

Forging the National Economy 1790 - 1860





- In 1815, the cost of moving goods by land was high

Cost just as much to haul heavy goods by horse-drawn wagons 30 mi. as it did to ship the 3,000 mi. across the Atlantic Ocean

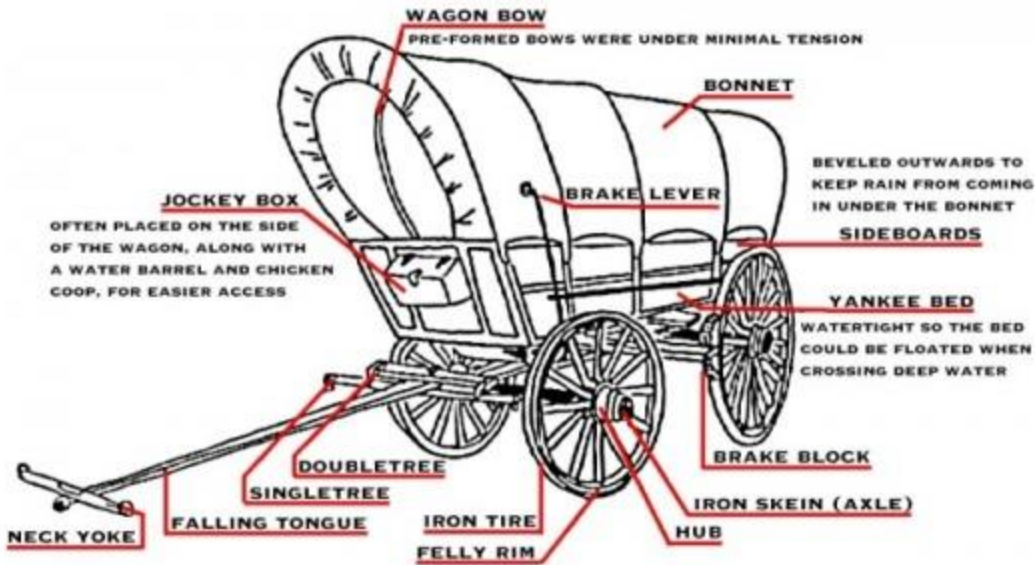
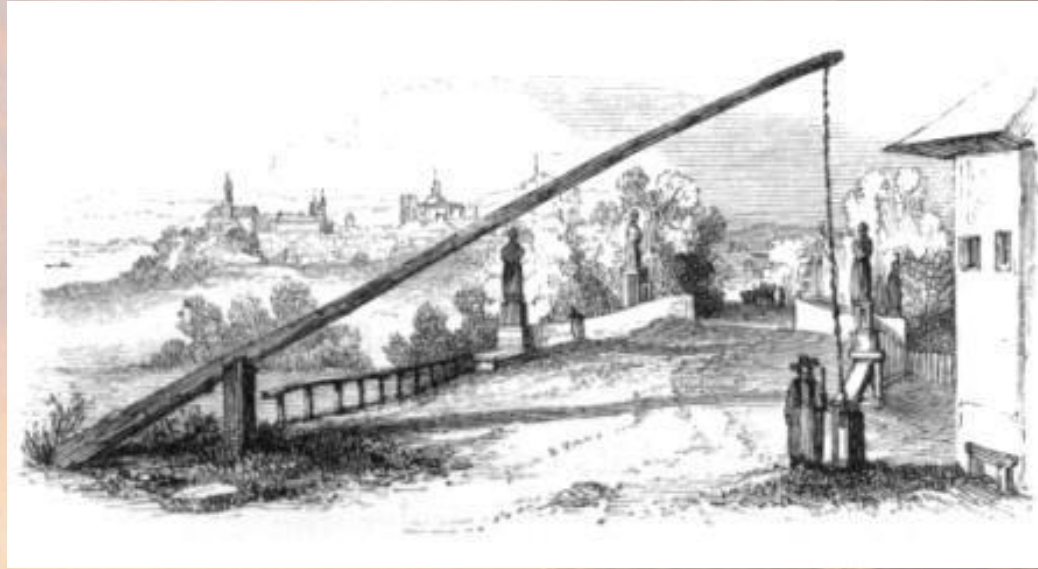
- Water transportation was much cheaper, but was limited to the coast or navigable rivers
- Only farmers located near a city or river could grow surplus crops for sale

Between 1815 and 1860, advances in transportation will drastically change the American economy and landscape



Improvements in Transportation

- 1790s - Lancaster Turnpike toll road completed in PA; hard-surfaced highway
- Led to canvas covered Conestoga Wagon



