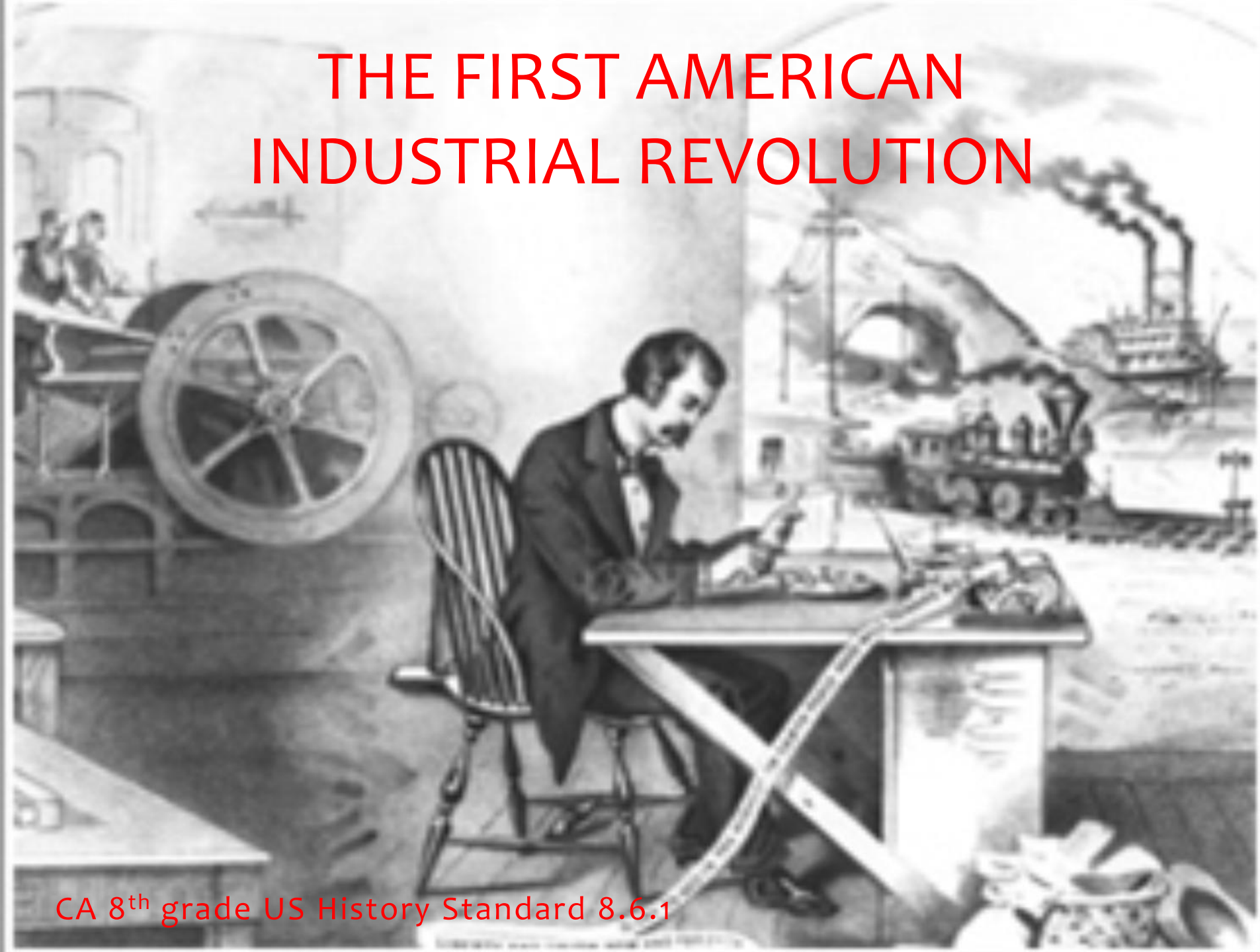
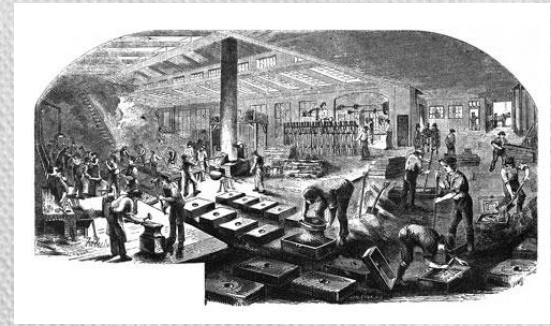


# THE FIRST AMERICAN INDUSTRIAL REVOLUTION



CA 8<sup>th</sup> grade US History Standard 8.6.1

# What was the Industrial Revolution?



The Industrial revolution was a time when American production changed from goods created by hand at home to goods created by machines in factories. The Industrial revolution began in England and spread to the United States.

