

# The Market Revolution & Reforming American Society

1800-1848

# The Growth of Industry

- Modern factory system begins, 1750
  - Began in Britain
  - US slow to embrace system
    - Labor, capital, & consumers scarce
    - Raw materials untapped
    - Britain maintains a monopoly on manufacturing
    - Farming is the future for Americans
- War of 1812 stimulates domestic manufacturing
- Protective tariffs further manufacturing
- New England emerges as the leading manufacturing center. Why?
- Manufacturing spurs the growth of banking and insurance industries

# Samuel Slater



Samuel Slater

- **Father of the Factory System**
  - Skilled British mechanic, 21 years old
- He was attracted by bounties offered to British workers familiar with the textile machines
- Memorizes plans in Britain & escapes in disguise
- He won the backing of Moses Brown, a Quaker capitalist in Rhode Island
- 1791-Pawtucket factory

# Eli Whitney



- Yale graduate
- Private tutor in GA
- Inventor of cotton gin and interchangeable parts

# Cotton Gin 1793



- King Cotton
- Slavery explodes
  - Southern capital tied up in slaves
- Cotton farming pushes westward
- 50 times more effective than hand picking

# Interchangeable parts 1825



- Mass production of muskets for US Army
  - Previously hand-tooled
- Interchangeable parts principle adopted widely by 1850
- Assembly line

# Sewing Machine

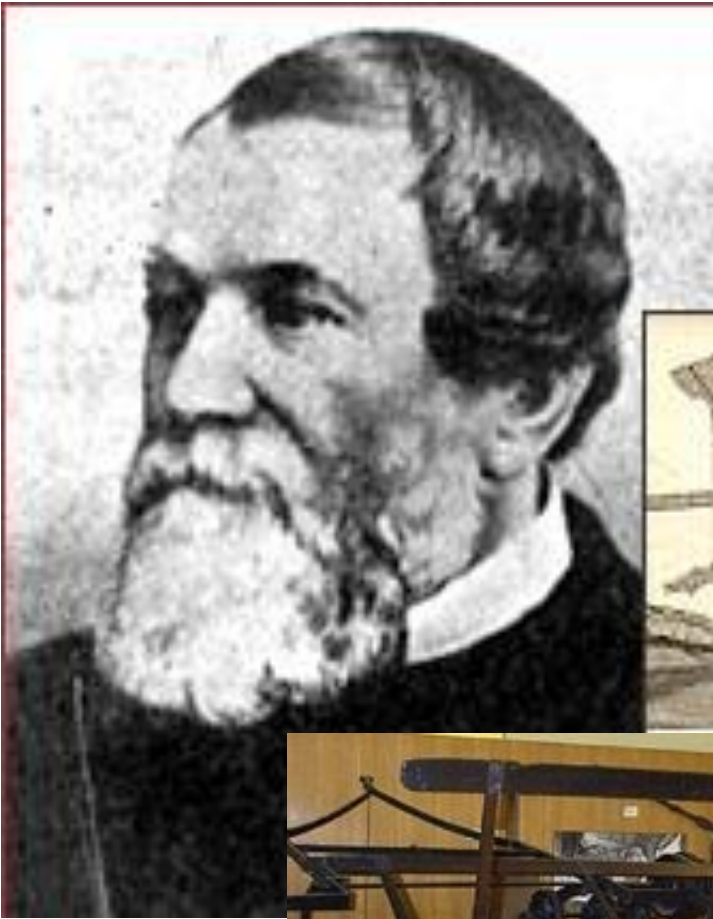
## 1846

- Elias Howe & Isaac Singer
  - Revolutionizes textile industry
  - Boosts northern industrialization
  - Foundation of ready-made clothing industry
  - Drove seamstresses to the factory from home





# McCormick: mechanical mower-reaper 1830



SINGLE FARMHAND  
COULD DO WORK OF 5

USE OF HORSES, NOT  
OXEN





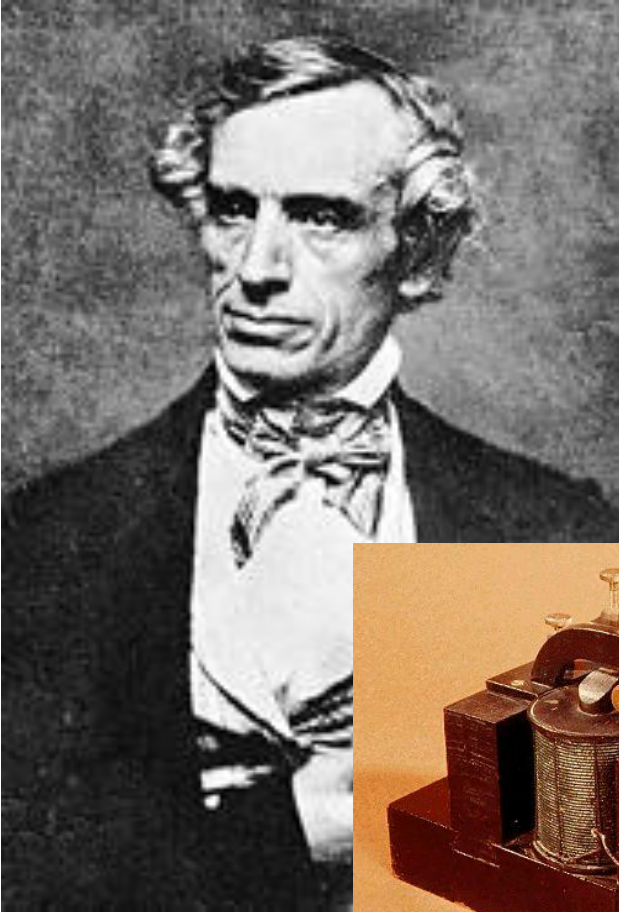
# John Deere invents steel plow 1837



*OLIVER CHILLED STEEL turned up in the 1830s and was destined to be a big name in plows. The steel*



