

The Industrial Revolution

What Caused The Industrial Revolution

In the 1800s after their independence from England, America saw the need to become less dependent on England and Europe. England wanted America to remain dependent on them. America shipped them cotton and they manufactured it into cloth and sent it back. Anyone who worked in a factory was not allowed to leave the country. England planned to keep the technology and not share. Americans offered a large reward for anyone who could build a factory in this country. A brave man with a photographic memory took on the task. Samuel Slater memorized everything in the factory, quit his job, moved to London where he worked doing manual labor. He didn't tell anyone he used to work in the factory.

British ideas of a spinning mill and a power loom reach America.
Eli Whitney invents the cotton gin.
War of 1812 prompts Americans to make their own goods.
Eli Whitney introduces the idea of interchangeable parts.

CAUSES

The Industrial Revolution In America

EFFECTS

Factory system spreads.
Young women and children from nearby farms work in mills.
Growing cities face problems of fire, sewage, garbage and disease.

Cause and Effect of the Industrial Revolution

1785 ~ 1815

When the Industrial Revolution came to the United States, several swore not to copy the English who had a permanent underclass living in wretched conditions. Francis Cabot Lowell tried to set the stage in Massachusetts. Lowell built a factory which spun cotton into thread AND wove it into cloth by machine. He was as much concerned with the well-being of his workers as well as his profits. He was set on not using children and poor families. He hired young girls from the surrounding farms, housed them in nice dormitories, built them a church and paid them fairly for the work they did in his mill. Some of the girls were even able to send money home to help their parents back on the farm. While the Lowell System of hiring workers worked, it did not catch on.

