



The spread of the Industrial Revolution

Chapter 25 Section Three

Industrial development in the United States

- ✦ The U.S. had the same resources that had allowed the British to industrialize.
- ✦ During the war of 1812 Britain blockaded the U.S. to keep it from engaging in international trade.
- ✦ The blockade forced the U.S. to use its own resources to develop independent industries that would manufacture goods that the U.S. could no longer import.

The American Industrial Revolution

- ✦ Industrialization in the U.S. began in the textile industry.
- ✦ In an attempt to keep the secrets of industrialization Britain had forbidden engineers, mechanics, and toolmakers to leave the country.
- ✦ 1789- A British mill worker named Samuel Slater immigrated to the U.S. and built a spinning machine from memory and a partial design
- ✦ 1790- Moses Brown opened the first factory in the U.S. to house Slater's machines in Pawtucket RI.
- ✦ The Pawtucket factory mass produced only thread.

Lowell Massachusettes

- ✦ ~~1813~~ Francis Cabot Lowell and four other investors mechanized every stage in the manufacture of cloth.
- ✦ Their weaving factory in Waltham Mass. Earned enough money that they set up a larger operation in another Mass. town.
- ✦ When Francis Lowell died the remaining partners named the town after him.
- ✦ By the late 1820's Lowell Mass. had become a booming manufacturing town and a model for other manufacturing towns

Women in factories

- ✦ Workers for factories were mostly young, single women called mill girls
- ✦ To ensure proper behavior the young women were closely watched inside and outside the factory
- ✦ Mill girls worked 12 hour days for decent wages
- ✦ The only other job open to young women was to be a servant

Industrial growth

- ✦ After textiles, clothing manufacturing and shoemaking mechanized especially in the NE part of the nation
- ✦ The U.S. was primarily agricultural until the end of the civil war in 1865.
- ✦ The last 1/3 of the century there was a technological boom. Light bulb, telephone etc..
- ✦ A growing urban population created a high demand for manufactured goods.

Railroads in U.S.

- ✦ Chicago and Minneapolis expanded rapidly because of their locations on the RR lines.
- ✦ RR's were profitable business
- ✦ By the end of 1800's a limited number of powerful companies controlled 2/3 of all the RR track in the U.S.
- ✦ To raise money to build the RR's entrepreneurs sold shares of stock
- ✦ People who bought stock became part owners in the corporation and shared in the profits without being personally responsible for its debts.

Big Business in U.S.

- ✦ Late 1800's- large corporations like Standard Oil and the Carnegie Steel Company sought to control every aspect of their own industries in order to make big profits.
- ✦ Big Business- made big profits by cutting the costs of producing goods
- ✦ Workers earned small wages for long hours of hard labor.

Industrialization in Europe

- ✦ Industrialization didn't happen in Europe while it was happening in Britain because of war
- ✦ The Napoleonic wars halted trade, interrupted communication, and caused inflation
- ✦ European countries were absorbed in the French Revolution and Napoleonic Wars from 1789-1815.
- ✦ During that time the gap widened between themselves and the British.

Belgium industrializes

- ✦ Belgium led Europe in adopting Britain's new technology. Belgium had iron ore, coal and extensive waterways.
- ✦ A British carpenter from Lancashire, Wm. Cockerill made his way to Belgium in 1799 with secret plans for building spinning machinery.
- ✦ Cockerill's son John eventually built an enormous industrial enterprise in eastern Belgium producing machinery, steam engines, and RR locomotives.
- ✦ Industrialization spread to other parts of Europe through Cockerill as more British workers came to work in Belgium and then struck out on their own to establish companies elsewhere in Europe.

Industrialization in Germany

- ✦ Germany was politically divided and its economic isolation and scattered resources made it difficult to industrialize.
- ✦ Pockets of industrialization appeared in coal rich Ruhr Valley of west-central Germany
- ✦ Beginning in 1835 Germany began to copy the British model for industrialization
- ✦ Germany imported British equipment and engineers.
- ✦ German manufacturers sent their children to England to learn industrial management
- ✦ Germany built RR's linking growing manufacturing cities like Frankfurt with coal and iron deposits of the Ruhr valley.

In Europe

- ✦ Throughout Europe industrialization happened in pockets
- ✦ Bohemia- spinning industry
- ✦ Catalonia in Spain-processed more cotton than Belgium
- ✦ Northern Italy-mechanized textile production specializing in silk.
- ✦ Moscow and St. Petersburg serf labor ran factories.
- ✦ France was able to industrialize only after 1850 when the government constructed RR's
- ✦ Geography in Spain and Austria made transportation almost impossible so industrialization was difficult

Growth of Imperialism

- ✦ The industrial revolution promoted competition between nations that were industrialized and increased poverty in nations that couldn't
- ✦ To keep factories running and workers fed required a steady stream of raw materials from less developed countries.
- ✦ Industrialized countries like Britain, U.S., Russia, Japan exploited their overseas colonies as a source of resources and markets for their finished goods.
- ✦ Imperialism- the policy of extending one country's rule over many other lands gave even more power to industrialized nations