

A National Economy

1790 – 1860

Snap Shot: 1860



VIEW OF WASHINGTON.

Published and sold by E. S. Loring & Co., Publishers, N.Y.

- Pop. doubles 25 years
- 33 states
- 4th in world population
- Urbanization
 - 43 cities with > 20,000 population
 - Bad Sanitation
- High birthrate
- Immigration
- Quicker Travel
- Higher living standards

Economy and Westward Movement in Brief

- **Americans move west**
 - **Want economic opportunities; land to own and farm**
- **1810 – 20's move into Midwest, Southwest and Texas**
- **Use railroads and canals**
 - **Also helps industrial economy**

Westward Movement

- **Shaping environment**
 - Tobacco exhausted land; takes tons of land
 - Used up natural resources
 - Beavers, otters, bison
 - Nationalism leads to appreciation for wilderness
 - National Park creation – Yellowstone 1872

Westward Movement 1790 – 1990

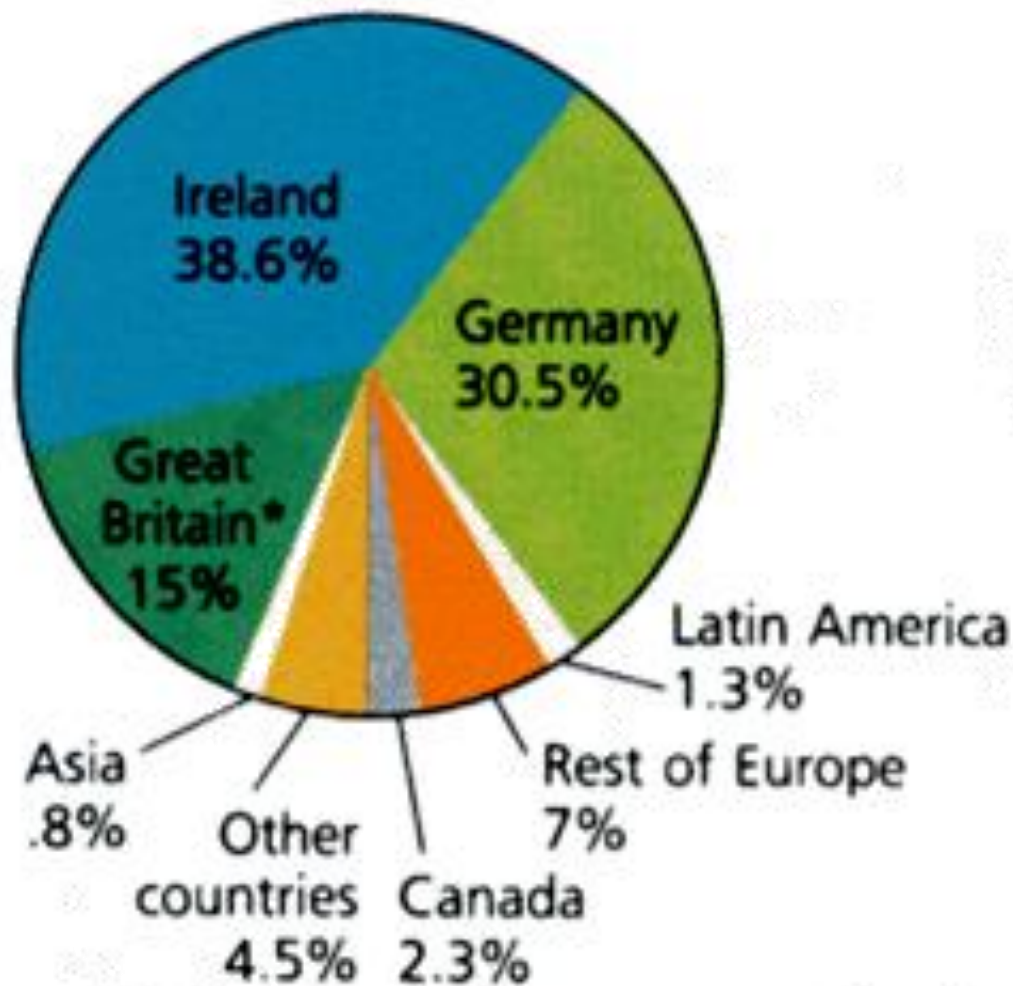


Immigration

- **Irish 1830 – 40's**
 - **Why: potato famine**
 - **Came to cities: Boston, New York**
 - **Get lowest jobs; illiterate,**
 - **Discriminated against (Catholic)**
 - **Attracted to politics and police**

Immigration

- **Germans: 1830's – 1840's**
 - **Why: Crop failures, loss of 1848 Revolution toward demo**
 - **More \$ than Irish → move west (Wisconsin)**
 - **Not as political; spread out**
 - **Contribute to Culture – Christmas tree; isolationism**
 - **Wanted public education and end to slavery**



*Great Britain included England, Scotland, Wales, and Northern Ireland.

Total number of immigrants: 5,062,414

National Origin of Immigrants: 1820 - 1860

Reaction



THE IRISH "TEMPEST."

CHIEF (BOSS OF THE HILL). "THIS ISLAND'S MINE, BY SYDORAN MY MOTHER, WHICH THOU TAK'ST FROM ME."—*Shakespeare*.

- Anti-foreignism
 - Nativism – against immigrants
 - Taking jobs; politics, religion
 - Fear Catholicism – now largest religion
 - Know-Nothing Party (Order of the Star-Spangled Banner)
 - Restrict immigration
 - Wrote fiction books about church corruption
 - Violent
 - America now diverse
 - Against Dems

**Know-
Nothing
Party:**
**"The Supreme
Order of the
Star-Spangled
Banner"**
Against Dems



NATIVES OF THE SOIL! AROUSE!

**Shall American Labor be Protected
Against Foreign Competition in the Home Labor Market?**

THE WATCH-WORD OF NATIVE AMERICANS:

Repel the Influx of "FOREIGN INFLUENCE," by repelling the Influx of Foreign Immigrants;
Protection against foreign Competition in the Home Labor Market; and a Limitation of the Area
of Slavery, and of Fugitive Slave Laws.

FOSTER BRYANT, ESQ.

Of Massachusetts, an original Member of the "OLD AMERICAN GUARD"
of 1845, will address the citizens of

Evening, at o'clock, in the on the
RUINOUS INFLUENCE OF FOREIGN IMMIGRATION ON AMERICAN LABOR!

The dangers to which our Institutions are exposed from the ALARMING INCREASE OF POPERY; and

AGAINST THE EXTENSION OF SLAVERY.

*Members of all parties in politics, and all persons who love our common
country, and desire that our Free Institutions may be permanent and lasting, are invited to attend. After the Lecture
an opportunity will be afforded to those who may desire to controvert any of the Lecturer's positions. The Ladies
are especially invited to attend.*

Early Industry

- **Industry spreads**
 - **Cheap land, \$ for investment**
 - **But raw materials not discovered; lacked consumers; British competition**
 - **Though US still very rural**
- **Samuel Slater – starts factory system**
 - **Starts 1st cotton spinner 1791**
- **Eli Whitney – Saves slavery**
 - **Cotton Gin – 1790**
 - **Cotton Profitable**
 - **Helps Northerners manufacturing**
 - **Replaceable parts 1850**

Eli Whitney's Cotton Gin, 1793

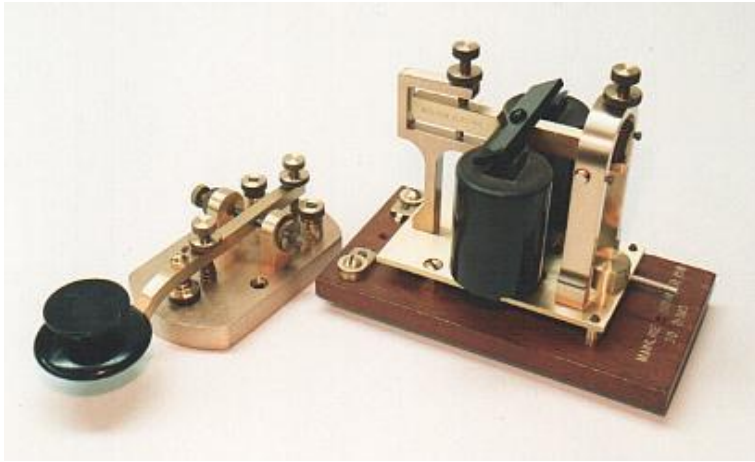


Eli Whitney's Gun Factory



Interchangeable Parts Rifle

Early Industry



- **War of 1812 encouraged home manufacturing**
 - **Tariff of 1816 – supports this**
- **New Inventions**
 - **Sewing machine**
 - **Limited Liability, Corporation**
 - **Telegraph and Morse Code**

