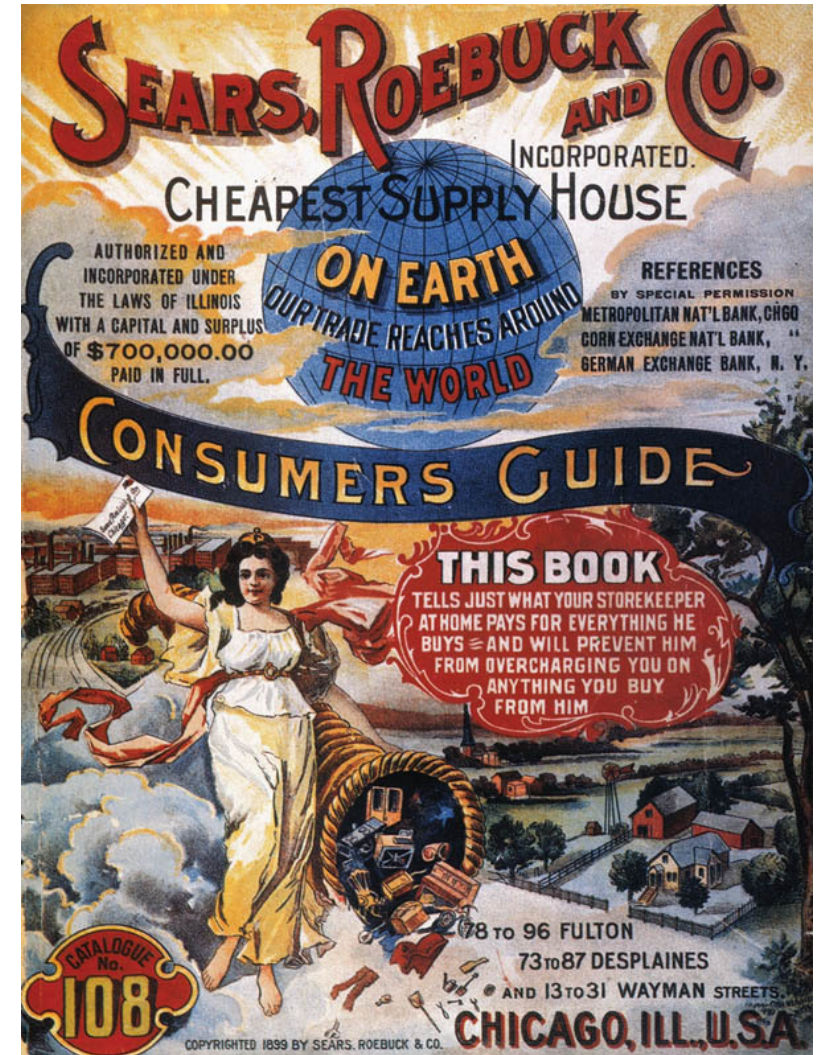


# Lesson 25: The Rise of Industry

*Did the benefits of industrialization outweigh the costs?*

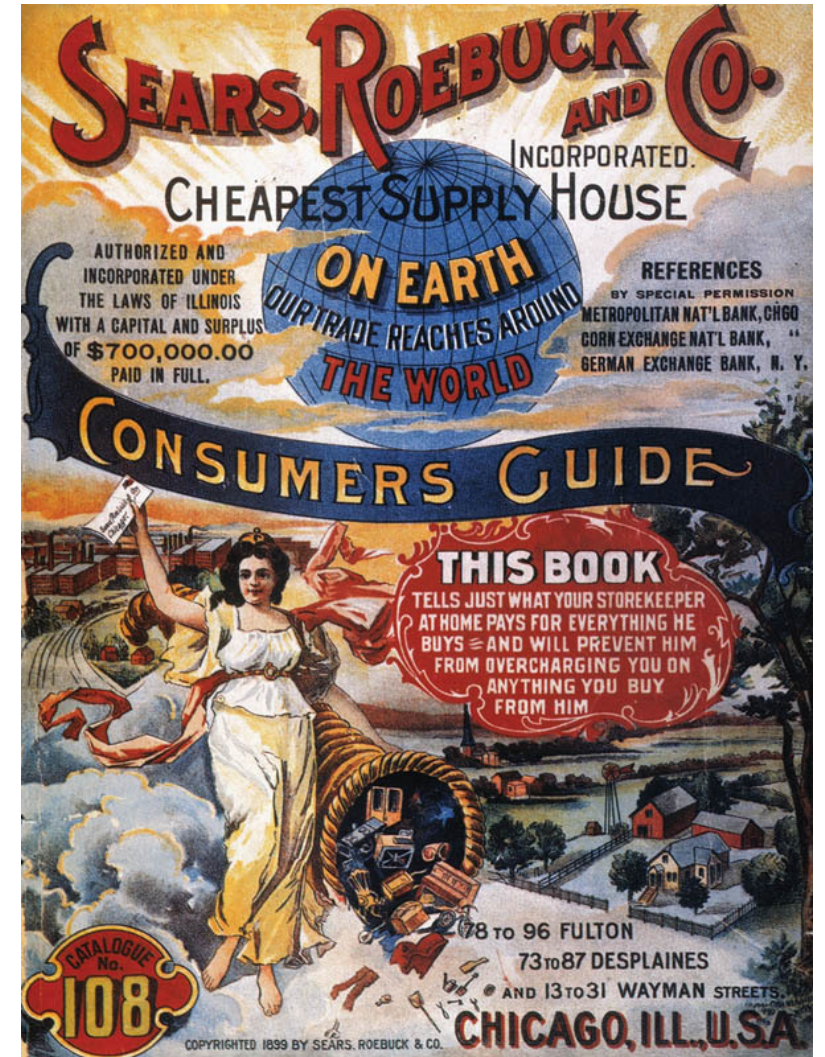
# 25.1 A Nation Transformed

- Cities like New York were booming, and entrepreneurs in banking, commerce, and industry were gaining enormous wealth.
- Technological marvels like the electric light were changing how Americans lived and worked.



