

The Industrial Revolution

The **Industrial Revolution** describes a time when inventions changed the way Americans worked and lived. Before the Industrial Revolution, people made products like clothing at home. They would grow their own cotton and then turn it into fabric. After the Industrial Revolution, products were made by machines in **factories**. The Industrial Revolution changed the way people travel, the way people work, and the way people live.

The Industrial Revolution started in Great Britain during the mid-18th century. It began with the inventions of spinning and weaving machines that were operated by waterpower. These machines were eventually replaced by steam. The American Industrial Revolution began in 1790 and is often attributed to Samuel Slater. Despite British laws protecting their technology, Slater brought new manufacturing ideas from Britain to the United States. Slater started the first cotton **mill** in Rhode Island. Slater's technology greatly increased the speed with which cotton thread could be spun into yarn. Work was performed on a large scale in a single centralized location instead of in the home. In this **factory system**, many businessmen recruited thousands of New England farm girls to operate the machines in their new factories and mills.

Slater's mill, like many of the mills and factories that sprang up in the next few decades, was powered by water, which confined industrial development to the Northeastern United States. The concentration of industry in the Northeast also increased the development of **transportation** systems such as railroads and canals, which encouraged commerce and trade.

Soon mills began to drive the economy of the North. The most famous of these mills was in Lowell, Massachusetts, which opened in 1823. Factory owners wanted women to work because they paid the young girls less than men. Throughout the 1800s, the demand for labor was so great that children were put to work. Employers paid these children less than women, who made less money than men. **Textile mills** (where fabric and clothing are made) employed children as young as seven years old to work around heavy machinery, sometimes resulting in serious injuries. Young boys worked in coal mines since their smaller bodies moved through tunnels more easily than grown men. Coal dust often settled in their lungs, shortening their lives. These working children toiled up to ten hours a day and didn't go to school.



Young girls worked long hours in textile mills.

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Most of the Industrial Revolution centered around the Northeastern United States. The geography of this region encouraged industrialization. Major rivers provided the energy necessary to run the mills. These same rivers created a transportation network for the products that were created in the new factories.

New jobs created by the Industrial Revolution causes cities to grow. The Industrial Revolution began the transition of the United States from a rural to an urban society. By 1890, the Industrial Revolution created substantial growth of cities, and 35 percent of Americans lived in urban areas, mostly in the northern half of the United States. Americans left the farm and moved to cities, as did millions of immigrants from Europe. The increased number of jobs, along with technological innovations in transportation and housing construction, encouraged migration to cities.



Many immigrants lived in slums in the city.

The population of urban areas grew quickly. Providing housing for all the new residents of cities was a problem, and many workers found themselves living in urban slums; open sewers ran alongside the streets, and the water supply was often tainted, causing disease. In these overcrowded cities, laborers often suffered in poor housing, plagued by terrible sanitation and violence. Many immigrants faced discrimination in housing and jobs.

In many ways, the Industrial Revolution changed the United States. In the mid 1800's, people worked for small businesses or on farms, laboring in fields that would yield barely enough food to feed the family. New inventions and technology began to change American life. Larger factories opened and produced new farm equipment, such as the steel plow and the tractor, which allowed farmers to cultivate bigger fields and produce more food that cost much less. The inventions and innovations that occurred during this time period encouraged rapid growth of cities, a movement west and a population boom.