# Early 196 Industrialization in America: The Market Revolution

AP US History

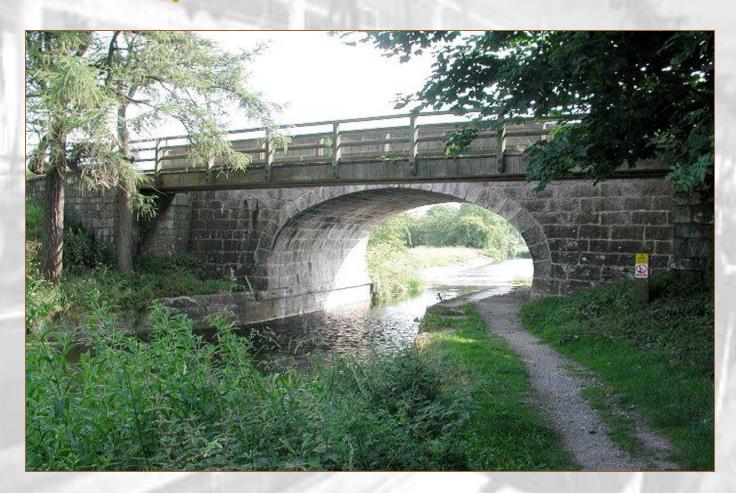
# THEMATIC QUESTION: What were the results of Carly 19G industrialization in America?



# Transportation

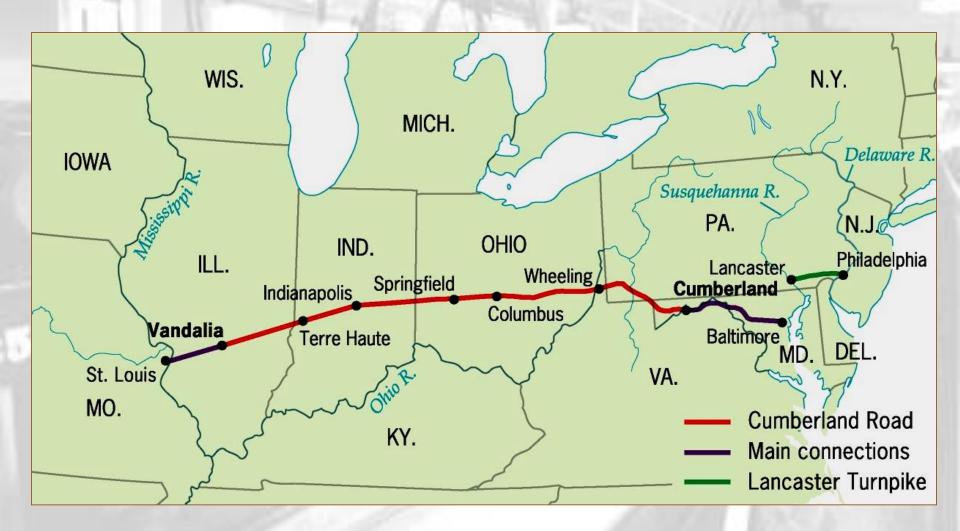
Revolution

#### First Turnpike- 1790 Lancaster, PA



By 1832, nearly 2400 mi. of road connected most major cities.

#### Cumberland (National Road), 1811



#### **Conestoga Covered Wagons**





#### Conestoga Trail, 1820s

#### **Erie Canal System**



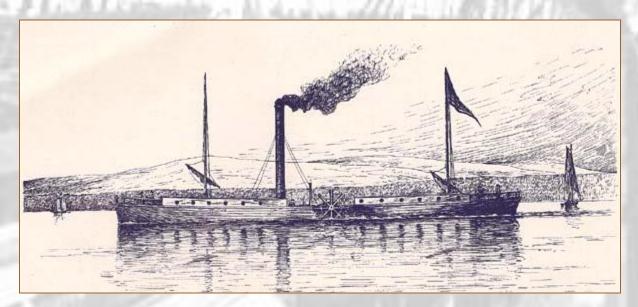
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#### Erie Canal, 1820s