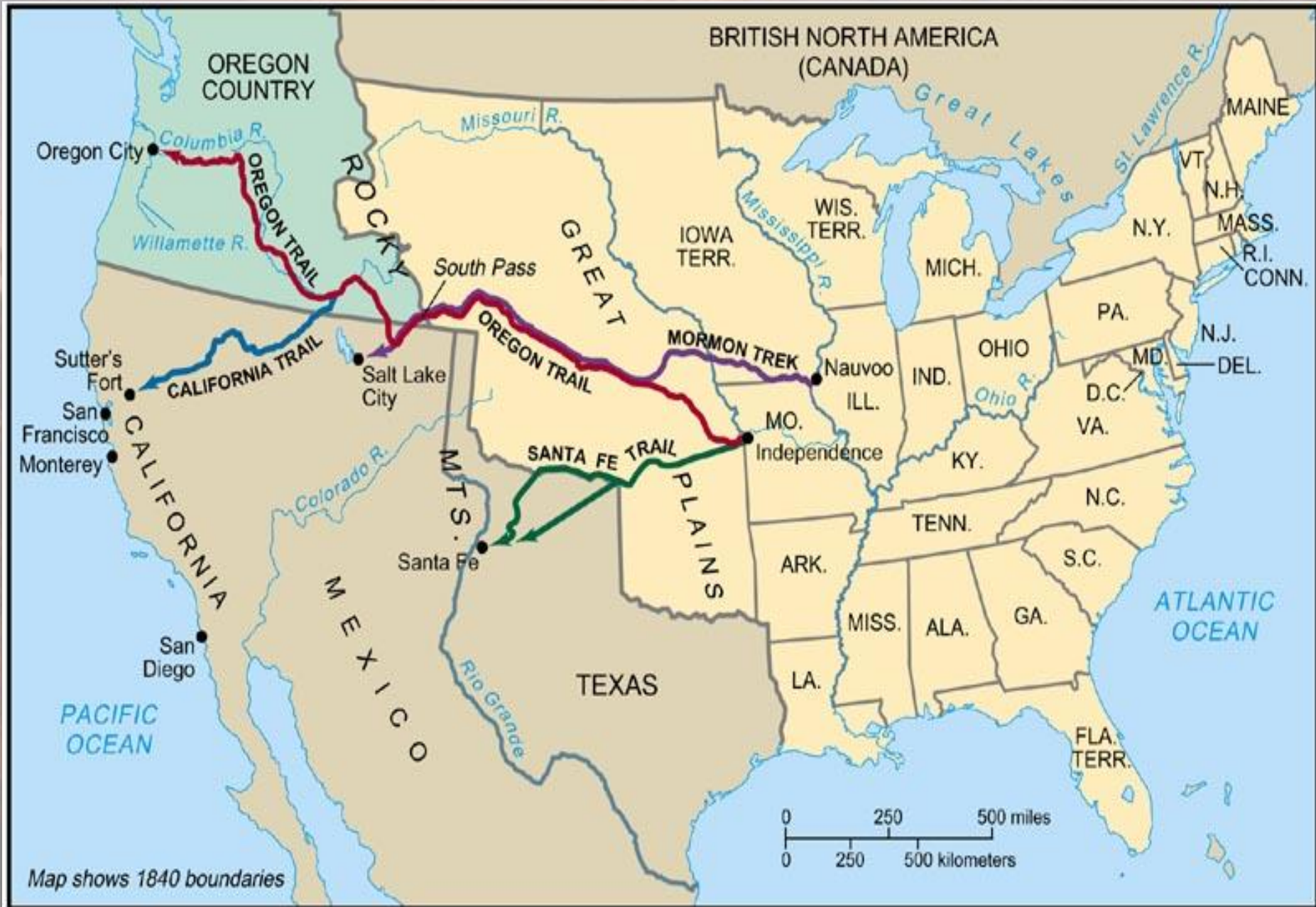
WAGON DESIGN COURTESY OF THE UNIVERSITY OF OREGON



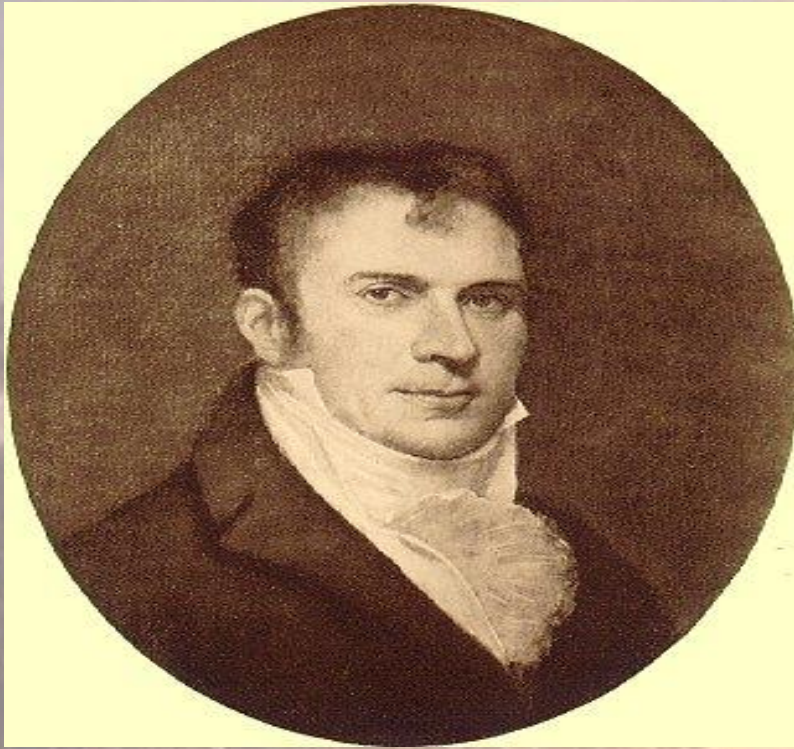
In 1806, Congress funded the building of the National Road



- Begun in 1811
- Helped facilitate movement of pioneers west
- Livestock and farm produce traveled east towards markets
- Largest federally-funded transportation project of its time

