

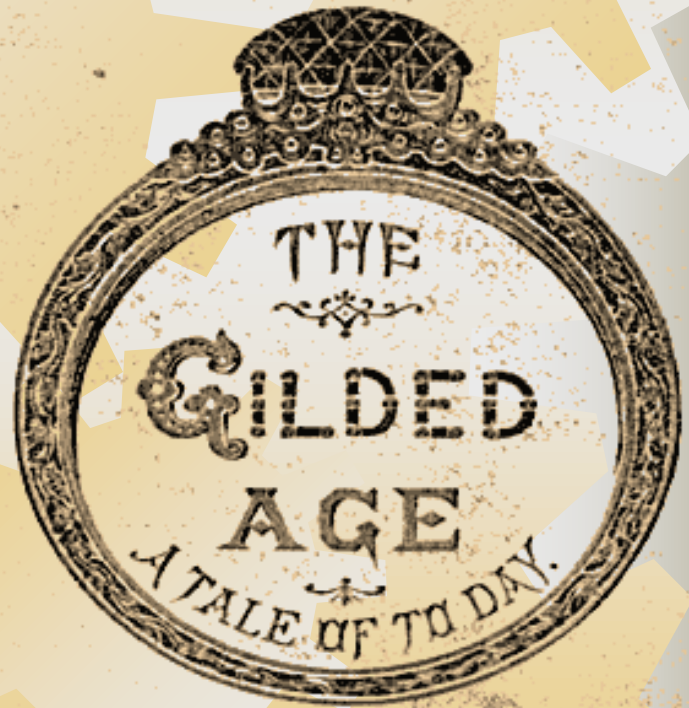


The Gilded Age: Rise of Industry & Big Business

1865-1900

A16W | 10.12.14

Origins of the Term: Mark Twain's *The Gilded Age* (1873)



GUIDING QUESTION

Why did the United States become an industrial power in the period 1865 and 1900?

How did this economic growth also cause problems?



QUESTION TO CONSIDER

**Has capitalism been good
or bad for the United
States?**



Causes of Rapid Industrialization

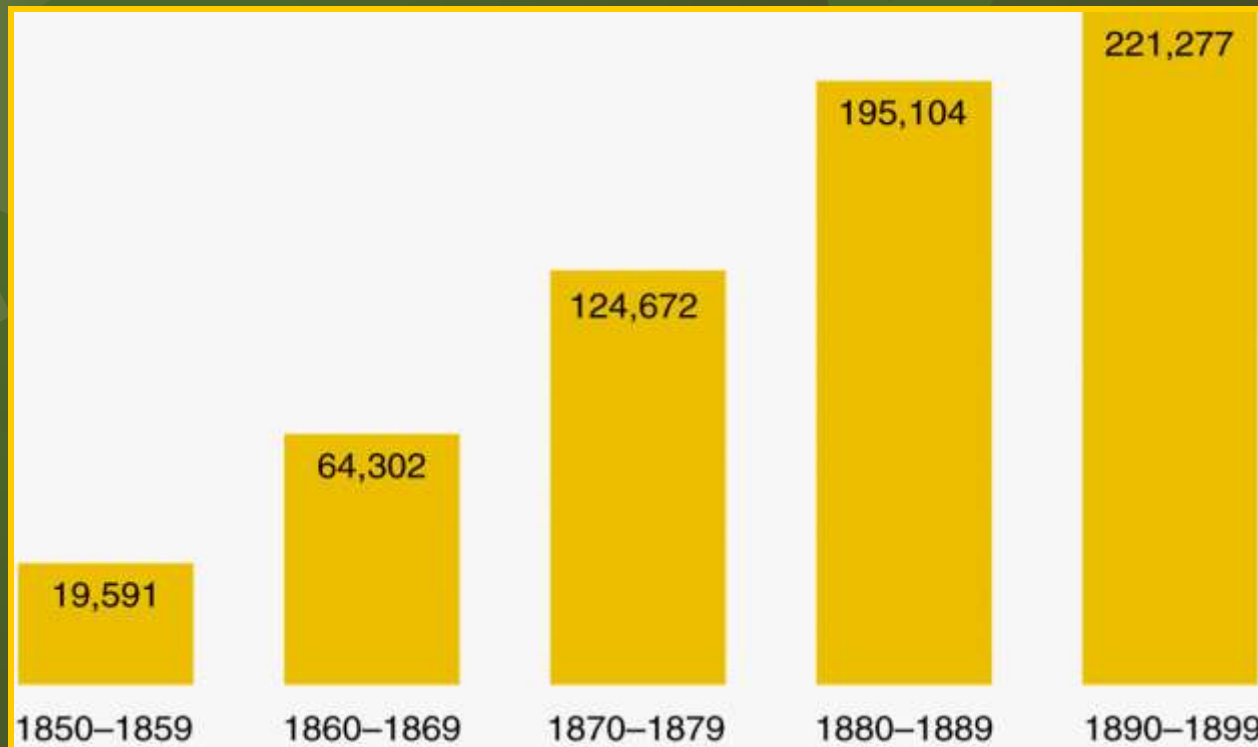
Rise to Industrial Supremacy

Percent of World Industrial Output

	Great Britain	United States	Germany
1870	32	23	13
1896–1900	20	30	17
1913	14	36	16
1926–1929	9	42	12

