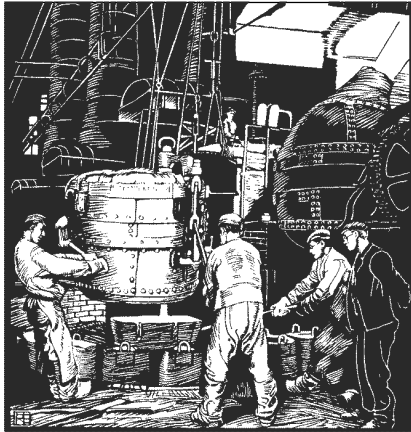


Introduction

Before the Civil War ended in 1865, most Americans lived in **rural** areas away from the cities and made their living in agriculture, or farming. When the war came, the North built many new factories to make the products needed to fight the war. When the war was over, the factories continued to grow and produce goods for peacetime use.



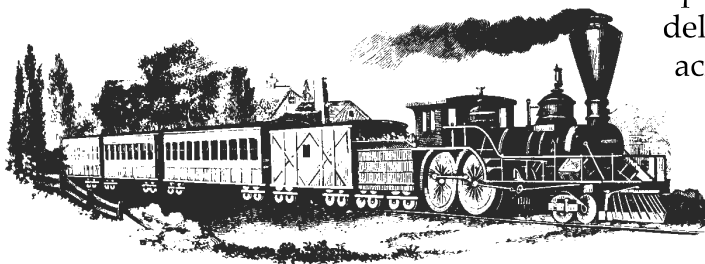
Many people left their rural homes and moved to the cities to work in factories.

After the Civil War, many people left their rural homes and moved to the cities to work in factories. As more factories were built and more people were needed to work in them, cities, or **urban** areas, developed. Consequently, between 1865 and 1915, the United States changed from an agriculture nation to an **industrial nation**. An industrial nation is one in which most goods are produced by machines in factories, rather than by hand.

Why American Industry Developed

There were many reasons why the United States was able to become an industrial nation. First, the United States had many **natural resources** for use in making products and fuel for machines. Examples of these resources included coal and oil (to make fuel), iron (to make steel), and forests (to make wood products).

Second, the United States had a growing population. There were enough workers to fill the new jobs in the factories. More people also meant that more goods (such as shoes) were needed. Third, the railroad system expanded and was able to deliver goods to cities across the United States.



The system of railroads expanded and was able to deliver goods to cities across the United States.

Fourth, new inventions increased the speed and lowered the cost of factory production.

The Role of Inventions

Many inventions that played an important part in the growth of the factory system came before the Civil War. For example, in 1793, *Eli Whitney* invented the cotton gin, and in the early 1800s, he introduced the idea of using **interchangeable parts** in the production of muskets. The separate production of precision-made parts in mass quantities permitted workers to build or repair a product or machine quickly using readily available parts.



Eli Whitney

In 1804 *Oliver Evans* invented the conveyor belt. Years later this invention would be used in **assembly lines**. A part of a product, for example an automobile frame, could be put on a power-driven belt. As the frame passed workers, each one added a particular part, such as a wheel or a door. A production process like this one, with different workers completing single steps, is called assembly-line production. This new way of working requires a **division of labor**, with workers responsible for one task, not the whole product. While helpful in the development of industries, this system had its drawbacks. Repeating the same task over and over again was less interesting to most workers than doing more complicated tasks.



Elias Howe

Most factories eventually began using the assembly line method. This method of mass production could produce large quantities of products. Because the price of these products was lower than those made by hand, many more people could afford them.

Many other new machines invented in the 19th century made producing goods more efficient. For example, in 1846, *Elias Howe* invented the sewing machine. Before then, all sewing was done by hand. Howe's machine made the ready-made clothing industry possible.

Samuel B. Morse invented the telegraph (1837); *Alexander Graham Bell* invented the telephone (1876). These two inventions made it possible for people to



Samuel B. Morse



Alexander Graham Bell

communicate quickly over great distances. *Thomas Edison* developed a long-lasting electric light in 1879. Edison's invention improved conditions in factories, homes, and cities. Electric light also allowed people to extend their days at work and home.

Meanwhile, new inventions helped farmers produce more food. *John Deere* made the first all-steel plow in 1837. In 1834 *Cyrus McCormick* invented a mechanical reaper, and in 1847 put his reapers into



Cyrus McCormick

mass production. Factory owners and farmers quickly understood the value of using machinery to produce goods.