Samuel F. B. Morse



1840 - Telegraph

Cyrus Field & the Transatlantic Cable, 1858



Elias Howe & Isaac Singer



**1840s
Sewing Machine**



Lowell, MA Start of Industry in America

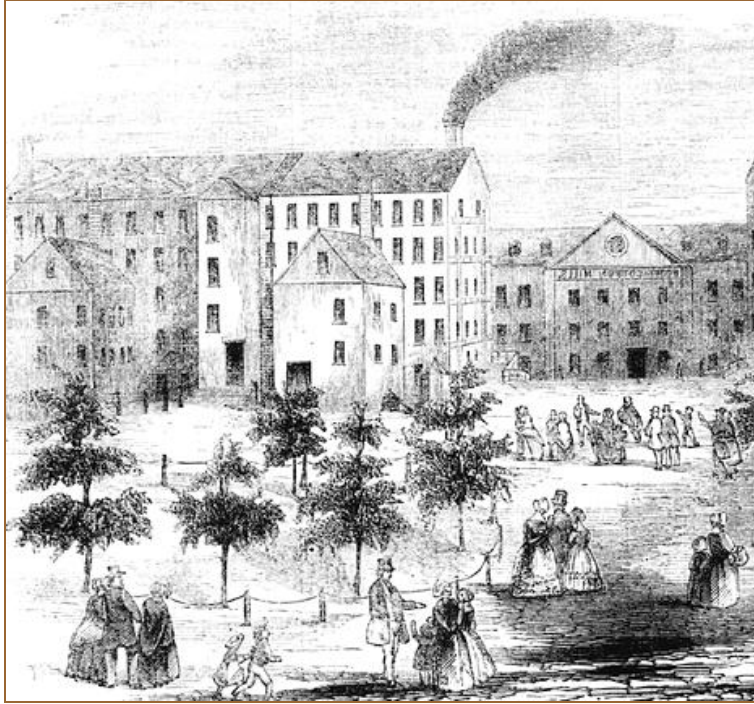


Francis Cabot Lowell's town - 1814

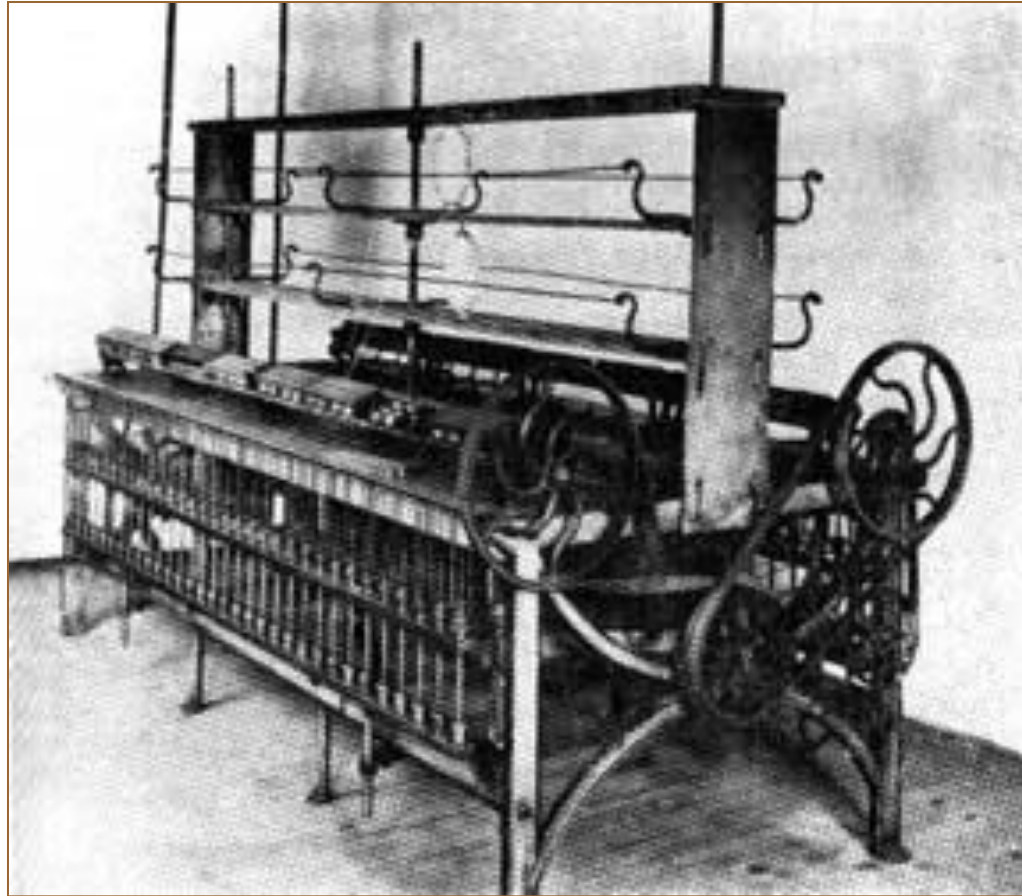
Lowell in 1850

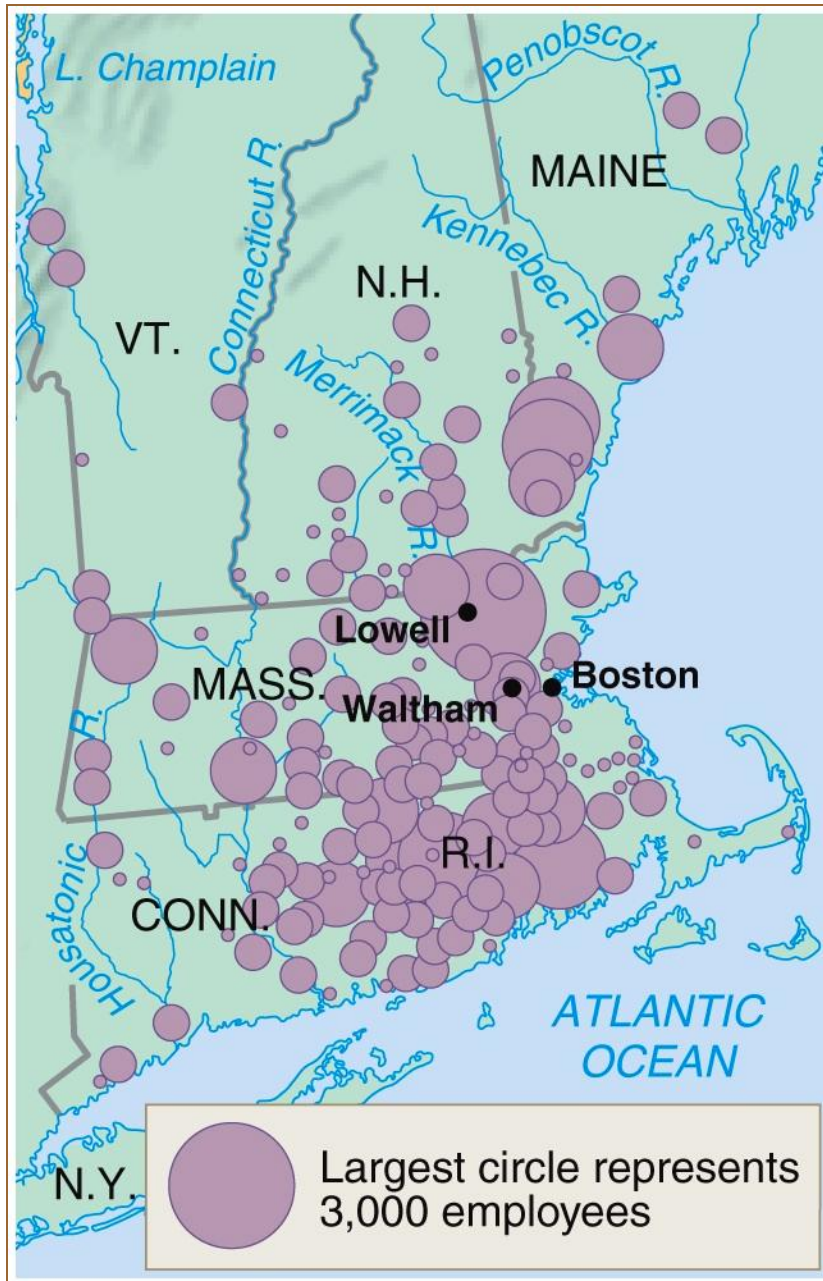


Lowell Mill



Early Textile Loom





New England Textile Centers:

1830s

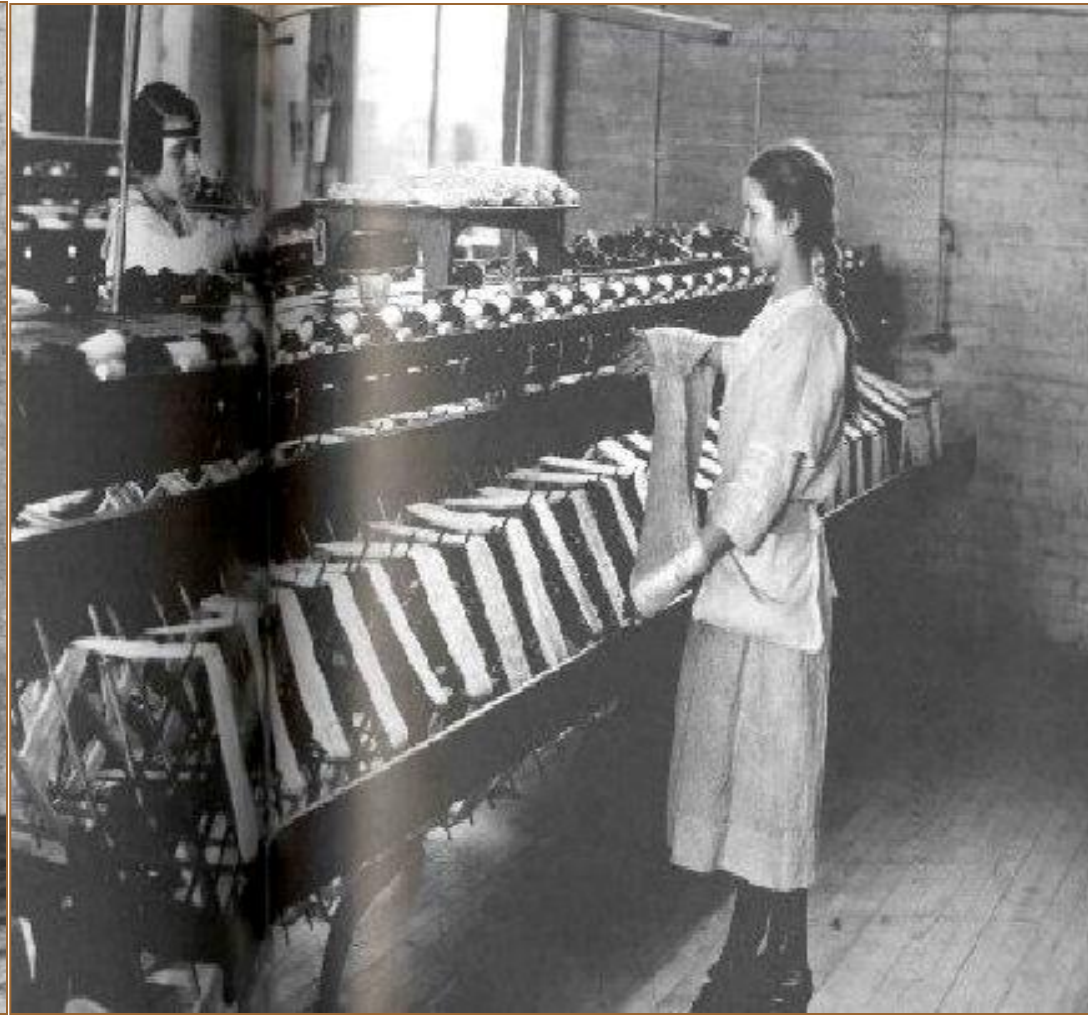
New England Dominance in Textiles



Starting for Lowell



Lowell Girls



Lowell Boarding Houses



What was boardinghouse life like?

Lowell Mills Time Table

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 AMOS 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 Evenings.
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 Evenings.
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.

<i>Morning Bells.</i>	<i>Dinner Bells.</i>	<i>Evening Bells.</i>
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.

<i>Morning Bells.</i>	<i>Dinner Bells.</i>	<i>Evening Bells.</i>
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 OFFERING:

A REPOSITORY

OF

ORIGINAL ARTICLES ON VARIOUS SUBJECTS,

WRITTEN

BY FACTORY OPERATIVES.

"Full many a gem of purest ray serene,
The dark, unfathomed caves of ocean bear;
Full many a flower is born to blush unseen,
And waste its sweetness on the desert air."

No. 1. Price 6 $\frac{1}{4}$ cts.

THIS NUMBER WHOLLY WRITTEN

BY FEMALES EMPLOYED IN THE MILLS.

CONTENTS:

- | | |
|--|---------------------------------------|
| 1. The Hemlock Broom, . . . Page 1. | 11. The Tomb of Washington, Page 9. |
| 2. The Mother's Love, 2. | 12. Knowledge in Heaven, 9. |
| 3. Beauty of Leaves, 2. | 13. Messrs. Birch and Spruce, . . 10. |
| 4. Woman's Proper Sphere, . . . 3. | 14. Beauty and Wealth, 11. |
| 5. The blessings of Memory, . . . 4. | 15. Longings of the Spirit, . . . 11. |
| 6. Letter about Old Maids, . . . 4. | 16. Divine Love, 12. |
| 7. Recollections of an Old Maid, No. 1. 5. | 17. Autumn Reflections, 12. |
| 8. Autumn's Doings, 7. | 18. Mount Auburn, 13. |
| 9. The Pleasures of Science, . . . 7. | 19. Thoughts on a Rainy Day, . . 14. |
| 10. The Garden of Science, . . . 8. | 20. Old Bachelor's Friend, . . . 15. |

LOWELL, MASS.

