

The Industrial Revolution: An Overview

Life Before the Industrial Revolution

- People lived in rural areas (small towns and villages)
- Less than 10% lived in cities
- Most people were farmers and grew enough food only to support their families

Life Before the Industrial Revolution (continued)

- For many, life was centered around the agricultural season
- Some industry did exist in Europe
 - Craftworkers made things such as cloth, jewelry, and weapons



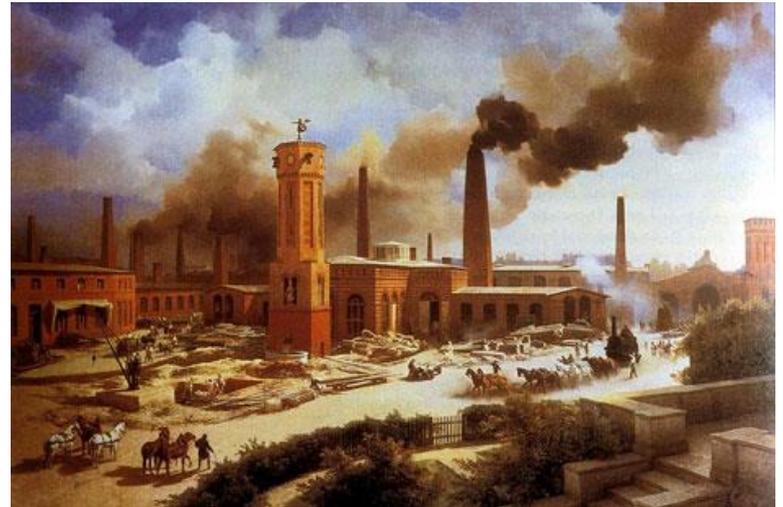
Life Before the Industrial Revolution (continued)

- During this time Europe was dominated by powerful monarchs
 - This meant workers and farmers had no say in their government



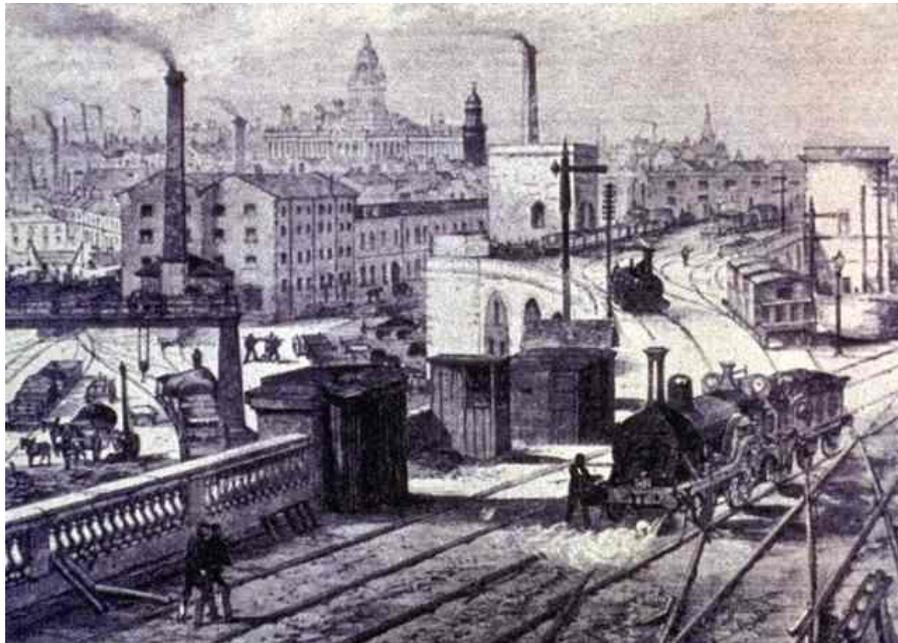
Background Information

- The Industrial Revolution began in the mid-1700s
 - Started in Britain
 - Spread to other parts of the world including the rest of Europe and North America



Why Did the Industrial Revolution Start in Britain?