# Samuel Morse & TELEGRAPH 1837



Revolution in communication

News gathering, diplomacy,  
finance



Web of wires  
across continent

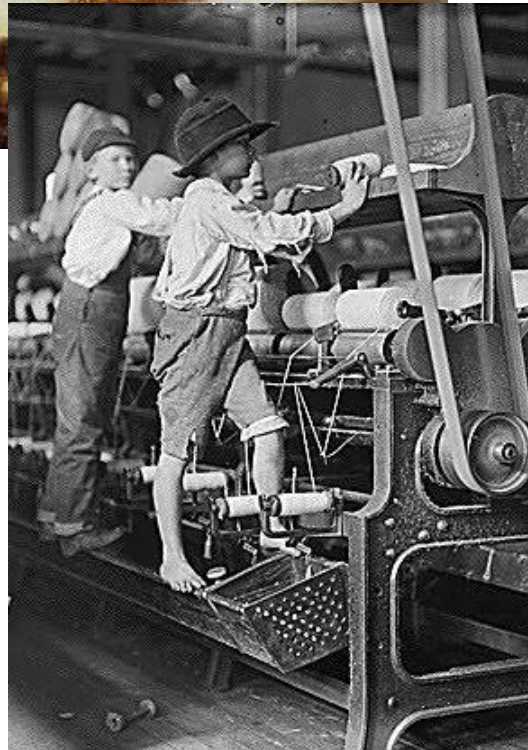
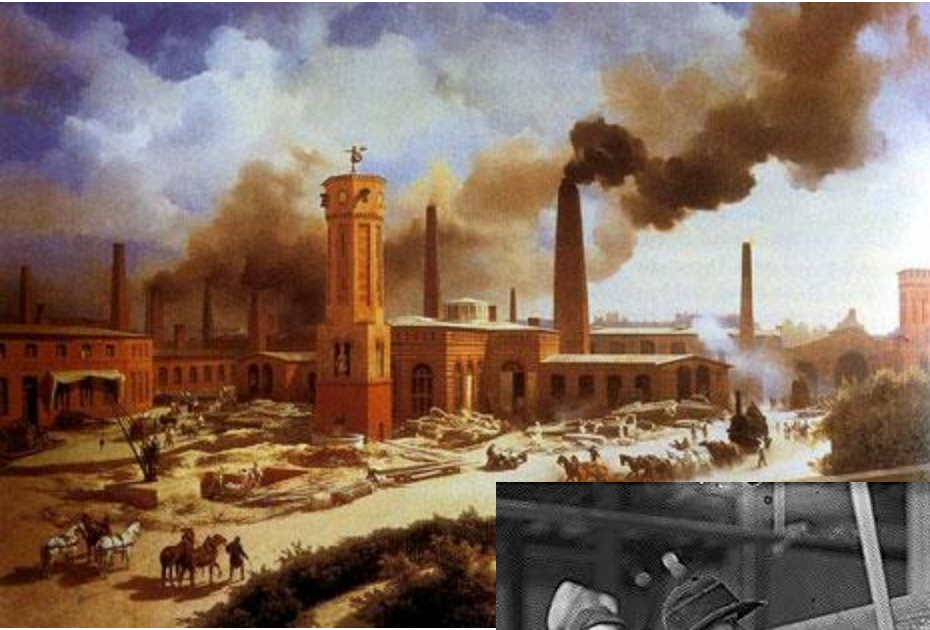
# Impact of Industrialization

- **Transformation of Work**
  - Masters - experienced craftsmen
  - Journeymen - Skilled workers employed by masters
  - Apprentices Young workers learning craft
- **Industrial revolution displaces the craft system or cottage industry**
- **“wage slaves”**
- **Corporations raise capital**
- **Limited Liability**
- **Free Incorporation Laws** – incorporation without charter from Legislature





# Effects of factory system



1. The cost of making and repairing items drops dramatically
2. New machines allow unskilled workers to perform tasks once performed by trained artisans
3. The work is alienating, boring, long and dangerous
4. Use of child labor
5. Van Buren est. 10 hr work day for FED employees in 1840

# The Lowell System



- Mill owners sought New England farm girls to work
  - Cheap wages
  - Long hours
  - Poor working conditions
  - Strict factory rules
  - Housing and entertainment provided
  - Paternalistic



# TIME TABLE OF THE LOWELL MILLS,

Arranged to make the working time throughout the year average 11 hours per day  
TO TAKE EFFECT SEPTEMBER 21st, 1853.

The Standard time being that of the meridian of Lowell, as shown by the Regulator  
Clock of ANOS SANBORN, Post Office Corner, Central Street.

**From March 20th to September 19th, inclusive.**

COMMENCE WORK, at 6.30 A. M. LEAVE OFF WORK, at 6.30 P. M., except on Saturday Evening  
BREAKFAST at 6 A. M. DINNER, at 12 M. Commence Work, after dinner, 12.45 P. M.

**From September 20th to March 19th, inclusive.**

COMMENCE WORK at 7.00 A. M. LEAVE OFF WORK, at 7.00 P. M., except on Saturday Evening  
BREAKFAST at 6.30 A. M. DINNER, at 12.30 P. M. Commence Work, after dinner, 1.15 P. M.

## BELLS.

**From March 20th to September 19th, inclusive.**

Morning Bells.	Dinner Bells.	Evening Bells.
First bell,.....4.30 A. M.	Ring out,.....12.00 M.	Ring out,.....6.30 P. M.
Second, 5.30 A. M.; Third, 6.20.	Ring in,.....12.35 P. M.	Except on Saturday Evenings.

**From September 20th to March 19th, inclusive.**

Morning Bells.	Dinner Bells.	Evening Bells.
First bell,.....5.00 A. M.	Ring out,.....12.30 P. M.	Ring out at.....7.00 P. M.
Second, 6.00 A. M.; Third, 6.50.	Ring in,.....1.05 P. M.	Except on Saturday Evenings.

## SATURDAY EVENING BELLS.

During APRIL, MAY, JUNE, JULY, and AUGUST, Ring Out, at 6.00 P. M.

The remaining Saturday Evenings in the year, ring out as follows:

SEPTEMBER.	NOVEMBER.	JANUARY.
First Saturday, ring out 6.00 P. M.	Third Saturday ring out 4.00 P. M.	Third Saturday, ring out 4.25 P. M.
Second " " 5.45 "	Fourth " " 3.55 "	Fourth " " 4.35 "
Third " " 5.30 "		
Fourth " " 5.20 "		
OCTOBER.	DECEMBER.	FEBRUARY.
First Saturday, ring out 5.05 P. M.	First Saturday, ring out 3.50 P. M.	First Saturday, ring out 4.45 P. M.
Second " " 4.55 "	Second " " 3.55 "	Second " " 4.55 "
Third " " 4.45 "	Third " " 3.55 "	Third " " 5.00 "
Fourth " " 4.35 "	Fourth " " 4.00 "	Fourth " " 5.10 "
Fifth " " 4.25 "	Fifth " " 4.00 "	
NOVEMBER.	JANUARY.	MARCH.
First Saturday, ring out 4.15 P. M.	First Saturday, ring out 4.10 P. M.	First Saturday, ring out 5.25 P. M.
Second " " 4.05 "	Second " " 4.15 "	Second " " 5.30 "
		Third " " 5.35 "
		Fourth " " 5.45 "

YARD GATES will be opened at the first stroke of the bells for entering or leaving the Mills.