Causes of Rapid Industrialization

1. abundant supply of raw materials
2. abundant labor supply - migration, immigration
3. new technology - innovations that raise productivity



- Patents - US granted 36K total patents prior to 1860, 440K from 1860-1890

Causes of Rapid Industrialization

4. abundant capital
5. talented businessmen (entrepreneurs)
6. new types of business organization
7. growing markets - expansion of population and settled area (West, cities)
8. business-friendly governments - laissez-faire, but: subsidies, tariffs
9. steam revolution of 1830s-1850s - railroads



**OLD INDUSTRIES
TRANSFORMED, NEW
INDUSTRIES BORN**

**OUT OF NEW TECHNOLOGY &
INNOVATION**



Railroad Network 1860s

— Railroad — Canal — Cattle trail — Overland trail • City (top 20)



Railroad Network 1870s

— Railroad — Canal — Cattle trail — Overland trail • City (top 20)



Railroad Network 1880s

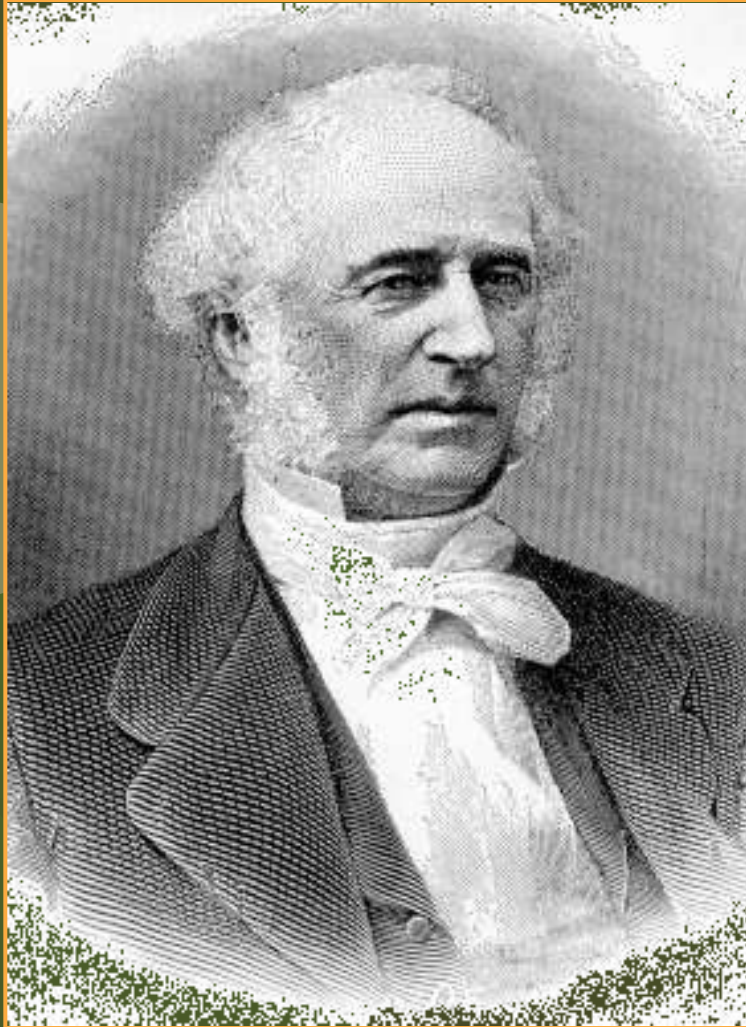
— Railroad — Canal — Cattle trail — Overland trail • City (top 20)

1. RAILROADS

Dramatic expansion key factor in industrial development:

- ✱ First big business in the U.S.
 - Corporations, stock
 - ✱ New methods of management
 - ✱ “pools” (*cartels*)
- ✱ Key to opening the West
- ✱ Aided the development of other industries