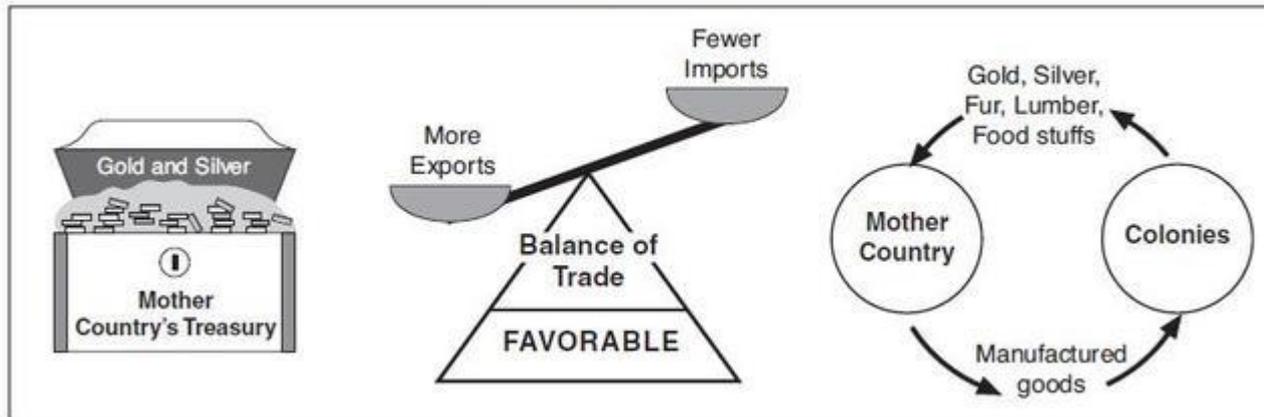
- Britain had large deposits of coal and iron
 - These were 2 natural resources that early industrialization depended on



Why Did the Industrial Revolution Start in Britain? (continued)

- Britain was a key colonial power and depended on its colonies for raw materials
 - The colonies were also used as markets for the final manufactured goods produced by Britain

A European View



Why Did the Industrial Revolution Start in Britain? (continued)

- As demand for British goods increased Britain was forced to produce goods more efficiently to keep up with demand without cutting into its profits
 - They found more economical ways of using capital and labor



Farming Methods Improve

- Jethro Tull invented the seed drill to help farmers plant in rows
- In the early 1700s Charles Townshend invented a new method of crop rotation
 - This meant farmers could use their land all year round by rotating crops



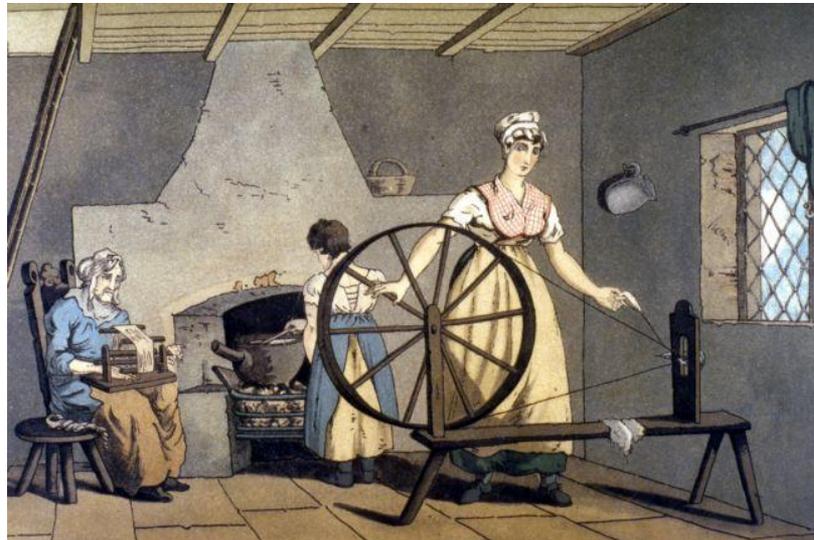
New Technology Aids the Revolution

- James Watt improved the invention of the steamboat
- Methods to produce iron improved