SPEED GATES commence hoisting three minutes before commencing work.



# The Lowell Strikes



- 1834, strike for better wages
  - Lowell press and clergy critical
  - Girls return to work
- 1836, strike again
  - Board charges increase (12.5% pay cut)
  - Fire strike leaders
- 1844, Lowell Female Labor Reform Association
  - Petition Massachusetts legislature for a ten-hour work day
  - Legislation fails, but defeat a local legislator who opposed the bill

# Gains of Women



- Factory jobs offer economically self-supporting jobs
- Feminization of teaching profession
  - Catherine Beecher
- About 10% of white women work for pay outside of home in 1850
- Estimates of 20% of all women had worked at some time prior to marriage
- Smaller families

# Transportation Revolution

- 1789—primitive methods of travel
  - Waterborne commerce slow, uncertain & dangerous
  - Stagecoaches and wagons travel rutted “roads”
- ***The desire of the East to tap the West stimulates the revolution***



## National Roads

- **Pennsylvania Lancaster Turnpike**
  - “turnpike” toll road
  - 15% dividends – incentive to build more roads
- **National or Cumberland Road, 1811-1852**
  - Uses both federal and state monies
  - Connects Cumberland, MD & Vandalia, IL
- ***Roadblocks include states’ righters & Eastern states who feared a drain on their populations***



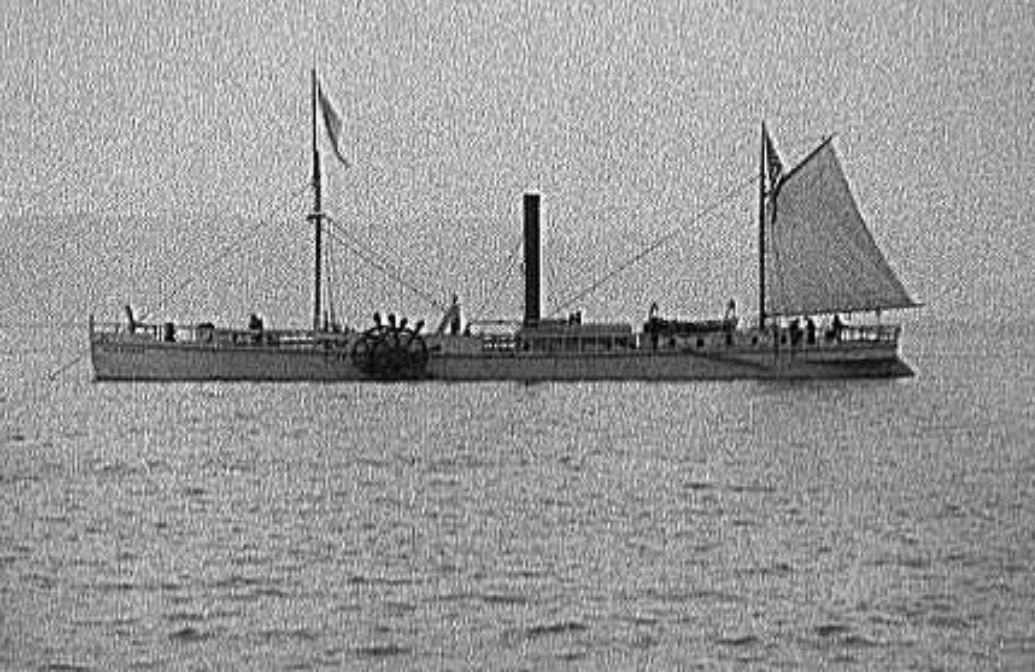
# Canals



- Erie Canal – 1817/1824
  - Links economies of western farms and eastern cities
  - Touches off canal craze
- Canals joined together all major lakes and rivers East of Mississippi within a decade
- Lowers food prices in East, settles immigrants in West, and develops stronger economic ties between East and West
- Shipping cost fall (overall prices decline)
- Land value along canal skyrockets – boom cities like Buffalo, Rochester, Syracuse