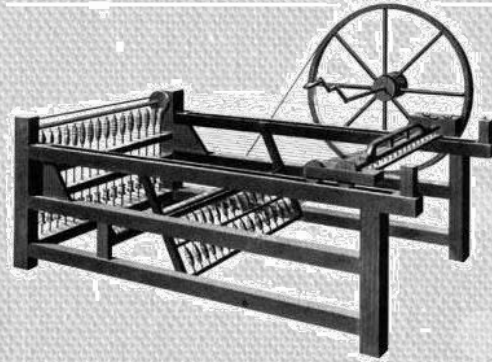
- One of the major industries in England was the textile industry. A textile is a fabric produced from
  - a plant fiber such as cotton, flax, or jute
  - Or from an animal protein such as wool or silk
  - or from some combination of plant fiber and animal protein
- Textile mills are where the fabric is created. These fabrics are then turned into clothes, blankets, upholstery and many other products.



# Important inventions of the Industrial Revolution

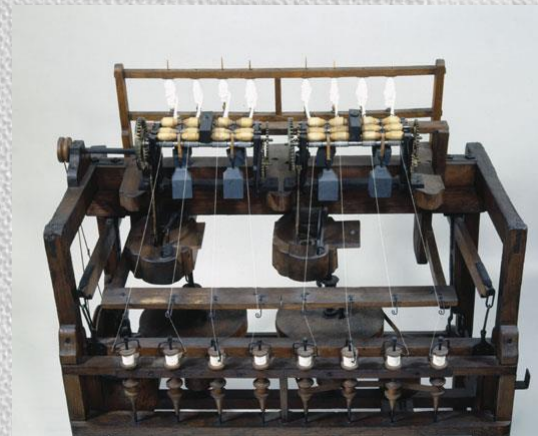
James Hargreaves invented the Spinning Jenny (1764)

The Jenny spun several threads at once.



Richard Arkwright invented the Water Frame (1769)

The Water Frame could spin 100 threads at once. It was powered by water.



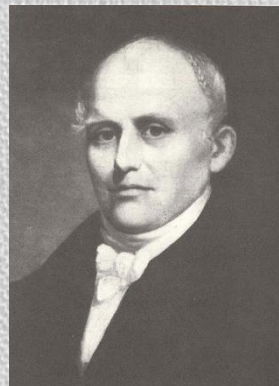
# Samuel Slater

Fearing the loss of their hold on the textile market, England made it illegal for textile workers to leave the country with their knowledge of how the machines worked.

Samuel Slater memorized Arkwrights Water Frame design and brought it to America in 1789.

He then built the Slater Mill in Pawtucket, RI in 1793.

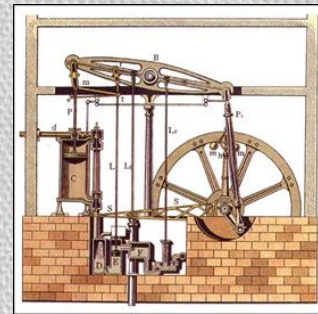
Slater was nicknamed the “Father of the American Industrial Revolution”.



# Where were the Mills built?

Many of the first factories were built in the New England region because of their large number of fast moving rivers and a large population of people to work in the factories.

The textile mills were powered by water until the 1830's when they switched to steam power.

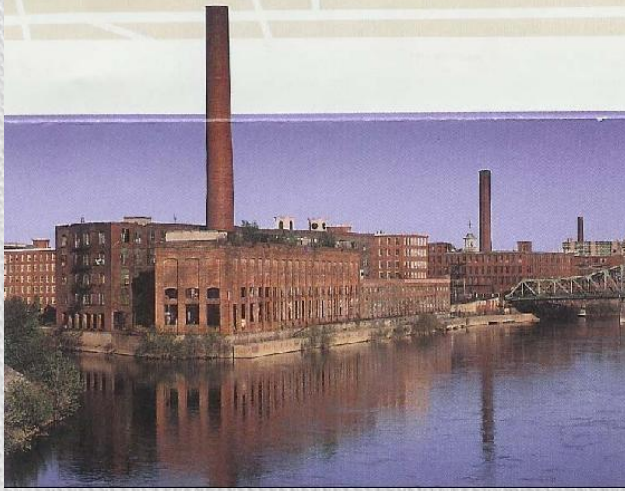


The work of Samuel Slater and others led to the creation of the “factory system”.