Railroads Create Great Wealth



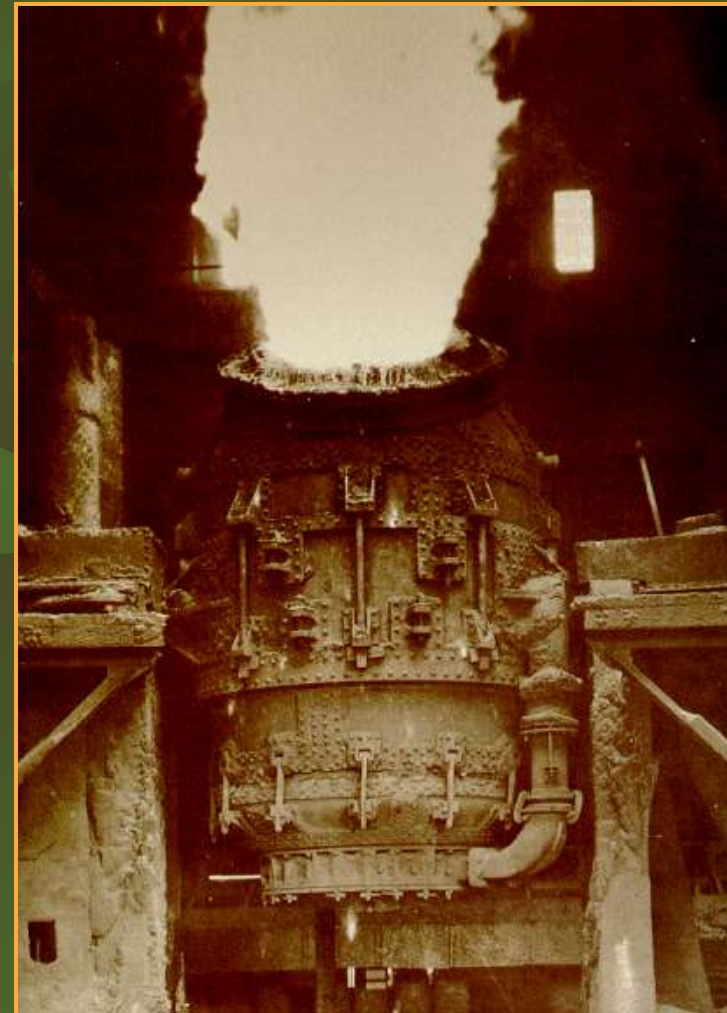
Cornelius Vanderbilt



Jay Gould

2. STEEL

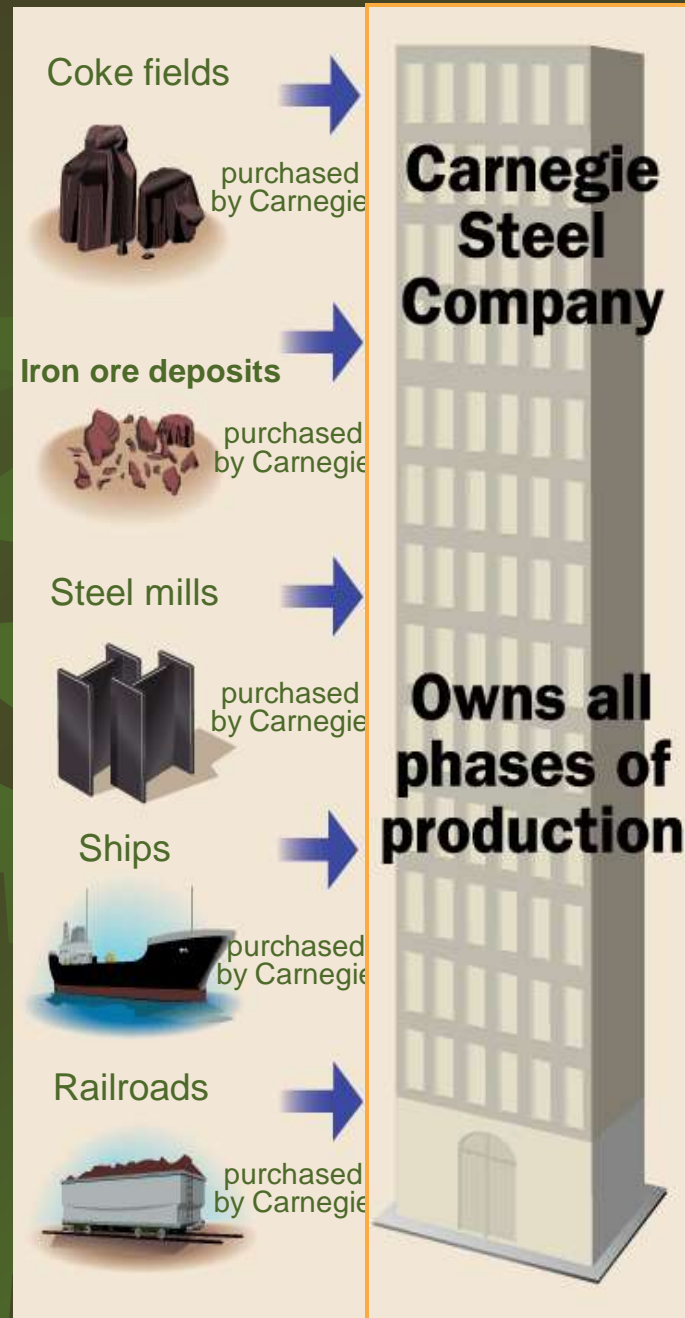
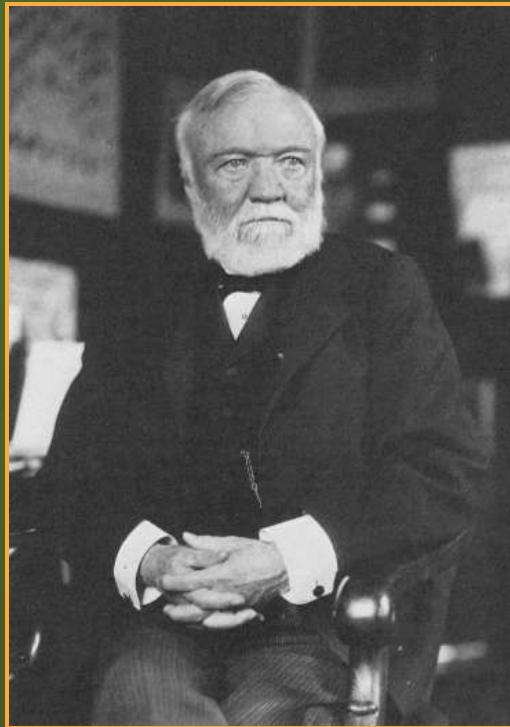
☀ Bessemer-Kelly Process