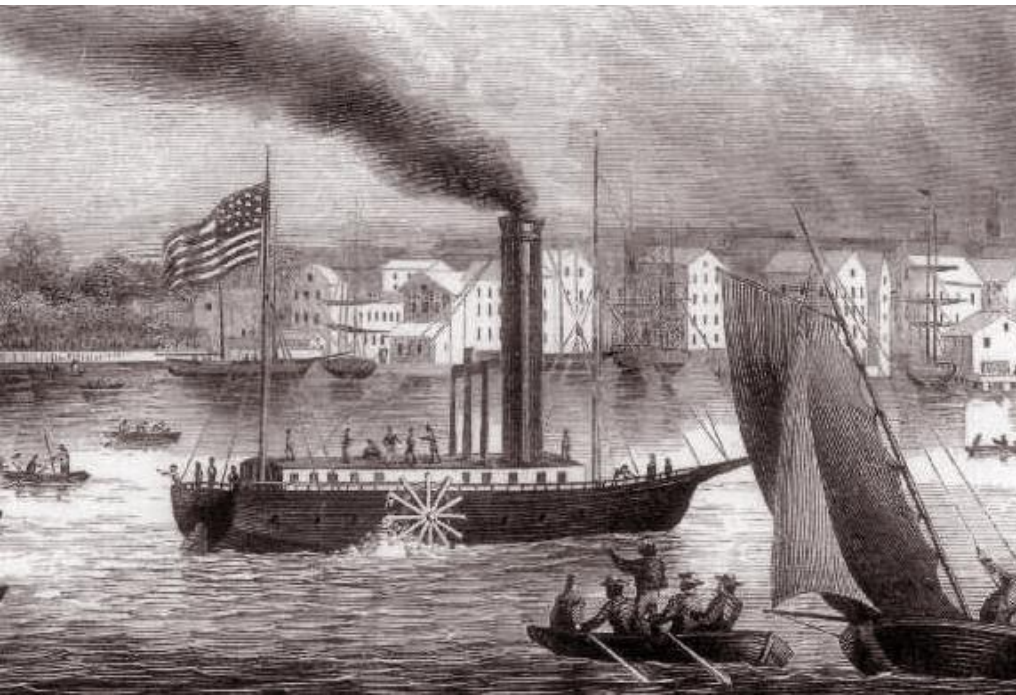


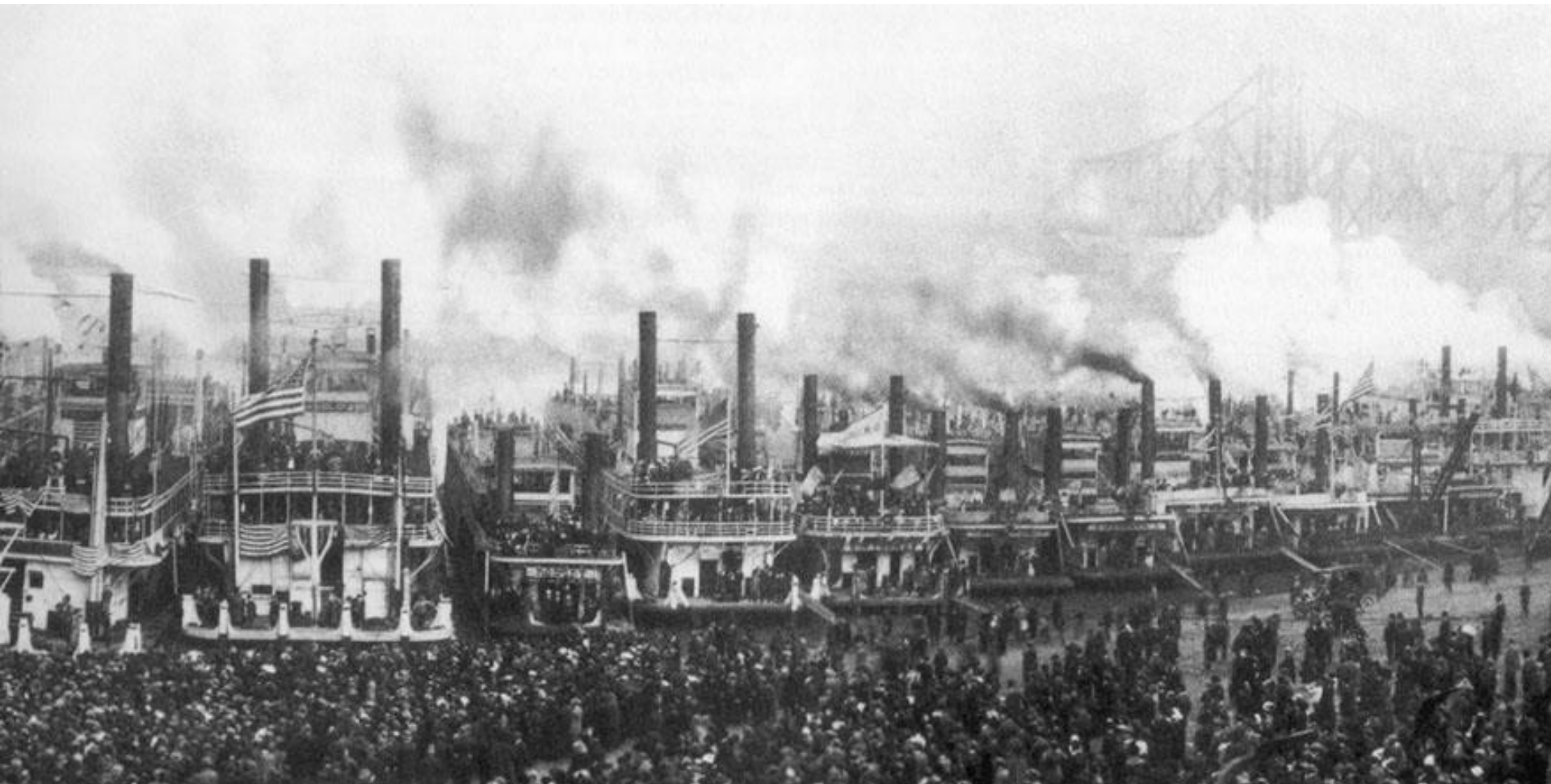




# Steamboats

- 1783 in France and US simultaneous invention.
- French plan would become the model for:
- 1807-*Clermont* - Robert Fulton
  - 150 miles in 32 hours from NYC to Albany
- Steamboat lines make round-trip shipping on the nation's great rivers faster & cheaper & open the West & South





STEAMBOATS IN PITTSBURGH



# Railroads

- ***Most significant development in transportation***
- ***First steam locomotive demonstration 1769***
- ***First practical locomotive 1804***
- ***First in US 1830***
  - Cheaper than canals & will not freeze in winter
  - By 1860—30,000 miles of track
  - Early RR is dangerous
  - Develops Midwest cities





# Watkins' Central Pacific R. R.

26 Montgomery St., opposite Lick House entrance, San Francisco.



Pullman's Palace Sleeping Car Palmyra.

1534

Photographic Views of California, Oregon, and the Pacific Coast generally, embracing Yosemite Big Trees, Geysers, Mount Shasta, Mining, City, etc., etc. Views made to order in any part of the State or Coast.

## PULLMAN PALACE SLEEPING CAR (1859)



# Clipper ships



Golden Age of  
American Shipping

Outrun a steamer if  
proper wind

Sacrificed space for  
speed – charge high  
fee for quick delivery



# PONY EXPRESS

MISSOURI to CALIFORNIA  
in 10 days or less.

WANTED

**YOUNG, SKINNY, WIRY FELLOWS**  
not over eighteen. Must be expert  
riders, willing to risk death daily.

Orphans preferred.

Wages \$25 per week.

**APPLY, PONY EXPRESS STABLES**  
Marysville, Kansas Territory

- Established in 1860
- Carry mail 2000 miles (MO to CA) in 10 days
- Pony stations every 10 miles (fresh horse)
- Only lasts 18 months (lost \$\$ big time)

# Transportation Binds the Union

- Binds west and south
- Goods move east on trains, boats, canals
- Buffalo handles more produce than New Orleans
- Regions specialize in economic activity
- NYC becomes biggest seaport



# Antebellum Reform



- Free public schools
- Treatment of mentally ill
- Temperance
- Women's rights
- Abolitionism

# 3<sup>rd</sup> revolution

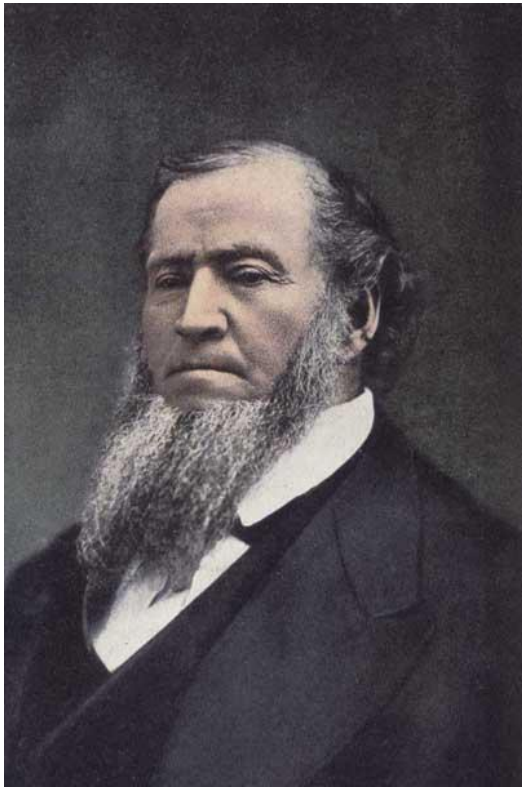
- Puritan sense of mission
- Enlightenment belief in human goodness and perfectibility
- Powerful religious motives
- 1<sup>st</sup> – political
- 2<sup>nd</sup> – economic
- 3<sup>rd</sup> - moral