PRINTED BY A. WATSON, 15 CENTRAL STREET.

For Sale at all the Bookstores; and by Tower, in the angle of Central and Gorham sts.;
and at Billings' Variety Store, Merrimack st. opposite Tremont Corporation.

Early
"Union"
Newsletter

The Factory Girl's Garland



February 20, 1845 issue.

I'm a Factory Girl Filled with Wishes

I'm a factory girl

Everyday filled with fear

From breathing in the poison air

Wishing for windows!

I'm a factory girl

Tired from the 13 hours of work each day

And we have such low pay

Wishing for shorten work times!

I'm a factory girl

Never having enough time to eat

Nor to rest my feet

Wishing for more free time!

I'm a factory girl

Sick of all this harsh conditions

Making me want to sign the petition!

So do what I ask for because I am a factory girl

And I'm hereby speaking for all the rest!

Irish Immigrant Girls at Lowell



May 28, 1830

Act Passed By Congress

•An Act to provide for an exchange of lands with the Indians residing in any of the states or territories, and for their removal west of the river Mississippi.

Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That it shall and may be lawful for the President of the United States to cause so much of any territory belonging to the United States, west of the river Mississippi, not included in any state or organized territory, and to which the Indian title has been extinguished, as he may judge necessary, to be divided into a suitable number of districts, for the reception of such tribes or nations of Indians as may choose to exchange the lands where they now reside, and remove there; and to cause each of said districts to be so described by natural or artificial marks, as to be easily distinguished from every other.

Industrial Effects

- **Impersonal relations**
- **Poor treatment of workers**
- **Child labor**
- **Some workers did get...**
 - **10 hour work day, higher wages, public education, ban on debt imprisonment**
- **Women working**
 - **Nursing, teaching, domestic service**
 - **Work before marriage, not after**



Industrial Effects

- **Families**
 - **Grow smaller (Cult of Domesticity)**
 - **Child centered**
 - **More affectionate**
 - **Married for love**



Boom/Bust Cycles: 1790-1860

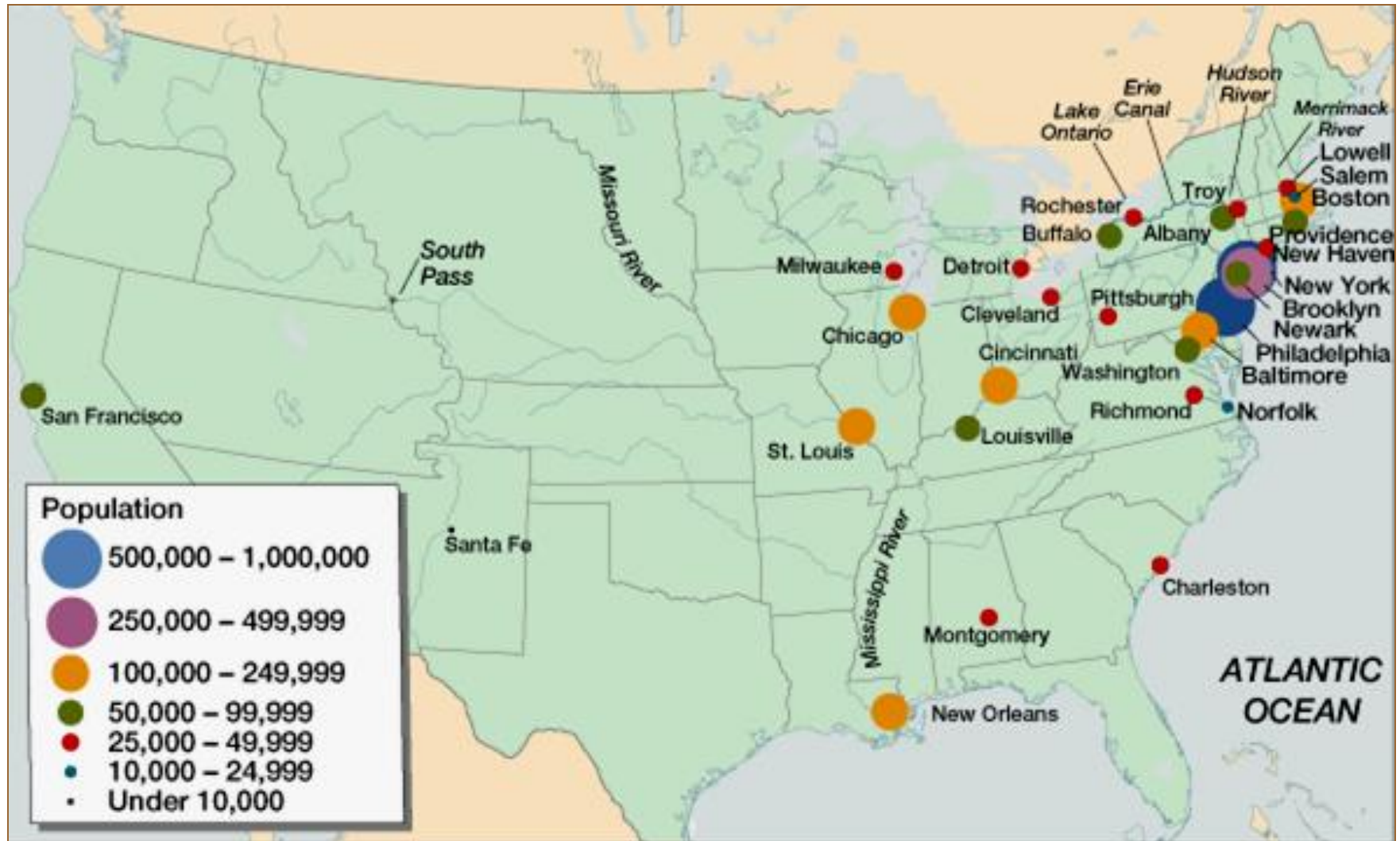


The blue line shows, for comparison, the price of a year's tuition at Harvard College. In 1790 it was \$24, but by 1860 had risen to \$104.

New England Dominance in Textiles



American Population Centers in 1860



Changing Occupation Distributions: 1820 - 1860

	1820	1840	1860
Agriculture	78.8%	63.1%	52.9%
Mining	0.4	0.6	1.6
Construction	—	5.1	4.7
Manufacturing	2.7	8.8	13.8
Trade	—	6.2	8.0
Transport	1.6	1.8	2.0
Service	4.1	5.0	6.4
Other	12.4	9.4	10.6

Source: U.S. Bureau of the Census.

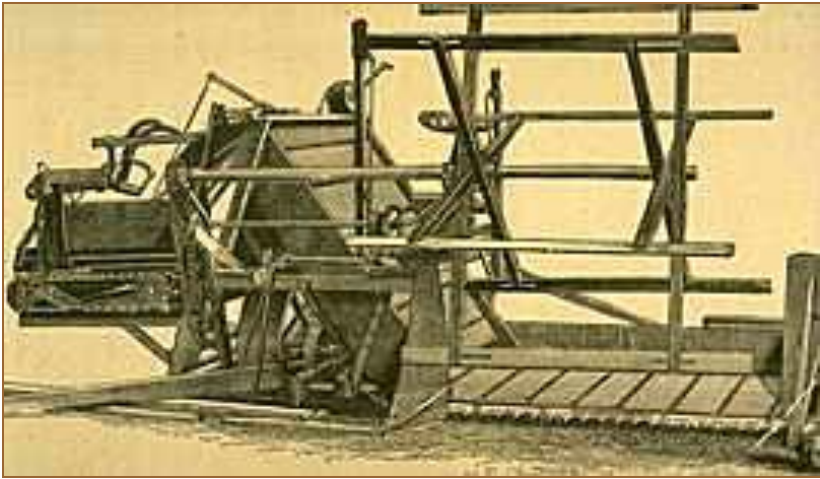
Western Farmer Inventions

- **Trans-Allegheny region**
 - Nations breadbasket
 - Helped by John Deere steel plow and McCormick reaper
 - Increased production
- **Products flow North to South on rivers**
 - Need new transportation method to go west

John Deere & the Steel Plow (1837)



Cyrus McCormick & the Mechanical Reaper: 1831



Conestoga Covered Wagons



Conestoga Trail, 1820s

Transportation



- Robert Fulton develops Steamship
- Railroad, Roads, and Steamship
 - Economic expansion in west
 - Cumberland road constructed 1811 – 1852
 - Erie Canal built
 - Food cost reduced
 - Cities built
 - Quicker travel

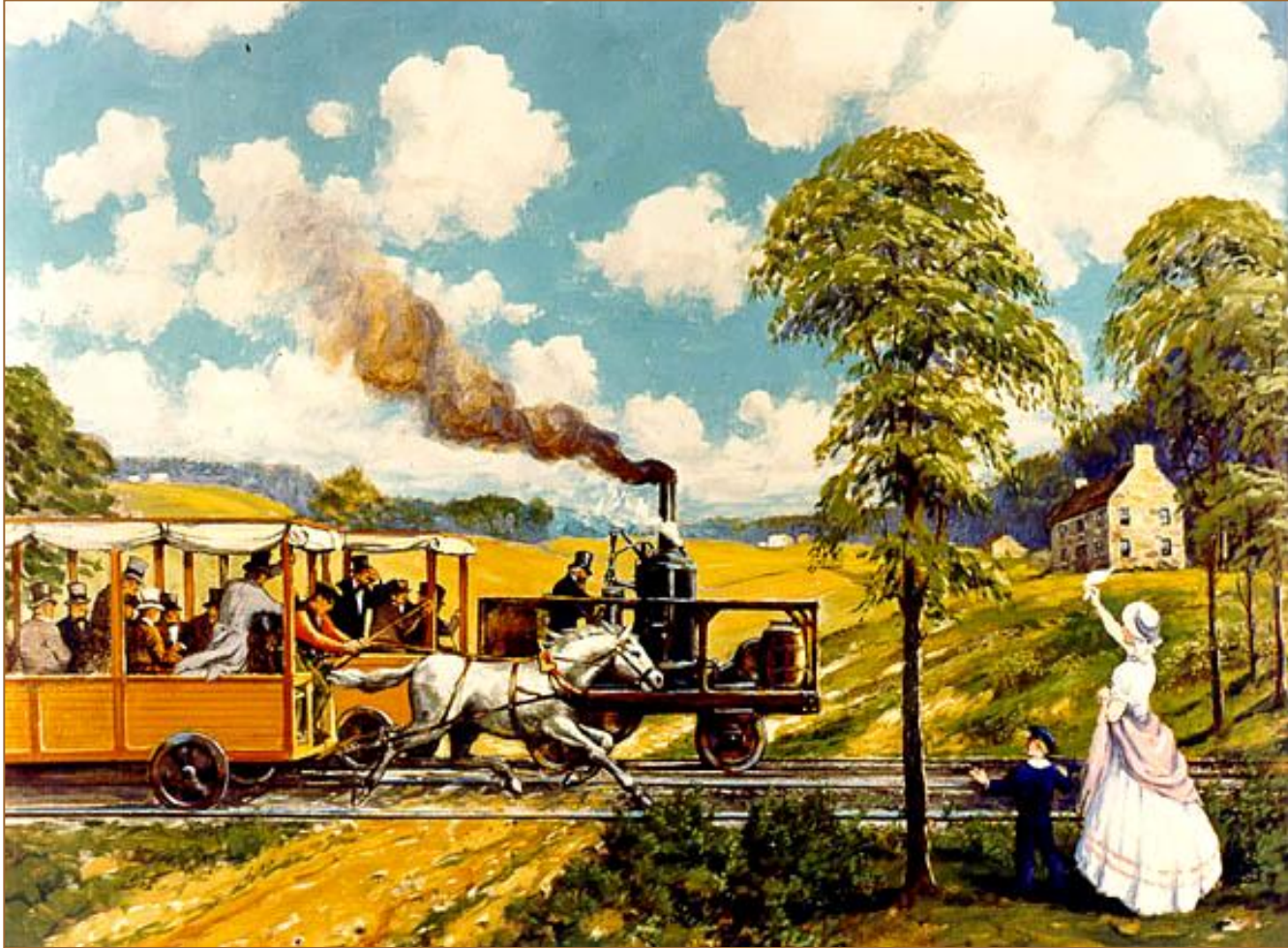
This map illustrates the Eastern United States, highlighting several major canals and their routes. The canals are color-coded and labeled in the legend:

