Textile Industry

Object: Upright Rotary Knitting Machine
Tompkins Brothers, Troy, New York, c. 1895, cast iron, metals, cotton yarn, wood, courtesy of the New York State Museum

Image: Birds-Eye-View of Cohoes, N.Y. Published by Galt & Hoy, New York City 1879, chromolithograph on paper, Albany Institute of History & Art Purchase, 1946.29
The Capital Region in 50 Objects

Textile Industry

In the 1870s, the largest cotton mill complex in the world was located in Cohoes, New York. This once thriving industry began in 1836 when Peter Harmony strategically founded a textile company along the Erie Canal. Harmony used water diverted from the Cohoes Falls to power his factory, and the Canal to transport the finished goods. Raw cotton brought up the East Coast from southern states was processed, spun, and knitted or woven into printed calicos and fine cotton muslins.

By 1870, Cohoes had eighteen knitting mills and six cotton mills running 203,000 spindles, giving the city its nickname, the “Spindle City.” The largest, Mill No. 3 at Harmony Mills, was built between 1866 and 1872. The building was 1,185 feet long and five stories high and considered to be one of the most technologically advanced cotton factories in America. Mill No. 3 alone housed 2,700 looms that produced 100,000 yards of fabric every sixty hours. At its peak, Harmony Mills employed 3,100 people, most of them women. The Harmony complex sold in 1937 when the cotton industry grew less dependent on water power.

Clark Tompkins of Troy invented and patented the upright rotary knitting machine to produce knit goods that could be turned into men’s and women’s clothing. Considered noiseless, the machine could knit, revolve, and wind the material. Machines manufactured by him, and later his sons known as Tompkins Brothers, were used in the United States, Canada, and South America.

Vocabulary

Calicos – printed coat fabric

Loom - a machine for making fabric by weaving yarn or thread

Mill - a building equipped with machinery to make a product

Muslins – a plain, lightweight cotton cloth

Patented - government authority or license that awarded a right or title for a set period, especially the sole right to exclude others from making, using, or selling an invention.

Spindles - slender rounded rods with tapered ends used in spinning to twist and wind thread from a mass of wool

Textile – a type of cloth or woven fabric

Directions

Use the depiction of the object, image, and corresponding text to answer the following questions.

1. Name of the object: ________________________________________________________________

2. When was the object made? _________________________________________________________

3. In what industry was the object used? ______________________________________________

4. Name of image: _________________________________________________________________

5. What can you see in the image? ____________________________________________________

6. What body of water provided power for Harmony Mills? ________________________________

7. Why was Cohoes nicknamed the “Spindle City?” ______________________________________

8. Why do you think Harmony Mills employed mostly women? _____________________________

9. What three textile producing processes did the Tompkins Brothers’ knitting machine include?
   a. ______________________________________________________________________________
   b. ______________________________________________________________________________
   c. ______________________________________________________________________________

10. Where was the raw cotton for processing, spinning and knitting produced? ________________