## The Domestic System vs. the Factory System

By Sarah Collinge

## The Domestic System

Before the 1700s, people manufactured products in their own homes. These people were considered artisans. They made products by hand, often taking a long time to make each object. While this work was slow, the finished products were of high quality.

During the time of the domestic system, it took a great deal of time to produce fabric that could be made into clothing. First, wool was sheared from the sheep and cleaned. It was then spun by spinners and made into yarn. Finally, a skilled weaver wove the yarn using a handloom. It took a significant amount of time and skill to make a single piece of fabric.

With the population growing, the need for a large production of goods, especially textiles, was needed. The domestic system was no longer able to provide enough goods to meet the demand.

## The Factory System

In the late 1700s, machines were invented that allowed textiles to be made faster and in larger quantities. These new machines replaced hand weavers. The new machines were too large to be housed in one's home. They also required a power source to make them run.

Factories, or mills, were built along rivers, which supplied power. Workers now had to leave their homes each day and travel to a factory to work. Some workers lived too far away from a factory to travel back and forth each day. They stayed in tenements or apartments in order to be close to their work.

Workers no longer had to be skilled artisans. Instead, each worker was used to form part of an assembly line. An assembly line is an arrangement of workers and machines that each perform a single operation. As the product is passed down the assembly line, each worker or machine completes a single step in the production process. Working in an assembly line is a monotonous task. The invention of the assembly line allowed a large quantity of goods to be made in a short time frame and at a low cost.

1733	Flying Shuttle	John Kay improved the handloom with a shuttle that could be thrown by a lever, removing the need for more than one person to operate a loom.
1764	Spinning Jenny	James Hargreaves invented this device, which allowed a person to spin many threads at once.
1764	Water Frame	Richard Arkwright used the power of a water wheel to run a machine that produced yarn faster than other production methods. This machine became known as the water frame and could produce a thread much stronger than any other machine of its time.
1769	Steam Engine	James Watt invented an efficient, reliable version of the steam engine that became a revolutionary source of power for factories.

## Inventions of the Factory System:

1793	Cotton Gin	Eli Whitney saw how hard it was to clean raw cotton by hand. He invented a machine that could clean cotton ten times faster.
1798	Interchangeable Parts	Eli Whitney popularized the idea of interchangeable parts. This meant that one single part could be manufactured in large quantities to be used in a variety of tools or machines.

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