# 25.1 A Nation Transformed

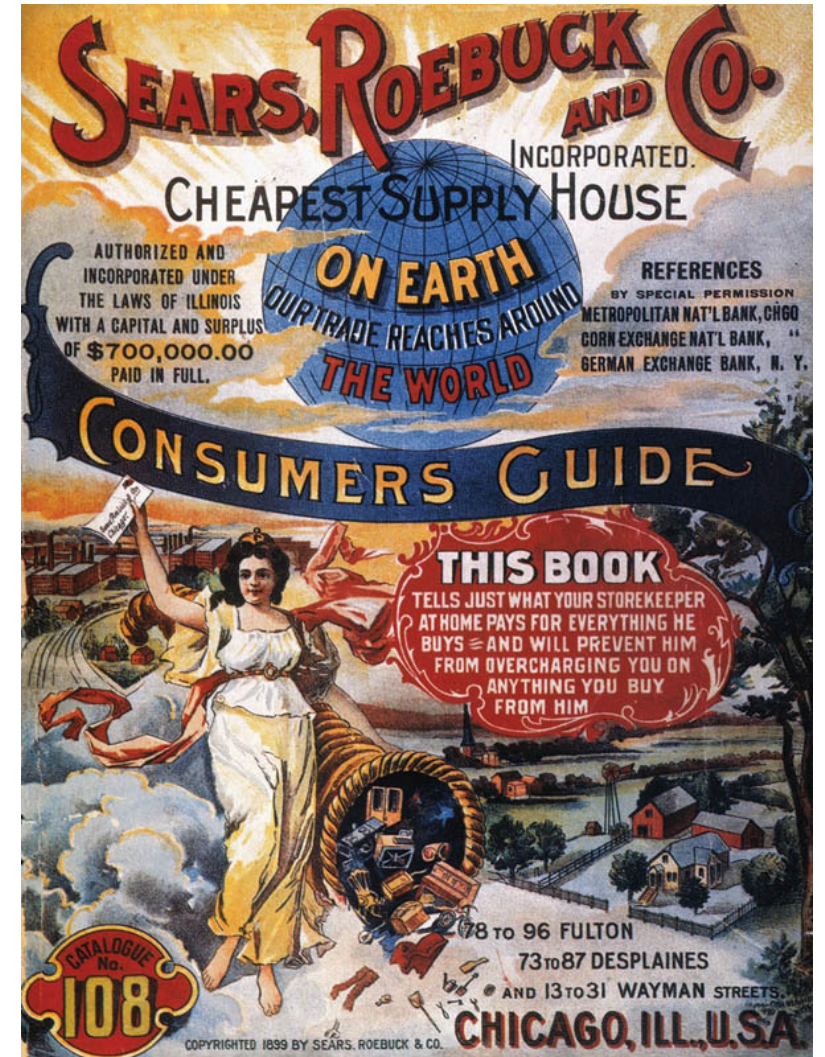
- Families like the Vanderbilts made huge profits from the growth of big business after the Civil War.
- Businesses got bigger in part because of the demand for new technology and innovations in manufacturing practices. They also grew because there was more money to invest in them.
- Some of the money that fueled industrialization came from the large-scale mining of gold and silver in the West.