- Erie Canal (Blue line):** Connects Lake Erie to the Hudson River, passing through Buffalo, Albany, and Troy in New York.
- Delaware and Raritan Canal (Black line):** Connects the Delaware River to the Raritan River, passing through Trenton and Philadelphia in New Jersey.
- Pennsylvania Canal (Yellow line):** Connects the Susquehanna River to the Delaware River, passing through Columbia and Philadelphia in Pennsylvania.
- Ohio and Erie Canal (Orange line):** Connects Lake Erie to the Ohio River, passing through Cleveland and Portsmouth in Ohio.
- Wabash and Erie Canal (Red line):** Connects the Wabash River to Lake Erie, passing through Cincinnati and Toledo in Indiana.
- Miami and Erie Canal (Green line):** Connects the Miami River to Lake Erie, passing through Cincinnati in Ohio.
- Chesapeake and Ohio Canal (Purple line):** Connects the Chesapeake Bay to the Ohio River, passing through Washington and Baltimore in Maryland.

The map also shows the Great Lakes (Lake Michigan, Lake Huron, Lake Erie, Lake Ontario), the Ohio River, and the Atlantic Ocean. States and territories labeled include Wisconsin (WIS.), Michigan, Indiana, Illinois (ILL.), Ohio, Pennsylvania, New York, Vermont (VT.), New Hampshire (N.H.), Maine, Massachusetts (MASS.), Connecticut (CONN.), Rhode Island (R.I.), New Jersey (N.J.), New Brunswick, Delaware (DEL.), Maryland (MD.), Virginia, and the District of Columbia (Washington).



The "Iron Horse" Wins! (1830)



1830 → 13 miles of track built by Baltimore & Ohio RR
By 1850 → 9000 mi. of RR track [1860 → 31,000 mi.]



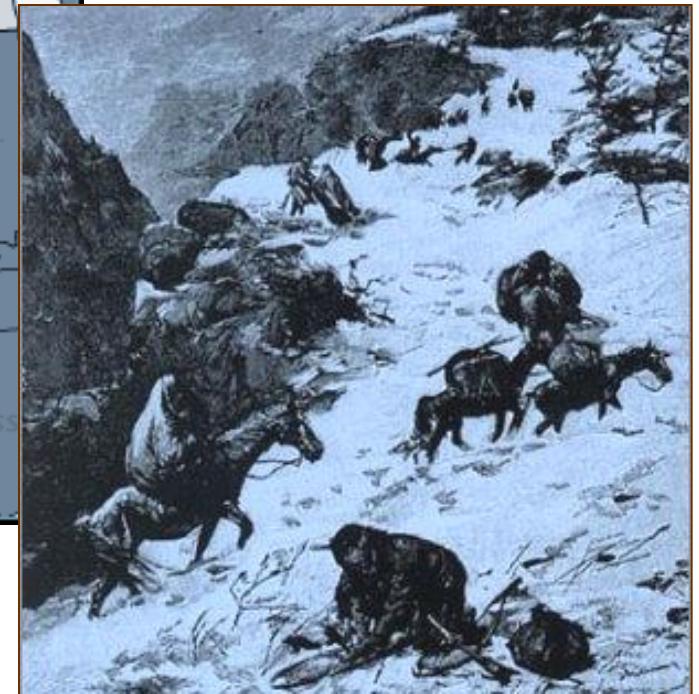
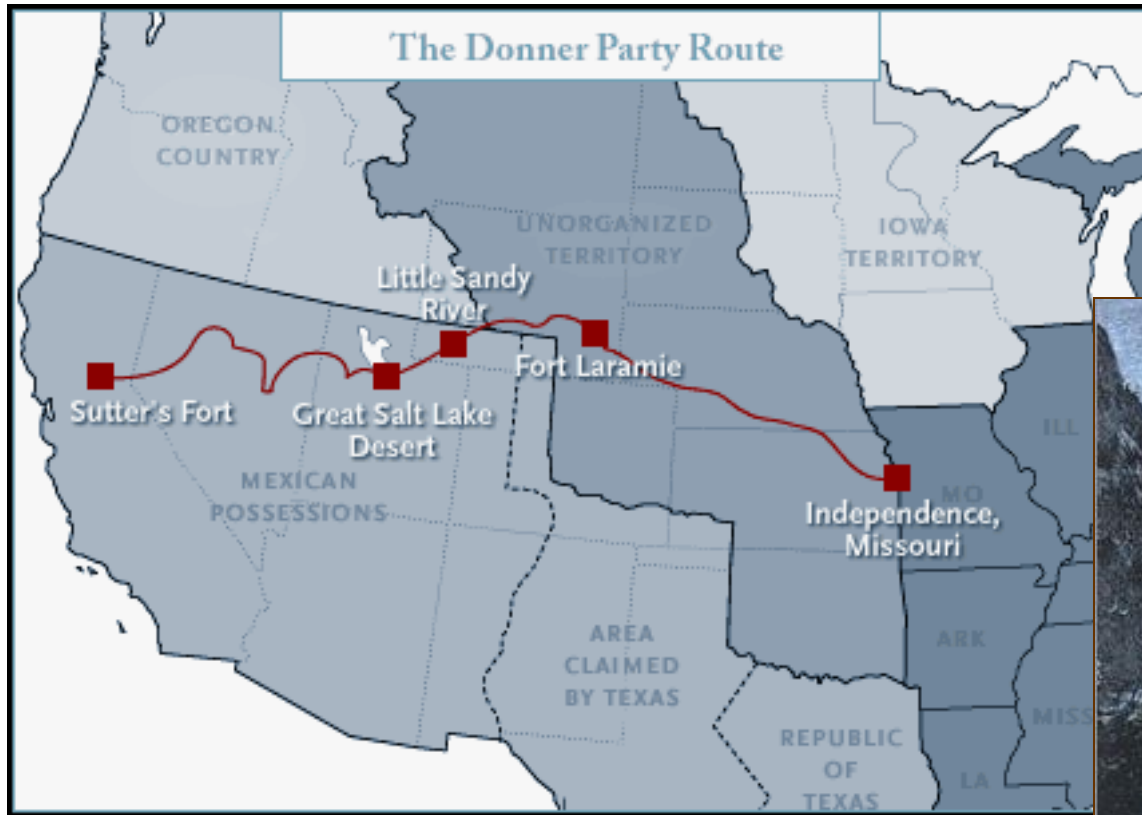
Railroads 1850s

- **Immigrant labor built the No. RRs**
- **Slave labor built the So. RRs**

Routes West



THE DOOMED DONNER PARTY



***APRIL, 1846 -
APRIL, 1847***

THE DOOMED DONNER PARTY

**CANNIBALISM
!!**



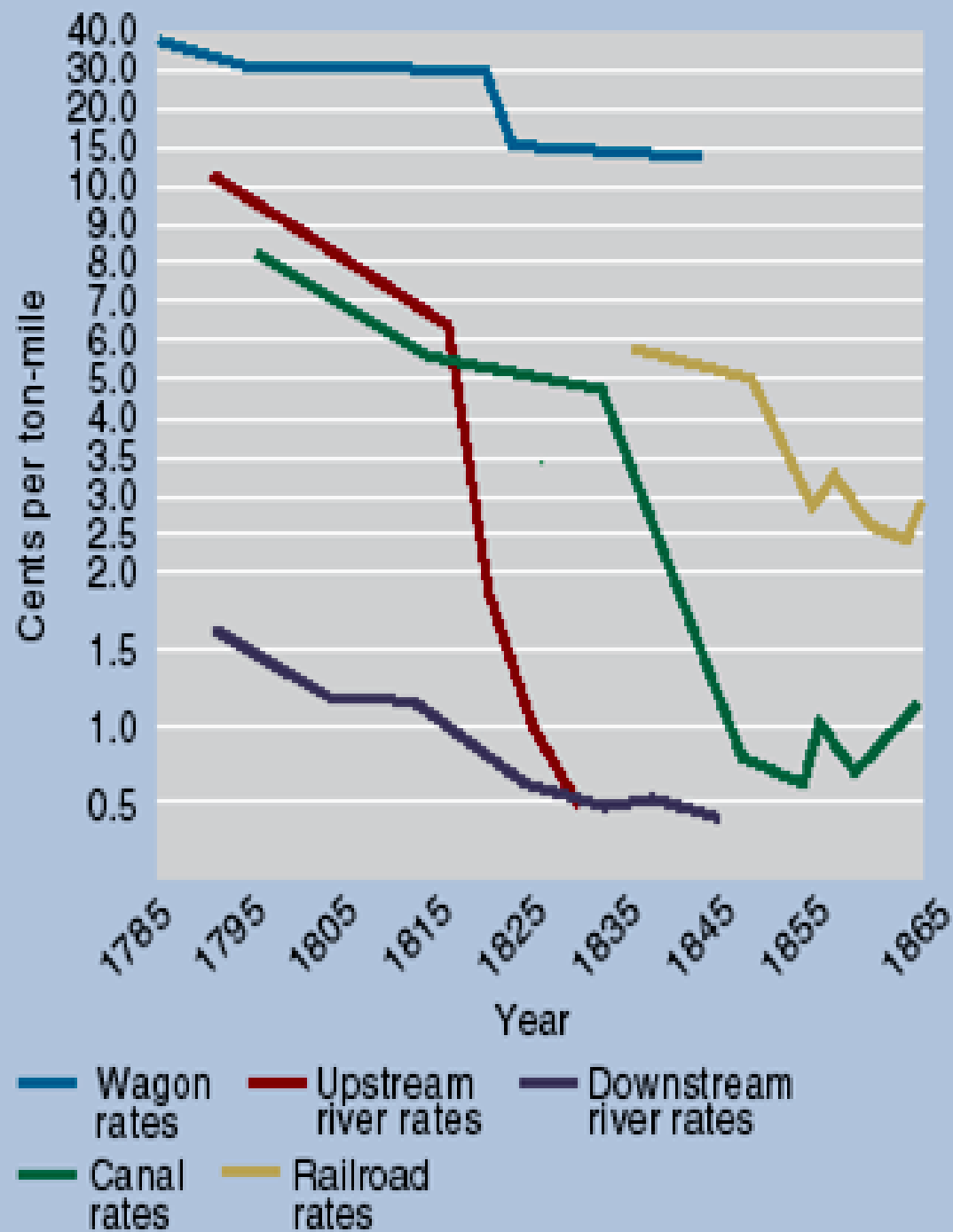
**JAMES REED &
WIFE**



**MARGARET
JOHN
BREED
BREED**

**PATRICK
BREED**

- **OF THE 88
MEMBERS OF THE
DONNER PARTY,
ONLY 49 SURVIVED
TO GET TO**



Transportation

- **Binds Nation together**
 - South to East, East to West, North to South, North to West
 - North has more canals leads to greater trade with West
- **Economic Specialization**
 - N: Machines, textiles → S and W
 - S: Cotton → New England
 - W: Grain, Livestock → S, N, and Euro.