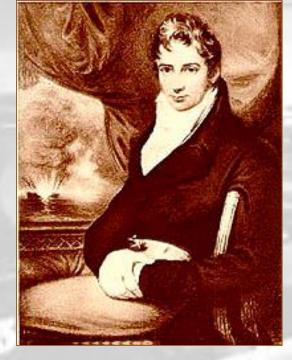


#### Begun in 1817; completed in 1825

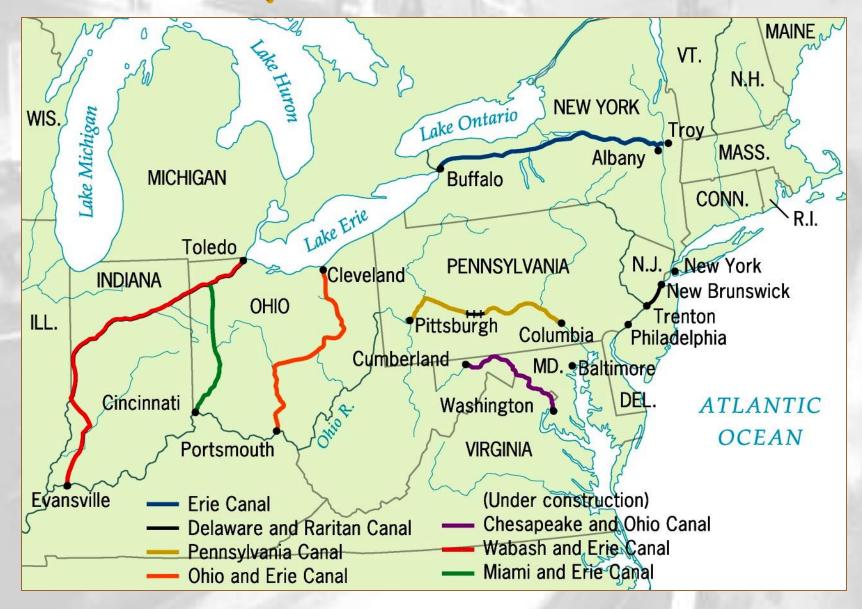
#### Robert Fulton & the Steamboat



#### 1807: The Clermont

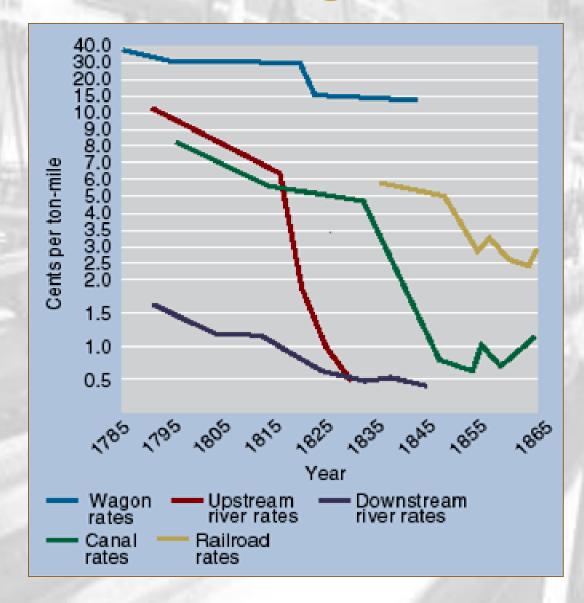


#### **Principal Canals in 1840**



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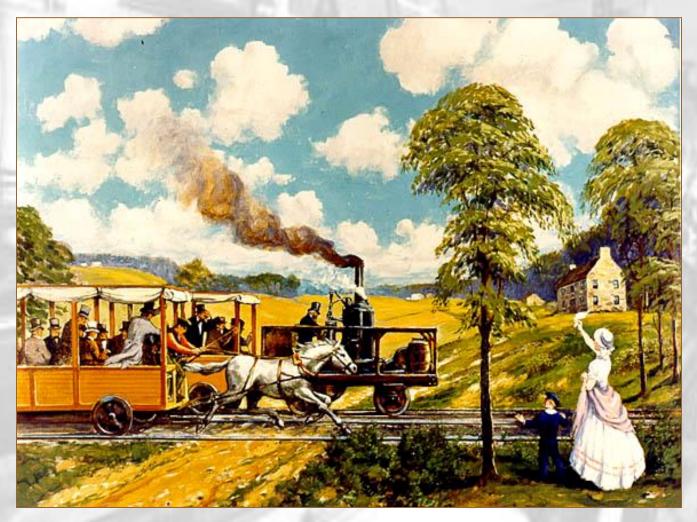
#### **Inland Freight Rates**