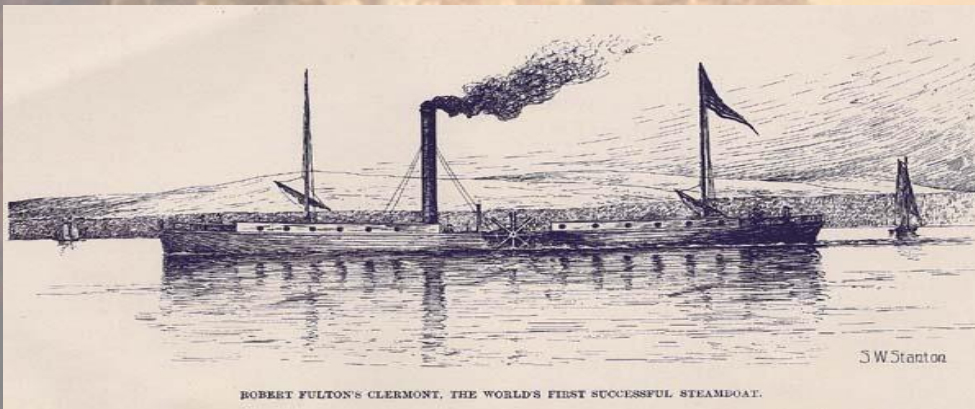


WESTERN TRAILS

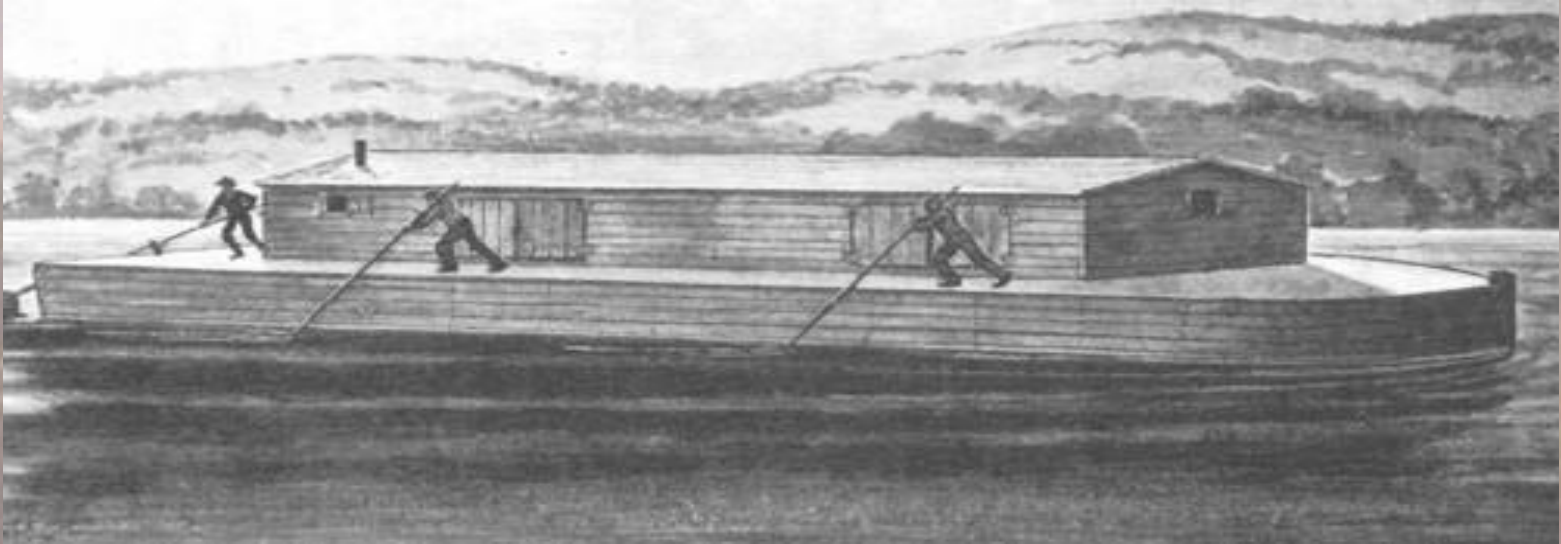


1807: Robert Fulton places a “perfected” steam engine on a boat (the “Claremont”)

- Traveled 150 miles UP the Hudson River (against the current)
- Steamboats make river travel more reliable
- Causes a growth in river travel and canal building



Impacts of the Steamboat



Travel time decreased:

- Could go against wind, tide, currents, and waves
- Could travel at over 10 miles per hour
- In 1820s, over 60 steamboats
- By 1860s, over 1,000