2. STEEL & Carnegie

- ★ Andrew Carnegie
- ★ mass production
- ★ economies of scale
- ★ “vertical integration”

Labor?

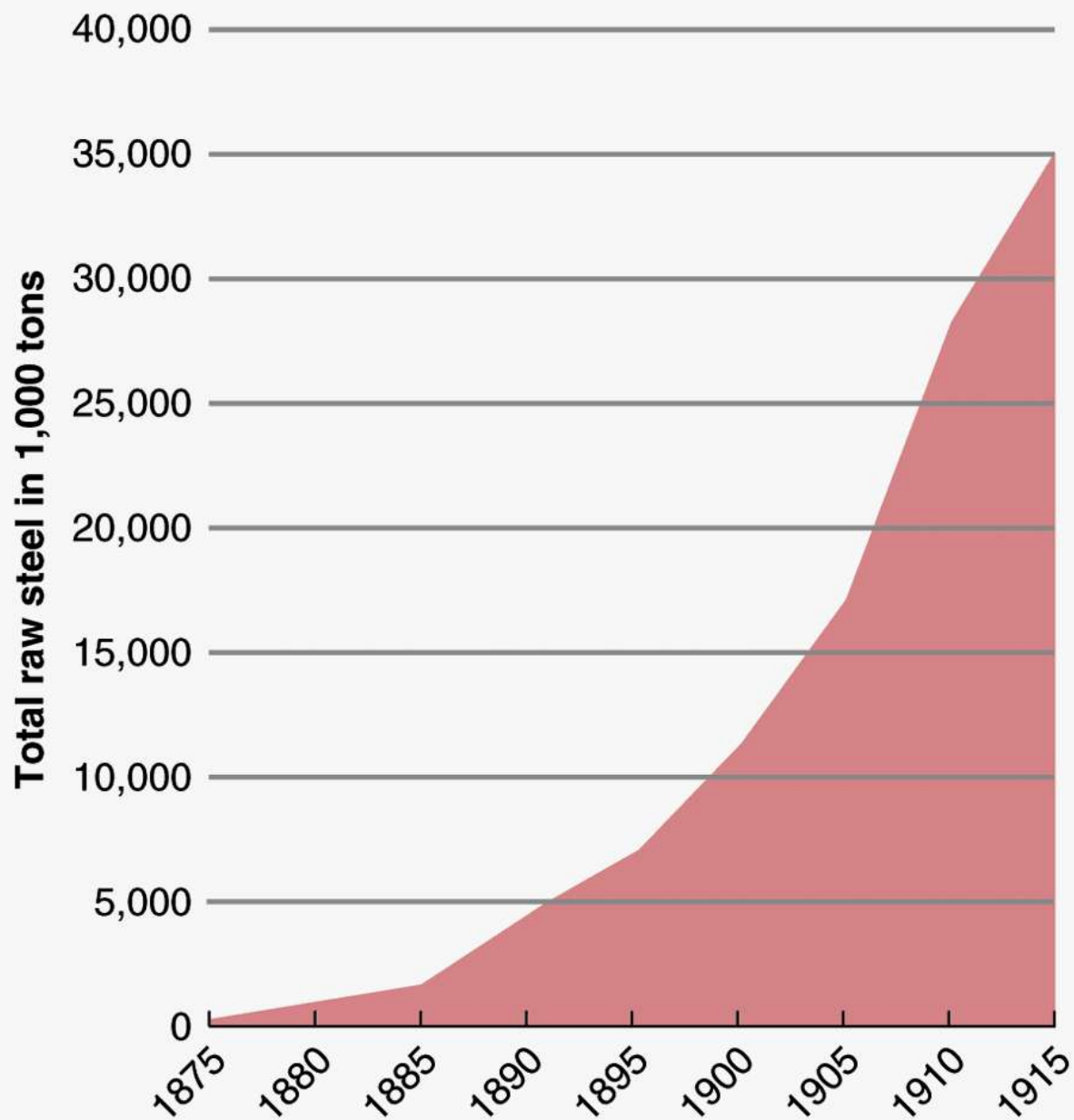




Iron and Steel Production, 1900

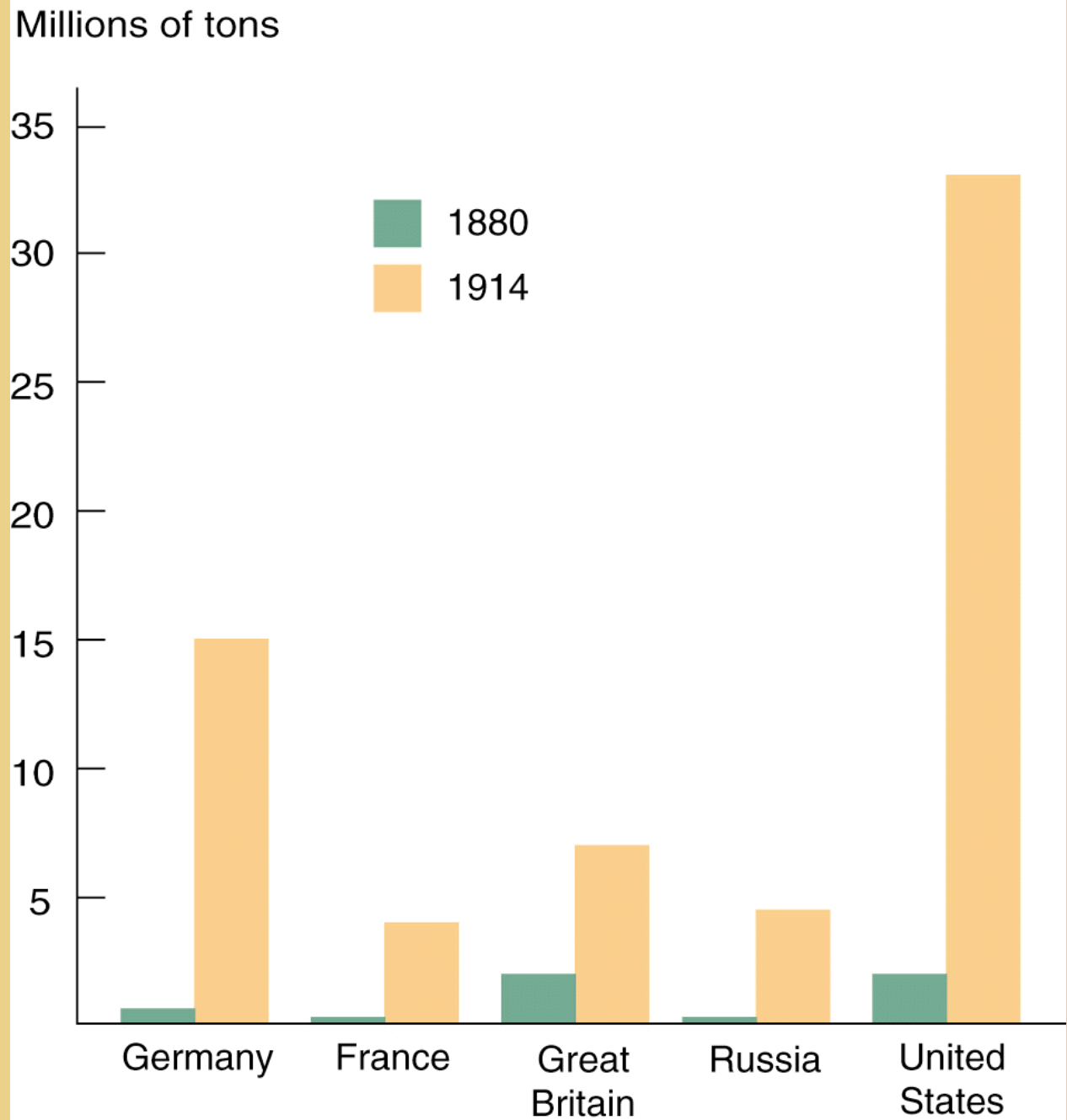