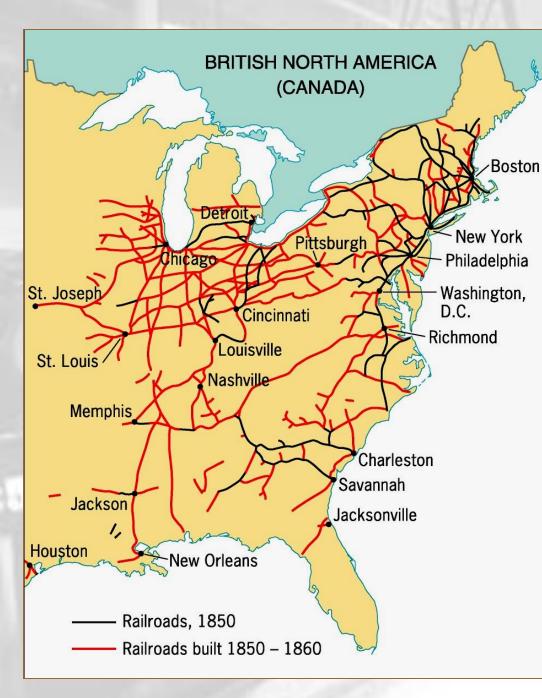




#### The "Iron Horse" Wins! (1830)



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



The Railroad Revolution, 1850s

Immigrant labor built the No. RRs.

Slave labor built the So. RRs.

# REM Inventions: "Yankee Ingenity"

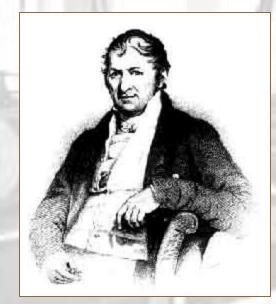
#### Resourcefulness & Experimentation

Americans were willing to try anything.

They were first copiers, then innovators.

 $1800 \rightarrow 41$  patents were approved.  $1860 \rightarrow 4,357$  " "