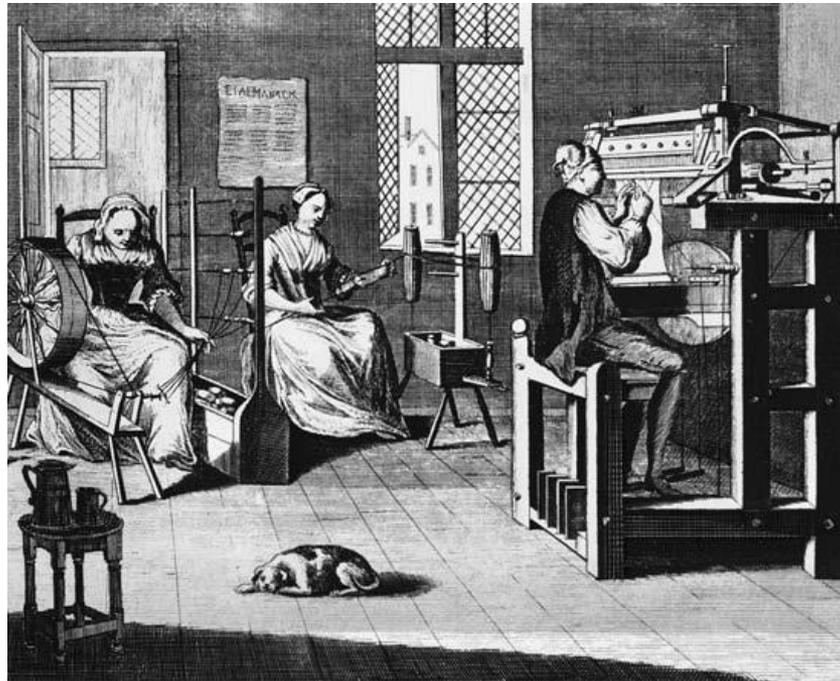
Advances in the Textile Industry

- Before the industrialization merchants purchased raw materials and distributed them among workers who lived in cottages, on farms, or in villages (this was called the cottage industry or the putting-out system)



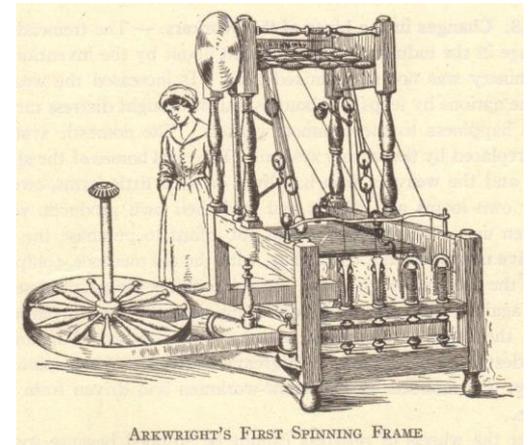
Advances in the Textile Industry (continued)

- People would then spin the cotton into thread and wove the thread into cloth
- This system was very slow and inefficient