Carnegie Mansion, New York



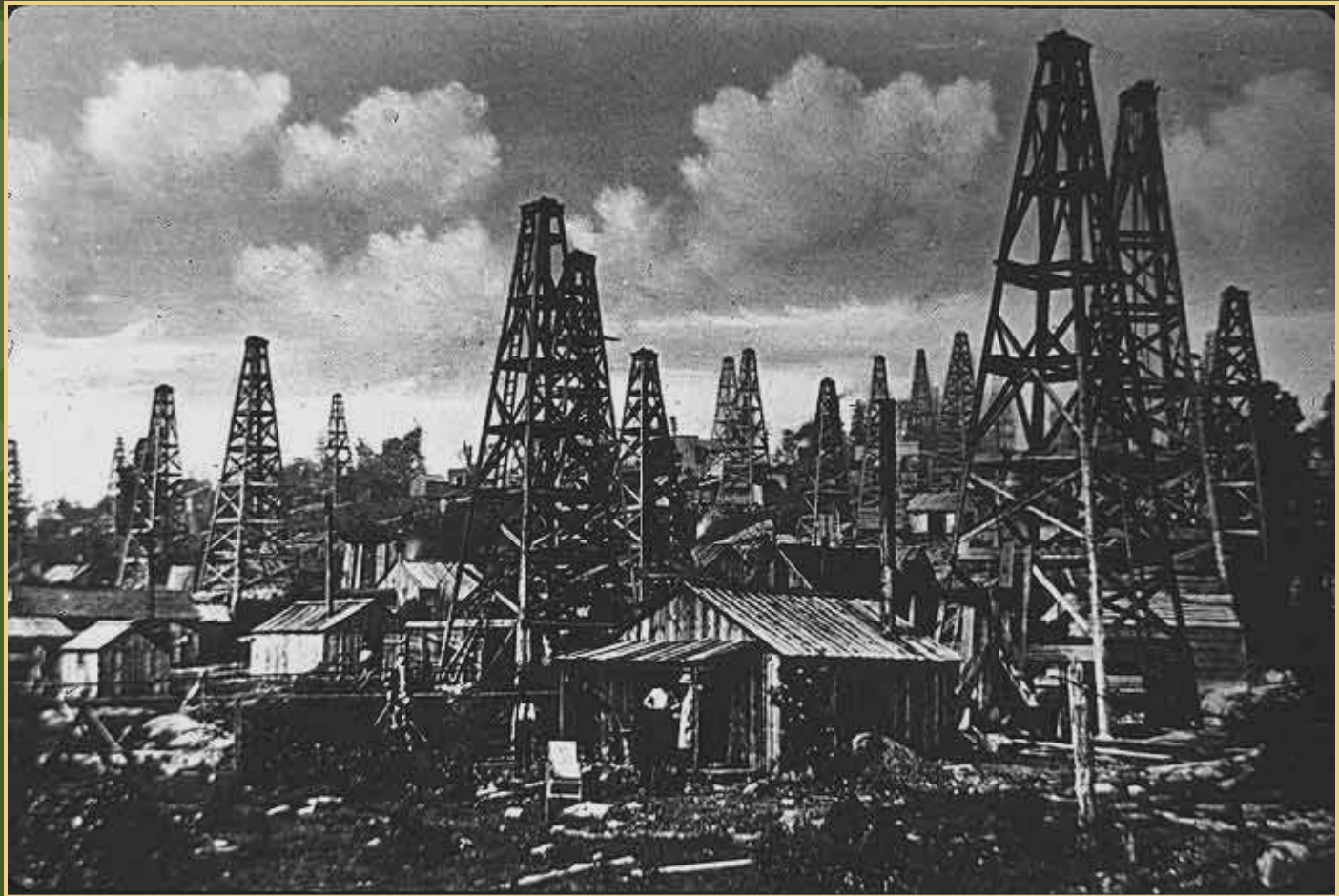
Iron & Steel Production 1875-1915

International Steel Production, 1880 & 1914



3. OIL & Rockefeller

★ George Bissell ★ Edwin Drake

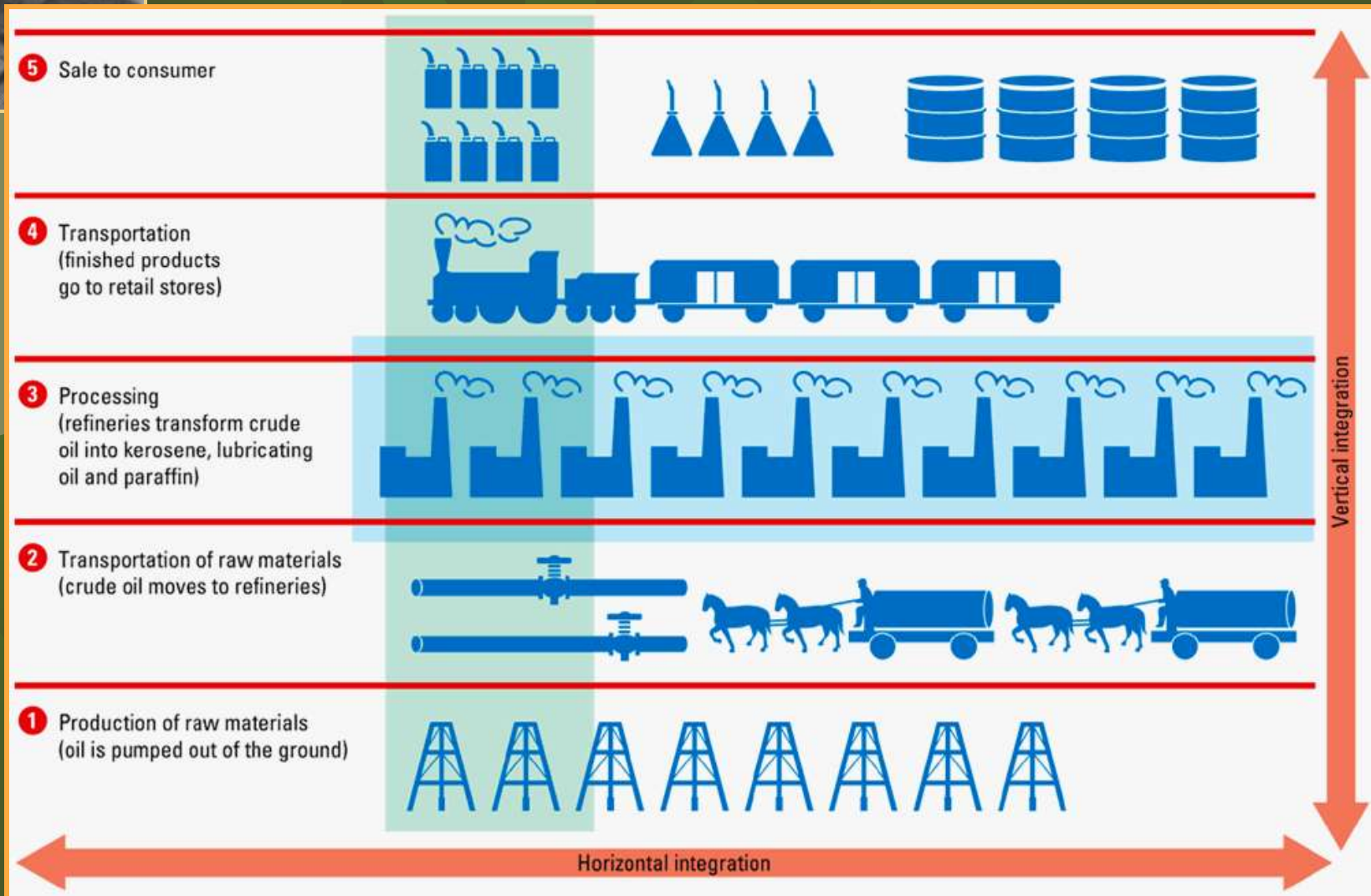


