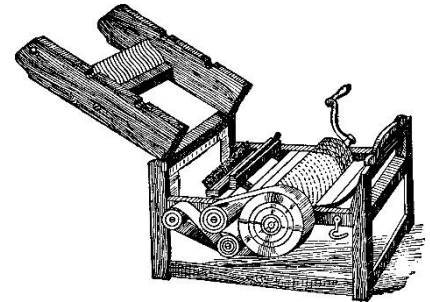


The Industrial Revolution

The Industrial Revolution began in Great Britain during the middle of the 18th century. It was a period of great change. Prior to the Industrial Revolution, goods were produced in small workshops or even homes. Most people in Britain lived outside of the cities and towns. Many people worked as farmers or craftspeople in rural areas.

Farming

The introduction of machinery to farms, and changes to farming practices, resulted in greater productivity. An example of an agricultural invention was the cotton gin. The cotton gin was a machine that separated cotton seeds from the fibres. Before this invention, the was a very slow process done by hand.



A cotton gin

Thanks to inventions like the cotton gin, farms produced a greater amount of food and other crops. The increased use of machines on farms also meant that fewer people were needed for farming jobs. Because of an increase in the amount of food and other resources, the population started to rise in the late 18th century. This resulted in an increase in the demand for goods such as textiles and clothing.

Factories and Machinery

New machines in other industries were also invented, allowing more goods to be produced more quickly than ever before. Factories were needed in which to operate these machines and to produce goods in such large quantities. Workers who crafted such goods by hand could not produce them quickly enough. It was impossible for these workers to compete against the factories who could produce goods more quickly and cheaply. Many people were left without jobs. Consequently, many people left the countryside and moved to towns and cities in search of work in one of the many new factories. The population of these cities grew extremely quickly. This population shift from rural areas to towns and cities is called urbanisation.



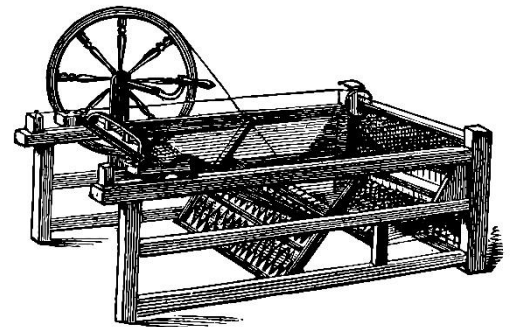
Factory workers

Inventions

The invention of the steam engine was the most important invention to emerge from the Industrial Revolution. Prior to its invention, power was generated by water, wind, horse and people. The steam engine provided a more reliable power source, and one which could power the new machines that were being designed.

One invention that made use of this new power source was the power loom. The power looms wove threads into cloth. While the original handlooms were powered with foot pedals, the power loom used a steam engine. This meant that the process of weaving was sped up enormously. As a result, production of cloth increased.

Another important invention was the spinning jenny. This machine was a spinning frame with eight different spindles which were operated by a single wheel. Effectively, this new machine allowed one person to do the work of eight people! Over time, many more spindles were added to the spinning frames. This allowed even more threads and yarns to be produced with less labour. As more spindles were added, the machines increased in size to a point where factories were needed. Many other machines offering similar advantages were invented during this period.



A spinning jenny

Impacts

The Industrial Revolution was responsible for a number of positive changes for people. It saw the invention of machines which were able to complete work more quickly than before. Telegraphs and railroads were built. Prices of common goods were lowered.

The Industrial Revolution also caused many problems. The sudden and significant increase in the population of cities was one of these problems. Houses were small and overcrowding was very common. Living in such close quarters caused sanitary problems. At the time there was no sewage system, which meant people would dispose of their waste on the streets and into rivers. Diseases spread easily. Smoke from factories, engines and fireplaces polluted the air around the cities. Waste from factories was also regularly dumped into rivers.

Working conditions were very poor. People worked long hours and in dirty and dangerous conditions. Many workers lost limbs or even died in their job. Workers had to put up with equipment that expelled smoke and as a result, many suffered from breathing problems. It was also common for children to be forced into labour.

The Industrial Revolution ended around the middle of 19th century.