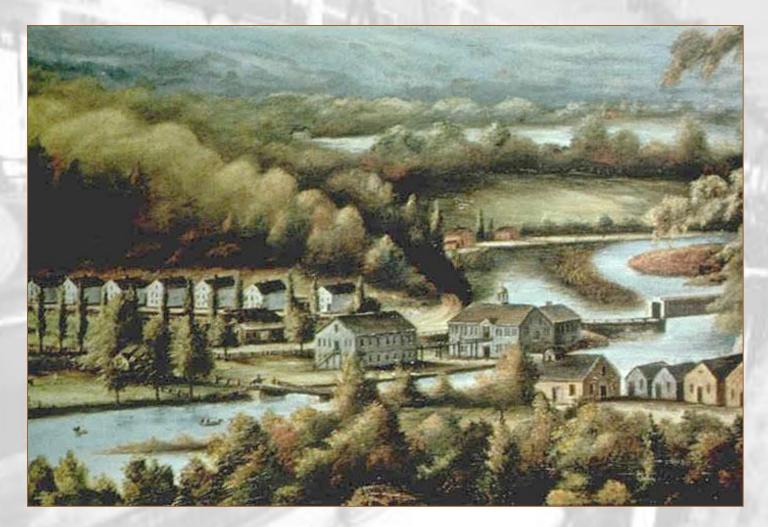
### Eli Whitney's Cotton Gin, 1791



#### Actually invented by a slave!

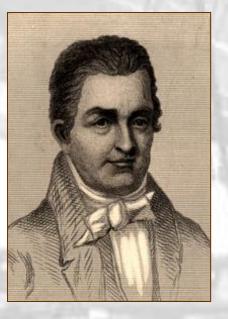


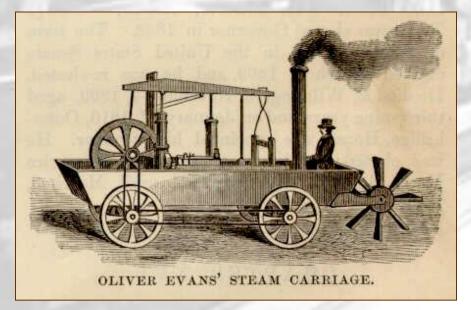
# Eli Whitney's Gun Factory



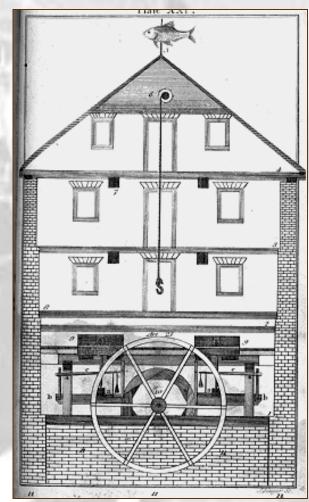
#### Interchangeable Parts Rifle

#### Oliver Evans



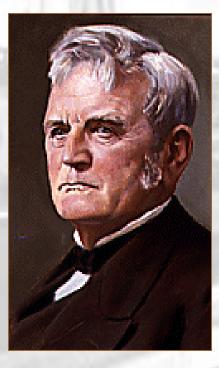


#### First automated flour mill

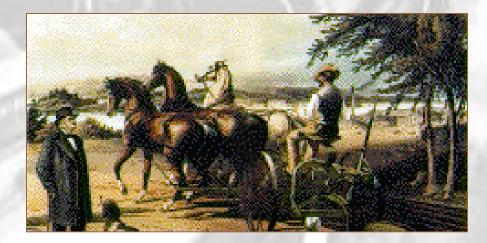


First prototype of the locomotive

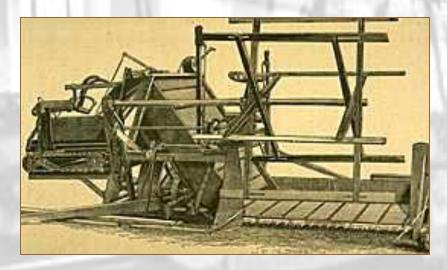
### John Deere & the Steel Plow (1837)







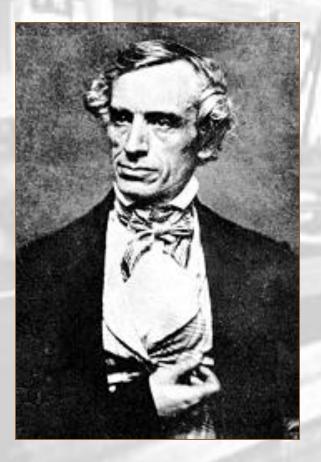
#### Cyrus McCormick & the Mechanical Reaper: 1831