Clipper Ships



Societal Economics

- **Gap between rich and poor wider**
 - **More rags to respectability than to riches**
- **Standard of living increases, wages rose**
- **Pony Express**
- **Bought goods in stores**
- **Women's work less valued**
- **Home was a refuge from working world**
- **Cities have economic inequity**

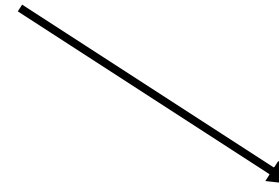
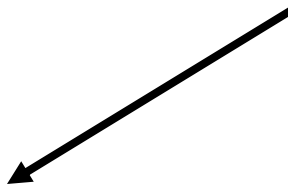
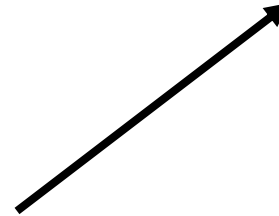
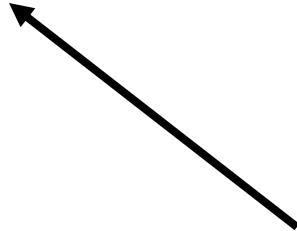
ECONOMIC?

POLITICAL?

**The results of
early 19c
industrialization
in America?**

SOCIAL?

**FUTURE
PROBLEMS?**

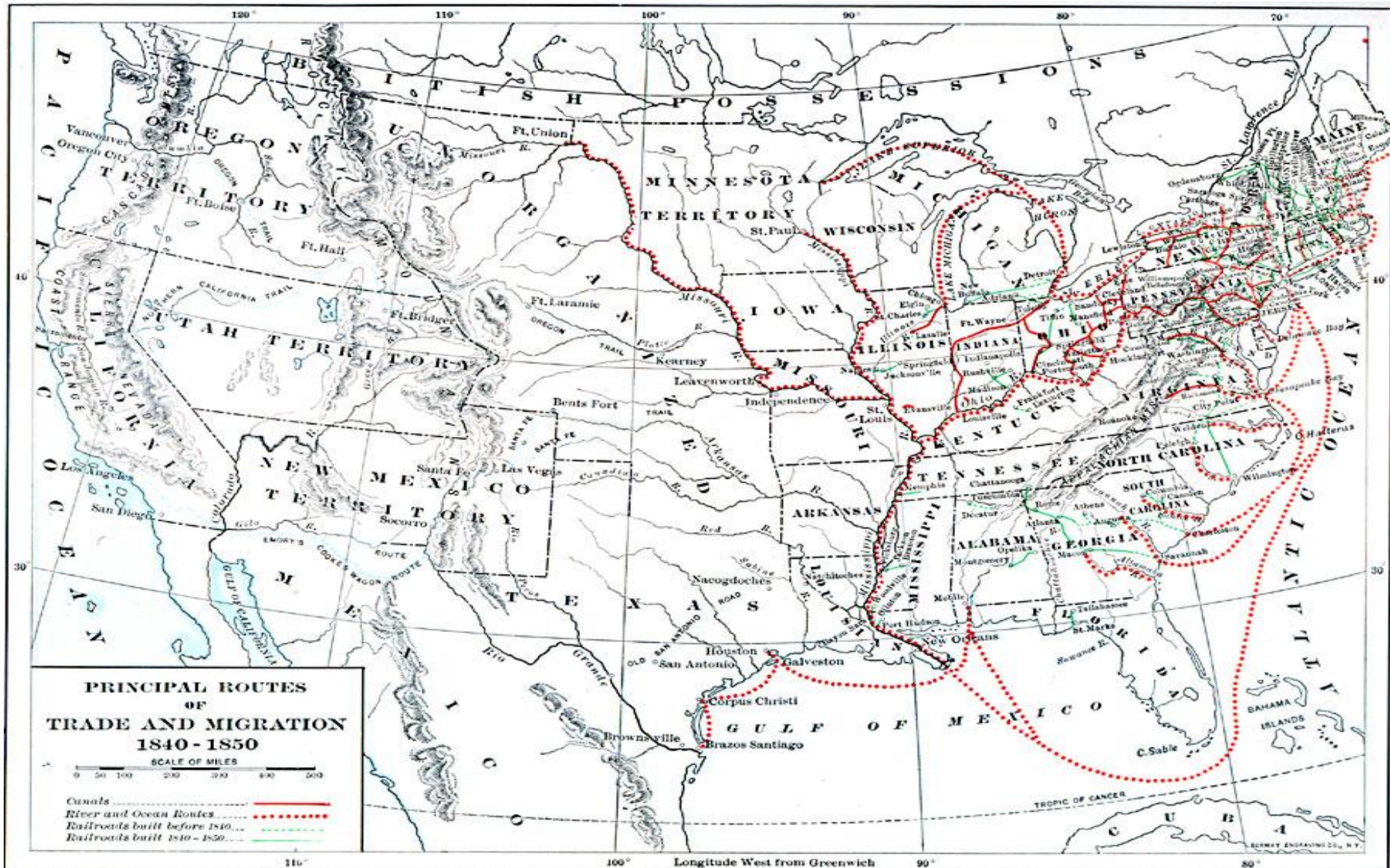


Economic Growth 1800-1850

Territorial Growth

- Constant movement to the West
- Improvements in Transportation and Communication
- New York becomes vital due to Canal Era
- Philadelphia & Baltimore attempt canals
- Migration is natural
- Growth of Trading posts on Mississippi & Ohio
- More shipping creates cities on Lakes
- West becomes “Safety Valve”

Routes of Western Migration



1820

TERRITORIAL GROWTH

COLONIAL PERIOD: 1775

- Original Thirteen Colonies
- Other British territories

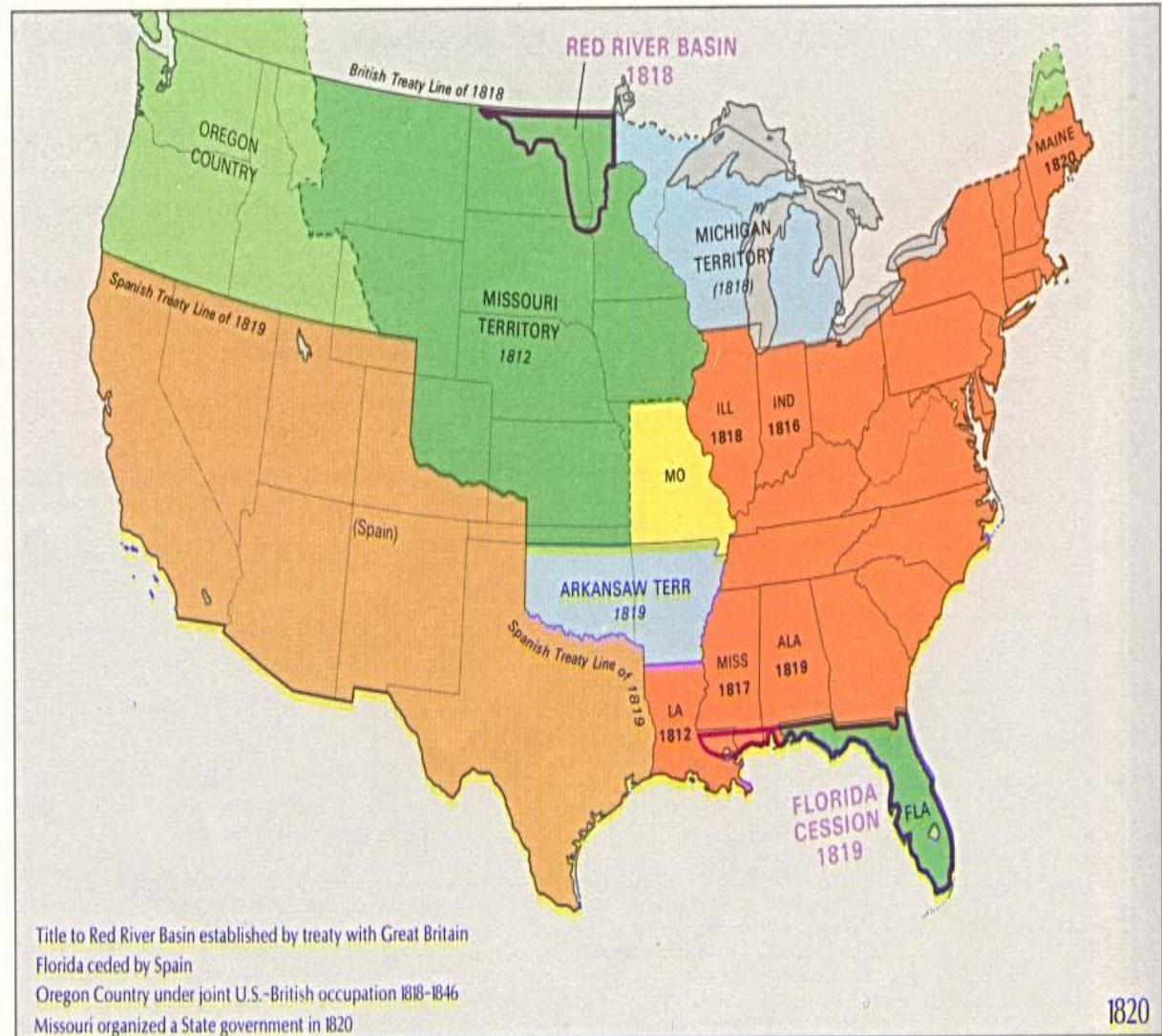
UNITED STATES: 1790–1920

- States
- State claims
- Special status areas
- Territories
- Unorganized territories
- Claimed areas
- Foreign areas

- 1803** Dates of territorial acquisitions
1805 Dates of initial territorial organization
(1809) Dates of latest change within given time period
1812 Dates of admission to the Union

Map scale 1:34,000,000

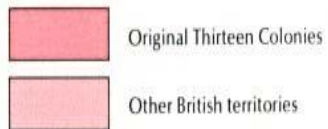
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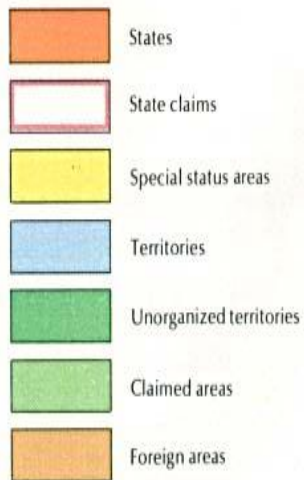
1830