Erie Canal

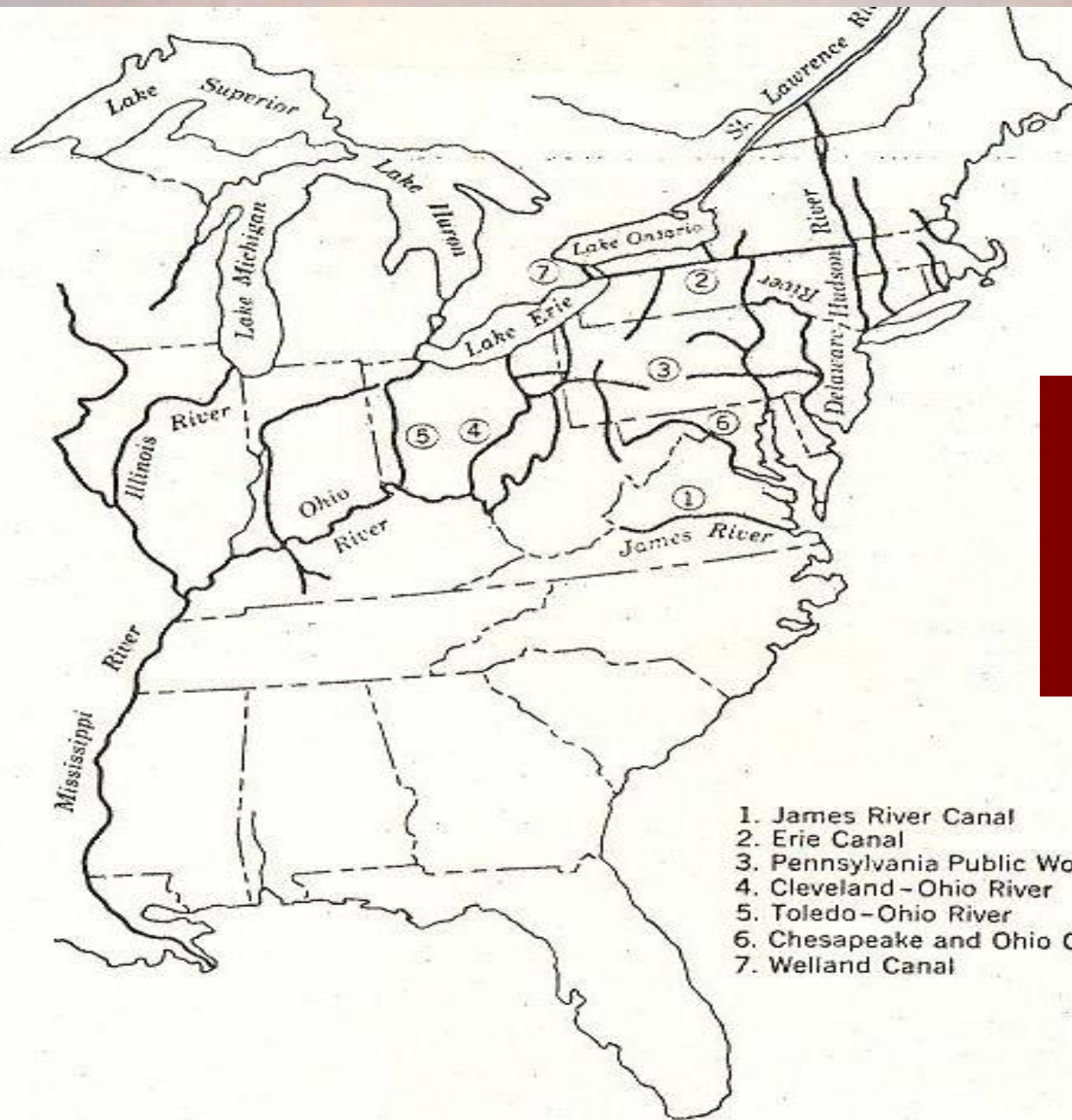
- Proposed in 1808 in response to the steamboat
- Ran through NY, linking Lake Erie in the West, with the Hudson River in the East; completed in 1825
- Reduced cost of transportation of goods by 90%
- By 1840s, more trade went down the Erie Canal than the Mississippi through New Orleans



Route of the Erie Canal and the “Lock System”



- Spurred by the success of the Erie Canal, other canal systems were dug throughout the northeast
- By 1840, over 3,000 miles of canals had been dug

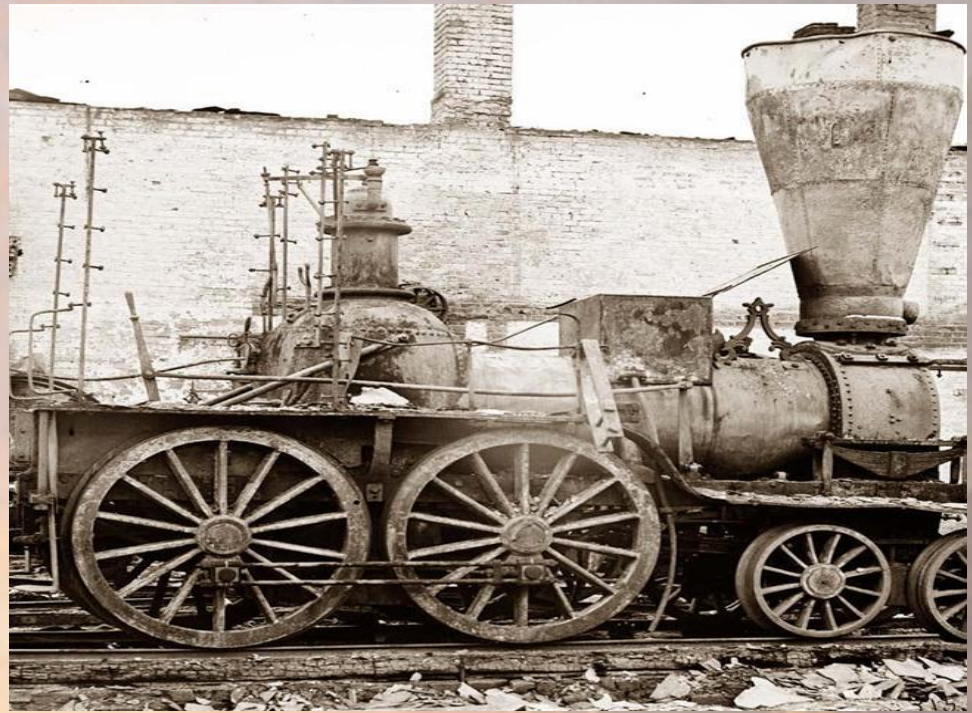


Canal System by 1850

1. James River Canal
2. Erie Canal
3. Pennsylvania Public Works
4. Cleveland-Ohio River
5. Toledo-Ohio River
6. Chesapeake and Ohio Canal
7. Welland Canal

Railroads

- First general-purpose railroad began traveling in England in 1825
- American construction began in late 1820s
- Traveled at 15-20 mph





What do you notice about where the railroads are placed?