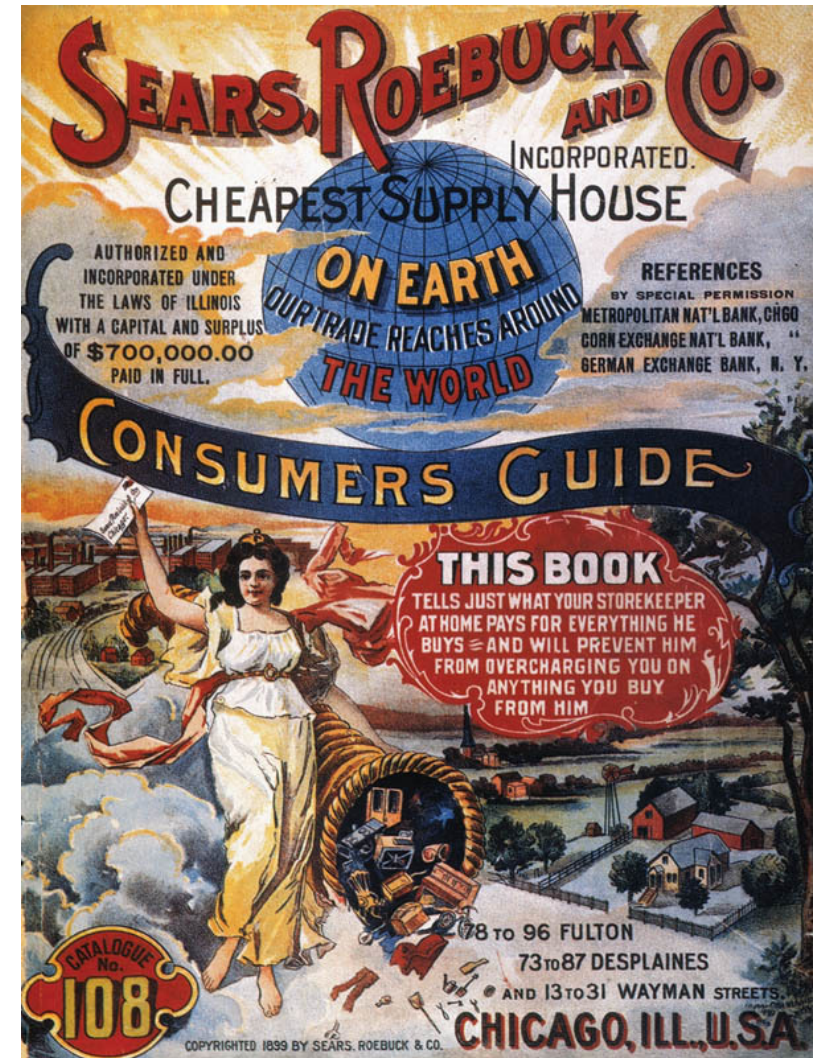
# 25.1 A Nation Transformed

- Government policies also contributed to the boom in big business.
- The idea of laissez-faire was that government should not regulate the price or quality of goods, the working conditions of laborers, or the business practices of bankers and industrialists.