TERRITORIAL GROWTH

COLONIAL PERIOD: 1775



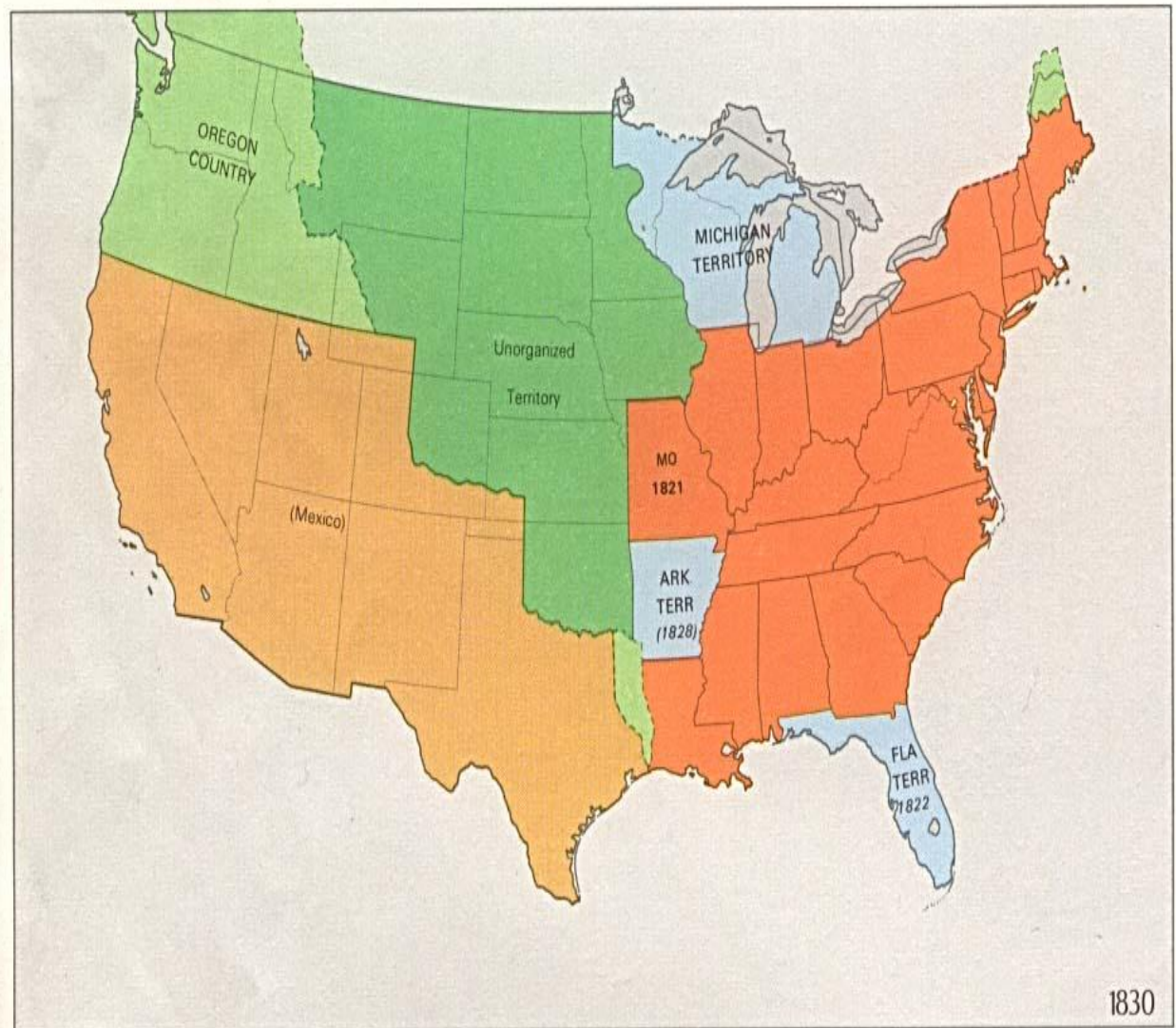
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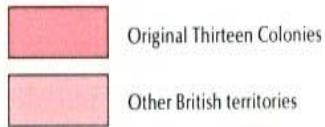


1830

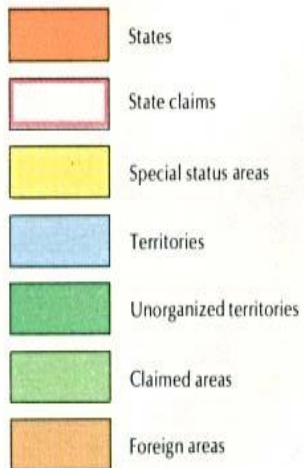
1840

TERRITORIAL GROWTH

COLONIAL PERIOD: 1775



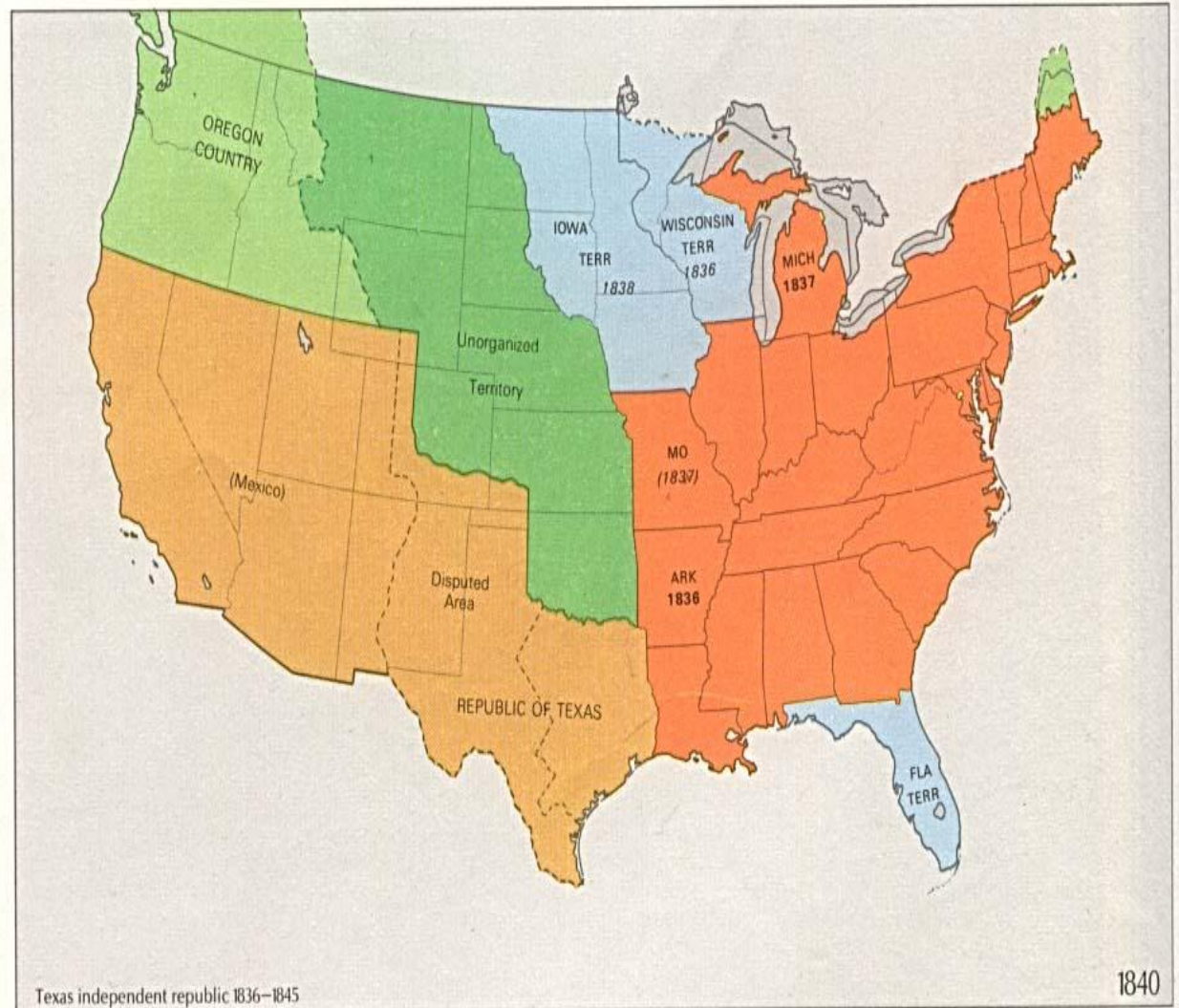
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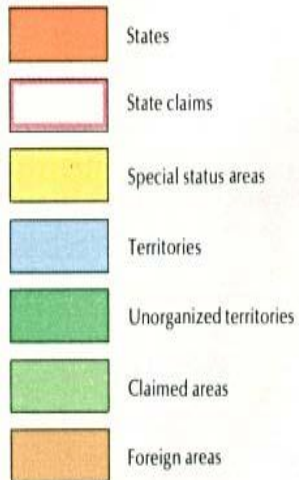
1850

