Long, Long Ago:
The United States Textile Industry

By Elise Fillpot

Textile is a word for cloth or fabric. Textiles can be made out of many things. Some textiles are made out of cotton. Farmers grow cotton on plants. Here is a picture of a cotton plant:

Before cotton is made into a textile, seeds must be cleaned out of the cotton balls. In 1793, more than 200 years ago, a man named Eli Whitney invented a machine to clean cotton quickly. His machine is called a gin. Gins are very large now, but the first one was small. It looked like this:

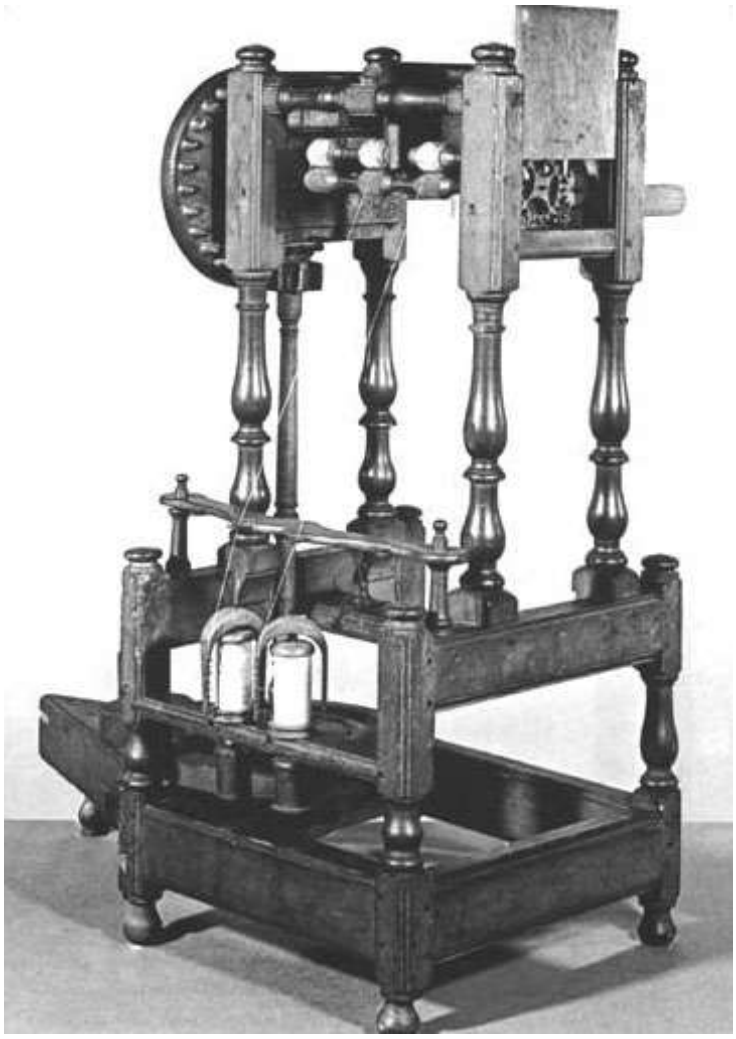
When cotton is clean, it can be spun into yarn or thread. Then the yarn or thread is woven into textiles or fabric. We make many things from cotton fabric: shirts, skirts, pants, coats, socks, bedspreads and curtains.

For more than two hundred years, we have used machines to turn cotton into textiles. Before people invented machines to do the work, craftsmen and women used hand tools to spin and weave cotton. Spinning and weaving by hand took much longer than spinning and weaving with a machine.

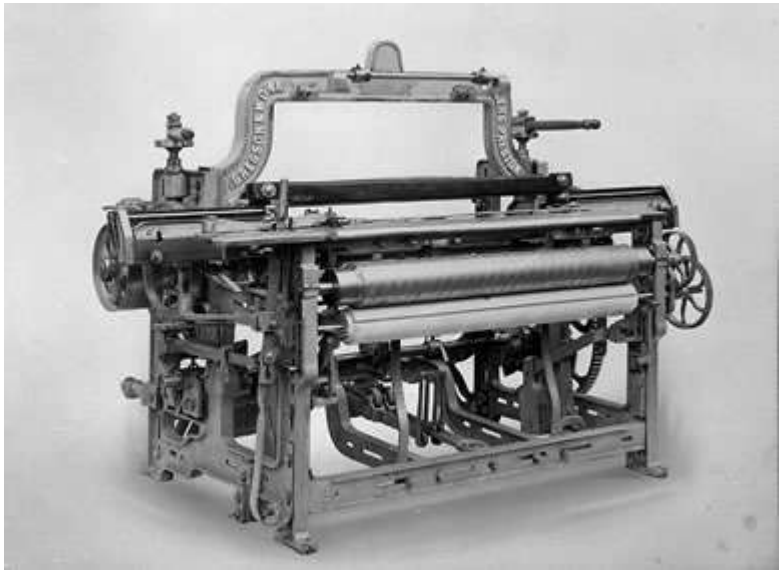
The first spinning machines were invented in England in the late 1700's. The English men that owned the first spinning machines would not share the secret of how to build those machines. So people in the United States had to study the English machines and figure out how to build their own.

A young man named Samuel Slater lived in England. Samuel worked in a factory that had a spinning machine. He learned all about the machine and the textile business. Then he emigrated to the United States.

Samuel arrived in New York in 1789 with no drawings of the English spinning machine, but he remembered it well. By using his memory, he built spinning machines for factories in the United States. The machines turned cotton into thread. The machines were powered by water-wheels. Here is a picture of a spinning machine built long, long ago:



When yarn and thread could be made by machines, American factory owners wanted machines that could weave that yarn into cloth. Just as Samuel Slater used his memory to copy an English ***spinning*** machine, a man named Francis Lowell used his memory to copy an English ***weaving*** machine. Francis built his weaving machine in 1813. It was also powered by water-wheels.



Now factory owners in the United States had both spinning and weaving machines. Francis Lowell and his business partners decided to build a big textile factory and a town. They built them north of Boston, which was their home. They named their factory town Lowell. They built it on the Pawtucket Falls of the Merrimack River. They chose this spot because long, long ago waterfalls made power for the spinning and weaving machines. Here is a photograph of a water-wheel:

By 1836, twenty textile mills in Lowell made fifty million yards of cloth a year. Eight thousand people worked in the mills. At first, daughters of local farmers worked in the mills. In later years, immigrants also worked there.

Before the Civil War, textile mills were the most important American factories.

The information in this history story came from these websites:

http://inventors.about.com/od/cstartinventions/a/cotton_gin.htm

http://inventors.about.com/library/inventors/blmills.htm

http://www.uh.edu/engines/epi159.htm

http://inventors.about.com/cs/inventorsalphabet/a/textile.htm