Will this have an impact on the future of the U.S.?

Impact on Travel Time

New York to Philadelphia

1800- 2 days

1830- 1 day

1860- Less than 1 day

New York to Charleston

1800- More than a week

1830- 5 days

1860- 2 days

New York to Chicago

1800- 6 Weeks

1830- 3 Weeks

1860- 2 days

New York to New Orleans

1800- 4 Weeks

1830- 2 Weeks

1860- 6 Days



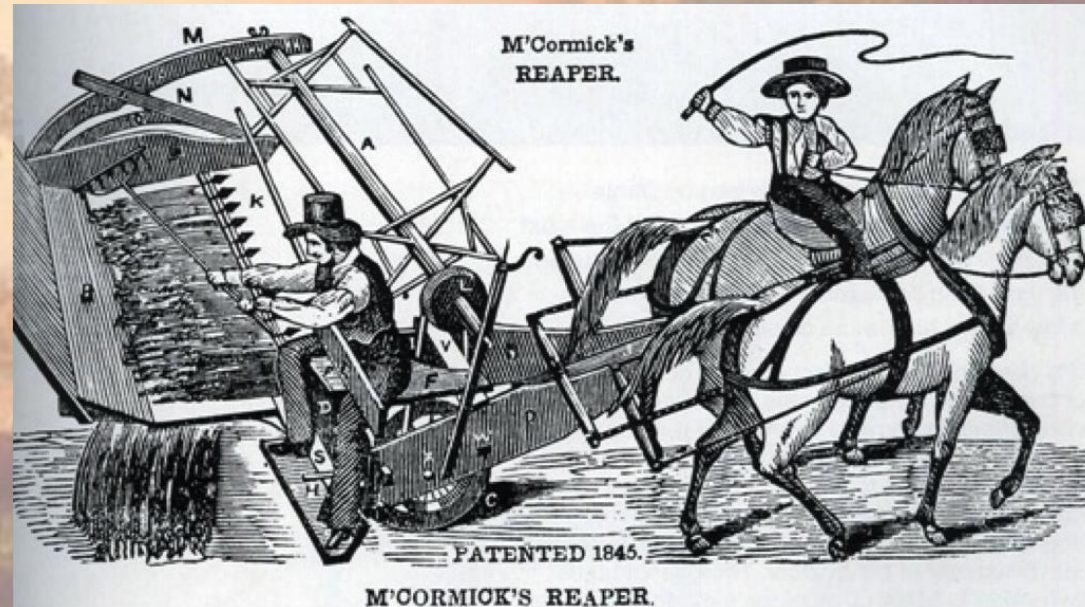
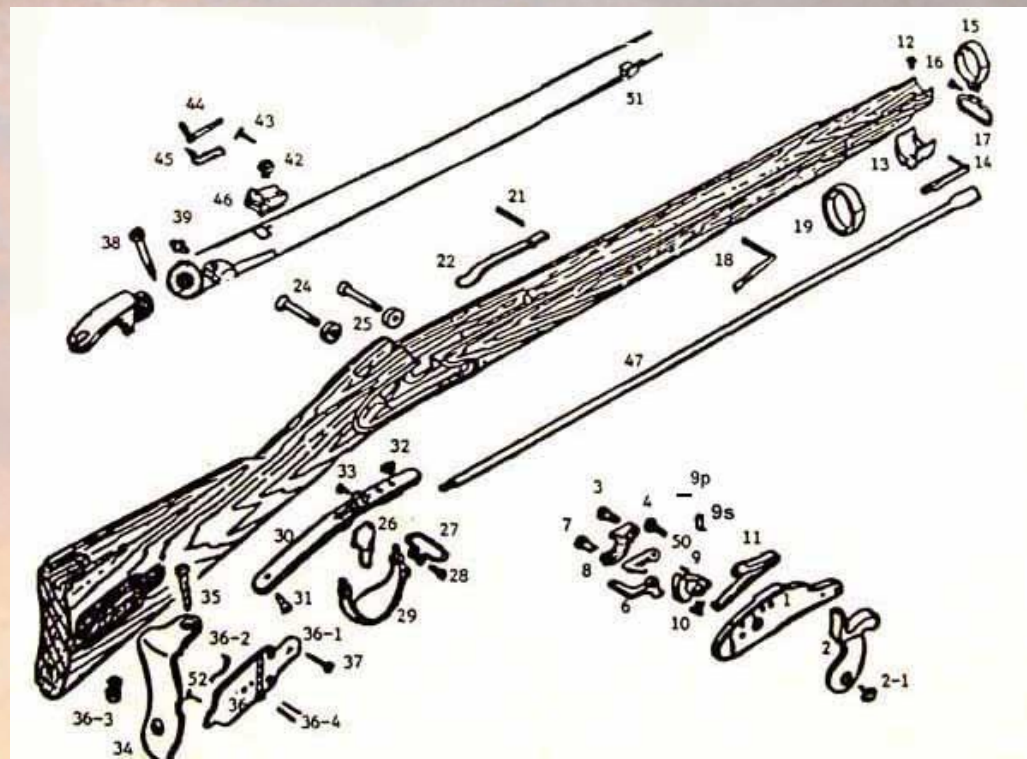
Market (Industrial) Revolution