# 25.1 A Nation Transformed

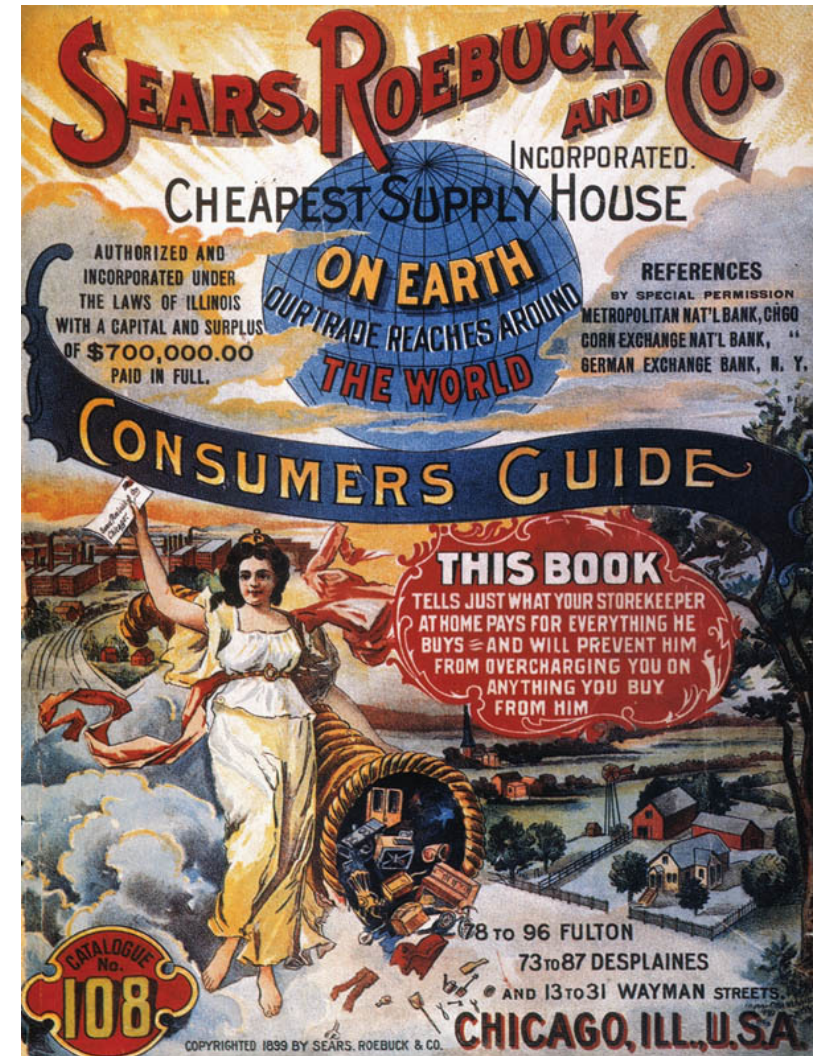
- In a laissez-faire economy, a lack of government interference means individuals and businesses have greater control over their economic decision making, which can have both positive and negative consequences for society.