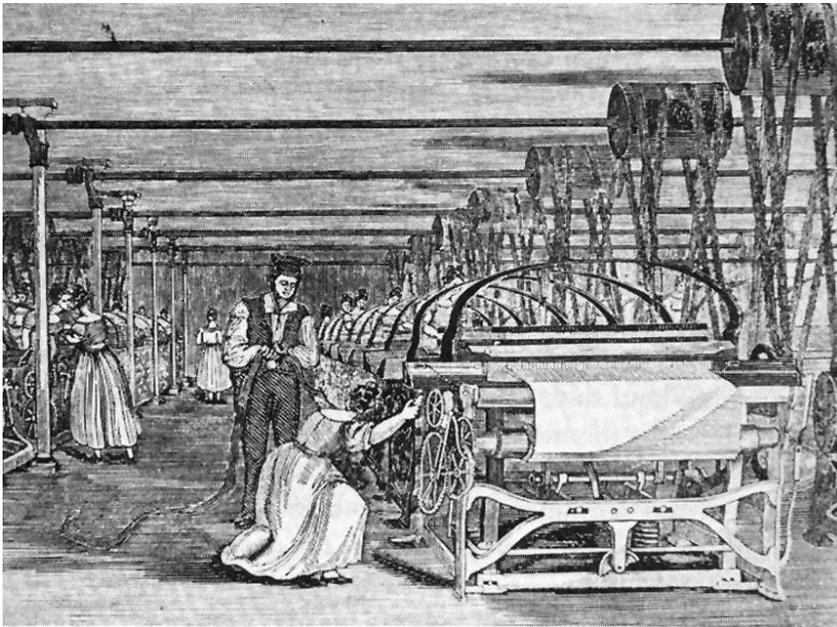


Advances in the Textile Industry (continued)

- In the 1760s, two new machines revolutionized the textile industry
 - One was the spinning jenny, invented by James Hargreaves
 - The other was the water frame, invented by Richard Arkwright



Advances in the Textile Industry (continued)



Power Weaving 1836

- The first textile mills appeared in Britain in the 1740s
- By the 1780s England had 120 textile mills
- New textile machines destroyed the old putting-out system

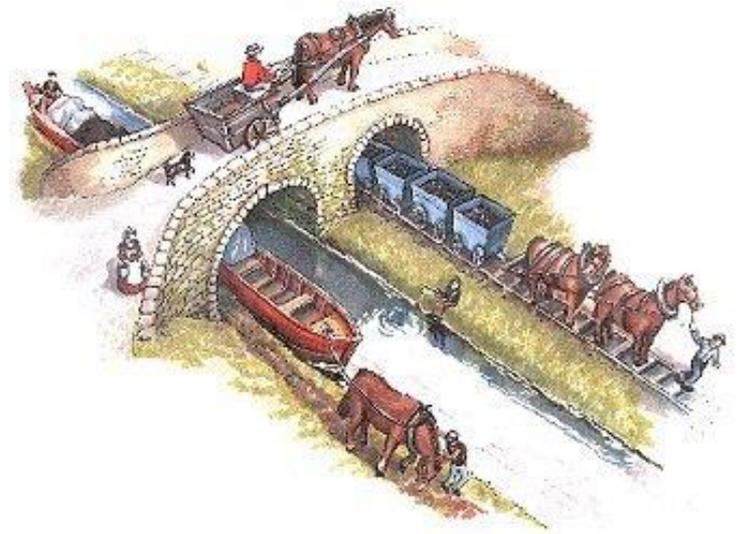
Advances in the Textile Industry (continued)

- Manufacturers started building these new machines near water and in large sheds—this was the beginning of the factory system