#### Samuel F. B. Morse



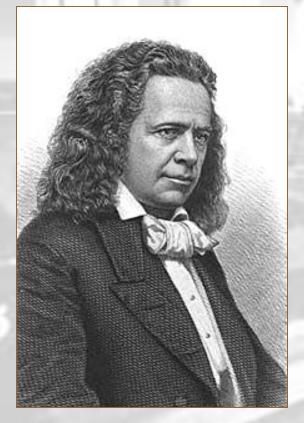


1840 - Telegraph

### Cyrus Field & the Transatlantic Cable, 1858

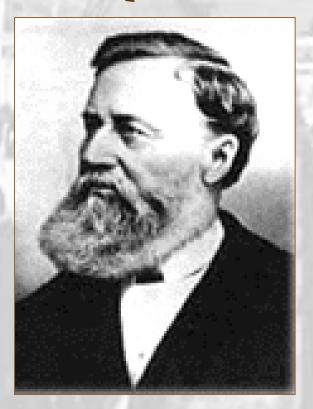


# Elias Howe & Isaac Singer





1840s Sewing Machine



#### The "American Dream"

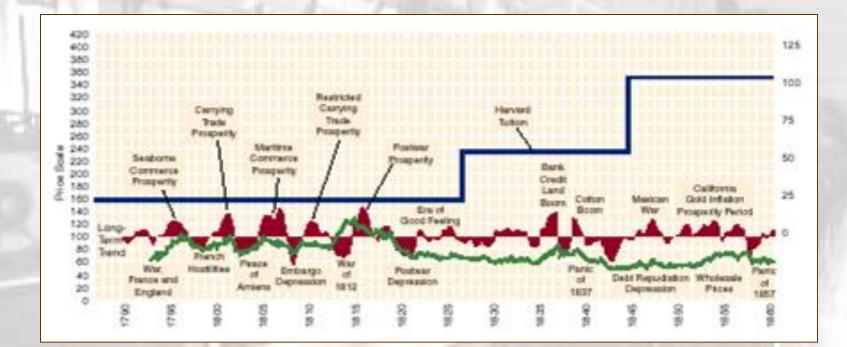
They all regarded material advance as the natural fruit of American republicanism & proof of the country's virtue and promise.

A German visitor in the 1840s, Friedrich List, observed:

Anything new is quickly introduced here, including all of the latest inventions. There is no clinging to old ways. The moment an American hears the word "invention," he pricks up his ears.

# The Northern Industrial "Juggernaut"

#### 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.

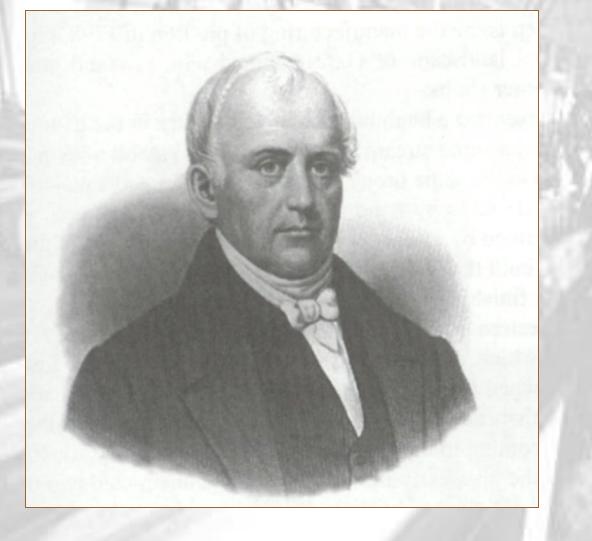
#### **Creating a Business-Friendly Climate** Supreme Court Rulings: \* Fletcher v. Peck (1810) \* Dartmouth v. Woodward (1819) \* McCulloch v. Maryland (1819) \* Gibbons v. Ogden (1824) \* Charles Rivers Bridge v. Warren Bridge (1835) General Incorporation Law → passed in New York, 1848.

Laissez faire → BUT, govt. did much to assist capitalism!

#### **Distribution of Wealth**

- \$ During the American Revolution, 45% of all wealth in the top 10% of the population.
- \$ 1845 Boston → top 4% owned over 65% of the wealth.
- \$ 1860 Philadelphia → top 1% owned over 50% of the wealth.
- \$ The gap between rich and poor was widening!