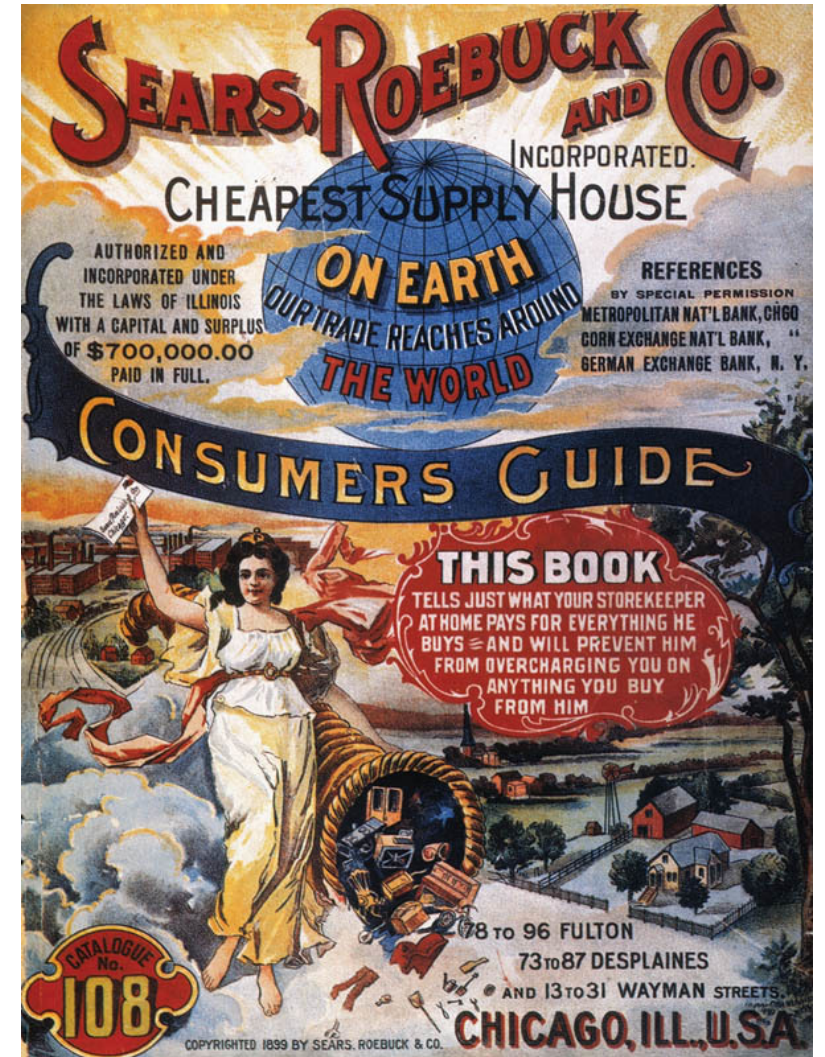
# 25.1 A Nation Transformed

- Federal, state, and local governments helped business and industry through favorable laws and subsidies.
- Congress passed higher and higher tariffs.
  - As the cost of imported goods became more expensive, the demand for American-made goods increased.



# 25.1 A Nation Transformed

- The business boom fed the growth of American cities.
- For 100 years, Americans had been going west to seek their fortunes, but 1890 marked the closing of the frontier after the Census Bureau declared the frontier line no longer existed.
- The new “land of opportunity” was located in the cities of the Northeast and around the Great Lakes, where factories provided thousands of new jobs.





# 25.1 A Nation Transformed

- Outside the cities, even farming was getting to be big business. In the Midwest, commercial farmers used new machinery and techniques to grow crops on a larger scale than ever before.

**SEARS, ROEBUCK AND CO.**  
INCORPORATED.  
**CHEAPEST SUPPLY HOUSE**  
**ON EARTH**  
OUR TRADE REACHES AROUND  
**THE WORLD**

AUTHORIZED AND INCORPORATED UNDER THE LAWS OF ILLINOIS WITH A CAPITAL AND SURPLUS OF \$700,000.00 PAID IN FULL.

REFERENCES BY SPECIAL PERMISSION METROPOLITAN NAT'L BANK, CHGO. CORN EXCHANGE NAT'L BANK, " GERMAN EXCHANGE BANK, N. Y.

**CONSUMERS GUIDE**

**THIS BOOK**  
TELLS JUST WHAT YOUR STOREKEEPER AT HOME PAYS FOR EVERYTHING HE BUYS - AND WILL PREVENT HIM FROM OVERCHARGING YOU ON ANYTHING YOU BUY FROM HIM

278 to 96 FULTON  
73 to 87 DESPLAINES  
AND 13 to 31 WAYMAN STREETS.  
**CHICAGO, ILL., U.S.A.**

COPYRIGHTED 1899 BY SEARS, ROEBUCK & CO.

CATALOGUE No. **108**

The advertisement features a central illustration of a woman in a white dress and yellow sash, holding a catalog aloft. She stands on a globe, with a large basket of goods spilling out from her. The background shows a rural landscape with a red barn and a windmill. The text is arranged in various fonts and colors, including red, blue, and yellow, to draw attention to the company's name and the benefits of the Consumers Guide.



# 25.1 A Nation Transformed

- Between 1860 and 1892, the number of millionaires in the United States grew from 300 to more than 4,000.
- The newly rich filled their palace-like homes with elaborate decorations and European art and antiques.
- In 1873, the great American writer Mark Twain dubbed this time of showy wealth “the Gilded Age.” (*Gilded* means overlaid with gold.)



# 25.1 A Nation Transformed

- While wealthy capitalists lived like royalty, many workers lived in dismal poverty.
- Those who were immigrants often faced prejudice and discrimination, and during business downturns, many workers lost their jobs.





## 25.2 Improved Technology

- In 1872, a Scottish immigrant named Andrew Carnegie went to England to study a less expensive method of making steel, a method invented by Henry Bessemer.
- Carnegie owned a company that made iron bridges for railroads and knew that his bridges would be better if they were made of steel.