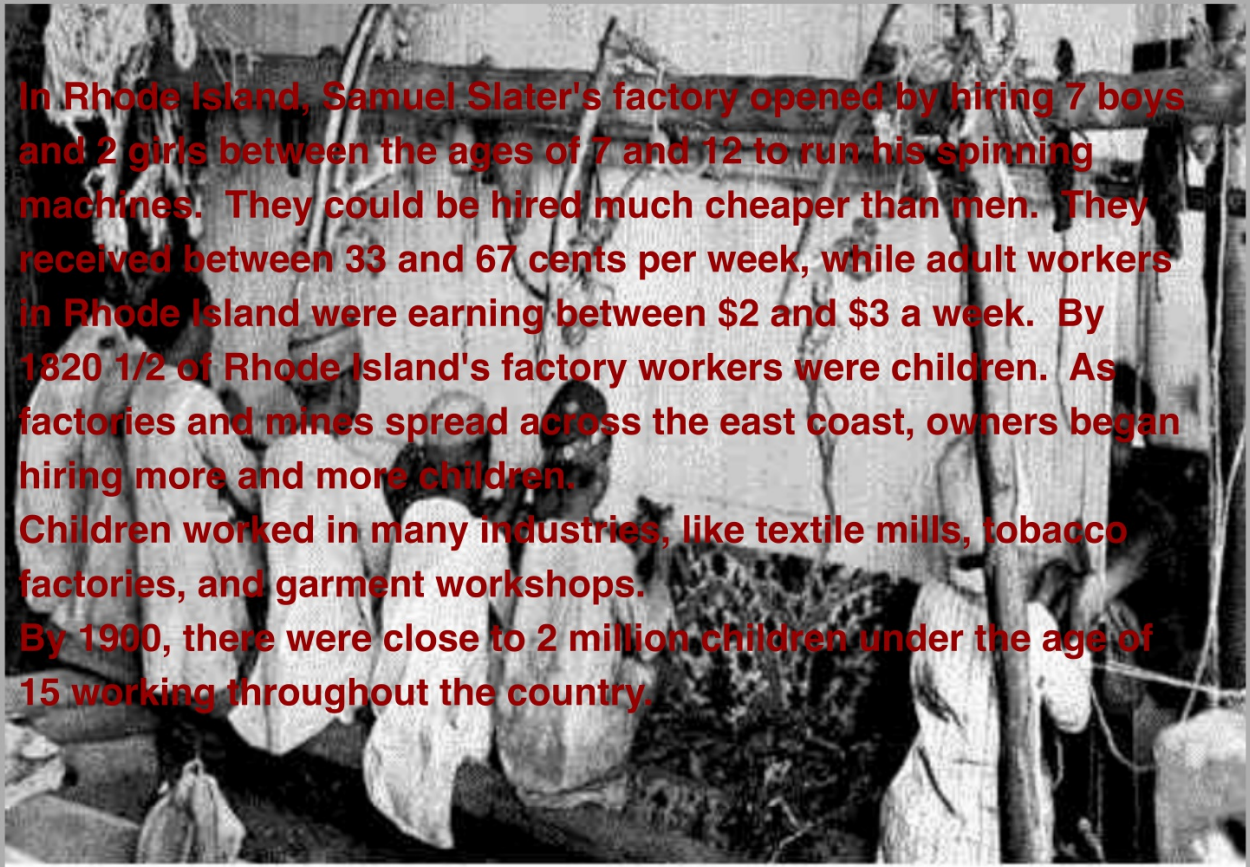
1790

The Beginning of Child Labor

In Rhode Island, Samuel Slater's factory opened by hiring 7 boys and 2 girls between the ages of 7 and 12 to run his spinning machines. They could be hired much cheaper than men. They received between 33 and 67 cents per week, while adult workers in Rhode Island were earning between \$2 and \$3 a week. By 1820 1/2 of Rhode Island's factory workers were children. As factories and mines spread across the east coast, owners began hiring more and more children.

Children worked in many industries, like textile mills, tobacco factories, and garment workshops.

By 1900, there were close to 2 million children under the age of 15 working throughout the country.



Working Conditions in the 1800's

* Workers: In the 1840's as factories replaced the textile mills. The workers were primarily women and children, and very often, entire families worked in factories together. Every family member's earnings helped the family survive.

* Hours: The factory workers began their day at 4:00a.m., and it ended at 7:30 p.m. They were allowed one break at 7:30 a.m. for breakfast, and another at noon for lunch.

* Conditions:

- o Factories often had no windows to allow for ventilation, or heating systems to help the workers stay warm in the winter.

- o Poor lighting led to accidents.

- o Workers hands and arms were crushed by machines, because there were no safety devices on them.

- o Textile workers got lung diseases from breathing dust and fiber all day.

- o Steel workers risked injuries working close to red-hot vats of melted steel.

- o In mines, cave-ins buried miners alive.

- o If a worker got hurt, they got fired.

- o There was no such thing as insurance.

Workers Felt Lucky Because They Had A Job!!

Life in the City in 1800's

In the cities of the 1800's, poor people lived in the oldest part of the city, near the downtown district. The middle class lived farther out in neat row houses or new apartment buildings. Beyond them, lived the rich. They lived in large homes with big lawns which had lots of trees.