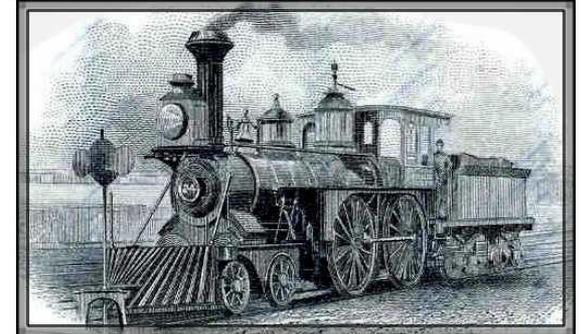
The Transportation Revolution

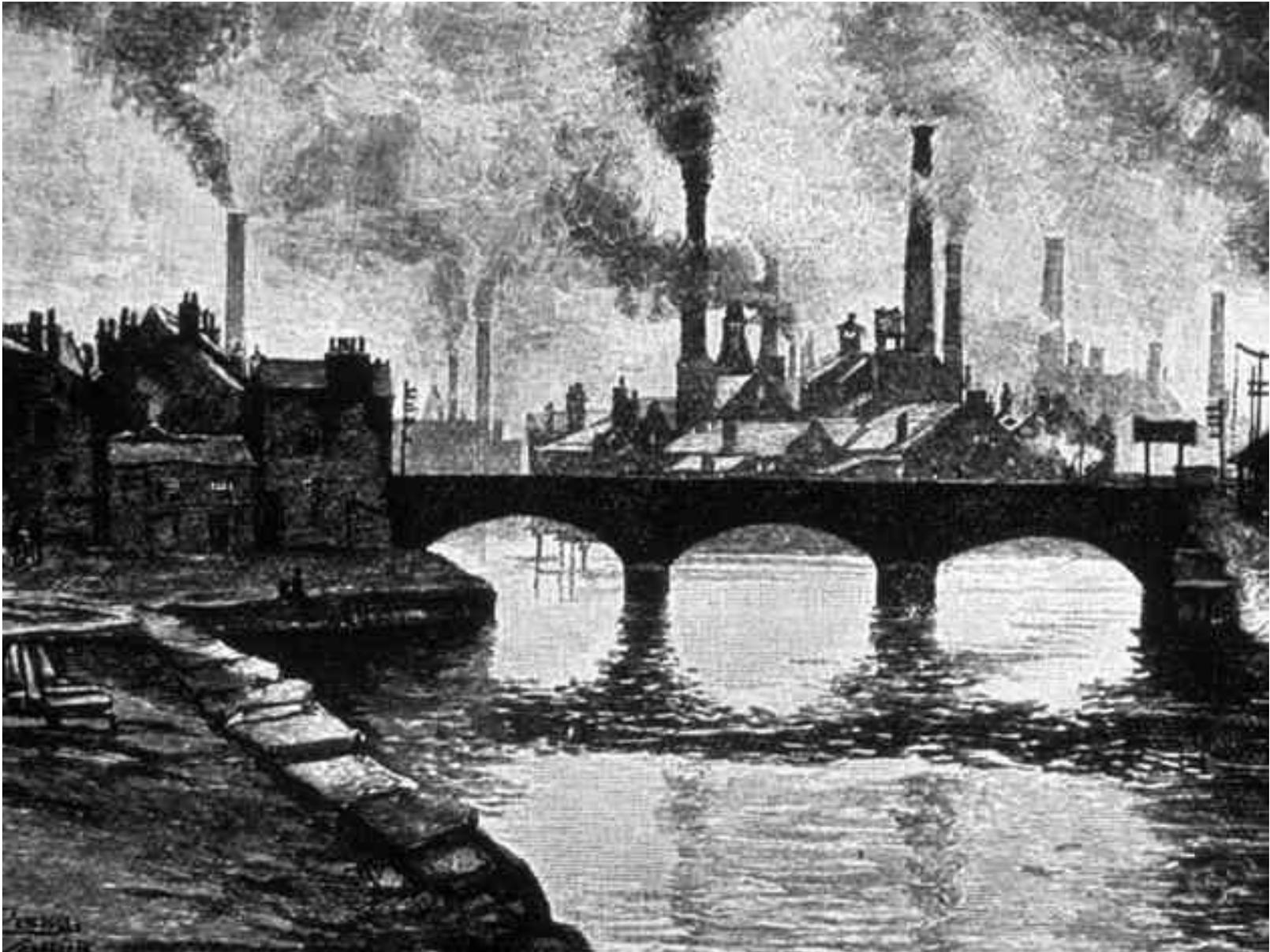
- The continued growth of the Industrial Revolution depended on the ability to transport raw materials and finished goods long distances
- We see the Industrial Revolution go hand-in-hand with the Transportation Revolution



The Transportation Revolution (continued)

- Turnpikes were built by private entrepreneurs and also helped goods to travel quickly
- Canals were built to transport coal and raw materials quickly and to link cities
- The steam locomotive also made the growth of railroads possible

