine using rollers for producing yarn from cotton fibers. In 1774, by combining the Spinning Jenny and Arkwright's water frame, Samuel Crompton greatly increased textile production.

Production of textiles took another giant leap forward in 1765 with James Watt's development of the first true steam engine. Before this invention, looms were powered by water and so were placed by streams. Textile factories thus spread over the English countryside. With the invention of the steam engine, however, factories were freed from waterpower and could be placed in more centralized locations. Cities such as Birmingham, Manchester, and Leeds became centers for manufacturing, filled with factories belching smoke from the coal burned to supply power for the steam engines.

Because of the revolution in industry, large factories came to replace traditional, small manufacturing shops throughout England, Scotland, and Wales. Unlike small shops, factories required a great deal of capital to build; and to obtain this capital, industrialists looked to men of means—the capitalists. As the costs of production increased, factory owners had to rely on loans from banks, which thus grew in importance and influence in British society.

The Industrial Workers

The huge factories, of course, required a large number of workers to man the machines. These workers were drawn from the older industries put out of business by the new machinery or from the rural districts.

The new factories were very different from the older, smaller shops. The old shops were intimate and allowed the owner and his employees to be friends. Hard masters there were, but many others treated their workers with kindness, as if they were members of the family. The new factories, however, were very impersonal. Workers labored typically 14 hours a day, 6 days a week—for very low wages. Packed into poorly built factory buildings, workers succumbed to disease or were injured in accidents with the machines. A laborer who was no longer able to work was fired; his employer did not need to keep him on, for many unemployed men could take his place. Women and children, too, worked in the factories and received even lower wages than the men. Many of the children were orphans or from poor families farmed out to the factories by parish organizations that had, by law, to care for the unfortunate. In 1788, England's textile mills employed 59,000 women and 48,000 children.

The capitalist class found justifications for their treatment of the workers. "Everyone but an idiot," said an English aristocrat, Arthur Young, "knows that the lower classes must be kept poor, or they will never be industrious." Enlightenment

thinkers, however, had provided another justification. *Laissez-faire!* (“Let them do as they will!”) was the motto of the French economist François Quesnay (1694–1774), who thought that economic activity should be allowed to follow the natural laws that govern it. Nothing, neither government nor guilds, should dare to restrict wealth making, according to Quesnay. His ideas were further developed by the Scotsman Adam Smith in his 1776 work, *Wealth of Nations*. In that work, Smith said that governments should not try to control economic activity by regulating wages or prices or by any restriction whatsoever. Each person should be allowed to follow his own personal interest in the creation of wealth for himself. Indeed, said Smith, each person *should* consider only his personal interest, for only in that way will the economic life of society be “led by an invisible hand” to wealth and prosperity.

The invisible hand, however, did not hold out prosperity for the new class of industrial workers. Housed in dismal **tenements** in slums that began spreading out from the factory towns of England, Scotland, and Wales, the workers and their families suffered from hunger, cold, and disease. The threat of losing their jobs was always present, for an employer could fire his workers at will.

Or, if the factory produced more goods than there were buyers for the goods, the employer would lay off his workers. Throughout England, **pauperism** spread. In 1742, the amount of money spent on relief for the poor was 600,000 pounds; in 1784, it had risen to 2 million pounds.

The poor in England, however, did not submit to the new state of things without some resistance. The older craftsmen, seeing the threat the factories posed to their jobs, took out their anger on the new machines. In 1779, factory workers in Lancashire County formed a mob that as it went swelled from 500 to 8,000 members. These workers wrecked one factory and smashed the equipment at another until troops from Liverpool put them to flight. Those who were caught were hanged. Other workers began organizing themselves to fight for better wages. The groups they formed staged **strikes** that involved violence from both the employers and the workers. In these struggles, Parliament in the end came down on the side of the employers. In 1799, the House of Commons passed a law making it illegal for any association of workers to push for higher wages or change the quality of work. Those who formed such associations would be imprisoned.

tenement: a house used as a dwelling; an apartment or flat
pauperism: the state of being a pauper, or poor
strike: a refusal by workers to work, in an effort to bring employers around to give into their demands

Revolution in Agriculture

It is, of course, not surprising that Parliament came down on the side of employers in the matter of workers’ organizations: Parliament was controlled by those who benefited

from paying workers low wages. Another area where parliamentary laws benefited the rich at the expense of the poor was in the matter of the rural commons and open fields.