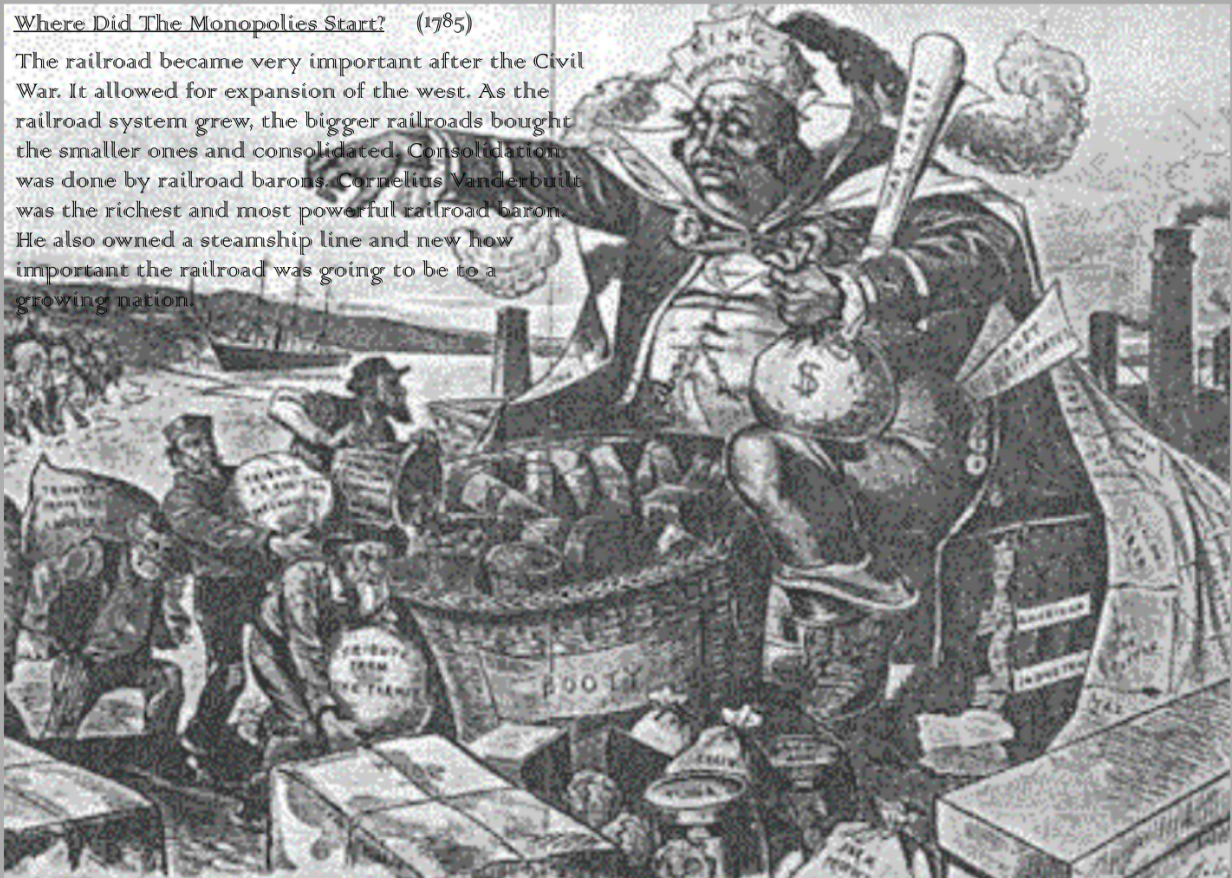




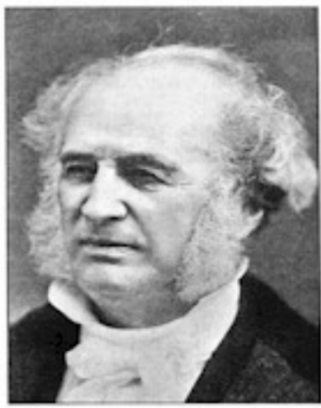
The Rise of Big Businesses

Where Did The Monopolies Start? (1785)

The railroad became very important after the Civil War. It allowed for expansion of the west. As the railroad system grew, the bigger railroads bought the smaller ones and consolidated. Consolidation was done by railroad barons. Cornelius Vanderbilt was the richest and most powerful railroad baron. He also owned a steamship line and new how important the railroad was going to be to a growing nation.



Cornelius Vanderbilt



John D. Rockefeller



The Players of the Industrial Revolution

Andrew Carnegie



J. P. Morgan



Muckrakers

What is a Muckraker?

Theodore Roosevelt gave that name to the reporters who were always sifting through the dirt or muck to find stories about corruption.

He meant the name as an insult, but muckrakers took up the name proudly.

There were several well known muckrakers. Lincoln Steffens wrote about city corruption in St. Louis and Pittsburgh. Ida Tarbell wrote about unfair practices used by Standard Oil Company. Upton Sinclair wrote the most shocking stories. In a novel called *The Jungle*, he revealed some gruesome details about the meatpacking industry in Chicago. Joseph Riis wrote about the life of the poor. Once people saw the photographs he took, and read his book, *How the Other Half Lives*, many people demanded reform.

Muckrakers helped change the attitude of the public. Before their stories were published, many people tolerated corruption. Once people saw how corrupt politicians and businesses could possibly threaten the good of the nation, they joined the muckrakers in demanding reform.