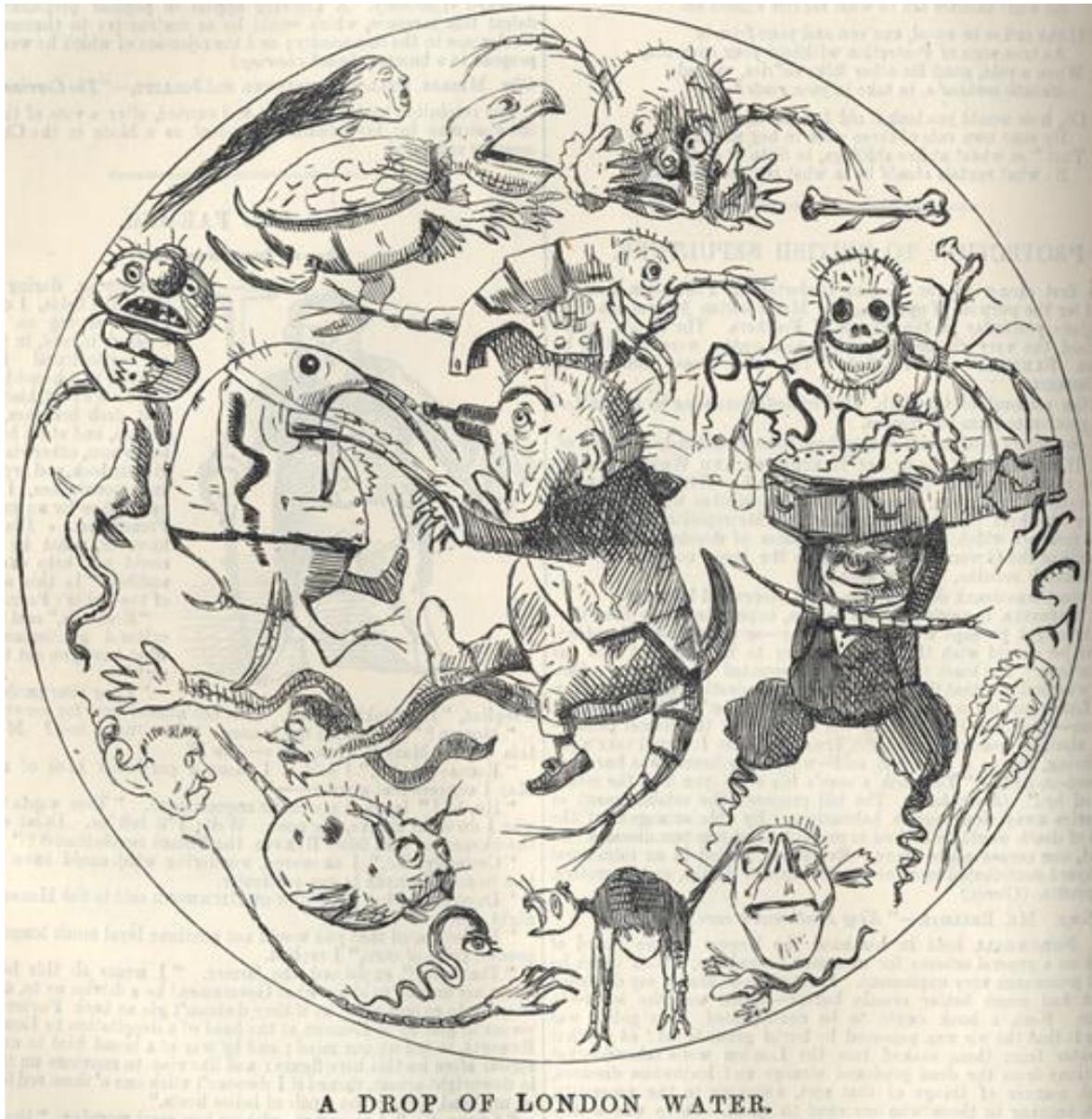






How did air pollution become so bad?
What can be done to solve this problem?