TERRITORIAL GROWTH

COLONIAL PERIOD: 1775



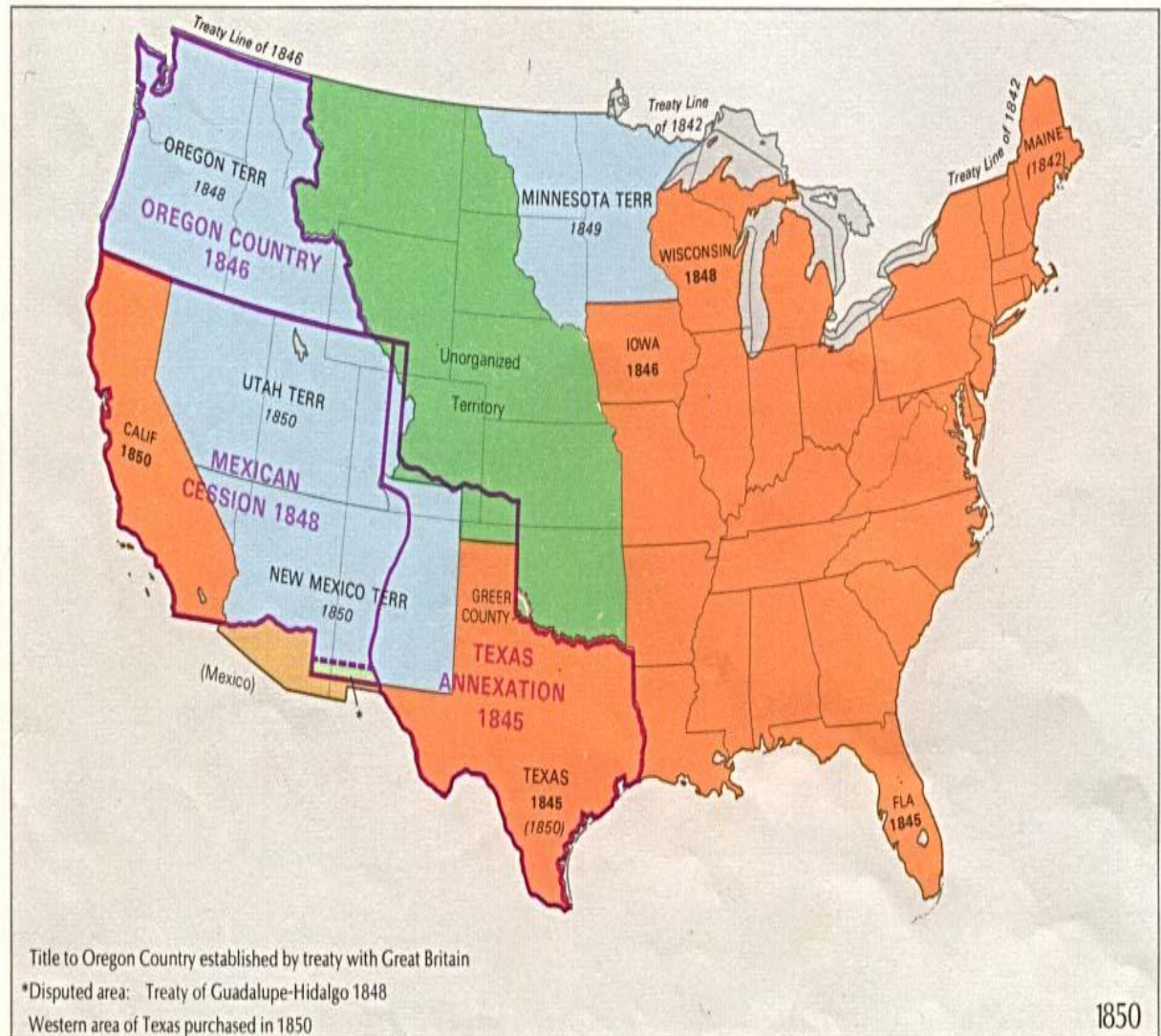
UNITED STATES: 1790–1920



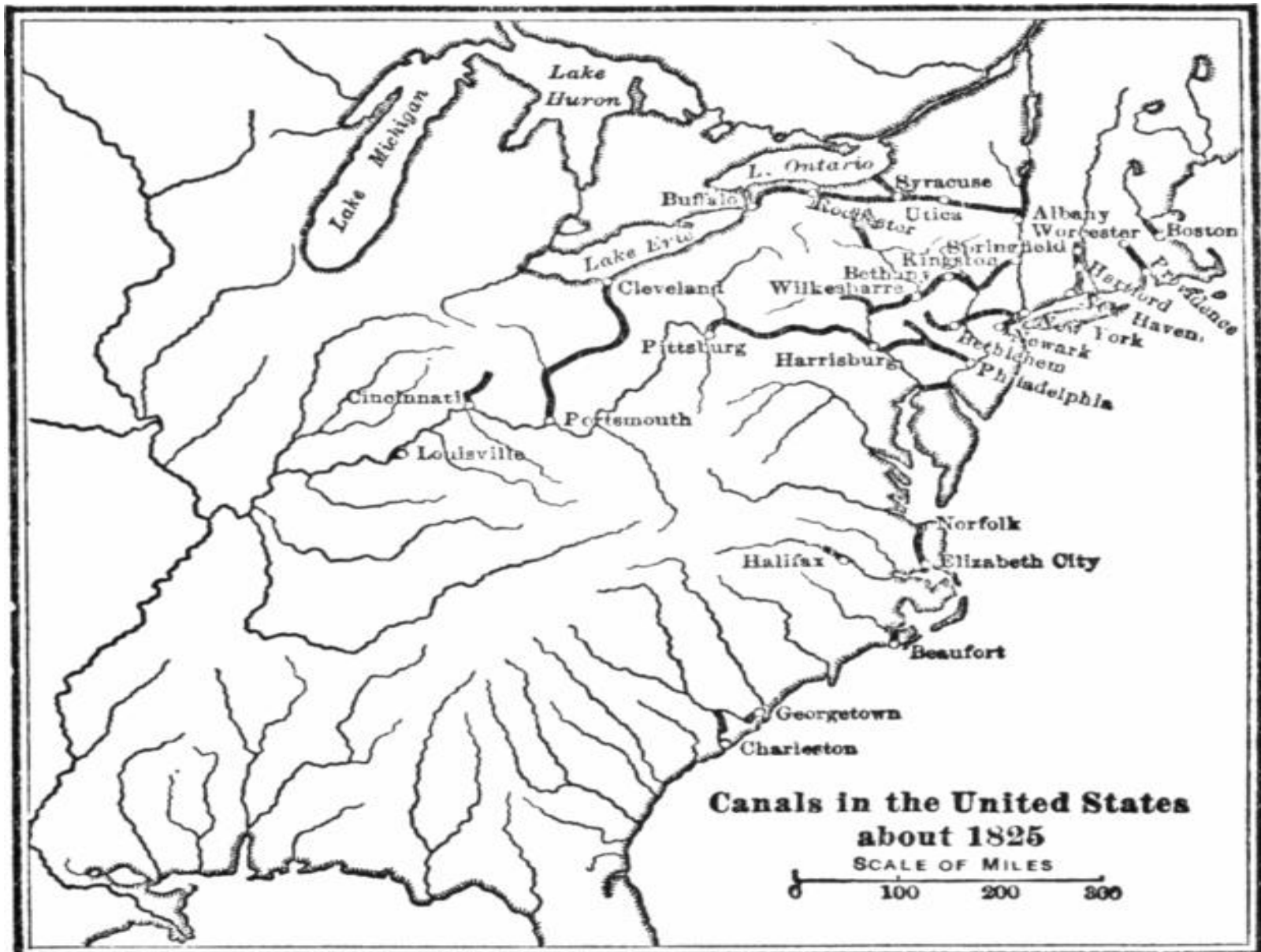
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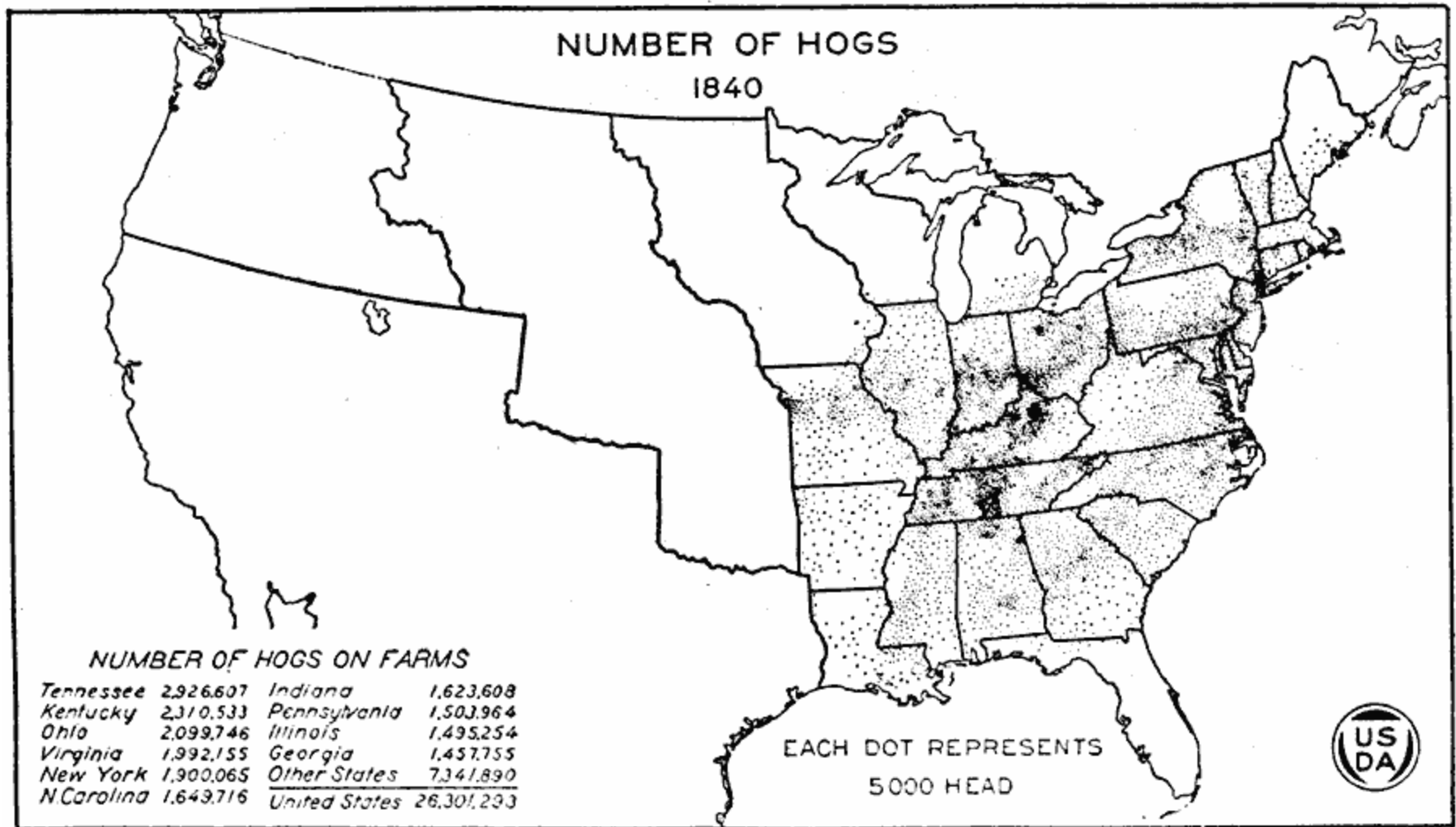
Canals in 1825