The factory system is a method of producing goods that brought people and machines together under one roof.



# The Factory System



Francis Cabot Lowell started the factory system in his mills in Massachusetts.

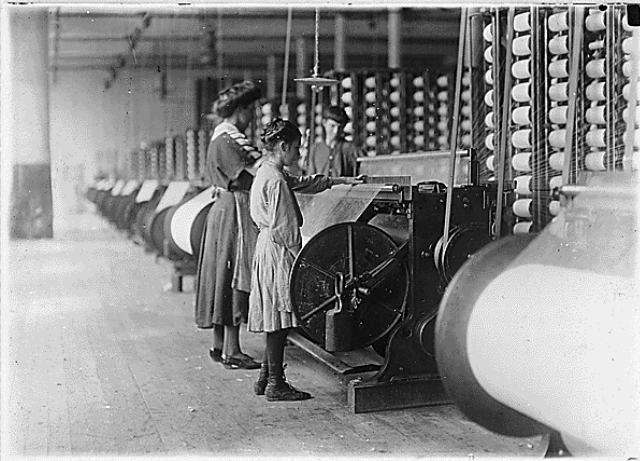
Lowell hired young women and children to work in his mills.

A usual work schedule was 12-14 hours a day, 6 days a week.

Girls were referred to as “Lowell Girls” or “Mill Girls”.

Children were called “doffers”.

Factories and Mills led to the growth of cities as people swarmed to the factories looking for work.



# Cotton and industrialization

One of the products needed to keep the mills running was a steady supply of cotton.

Cotton was a very labor intensive crop that took many slaves to plant, harvest, clean and process it.

In 1793, Eli Whitney, invented the Cotton Gin.

The Cotton Gin was a better and faster way to clean the seeds and twigs from the cotton fibers.

Whitney had hoped the Cotton Gin would reduce the need for slaves in the south.

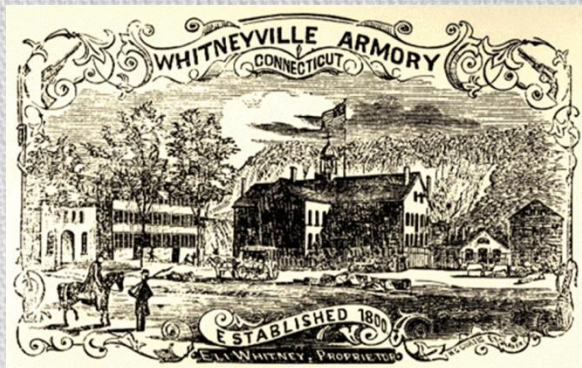
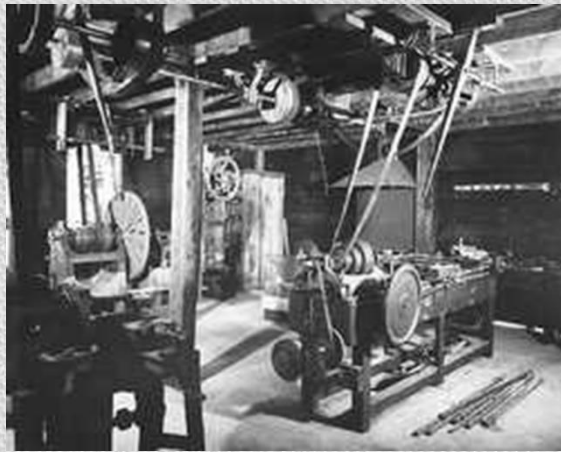
The Cotton Gin could clean 50lbs of cotton a day, a slave could only clean 1lb a day. So his machine did the work of 50 slaves.

Instead of reducing slavery, the Cotton Gin led to an increase in slavery.

Plantation owners saw \$ signs. With the Cotton Gin they could plant even more fields of cotton and make even more money. More fields meant more slaves to plant and harvest the cotton.



# Interchangeable Parts and Mass Production



In the early 1800's Eli Whitney introduced the idea of Interchangeable Parts.

Whitney had a contract with the Army to make rifles. Rifles were usually made by hand and the parts of one rifle did not fit in another rifle.

Interchangeable parts meant making many rifles from identical parts that would work in all the rifles.

These parts could be mass produced (making a lot at the same time) in a factory faster, easier and cheaper.

This, in turn, made repairing rifles much easier, faster and cheaper.

This led to the creation of assembly lines in factories which allowed the use of unskilled labor at a lower salary.