## 25.2 Improved Technology

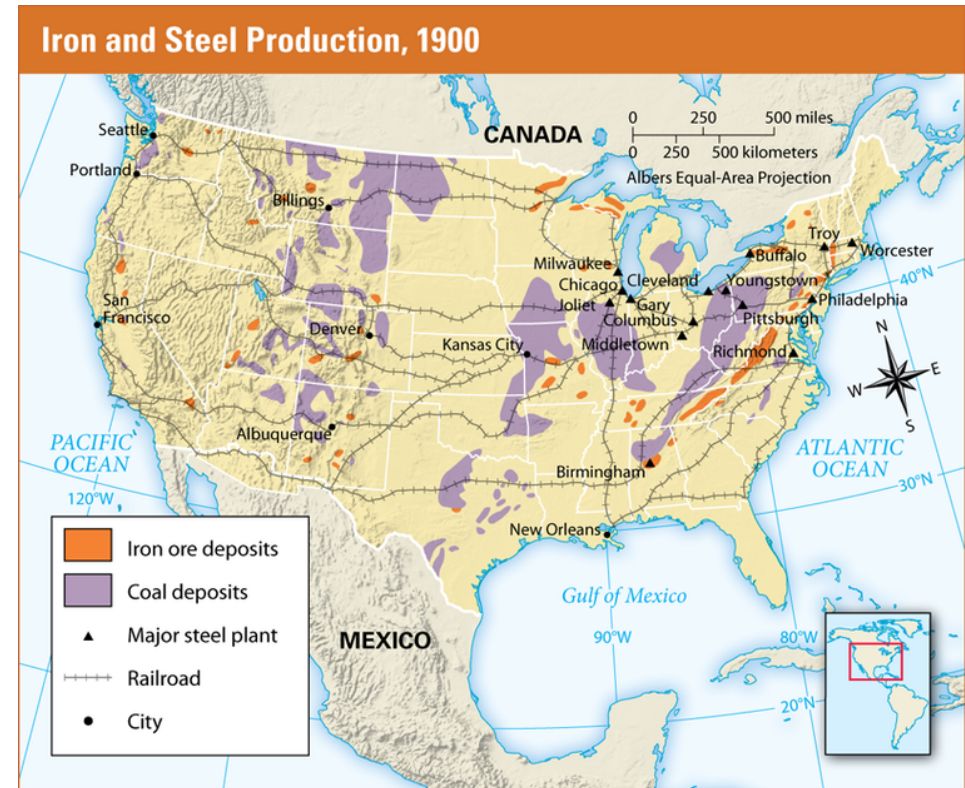
- The Bessemer Process
  - Invented by Henry Bessemer
  - Steel replaced iron in rails, trains, and bridges. Steel nails, needles, and knives became common household items.