### Shady Samuel Slater ("Father of the Factory System")

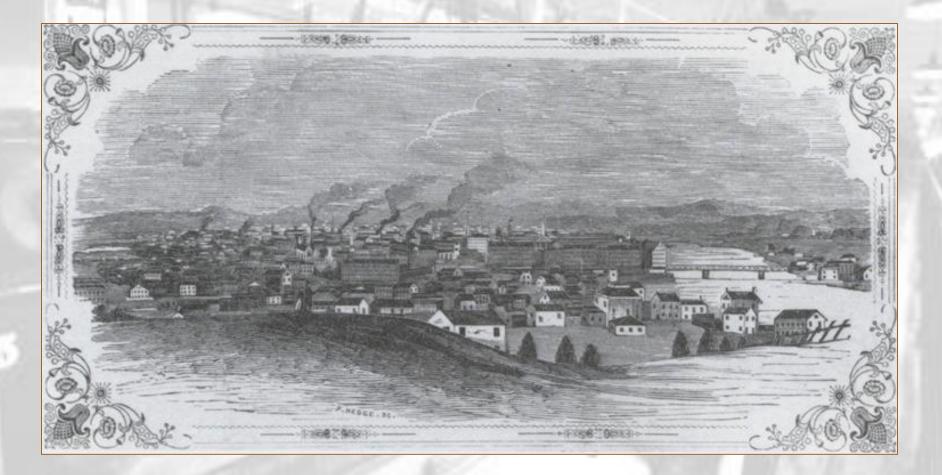


#### The Lowell/Waltham System: First Dual-Purpose Textile Plant



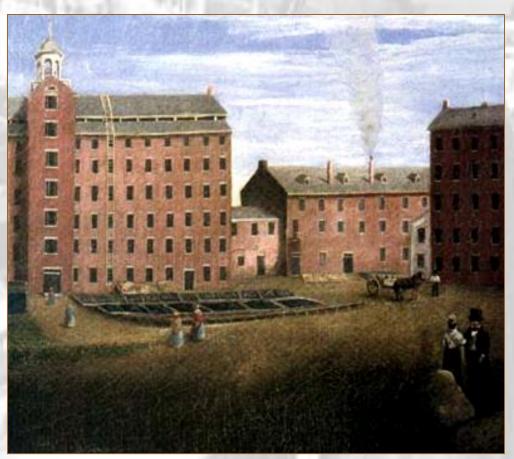
#### Francis Cabot Lowell's town - 1814

#### Lowell in 1850

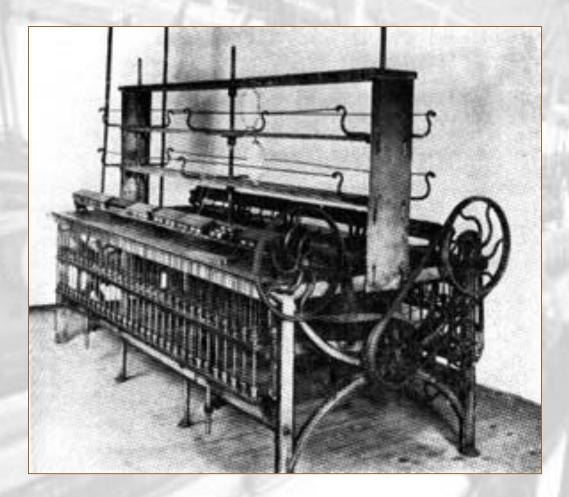


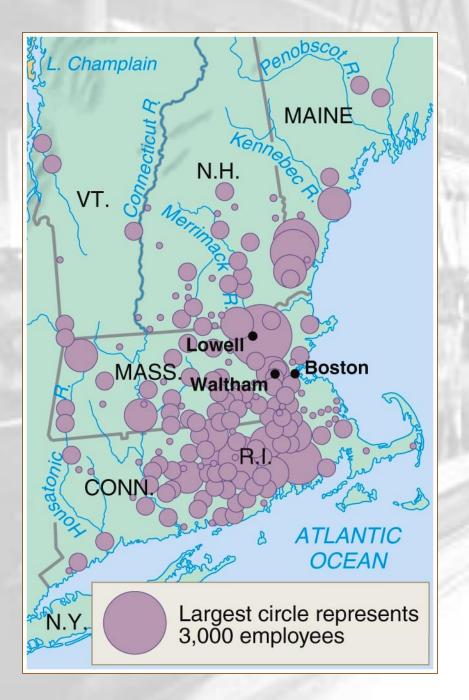






# Early Textile Loom





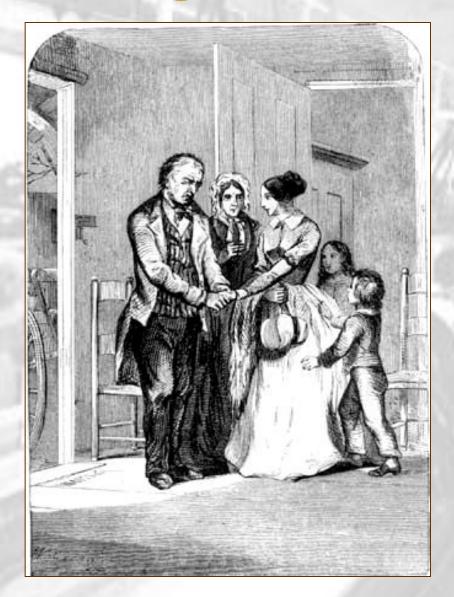
#### New England Textile Centers:

