

The North and the South Take Different Paths

Chapter 11

Section 1

THE INDUSTRIAL REVOLUTION

A Revolution in Technology

- Before 1800s- most Americans worked on farms and things were made by hand
- Industrial Revolution-

- _____ (and other sources of power) replaced human and animal power
- Most people still worked on farms but economy slowly shifted to manufacturing

The Industrial Revolution

- New Technology

- IR began in _____ in mid 1700s

- Machines were used in

- _____ made the spinning jenny (a machine that spun several strings at once, unlike spinning wheel)
 - Edmund Cartwright- 1780s- water powered loom increased productivity of cloth production
 - _____ - water frame- a spinning water machine that used falling water instead of human power

Machines and Factories

- The Factory System

- Large machines needed large mills on a stream

- Setting up a mill required a lot of capital (\$\$\$)

- Capitalist

- (_____) provide

- \$\$\$- build factories and hire workers

- Factory system-

- _____
 - _____
 - _____

- Workers earned daily or weekly- had to work a set # of hours a day

Machines and Factories

- Steam Power
 - Factories usually built along rivers
 - In dry season, _____
 - Arkwright then created factory that ran on steam-
no need for water power
 - Changed factory system- could move to cities and
by employed by women and children

A Revolution Crosses the Atlantic

- Slater Breaks the Law
 - British tried to keep technology secret- law said you couldn't take machinery plans out of the country
 - Samuel Slater was a mechanic in a textile mill- heard the US was offering \$\$\$ for plans
 - 1789- boarded a ship headed for NYC with plans
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A Revolution Crosses the Atlantic

- The First American Mill
 - Slater met _____ -
Quaker capitalist w/ a mill in Pawtucket, RI
 - Brown's mill wasn't good- Slater fixed it
 - First successful textile mill in US
 - Slater's wife Hannah made thread stronger so it wouldn't snap on spindles

A Revolution Crosses the Atlantic

- Interchangeable Parts
 - _____ - had the idea to have machine's make parts for guns- all the same, all pieces fit
 - Went to DC with the idea- officials laughed
 - Put parts for 10 muskets in 10 piles- took one piece from each pile until he had 10 muskets
 - Whitney was supposed to make 10k guns in 28 months
 - Took him _____ and the IP process still wasn't perfect

Lowell, MA: A Model Factory Town

- The Lowell Mills

- _____ - during of War of 1812- improved British textile mills- combined _____ into one factory
 - Built a factory in Waltham, MA
 - After he died, his partners made a factory town
 - Lowell, MA- originally 5 farm families, by 1836 there were 10,000 people- perfectly designed
 - Important outcome- mass production-
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Lowell, MA: A Model Factory Town

- “Lowell Girls”
 - Girls from surrounding farms hired to work in mills
 - A few years later returned home to marry
 - Sent \$\$\$ back home
 - Company built boardinghouses to protect girls and reassure parents
 - Became important in history of
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Daily Life During the Industrial Revolution

- Child Labor
 - Most factories hired women/children-

 - As young as 7- could move around machines easier and get into small places to change spindles
 - Child labor not considered cruel- a kid working on the farm was no different than in the factory
 - Untrue- a child working in a factory had no opportunity for

Daily Life During the Industrial Revolution

- Long Hours
 - 12 hours a day- 6 days a week
 - Farmers worked hard too- during spring, summer, and fall
 - American mills had better conditions than Europe- still unsafe
 - Not designed to protect the worker,

- Later- competition increased- care for workers decreased

Daily Life During the Industrial Revolution

- Changes in Home Life
 - More people left home to work in factories
 - Role of _____ changed
 - Poor families needed women to go to work
 - Having a stay-at-home wife was a sign of _____

Growing Cities

- _____ - movement of people from rural areas (farms) to cities (factories)
- 1800- 6% of people lived in cities
- 1850- 15%
- 1920- >50%
- Cities were small by today's standards- walk limit to limit in 30 mins
- Buildings were a few stories at most

Growing Cities

- Hazards
 - Streets became mudholes in the rain
 - No sewers- trash and sewage thrown into streets
 - Disease epidemics- flu and cholera
- Attractions
 - Entertainment- theaters, museums, circuses
 - Stores- European fashion- “ready-to-wear”