Rise of Labor

1877 The Birth of the Union

Workers came to realize that with the Industrial Revolution and the growth it caused, they needed to band together to demand better wages and working conditions. This was the beginning of the American Labor movement.

During economic depressions, workers had especially hard times. They either faced pay cuts or lost their jobs, causing them to not have enough money to pay their rent or buy food.

As workers looked for ways to voice their dissatisfaction, they realized that the railroads made ideal targets for strikes. All of America's industry depended on the railroads.

In 1877, workers at the Baltimore and Ohio Railroad walked off their jobs when the company decided to cut their pay.

This strike was not organized. It just happened.

The strike spread to the Pennsylvania Railroad. Mobs of workers destroyed the railroad yard. They tore up track, smashed cars, and set fire to the Union Depot. A thousand federal troops were called in to restore order.

The riot spread to Boston, Chicago, and Buffalo. In two weeks, more than 100 people were dead, and 500 were injured.

People realized that the struggle between management and labor would get worse before it got better.

The Knights of Labor

1869 - 1890

The Knights of Labor began as a secret society of tailors in Philadelphia in 1986.

The organization grew slowly until the railroad strike of 1877, when workers began to speak out and fight for the rights of the working man.

When Terence Powderly took office in 1879, the membership began to flourish and by 1886, the membership had grown to 700,000.

Powderly did away with the secrecy and committed the organization to finding solutions to the eight hour work day, child labor, equal pay for equal work, and the graduated income tax

The Knights of Labor were different from other trade unions; they included all laborers, regardless of the industry. They also accepted workers of all skill levels and both men and women. They began accepting African Americans after 1883. The down side, is that they excluded workers who were immigrants, mainly Chinese, because they felt they needed to protect American workers and their jobs.

Powderly was against strikes and chose to use boycotts and arbitration, but sometimes he was overruled, and the union did strike. The union participated in the railroad strike of 1877, and then did so again in 1886. During this strike, a bomb went off in Haymarket Square during a workers' rally. After this happened, the labor movement suffered some setbacks, and because the Knights of Labor were held responsible, although unfairly, for the bombing, the organization finally collapsed.

American Federation of Labor

1886

The AFL was organized in 1886 under the direction of Samuel Gompers. Gompers believed that in order to be effective, the union must organize as a craft union: just include the skilled workers in a single trade, unlike the industrial unions of the past who were open to all the workers in an industry.

By 1904, the union claimed 1.7 million members, although the union represented the more privileged members of the country's workforce.

The union is still in existence today. They are known as the AFL-CIO, which is a combination of the American Federation of Labor and the Congress of Industrial Organizations.



Production and Manufacturing

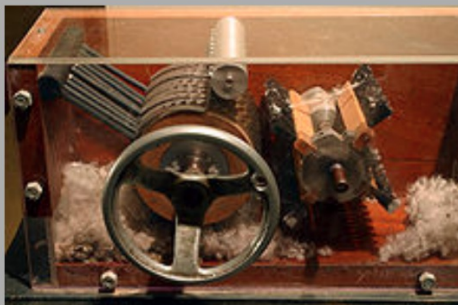
In the early 1800's, Eli Whitney came up with an idea that had a great impact on the way goods were produced.

Before his idea of interchangeable parts, most goods were produced by skilled workers who made each item by hand from start to finish. For example, a gunsmith worked long and hard on each gun he made. First the stock was made, then the barrel, and also the trigger. Each gun came out a little different, so if a part on a gun broke, the gunsmith would have to make a new part for that particular gun. This took a lot of time.

Whitney's idea was to build a machines that made each separate part of the gun. That way, all the parts would be exactly alike. Each barrel would be the same length, and stocks would be the same size and shape. If something broke, it could be easily replaced.

Whitney's idea of interchangeable parts made it possible to put together and repair things quickly.

This idea began with guns but soon spread to other industries.





The Assembly Line

In 1913, Ford introduced the idea of the assembly line. In his automobile factory, he had an assembly line where the frame of each car moved along on a moving belt. Workers on each side of the belt added parts to the car. This allowed Ford to make cars faster. He was then able to sell them for less than his competitors.