- Transformed America from a subsistence economy of the Antebellum Era (pre-Civil War), to a national network of industry and commerce
- “Big business” brought new problems for federal and state governments
- Family structures changed as a result of industrial work
- Polarity between rich and poor became increased



New Inventions

- Eli Whitney: interchangeable parts that can be replaced/repared rather than the whole machine (adopted 1850) - became basis of modern mass production & assembly line production
- Elias Howe: sewing machine – ready made clothing, drove seamstresses to factory work
- Samuel Morse: telegraph (Morse Code): revolutionized news gathering, diplomacy, finance
- John Deere: 1837 steel plow to till soil, light enough to be pulled by horses
- Cyrus McCormick: 1830s mechanical reaper for harvesting
- New machinery → increased debts due to loans



Factory Workers

- Factory system led to labor problems: long hours, low wages, poor meals, unsanitary buildings, unsafe conditions
- Labor unions forbidden
- Child labor:
 - Children under 10
 - “Whipping rooms” use corporal punishment
 - Spurred the demand for public education reform

ACCIDENTS

BOY FELL TO DEATH IN BIG COAL CRUTE
Thomas Miller, 10 years old, died today. All bodies had not been removed in the last three days.

"Children are not equipped by experience to care for themselves in modern industry"

AND SO THEY PAY



WITH A MAIMED LIFE

Three times as many industrial accidents occur to children as to adults

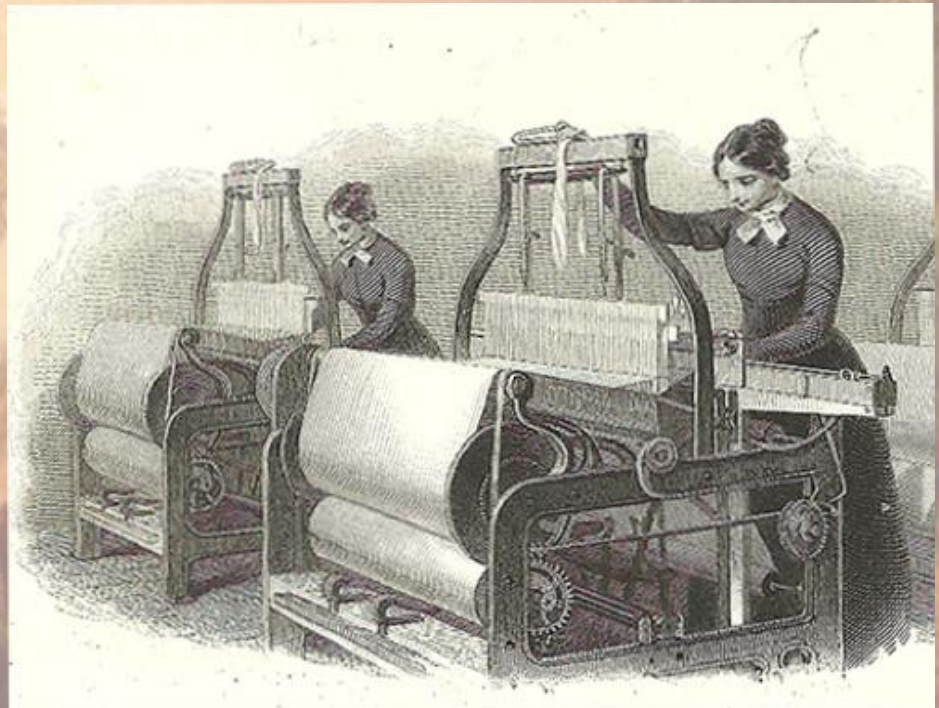
EMPLOYMENT OF CHILDREN IS DUE TO
IGNORANCE || **GREED** || **NECESSITY** || **OF INDUSTRY AND PARENTS**

ARE ANY OF THESE REASONS WORTH A CHILD'S LIFE?

Women in Factories

- Factory work replaced handmade production
- Mostly single “factory girls” worked 6 days a week, 12-13 hrs. a day
- 20% worked before marriage
- “Domestic Feminism” – “A woman's place is in the home; and out of it whenever she is called to guard those she loves and to improve conditions for them.” –Nellie McClung

➤Cause/Effect:
Fertility rate (# of births) dropped sharply after Industrial Revolution



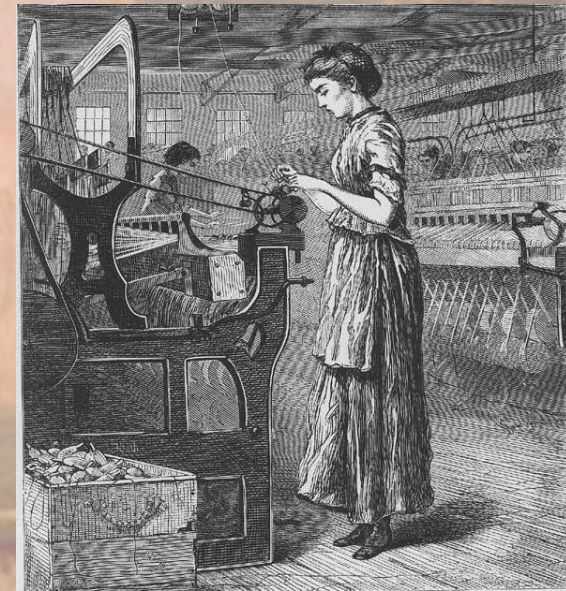
The North Industrializes

The Industrial Revolution Begins in the U.S.