Oil Field, Western PA, 1860s



- John D. Rockefeller
- Standard Oil Co.
- horizontal integration

3. OIL



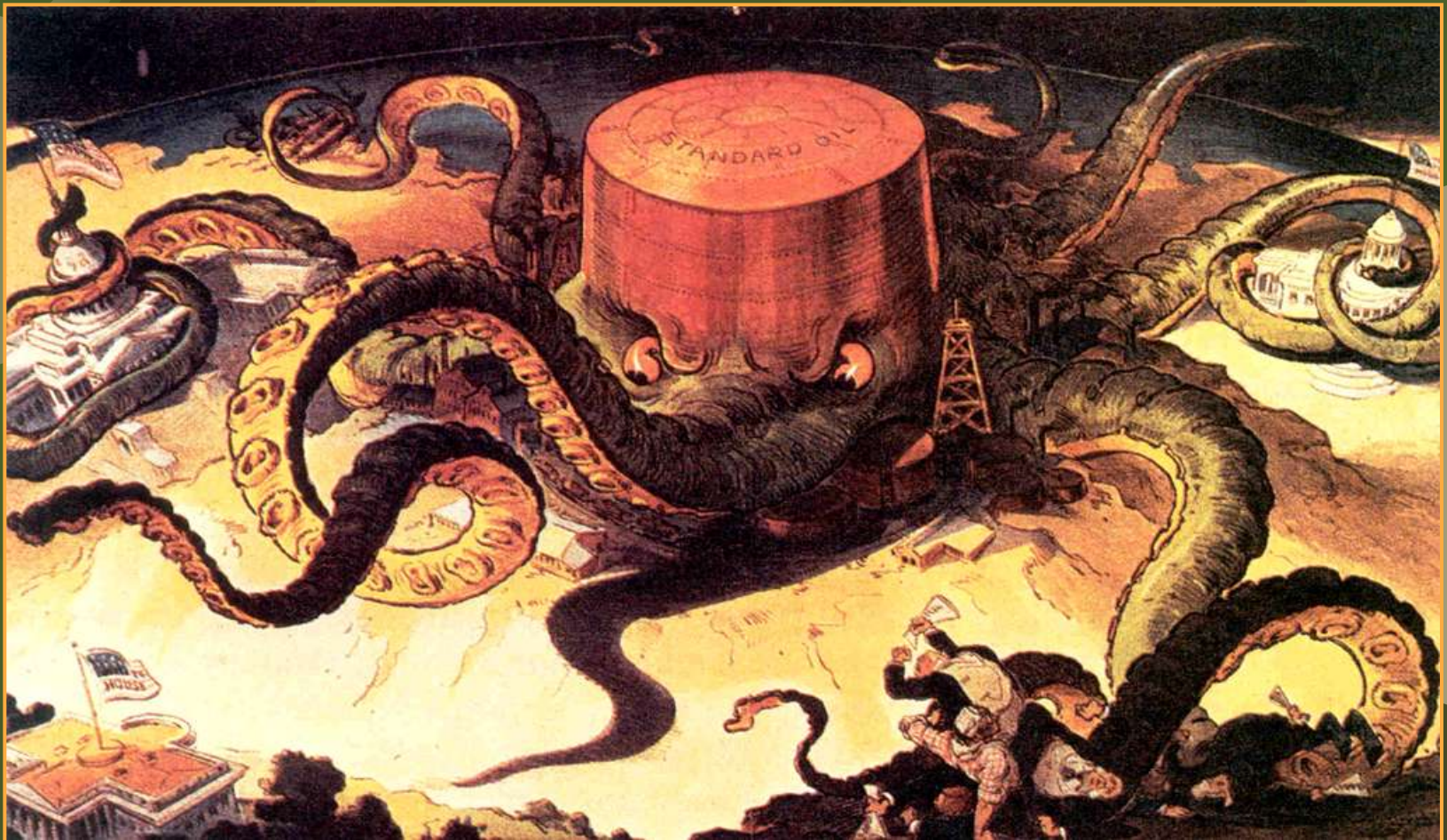
3. OIL & Rockefeller

- ✱ trust

- ✱ monopoly

- ✱ holding company

- ✱ Problem of the “trusts” ↴