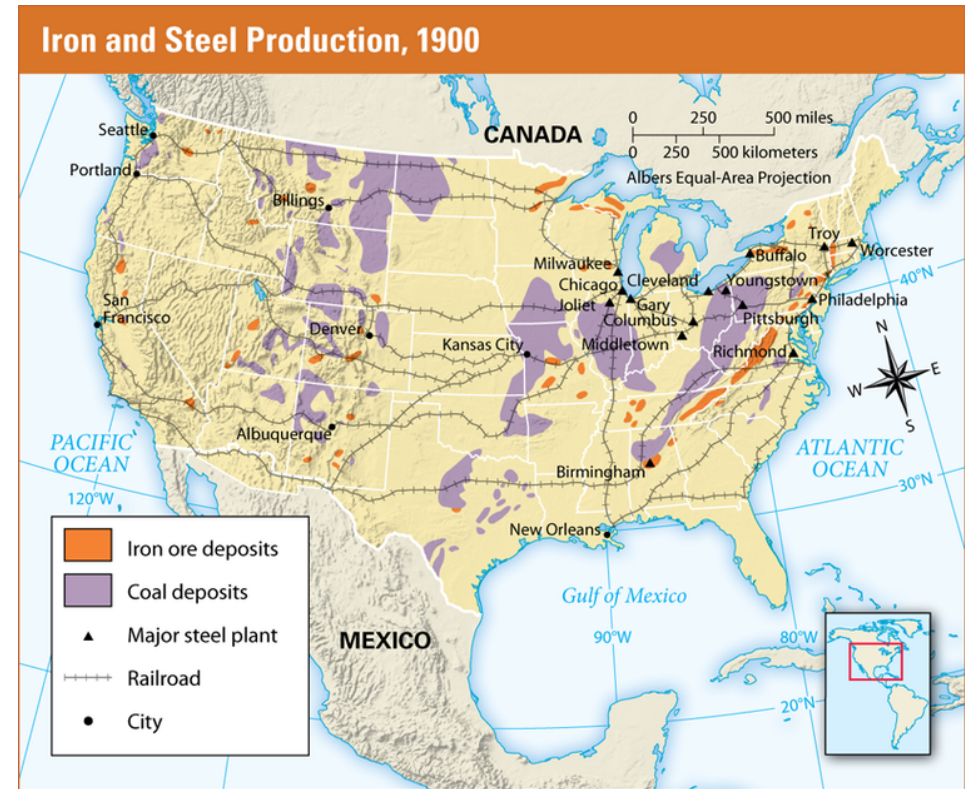
# 25.2 Improved Technology

- Many steel companies competed fiercely to supply steel for such products.
- To remain the leader, Carnegie hired scientists to improve the quality of his company's steel and employed good managers to make his steel mill run efficiently.
- His recipe for success was “adopt every improvement, have the best machinery, and know the most.”



## 25.2 Improved Technology

- To reduce his competition, Carnegie also bought up several rival steel companies.
- He then combined them all to form the giant Carnegie Steel Company, and by 1900, Carnegie Steel produced a quarter of the nation's steel.





## 25.2 Improved Technology

- In 1876, Thomas Edison opened an “invention factory” in New Jersey.
- With a team of workers, he set out to create a “minor” invention every ten days and a major one “every six months or so.”



## 25.2 Improved Technology

- Edison succeeded brilliantly and, more than any other inventor, helped turn electricity into an everyday source of light and power.
- His workshop turned out the first practical electric lightbulb, the phonograph (record player), the motion picture projector, and many other inventions.





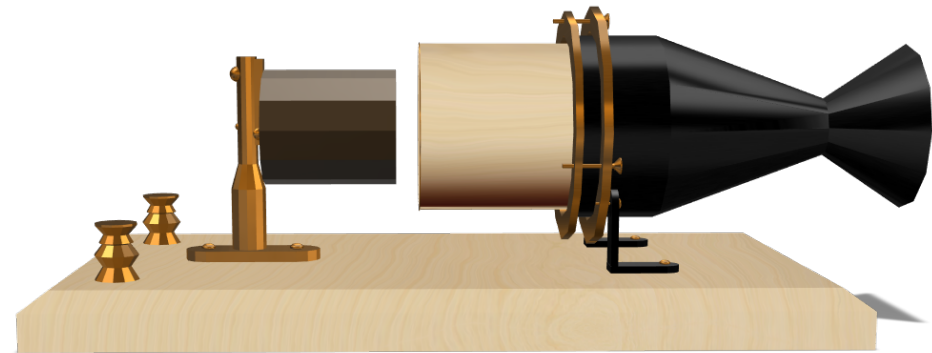
## 25.2 Improved Technology



- The Electrical Power Station
  - Invented by Thomas Edison
  - Power stations helped bring electricity to homes, stores, and factories.

# 25.2 Improved Technology

- The Telephone
  - Invented by Alexander Graham Bell
  - Telephones allowed Americans to communicate with one another and made industry more efficient and competitive.





## 25.2 Improved Technology

- New methods of organizing work were also making businesses more efficient.
- Factory owners adopted the assembly line in combination with Eli Whitney's idea of assembling a wide variety of products from interchangeable parts.



## 25.2 Improved Technology

- Mass Production
  - Several people contributed to this invention, which was made popular by Henry Ford.
  - Mass production enabled workers to produce more goods per day at a lower cost.





# 25.2 Improved Technology

- The Airplane
  - Invented by Orville and Wilbur Wright
  - The Wright brothers' invention sparked worldwide interest in flying. It also started the air travel industry, air mail delivery, and the use of planes by the military.



## 25.2 Improved Technology

- By the late 1920s, an industry based on air travel had emerged.
- The U.S. postal service used planes to transport mail across the country while the military used planes for exploration and scouting.
- At the same time, wealthy Americans took their first commercial flights across the country.