- 1793: Samuel Slater and Moses Brown build water powered spinning mill in RI
- Lowell, MA became the center of American textile production
 - 40 mill buildings
 - 10,000 looms
- Most workers in Lowell mills were young women recruited from local farms
 - Good wages but long hours (up to 14 hrs a day, 6 days a week)

The Industrial Revolution spreads rapidly throughout New England

“Lowell Girls”

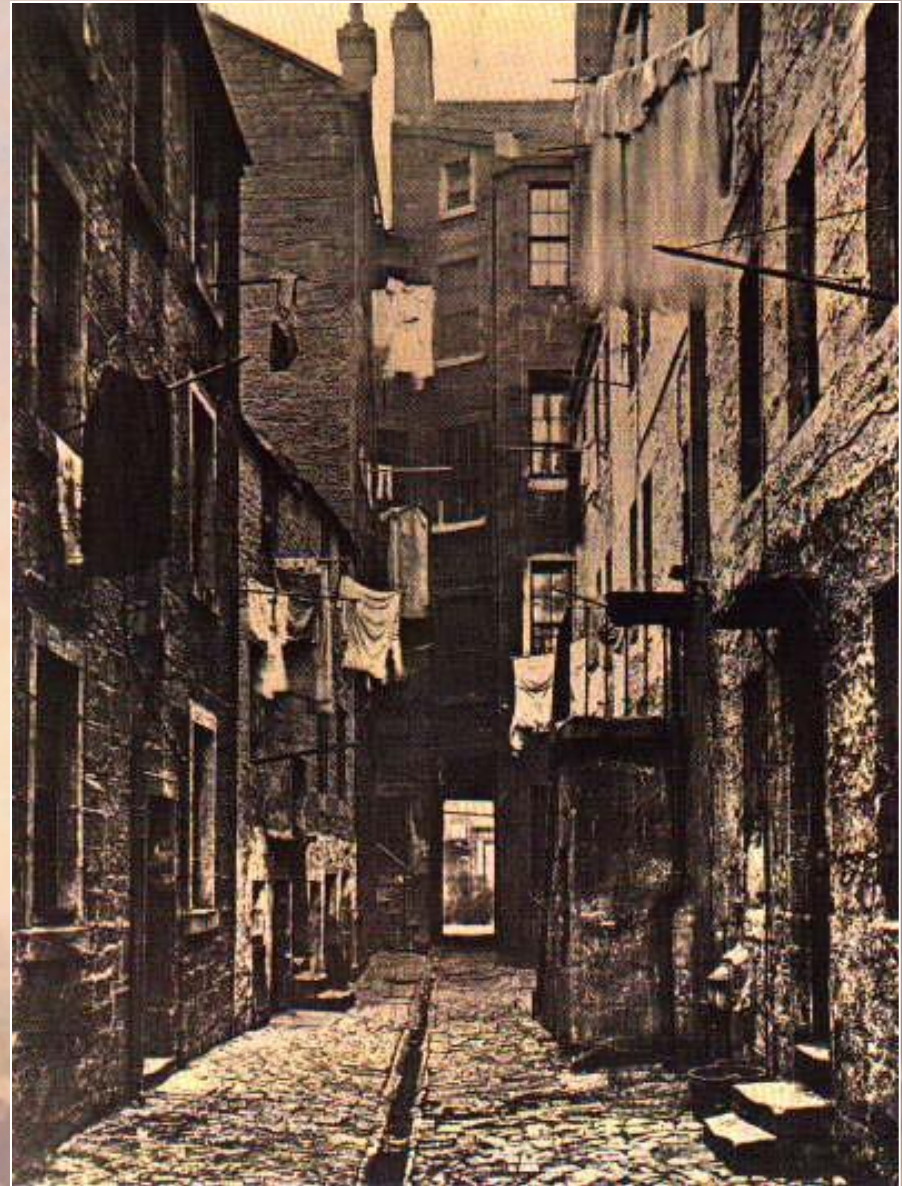


Through early and mid-1800s, industrialization spread to other northern industries

- 1830s: steam engines became better quality and more widely available
- Power of steam engines helped make industry the fastest growing part of the U.S. economy

Most Americans had lived in rural areas, but were now moving to the new cities in search of factory jobs and higher wages