Inventions—Changing Lives in America		
Inventions	Date	Inventors
cotton gin	1793	Eli Whitney
conveyor belt	1804	Oliver Evans
mechanical reaper	1834	Cyrus McCormick
telegraph	1837	Samuel B. Morse
all-steel plow	1837	John Deere
sewing machine	1846	Elias Howe
typewriter	1867	Sholes, Soule, and Glidden
telephone	1876	Alexander Graham Bell
phonograph	1877	Thomas Edison
electric light bulb	1879	Thomas Edison
railroad sleeping car	1880	George M. Pullman
gasoline automobile	1893	Charles Duryea
paper clip	1900	Johan Vaaler
cellophane	1912	Jacques Brandenberger

Development of Corporations

Building factories is very expensive. Before the Civil War, most factories were owned by a single person, or by partners. During and after the war, however, many people pooling their money to form businesses called **corporations**.

People could **invest** in, or buy shares, in corporations. Investors earned **profits** when the corporations were successful. Profit is the money left after expenses are paid. Industry grew in the United States because people were willing to invest their money in new factories and because new technology made producing goods easier.

Large corporations built factories that could mass produce goods and sell them at lower prices than small businesses could. Consequently, smaller businesses often could not compete with these large corporations. Many owners had to sell their smaller businesses to larger corporations to avoid losing money and going out of business.

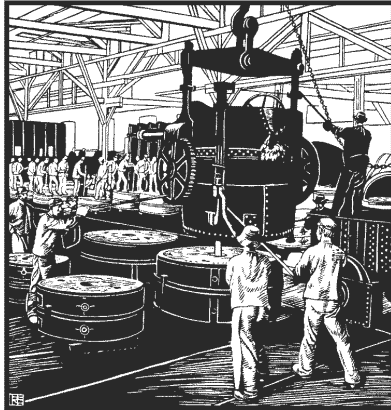
To make more money, some owners bought the companies that were in competition with them. Some of these resulting corporations became rich and very large. These huge corporations were called **trusts**. A trust is a corporation that controls many businesses. In some cases, trusts controlled most of the production of certain products such as steel or oil. An example of a trust is the Standard Oil Trust. It was started by *John D. Rockefeller* in 1882. By 1890 the Standard Oil Trust controlled 90 percent of the oil business in the United States.

Rockefeller started the Standard Oil Trust by buying oil refineries. An oil refinery processes oil into products such as kerosene and gasoline. Rockefeller soon owned most of the refineries in the country. He then started buying oil wells and other property used in the oil business. Eventually, he owned most of the oil and machinery needed to process oil.

Anyone who wanted to buy oil products had to buy from the Standard Oil Trust because Standard Oil had developed a **monopoly** on the oil business. A monopoly is the control by one company of all or most of a particular product or service offered for sale.

The Standard Oil Trust used its power and money to make special deals with other businesses. For example, it arranged deals with railroads to carry only its oil products or to carry Standard Oil products at a reduced fee. The profits from the Standard Oil Trust made Rockefeller one of America's first millionaires.

Andrew Carnegie was another wealthy businessman who developed a monopoly. At age 13, Carnegie came with his parents from Scotland to the United States. He invested the money he saved from working into the steel business. By 1900 the Carnegie Steel Company made most of the steel in the United States and earned 40 million dollars.



steel workers

In 1901 Carnegie sold his company to *J. P. Morgan*, a rich banker, for 500 million dollars. Morgan renamed the company the United States Steel Corporation. It soon produced 60 percent of the nation's steel.

Trusts and monopolies grew in other businesses also. There were sugar trusts and coal trusts. *Cornelius Vanderbilt* started a trust in the railroad business. The trusts became wealthy and powerful business organizations that made their owners the richest men in the world.

These businesses used their power freely and eventually influenced American government. They used their wealth to help elect people to office who would vote in their favor, such as United States Congressmen and even the President of the United States. By 1890 the men who controlled the trusts had as much power as, or sometimes even more power than, the President.

Reform of the Trusts

Little by little, people began to complain about the power of the monopolies. They demanded **reforms** in the way big business operated. Reform means to change a situation and make it better. Finally, Congress had to take action because many trusts were accused of corruption. Congress passed a series of reform laws against huge trusts. These reforms were called *antitrust laws*.

In 1890 Congress had passed the **Sherman Antitrust Act**. This act gave the government the authority to break up trusts. The federal government, however, was slow to enforce many of the reform laws. In 1902 President *Theodore Roosevelt* began to use the laws to break up trusts. He became known as the *trustbuster* because of his goal to eliminate trusts.



Theodore Roosevelt

Roosevelt's successor, *William Howard Taft* continued the attack on trusts. Because of reform laws, Standard Oil was divided into 33 smaller companies. Other large trusts such as the American Tobacco Company also were divided into smaller companies.

Summary

Different inventions and technological developments, such as interchangeable parts, enabled factories to mass produce products quickly and cheaply. Between 1865 and 1925, the factory system transformed the United States from an agriculture or farming nation into an industrial nation. Some factories needed money from more than just one or two businessmen. Many people put their money together and formed corporations to produce products such as steel or oil. Some corporations developed monopolies on products or services and eventually gained control over politicians. Finally, Congress passed antitrust laws against these large corporations known as trusts.



William Howard Taft