1830s

#### New England Dominance in Textiles

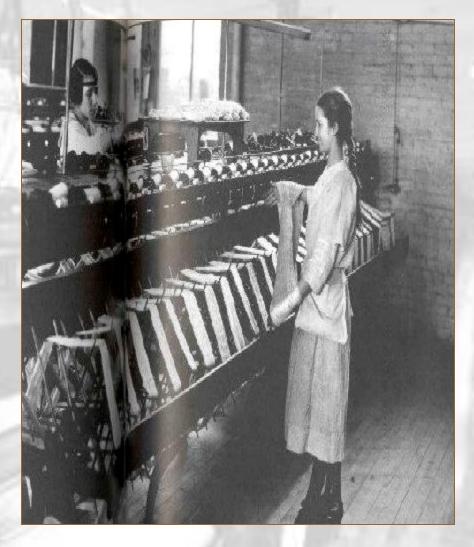


## Starting for Lowell



### Lowell Girls





### What was their typical "profile?"

### 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 6.80 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.

Morning Belle.	Dinner Belle.	Kooning Bells.
First bell	Ring out	Ring out, 6.80 P. M.
Second, 5.80 A. M.; Third, 6.20.	Ring in, 12.35 P. M.	Except on Saturday Evenings.
From Septen	aber 90th to March 19	h, inclusive.
	1 D' D.D.	Pusing D.D.
First bell 5.00 A. M.	Ring out, 12.80 P. M.	Ring out at
Second, 6.00 A. M. ; Third, 6.50.	Ring in, 1.05 P. M.	Except on Saturday Evenings.

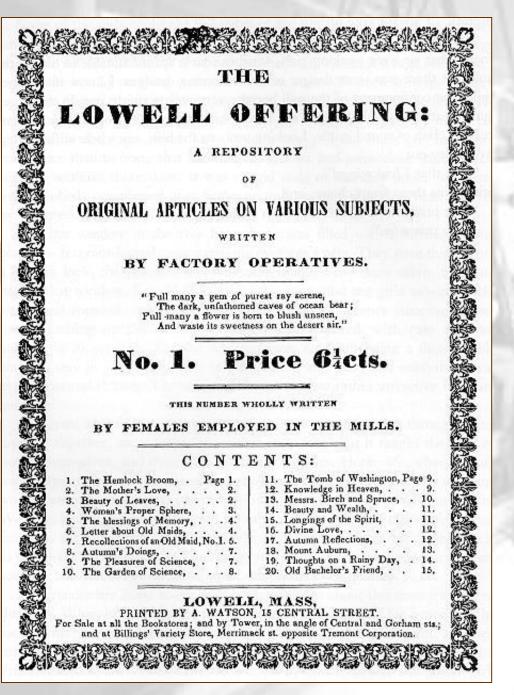
#### SATURDAY EVENING BELLS.

During APRIL, MAY, JUNE, JULY, and AUGUST, Bing Out, at 6.00 P. M. The remaining Saturday Brenings in the year, ring out as follows :

SEPTEMBER.				1	NOVEMBER.			JANUARY.						
First Sal	Lurday,	ring or	at 6.00	P. M.	Third S	atorday	ning or	at 4.00	P. M.	Third Se	aturday	, ring o	at 4.25 ]	P. M.
Second			5.45					8.65						
Third			5.80							C COUNT				
Fourth			5.20	**	diam'r	DEC	DEMB	SR.	- 11-	La ches	1 62	BRUAF	10 0 0 million	
Louis		TOBE		and the second	First 8a				P. M.	First Sa Second		, ring ou		
First Sa	tarday.	ring o	at 5.05	P. M.	Second			8.55		1.1919 C. 192			4.65	
								8.55		Third			202024	
		**	4.45	0.0.95200	Fourth			4.00	1.892	Fourth		"	5.10	
Fourth	**		4.85	**	Finh			4.00		- OCHER	M	AROH	1.	
Fifth		**	4.25		A THE				5 di	First Se	turday	, ring ou	at 5.25	P. M
	NOV	EMB	ER.	133	Distant S	JAI	NUAR	IY.	10 10 0	Second			5.80	**
First Sa				P. M.	First Sa	storday	, ring o	at 4.10	P. M.	Third			5.85	**
			4.05		Becond					Fourth			5.45	**

...