# The 2<sup>nd</sup> Great Awakening



- Begins as backlash to liberal deism in southern frontier
- Religious revivalism—camp meetings
- Emotional preaching
- Calvinist preaching of original sin and predestination rejected

# Religious Revivalism



- 1823—Presbyterian minister Charles G. Finney appeals to emotion and fear
- Denounces alcohol & slavery
- Salvation achieved through faith and good works
- Message appeals to middle class
- “Burned-over” district of western NY



# Effects of Great Awakening

- Boosts church membership
- Stimulates humanitarian reform & utopias
- Spurs missionary work
- Creates new sects
  - Newer, evangelical vs. older Protestant churches
- Feminization of religion
  - Middle class women spearhead and host benevolent and charitable crusades



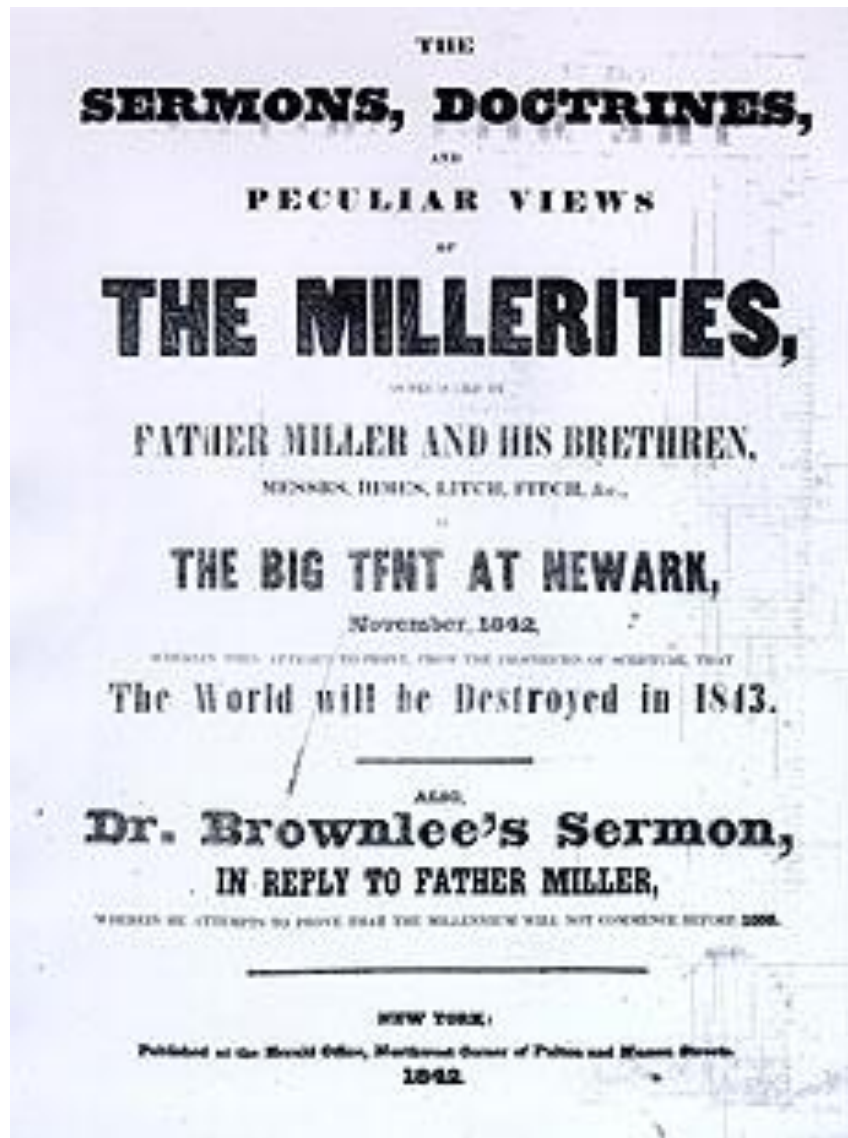
Perhaps the most famous Methodist circuit rider, Peter Cartwright (1785-1872), was another key figure of the Second Great Awakening

# Baptists and Methodists



- Peter Cartwright—Methodist “circuit rider”
- 1850—largest Protestant denominations in country
- Both sects stressed personal conversion, relative democratic control of church affairs, and emotionalism

A Methodist Circuit Rider



Front Page for *Extra New York Herald*,  
November 1842

# Millerites

- William Miller, the Millerites, anticipate the return of Jesus on October 21, 1844 based on biblical interpretation
- Begins Seventh-Day Adventist Church
- Originates in “Burned Over District” of NY



Smith receiving the Gold Plates

# Mormons

- **Church of the Latter-Day Saints**
  - **Founded by Joseph Smith, 1830**
  - **Book of Mormon—traces connection between the Native Americans and the lost tribes of Israel**
  - **Move from NY to OH, MO, IL**
    - **Smith murdered in IL**
  - **Brigham Young leads to New Zion—Salt Lake in UT**



# Mormons in Utah

- Transform Great Salt Lake
- By 1848, 5000 settlers & other bands followed
- Frontier theocracy
- Young married as many as 27 women and had 56 children
- DC government unable to control territorial governor Brigham Young
  - Federal army marched into area in 1857
  - Polygamy delayed UT admission into Union until 1896