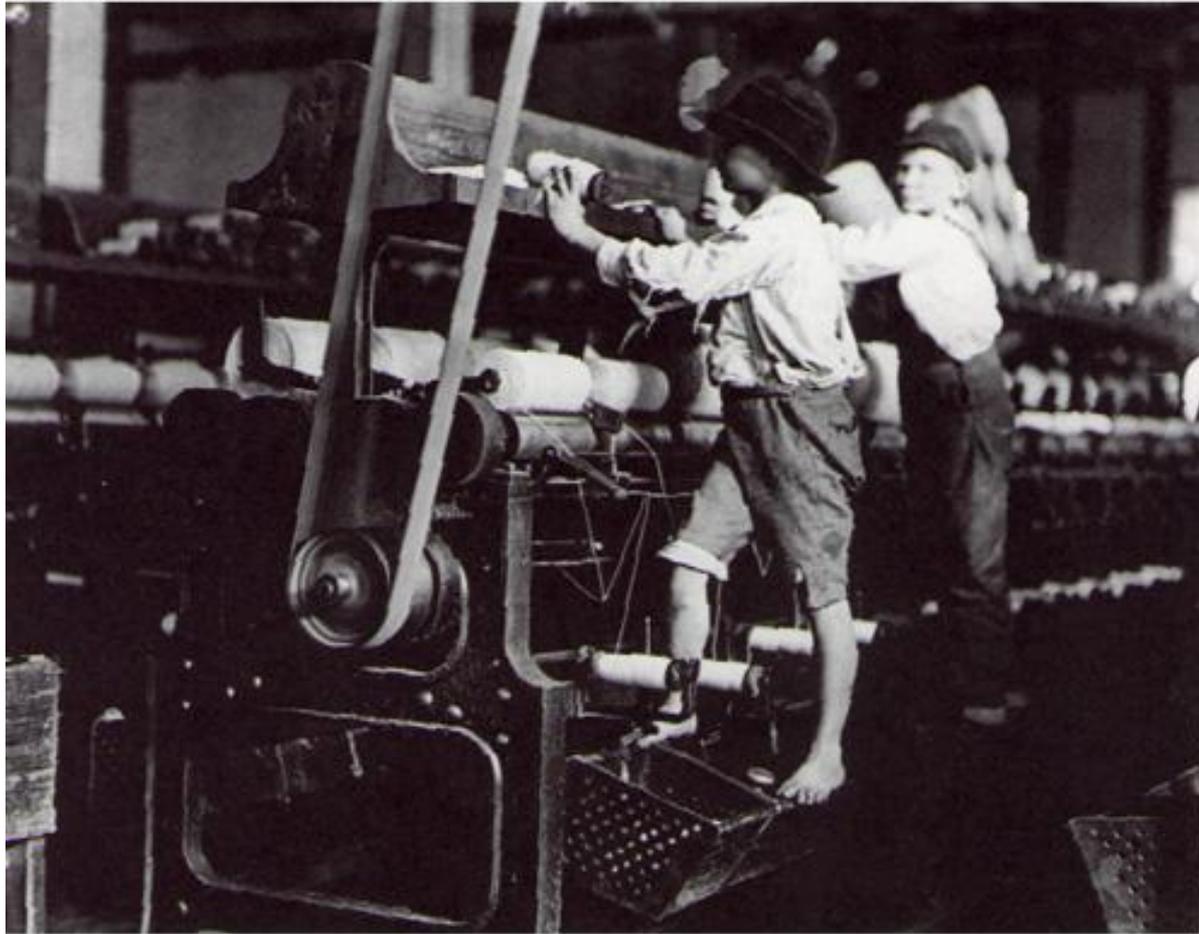
A DROP OF LONDON WATER.

How did water pollution become so bad?
What can be done to solve this problem?





How did living conditions become so bad?
What can be done to solve this problem?



Replacing bobbins on machinery

Kids At Work, Russell Freedman, Scholastic, 1994. Photo by Lewis Hine









How did working conditions become so bad?
What can be done to solve this problem?