SPEED GATES commence hoisting three minutes before commencing



## 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 wok 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**



The Early Union Movement Workingman's Party (1829) \* Founded by Robert Dale Owen and others in New York City.

Early unions were usually local, social, and weak.

Commonwealth v. Hunt (1842).

Worker political parties were ineffective until the post-Civil War period.

# What's Ī America by the 1850sp

## **Regional Specialization**

### $EAST \rightarrow Industrial$

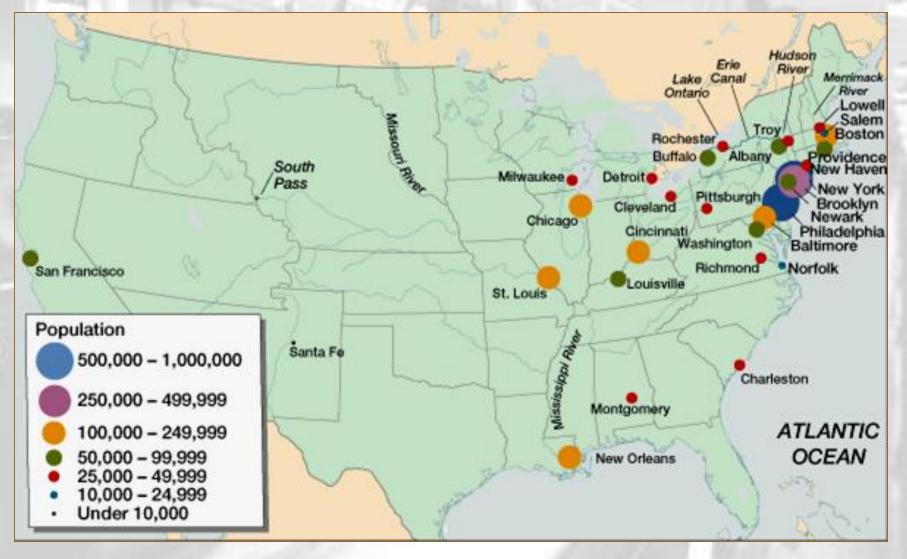
### SOUTH → Cotton & Slavery

### 

### American Population Centers in 1820

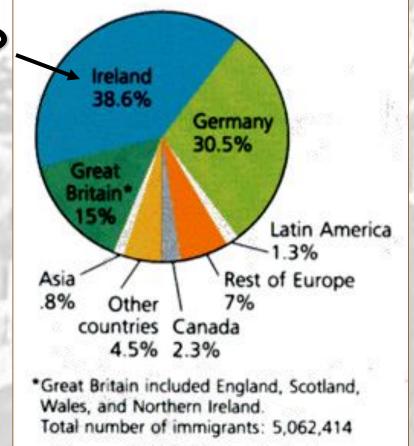


### American Population Centers in 1860



### National Origin of Immigrants: 1820 - 1860

Why now?



### Know-Nothing Party:

"The Supreme Order of the Star-Spangled Banner"



# NATIVES OF THE SOIL! ARQUSE!

#### 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,



Of Massachusetts, an original Member of the "OLD AMERICAN GUARD"

of 1845, will address the citizens of

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

on the

 $^{a}$ 

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

AGAINST THE EXTENSION OF SLAVERY.

Members of all parties in polities, and all persons who love our conmon country, and desire that our Pree 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 LADIM are especially invited to attend.

## 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

#### ECONOMIC?

#### POLITICAL?

The results of early 19e industrialization in America?

SOCIAL?

FUTURE PROBLEMS?