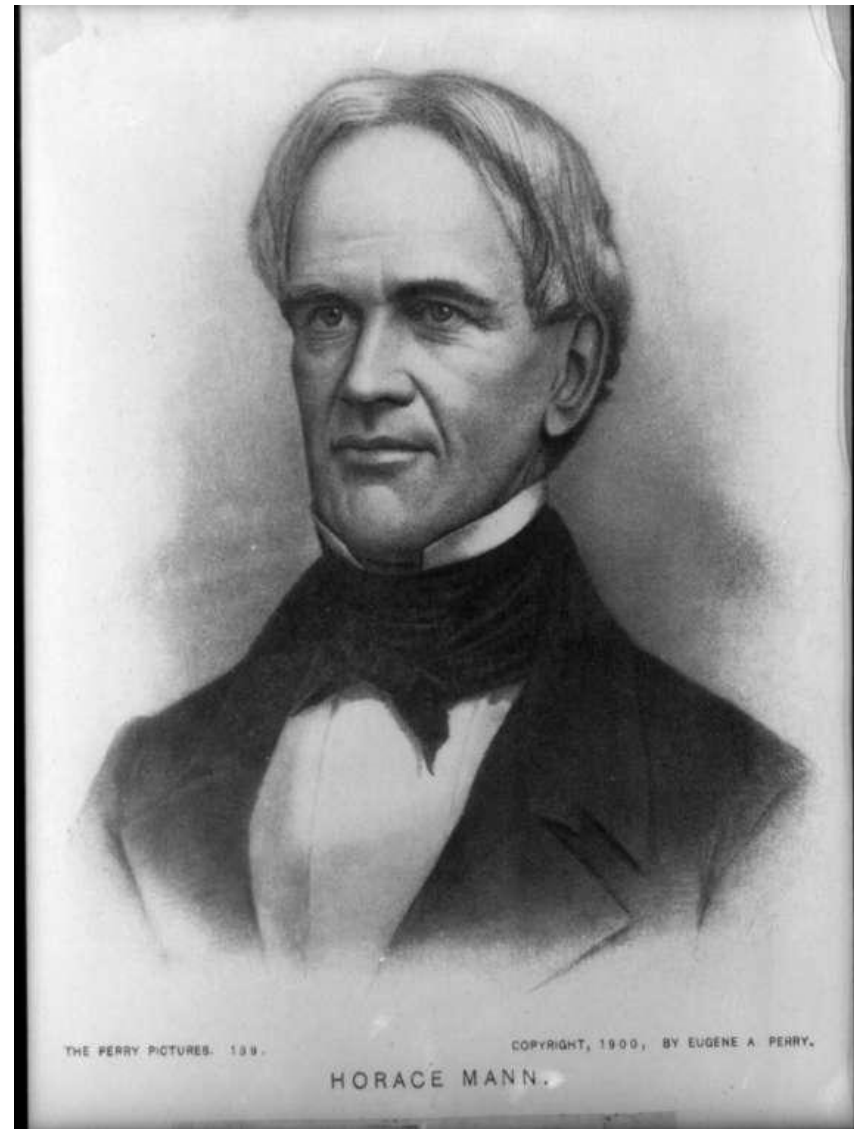
# Education

- Free, universal, tax-supported education in North
  - Viewed as premium the wealthy paid for stability
- Fosters educated republic
- Teachers ill-trained & ill-paid—usually men
- Taught 3 R's



# Horace Mann

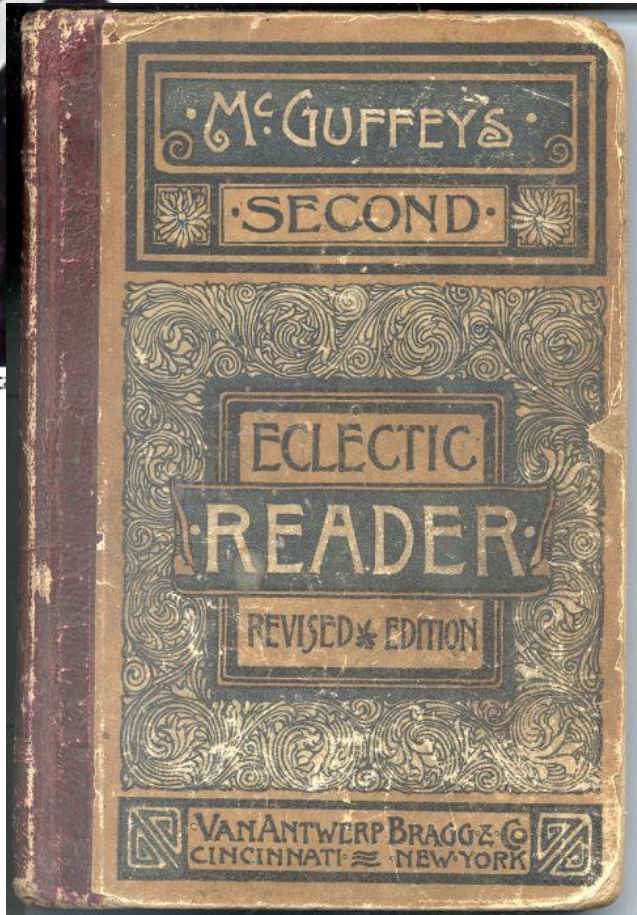
- **Superintendent of Massachusetts Board of Education**
- **Campaigns for better schools, longer school terms, higher pay for teachers, & an expanded curriculum**
- **As late as 1860, the nation only counted about 100 public secondary schools—and nearly ½ the nation was illiterate**
- **Black slaves were forbidden instruction in the South**
- **Free blacks excluded from education**







William Holmes McGuffey, circa 1830



# Moral Education

- **William Holmes McGuffey, a Pennsylvania teacher, created a series of elementary books based upon reading and moral instruction, known as the McGuffey readers**
  - **Emphasize hard work, punctuality, sobriety**
- **Roman Catholics formed their own private schools to counter Protestant values**



# Noah Webster

- Yale-educated  
Connecticut Yankee
- “Schoolmaster of the Republic”
- Creates “reading lessons”
  - Promotes patriotism
- Dictionary (1828)
  - Standardizes American language

**OATMEAL.** *n. f.* [*oat* and *meal*.] Flower made by grinding oats.

*Oatmeal* and butter, outwardly applied, dry the scab on the head. *Arbuthnot on Aliment.*

Our neighbours tell me oft, in joking talk,  
Of ashes, leather, *oatmeal*, bran, and chalk. *Gay.*

**OATMEAL.** *n. f.* An herb. *Ainsworth.*

**OATS.** *n. f.* [*æten*, Saxon.] A grain, which in England is generally given to horses, but in Scotland supports the people.

It is of the grass leaved tribe ; the flowers have no petals, and are disposed in a loose panicle : the grain is eatable.