4. ELECTRICITY & Edison

★ Thomas Edison



Thomas Edison in his Menlo Park, NJ Lab

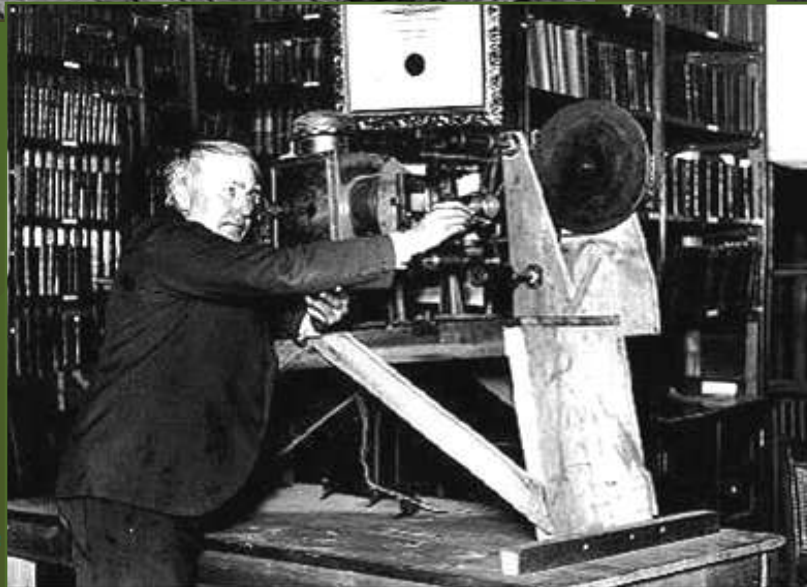




Edison's Menlo Park Lab



The Phonograph
(1877)



The Motion Picture
Camera



The Ediphone or Dictaphone