- North evolved from series of small towns to include large cities and factories



The Southern Economy

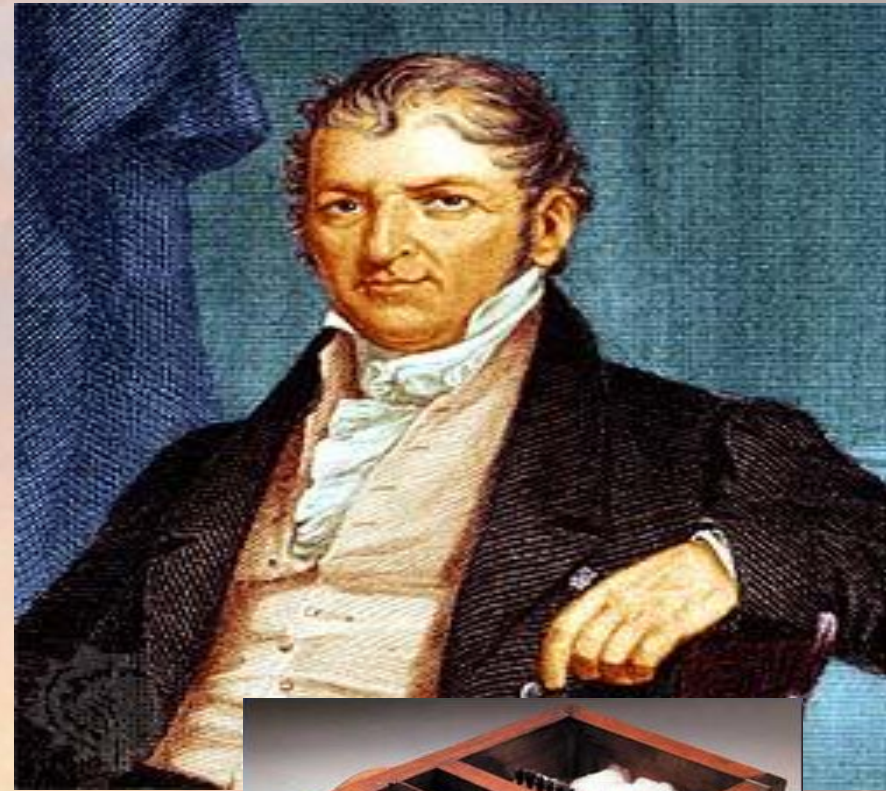
Cash crops varied depending on location:

- Tobacco in upper Southern states
- Rice in coastal areas
- Sugar cane in deep South (TX and LA)
- Cotton throughout South



Eli Whitney

- 1793: while visiting the South, noticed that it was tedious work to remove seeds from cotton lint (1 day to separate a lb.)



Cotton Gin (short for engine)

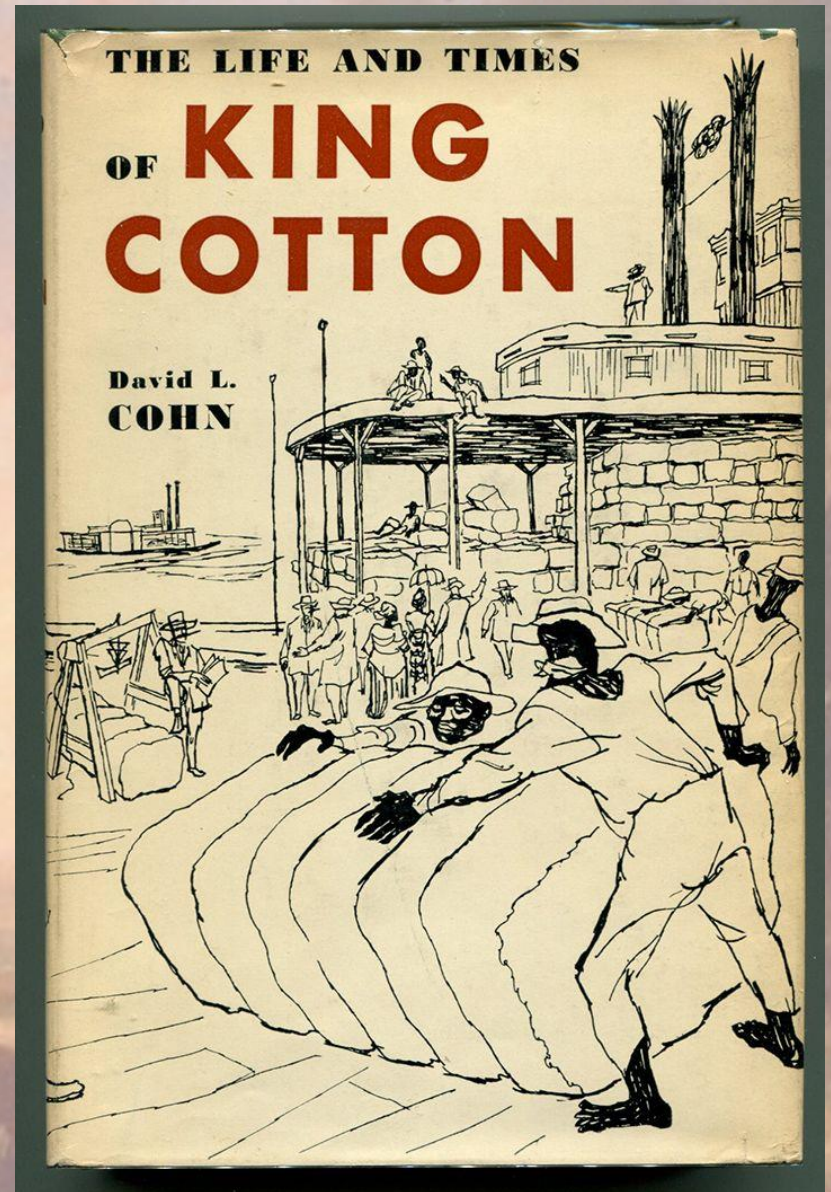
- Quickly and efficiently combed the seeds out of cotton balls

The Southern Economy

- In 1792 the South produced 6,000 bales of cotton
- By 1801 annual production reached 100,000 bales

At the same time as the invention of the cotton gin:

- Textile mills were expanding in Europe
- Demand for cotton rose



“King Cotton”

By the late 1860s, the South was producing almost 4 million bales of cotton annually

- Sold for a total of \$191 million in Europe
 - Almost 2/3 of all U.S. export trade

Makes Southern planter elite wealthy

- Strengthens the institution of slavery
- Congress had outlawed the international slave trade in 1807-1808
 - High birthrate encouraged sale of slaves within U.S.
- Slave population in South in 1820: 1.5 million
- Slave population in South in 1850: 4 million