The meal makes tolerable good bread. *Miller.*

The *oats* have eaten the horses. *Shakespeare.*

It is bare mechanism, no otherwise produced than the turning of a wild *oatbeard*, by the insinuation of the particles of moisture. *Locke.*

For your lean cattle, fodder them with barley straw first, and the *oat* straw last. *Mortimer's Husbandry.*

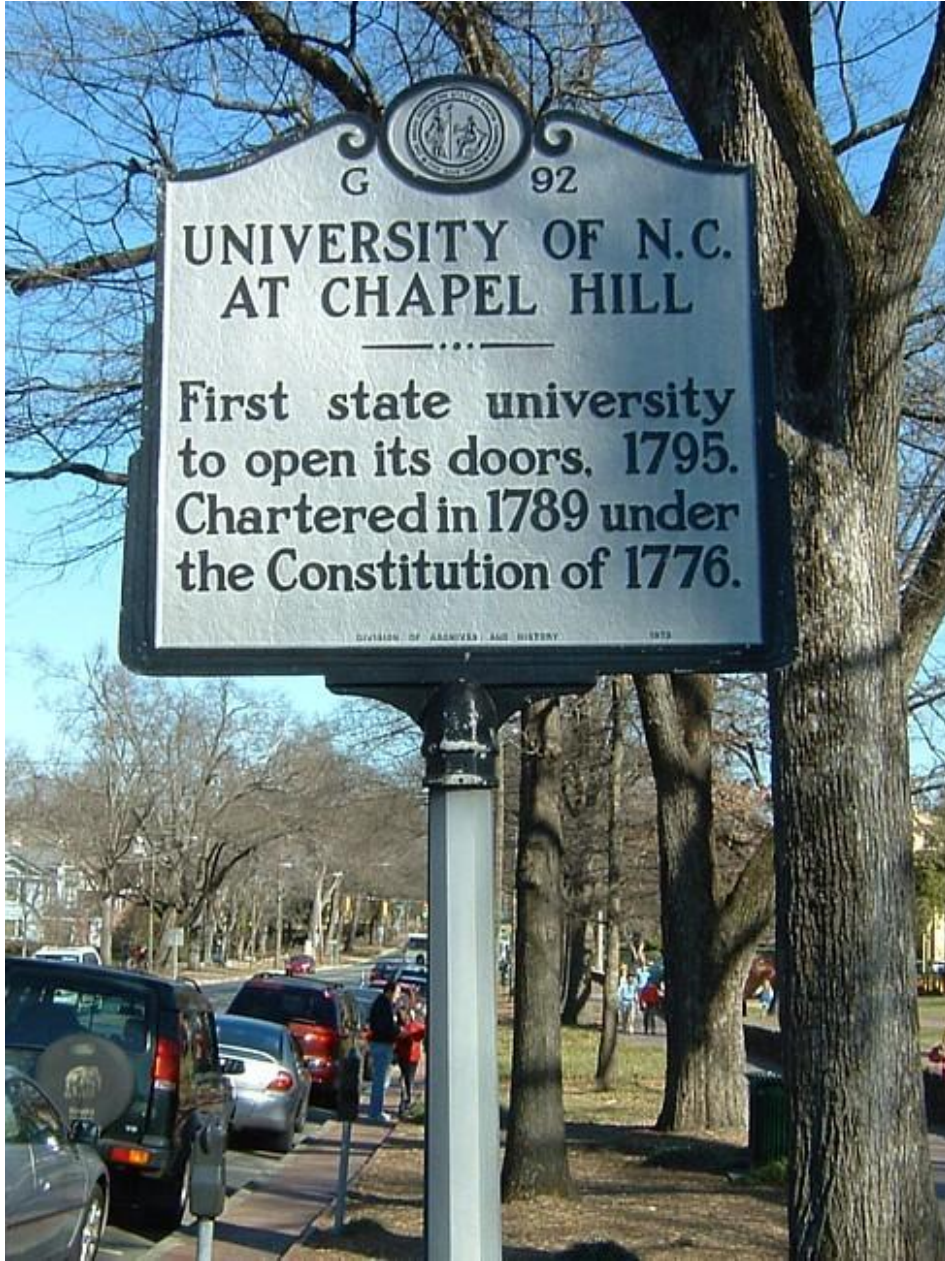
His horse's allowance of *oats* and beans, was greater than the journey required. *Swift.*

**OATTHISTLE.** *n. f.* [*oat* and *thistle*.] An herb. *Ainsf.*



# Higher Education

- **First state-supported universities**
  - NC, 1795
  - University of VA, 1819
- **Thomas Jefferson**
  - Designed school
  - Dedicated to religious and political freedom
  - Emphasizes modern languages & sciences



# Higher Education

- **Protestant denominations found small colleges, especially in the South & the West**
  - Offered narrow, tradition-bound curriculum
    - Latin, Greek, Math, moral philosophy

## **Women's Ed**

- **Mt. Holyoke College in Massachusetts (Mary Lyon)**
- **Oberlin College in Ohio**