The commons was wasteland or pasture adjoining farmland. It was called commons because, since the Middle Ages, peasant farmers had a common right to use such land as pasture for their cattle, pigs, geese, and beasts of burden. The open field was **arable** land held in common by a farming village. Each farmer received strips of the common land for cultivation. The strips belonging to any one farmer were as a rule scattered and separated from each other by the strips belonging to other farmers. Some farmers held more of these strips than others. Farmers called yeomen had actual ownership of the strips, while others paid rent for cottages and the right to use arable land. Such land divisions had for centuries characterized all of European farming, but two developments in the 18th century seemed to demand an end to this method of dividing property and rights.

yeoman: a small farmer who cultivates his own land; a freeholder
cereal crops: crops such as wheat, rye, barley, and corn
crop rotation: the practice of growing different crops in succession on the same piece of land in order to preserve and enhance soil fertility
subsistence farming: a kind of farming that provides all or most of what is needed by a farm family, and where much of the crop is not put up for sale on the market

The first of these developments was what has been called the agricultural revolution. In England, aristocratic gentleman farmers had developed methods of farming that were more “scientific” than those practiced by the peasant or **yeoman** farmers. These methods included a wider and better use of fertilizers, the planting of crops (such as grasses, clover, or turnips) that helped replenish nutrients in the soil, methods of planting **cereal crops** in rows to make weeding easier, the development of **crop rotation** techniques, better methods of breeding cattle, and the invention of new machines that made farm labor more efficient. Such methods dramatically increased crop yields which, at the time, added to profits made from farming.

And profits there were to be made. The population of the British Isles had doubled in the 18th century, and all these people (especially the growing number of workmen in the cities) needed food. Wars in Europe had cut off shipments of agricultural produce to England from France, increasing the need for English farms to produce food for the market. The open-field method of farming, it seemed, could not produce the food needed to feed both the growing population *and* the armies Great Britain was outfitting for war on the continent.

Traditional agriculture had been for **subsistence**; that is, farmers worked to feed their families first and sold only what they did not need. But now the desire was for farms that produced primarily for distant markets. Besides, it was harder—seemingly impossible—to use the new farming techniques and farm machinery on the traditional strip divisions. The gentleman farmers thought commons and wasteland could be converted into cropland; and, instead of being divided into strips, farmland could be

sectioned into fenced-off, compact holdings. Such holdings could be used for growing crops or as grassland to pasture cattle.

The Enclosures

To convert strip fields into compact holdings, landholders resorted to the practice of enclosure. Enclosure had two parts. The first was abolishing the village's common. The second was redividing the common and the village's arable fields into compact farmsteads. Those who had a claim to strips in the common field would now receive an equivalent amount of land as a compact farm, which they would then be required to fence off, or *enclose*.

Enclosures were not new in English history; they had occurred in the 16th and 17th centuries. The new thing about enclosures in the 18th century, however, was that they were being ordered by Parliament. In the course of the 18th century, Parliament ordered thousands of enclosures that affected over 5 million acres of land.

Lands were enclosed in this way. After at least three-fourths of village landowners agreed to an enclosure of their lands, they filed a petition with Parliament and then posted a notice announcing the enclosure on the door of the village church. Parliament then considered the petition and, if it was accepted, appointed commissioners to supervise the enclosure. The commissioners considered the legal claims of individual landowners and then divided the land based on those claims.