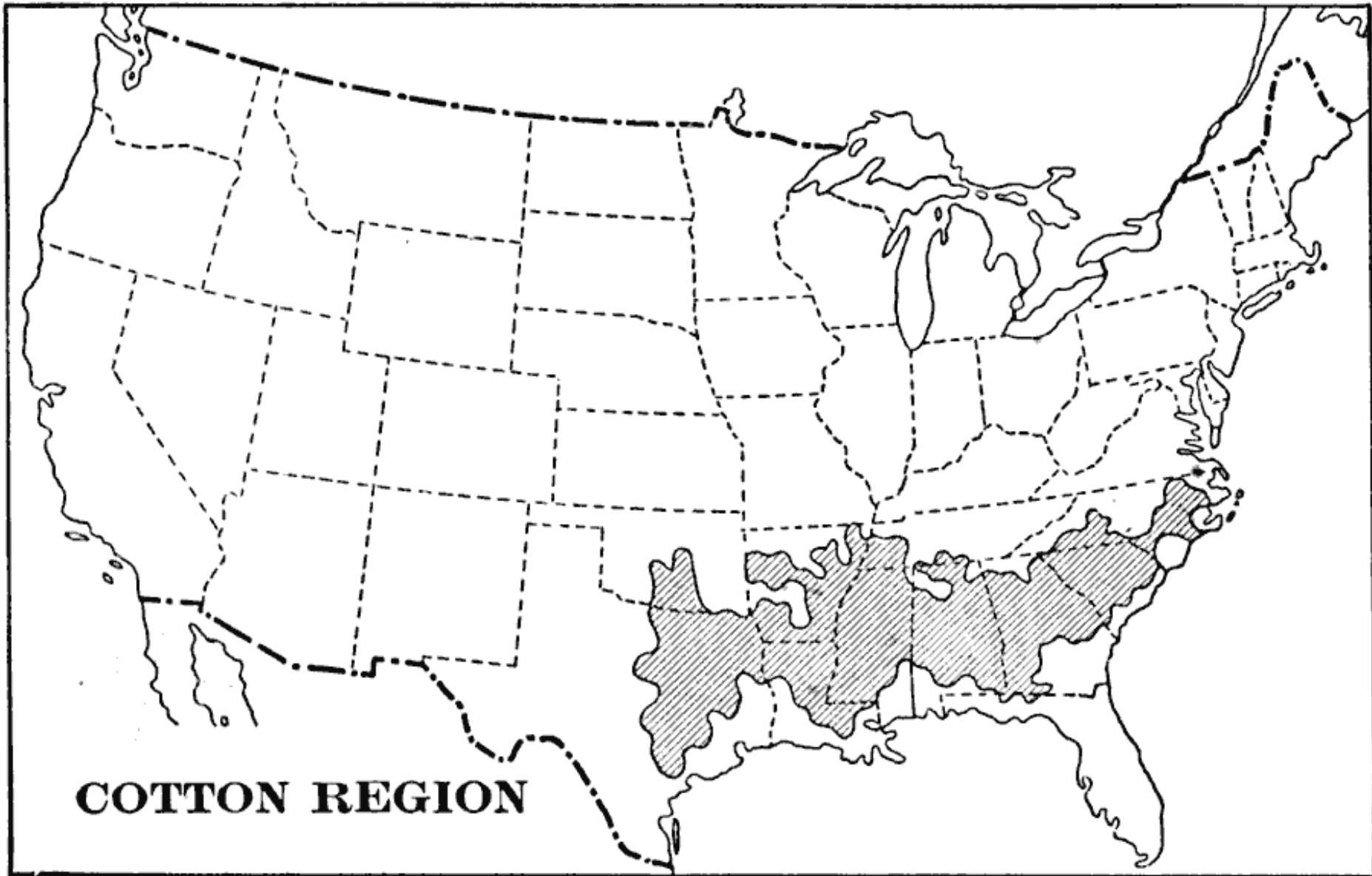
Geographic Issues

- NE – poor soil, no choice but manufacturing (fall lines)
- Tobacco exhausts soil – go west
- West becomes Breadbasket
- Porkopolis – Cincinnati
- King Cotton
- Boom or Bust Cycle
- Growth of Bank & Insurance Companies

Porkopolis



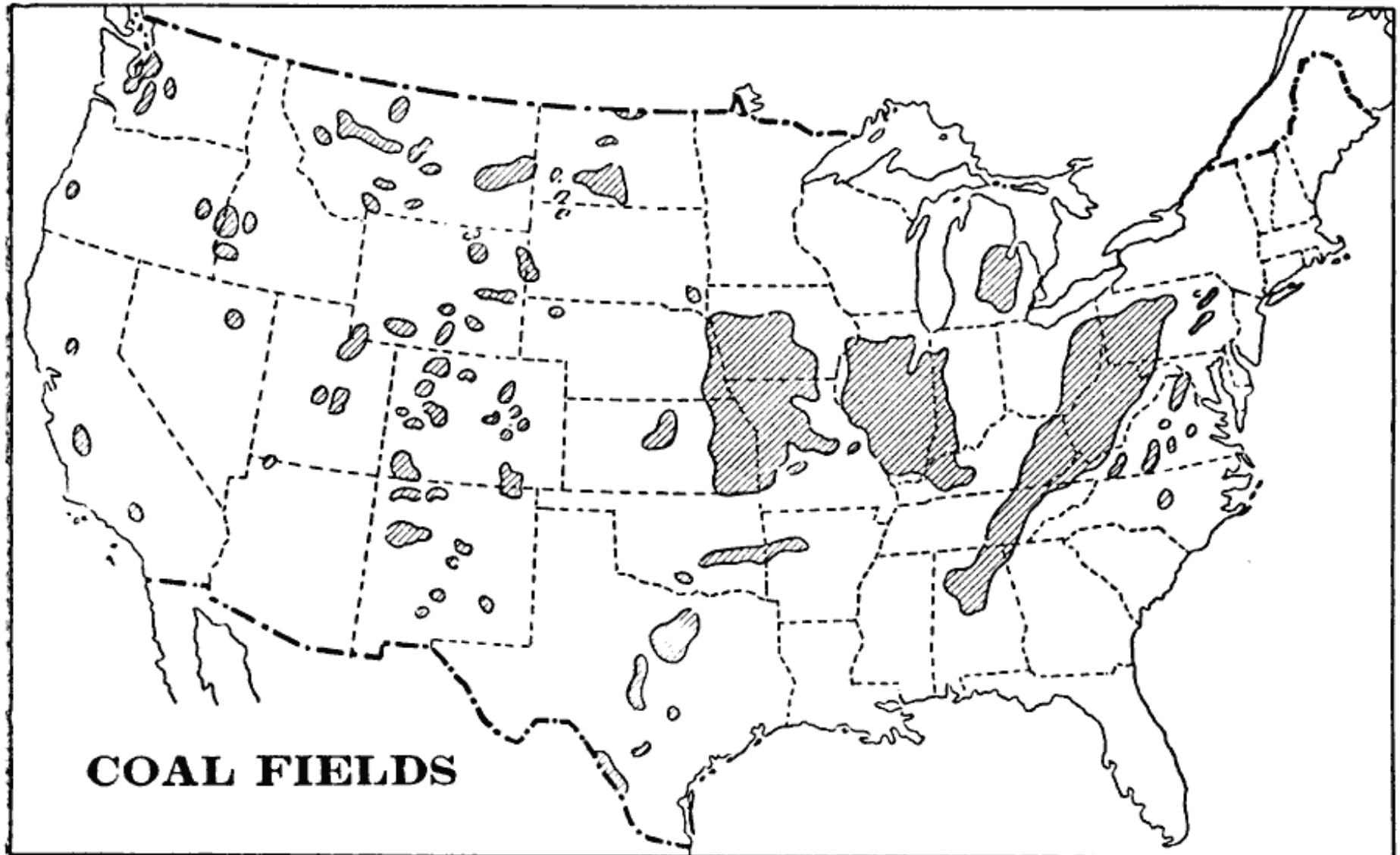
Cotton Growing Regions



Wheat Growing Regions



Coal Regions



Population Changes

- 1790 – 4 million / 1820 – 10 million / 1830 – 13 million / 1840 – 17 million
- Cure for what ill a City
- Immigration – American Dream
- Impact on Work Force – What happens to Lowell Girls?
- Large Population = Need for Goods
- Less Master Craftsmen
- Child Labor
- Population Doubles every 25 years

Immigration 1820-1840

- 43% Irish
- 27% German
- 18% English
- 11% Northern Europe
- 1% All Others

Business Growth

- Cash Crops
- Market Economy
- Standard Sizes
- Factory System – Samuel Slater
- Limited Liability
- Lowell Girls – 65% of work force is female
 - 73 hour work week
 - educated, etiquette, poetry
- Daring, Imagination, Ruthlessness
- General Incorporation Laws

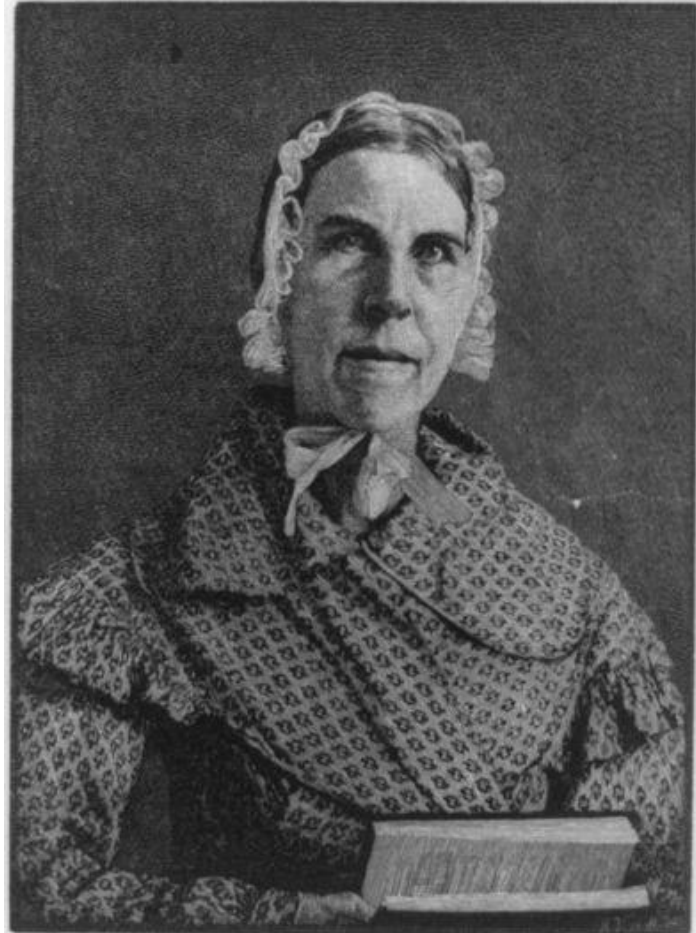
Effects of Economic Growth

- Company Towns
- Immigrants (Irish) take over (Dirty)
- Trade unions
- Less need for large Family
- Change in Role of Women
- Marriage for Love?
- Less Child Birth
- Child Centered Family

Angelina & Sarah Grimke



Angelina Grimke



Sarah M. Grimke

Economics and Politics

- Need for manufacturing caused by War of 1812, Embargo of 1807, and Tariff of 1816
- 10 hour work day – MVB
- Commonwealth vs. Hunt
- Charles River Bridge vs. Warren Bridge

Technological Advances

- Assembly Line
- Interchangeable Parts – Eli Whitney
- Steam engine
- Sewing Machine – Howe & Singer
- Safety Pins
- Typewriter
- Cotton Gin - Whitney
- Steel Plow – John Deere
- Reaper/Binder – Cyrus McCormick
- Repeating Rifle – military implications
- Revolver
- Dupont

Impact on Westward Expansion

- Boom & Bust cycle
- Need for new technologies & sciences
- Rise of new banks & insurance companies
- Manifest Destiny
- Need better transportation & communication
- Many jobs available

Chronology of Transport

- Walk, run, swim, skip
- Shipping – Clipper Ships
- Horse
- Turnpikes
- Canals
- Steamboat – Fulton
- Early Railroad
- Bridge Building
- Better Railroad

Impacts of Expansion of Transport towards West

- East & West are linked. Why was South not linked?
- New York becomes “Queen City” WHY?
- Specialized economy for sections of country
- More jobs available in West – rise of cities
- Efficiency in all aspects of life

Rise of Railroad

- Canals not feasible in Pennsylvania
- Canals too slow
- RR – no freezing over, faster, more reliable, defied terrain
- Improvements – Bessemer Process, Standard Gauge Track, Westinghouse Air Brake
- B & O RR is first major RR – growth of Baltimore
- Railroad creates cities out of towns and trading posts in west
- Miles of track
 - 1815 – 30 miles
 - 1840 – 2,800 miles
 - 1860 – 30,000 miles

Communications

- Post Office Created
- Cable run to Europe – Cyrus Field
- Pony Express
- Telegraph – Samuel Morse
- Press

Cost cut down to 1 Cent

Gets rid of middle man information

Creates a mass culture