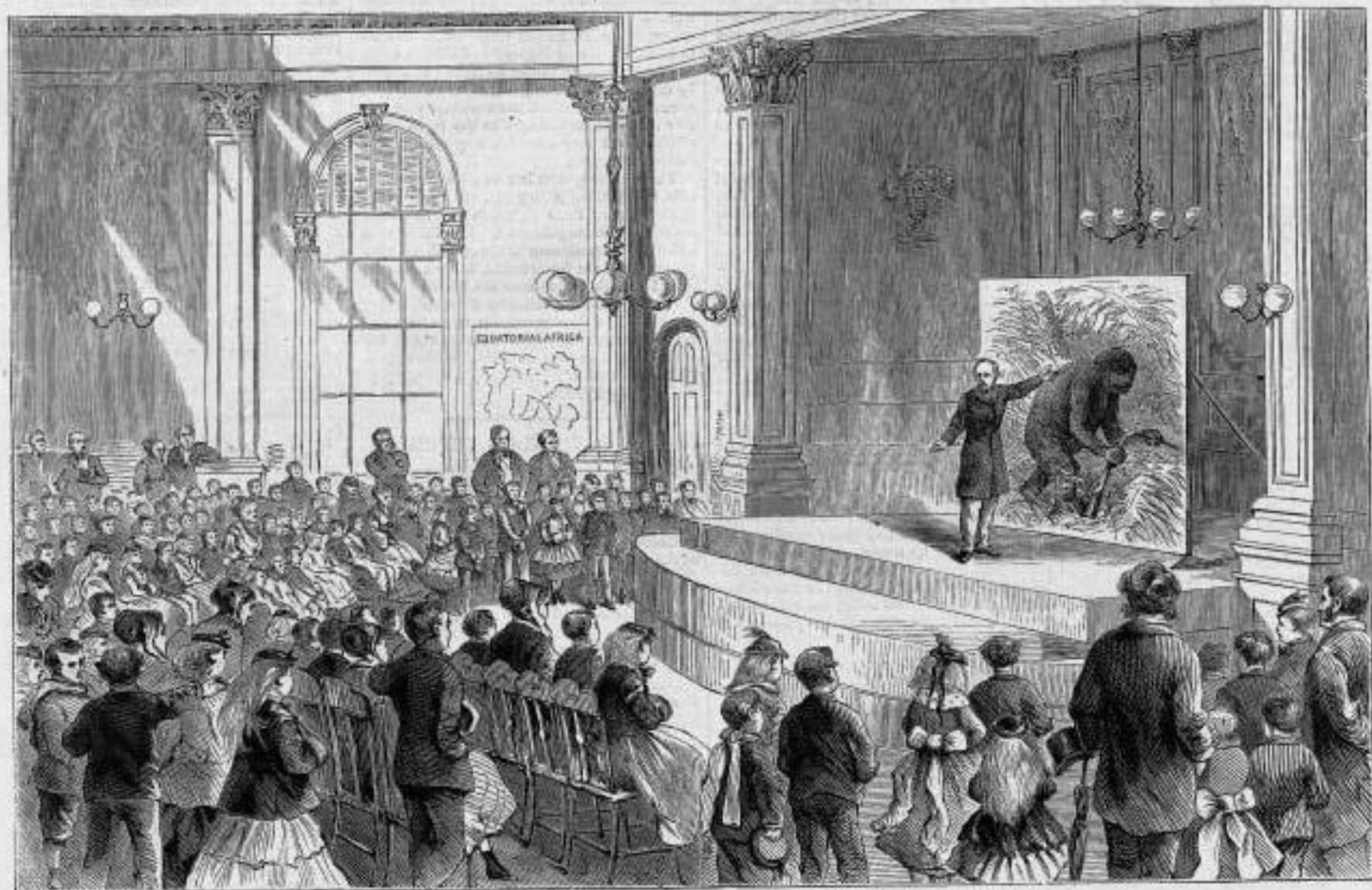




[Edmonia Lewis](#) attended Oberlin College 1859-1862. She is known today especially for her works drawing on themes of African American slavery and emancipation.

# Lyceum Lectures

- Named for Aristotle's Lyceum in ancient Greece
- Provided platforms for speakers in science, literature, philosophy
- Also spoke on character, abolition, temperance, women's rights
- Ralph Waldo Emerson toured on lectures circuit
- Horace Mann, Abe Lincoln, others



MR. PAUL DU CHAILLEU LECTURING TO THE YOUNG FOLKS OF BOSTON.

# Dorothea Dix



- Former school teacher from Massachusetts
  - Horrified to find mentally ill patients locked up with convicted criminals in unsanitary cells
  - Dedicates rest of her life to improving conditions for emotionally disturbed persons
  - Encouraged the building of new mental hospitals or improving old ones
  - Mental patients receive treatment at state expense



# Prison Reform

- Penitentiaries sprang up Pennsylvania
  - Solitary confinement to encourage reflection & repentance
  - Experiment dropped due to high suicide rates
  - Believe structure & discipline would bring about moral reform
- Auburn prison (NY)
  - Enforced rigid rules of discipline while providing moral instruction & work programs – supported by the Whigs



# American Peace Society



- Founded in 1828
- Objective
  - To abolish war
- Influenced some New England reformers later opposed to Mexican War in 1846
- first nationally based secular peace organization in the United States
- William Ladd spearheads movement
  - Ideas bear fruit in collective security of 20<sup>th</sup> century

# Temperance



American Temperance Society, Boston  
Founded by Protestant ministers & others  
concerned with excessive drink  
Persuade drinkers not only to moderate  
but to abstain from drink

- German & Irish immigrants opposed
- Factory owners & politicians join crusade
- 1851—Maine became the first state to prohibit the manufacture and sale of intoxicating liquors (Neil Dow)
- Slavery overshadows temperance movement yet some success
- Women's Christian Temperance Union gains strength in 1870s & 18<sup>th</sup> Amendment in 1920s
- Most popular of prewar reforms
  - 5 gallons of hard liquor per person in 1820

# Cult of Domesticity



- Women find true fulfillment in the home & the family
  - Women idealized as moral leaders in the home & educators of children
- Women's world
  - Could not vote
  - Could be legally beaten
  - Did not retain property upon marriage
  - Could not sit on juries
  - Lacked guardianship rights to children



# Gender Differences Accentuate Market Economy

- By 1850, roughly one in five white women had worked for wages a few years before marriage
- About one in 10 single white women worked outside the home, earning about half the pay of men received to do the same job

# Origins of Women's Rights Movement



- Sarah & Angelina Grimke
  - Letter on the Condition of Women & the Equality of Sexes (1837)
- Lucretia Mott (Quaker), Elizabeth Cady Stanton (Mother of seven) & Susan B. Anthony (Quaker-raised)
  - Began campaigning for rights after being barred from speaking at an antislavery convention

# Women's Gains



- Catherine Beecher
  - Encourage women to seek jobs as teachers
- Elizabeth Blackwell
  - First female graduate of a medical college
- Margaret Fuller
  - Editor of *The Dial*
- Amelia Bloomer
  - Dress reform for women

# Seneca Falls Convention, 1848



- Declaration of Rights and Sentiments
  - Based on Declaration of Independence
  - “all men and women are created equal”
  - Listed women’s grievances against laws and customs that discriminated against them
- Following the Convention, Elizabeth Cady Stanton & Susan B. Anthony campaigned for equal voting, legal & property rights for women



# Utopias



ONEIDA COMMUNITY MANSION, 1878

- **New Harmony, Robert Owen in Indiana**
  - Failed in confusion & scoundrels & debts
  - Answer to inequity and alienation caused by Industrial Revolution
- **Brook Farm, George Ripley, MA**
  - Lost to fire & debts
- **Oneida Community, John Humphrey Noyes, NY**
  - Free love & equality
  - Birth control
  - Silverware production
- **Shakers, Ann Lee**
  - Prohibit marriage & sex
  - Held property in common
  - Virtually died out by 1940s

# Painting



- Genre painting
  - Portrays everyday life
    - George Caleb Bingham
- Hudson River School
  - American landscape painting
    - Thomas Cole
    - Frederick Church
- Gilbert Stuart & Charles Wilson Peale & John Trumbull
  - Washington & Revolutionary War portraits

# Transcendentalism



- Simple living
- Mystical and intuitive
- Challenges materialism
- Individualistic
- Support reforms
- Writers
  - Ralph Waldo Emerson
    - Self-reliance
  - Henry David Thoreau
    - “On Civil Disobedience”
    - *Walden*
  - Walt Whitman
    - *Leaves of Grass*

# Architecture



- America adopted classical Greek & Roman styles
  - Columned facades graced entryways to public buildings, banks, hotels and even private homes
    - Thomas Jefferson-- Monticello



# Scientific Achievements



- Nathaniel Bowditch—mathematician, practical navigation & oceanography
- Matthew F. Maury—ocean winds & currents
- Benjamin Silliman, Yale chemist & geologist
- Louis Agassiz, Harvard—supports original research
- Asa Gray, Harvard—botany
- John J. Audubon--ornithologist