This process seemed fair and just; it was, however, subject to abuses. The larger and richest landowners could use the process to their own advantage. They worked up the petition and the plan for enclosure and obtained signatures in secret. Since the costs of the whole process were very high, those who opposed the enclosure plan were unable to put forward a plan of their own. They could not afford to hire lawyers to oppose the plan in Parliament; further, the parliamentary committee considering enclosures was made up of large landowners who rarely considered petitions filed against a plan drawn up by other large landowners.

The actual enclosure of the land benefited only those who could prove they had owned legal village farmlands. Those who had been non-owning tenants of farmland, but who had customary rights to the use of land, did not receive farmsteads. And with the abolishing of the commons, they had no place to graze whatever pigs, cows, geese, or poultry they owned. Such tenants were forced henceforth to work for wages, which were often too low to keep them sufficiently fed or clothed. If the newly divided farmland was used for cattle (which required less labor), these former farmers were forced to leave their native districts for other areas or go to the cities, where they were reduced to an even crueler poverty.

Of those farmers who received farmsteads, many now ended up with holdings so small that they could not produce enough wealth to pay the costs of fencing in their lands. Without the common on which to graze their livestock or gather fuel, they relied more and more on purchasing their food and cooking it—not in their own homes, but at

the baker's shop. Such farmers too were in the end forced to sell their lands and either labor for other men or go to the cities.

Though it did not happen immediately, the enclosure movement ended in drastically reducing the number of people who lived in the countryside of England and Wales. In many places, whole villages were abandoned and long-standing communities were destroyed. The class of stout, freedom-loving yeomen who had for centuries been the backbone of English culture began to disappear.

The enclosure movement, too, had sad effects on public morality. Village commons had given poorer tenant farmers an opportunity to better their condition. By raising geese or poultry on the common, they could feed themselves as well as earn

poor rates: taxes raised to support the poor

workhouse: a house set up to care for the poor at public expense

money to buy a cow and, eventually, even a small plot of land. After enclosure, this was impossible. Even if they could save money from their paltry wages, they could not hope to buy land, for the farm holdings were too large and thus too expensive for them to buy. They could not make money by handicrafts, for the

factories in the cities now produced what formerly rural craftsmen had made. The incentives for saving were gone; instead of working for extra pay, or tending his flock of poultry, or gathering fuel for his family's hearth, the common laborer often grew slothful and took to drink.

Even such a defender of agricultural improvements and enclosures as the writer Arthur Young could see the sad effects enclosures had on the morality of the rural poor. He wrote:

Go to an ale-house kitchen of an old enclosed country, and there you will see the origin of poverty and the **poor-rates**. For whom are they to be sober? For whom are they to save? (such are their questions.) For the parish? If I am diligent, shall I have to build a cottage? If I am sober, shall I have land for a cow? If I am frugal, shall I have half an acre of potatoes? You offer no motives; you have nothing but a parish officer and a **workhouse**. Bring me another pot [of ale].

CHAPTER REVIEW

Summary

- ♦ Trade with the Great Britain's overseas colonies allowed middle-class people in Great Britain to become very rich. The aristocracy invested their wealth and became even wealthier. The merchant aristocracy and middle class came to wield great power in Parliament—a power they used to further their own interests.

- ♦ The increased commercial activity in Great Britain developed into capitalism, the large-scale organization of business, where those who possess a store of wealth or capital hire laborers to engage in activities that increase wealth. In capitalism, a few own and control wealth-producing enterprises, while the vast majority of the people engaged in those enterprises (the workingmen) control only their labor, which they sell to the capitalists for a wage.
- ♦ Capitalists invested in new machinery and developed large industries, against which smaller manufacturers and the manufacturing guilds could not compete. The development of capitalism thus led to the destruction of the guild system in Great Britain.
- ♦ Capitalism led to what is called the Industrial Revolution. Though this revolution brought about an amazing growth in the manufacture of goods, it brought misery and poverty to many laborers. Capitalists justified their treatment of workers by the Liberal economic doctrine called *laissez-faire*. Workers reacted with strikes and violence. Parliament sided with employers against the workers.
- ♦ Large landowners in Great Britain, wanting to consolidate lands to make it easier to practice “scientific” agriculture, pushed for the enclosure of agricultural lands. Parliament mandated enclosures, which led to a drastic reduction in the rural population of England and Wales and devastated rural communities.

Key Concepts

Industrial Revolution: a rapid change in 18th-century England that arose because of the introduction of steam-driven machinery and greater efficiency in the textile industry. It is called a “revolution” because the economy of British society and its social structure were changed radically by the introduction of power-driven machinery.

crop rotation: the practice of growing different crops in succession on the same piece of land in order to preserve and enhance soil fertility

enclosure: division of common grazing land or wasteland into small farms, which then had to be enclosed or fenced. In the 18th century, Great Britain’s Parliament ordered over 5 million acres enclosed. Enclosure was subject to much abuse by those who were wealthiest, and it drove many poor tenant farmers into deeper poverty.

workhouse: a house set up to care for the poor at public expense

Dates to Remember

- 1765 James Hargreaves invents the Spinning Jenny.
James Watts develops the first true steam engine.
- 1776 Adam Smith publishes the *Wealth of Nations*.
- 1779 Workers rise in Lancashire County, England.
- 1799 The British parliament declares workers’ associations illegal.

Central Characters

James Hargreaves (d. 1778): inventor of the Spinning Jenny

Richard Arkwright (1732-1792): inventor of the water frame

Samuel Crompton (1753-1827): an inventor whose combination of the Spinning Jenny and Arkwright's water frame led to a increase in textile production

François Quesnay (1694–1774): a French economist who promoted the economic principle of *laissez-faire* --- "Let them do as they will." Quesnay believed that economic activity should be allowed to follow the natural laws that govern it and that neither government nor guilds should dare to restrict wealth making. Quesnay influenced Adam Smith.

Adam Smith (1723–1790): author of the *Wealth of Nations*, in which he argued that governments should not try to control economic activity by regulating wages or prices or by any restriction whatever

Questions for Review

1. Why did the Industrial Revolution cause such social upheaval in England?
2. What is capitalism? How does capitalism differ from the guild system?
3. How did the increase of aristocratic and middle class wealth in England bring about the rise of capitalism?
4. What does *laissez-faire* refer to?
5. What are strikes? Why did workers in Great Britain strike? Were their strikes successful?
6. What is meant by the agricultural revolution?
7. What were enclosures? What were the effects of the enclosures on farmers in Great Britain?

Ideas in Action

1. Research the workhouses of England and discuss the pros and cons of such public housing for the poor.
2. List the good effects of work. Explain what keeps people from getting work.
3. Have students bring in poems or songs written in the 18th century about the conditions of the Industrial Revolution and the desire for a pristine natural world. Read the poems aloud and discuss them.

HIGHWAYS AND BYWAYS

The Deserted Village

In 1770, in his long poem, "The Deserted Village," the poet Oliver Goldsmith described the effects of the enclosures on rural villages. The village he describes, Auburn, is imaginary; but as Goldsmith said in a letter of dedication, all that he wrote about Auburn was based on villages he had seen "in my country excursions, for these four or five years past." In his poem, Goldsmith attacks the greed for land, the love of wealth and luxury that he says impelled the rich and powerful to seek and seize the lands of the poor. He praises the life of the rural peasant, his innocence and simple joys. The following lines from the poem are among the most famous.

Ill fares the land, to hastening ills a prey,
Where wealth accumulates and men decay;
Princes and lords may flourish or may fade;
A breath can make them as a breath has made;
But a bold peasantry, their country's pride,
When once destroyed, can never be supplied
 A time there was, ere England's griefs began,
When every rood of ground maintained its man;
For him light labor spread her wholesome store,
Just gave what life required, but gave no more;
His best companions, innocence and health;
And his best riches, ignorance of wealth.
 But times are altered; trade's unfeeling train
Usurp the land, and dispossess the swain;
Along the lawn, where scattered hamlets rose,
Unwieldy wealth and cumbrous pomp repose;
And every want to opulence allied,
And every pang that folly pays to pride.