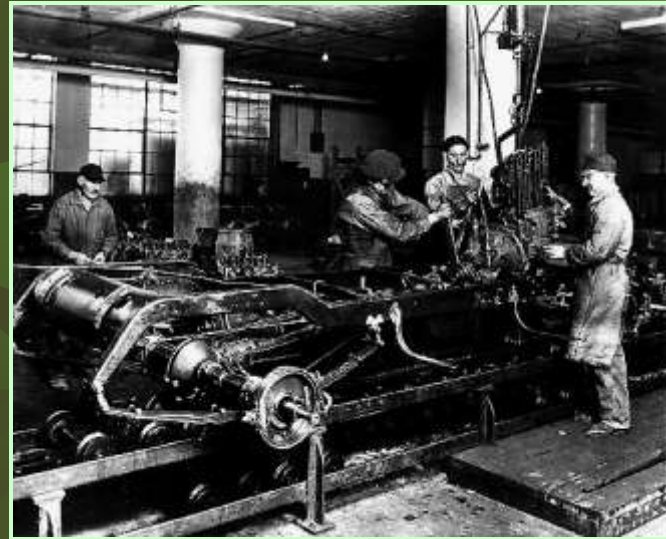
Edison:

- innovator
- businessman
- Age of technology



5. The AUTOMOBILE, Ford & Mass Production

- ✦ Henry Ford
- ✦ “Fordism”
- ✦ Taylorism



The Moving Assembly Line

1913 Ford
Model T

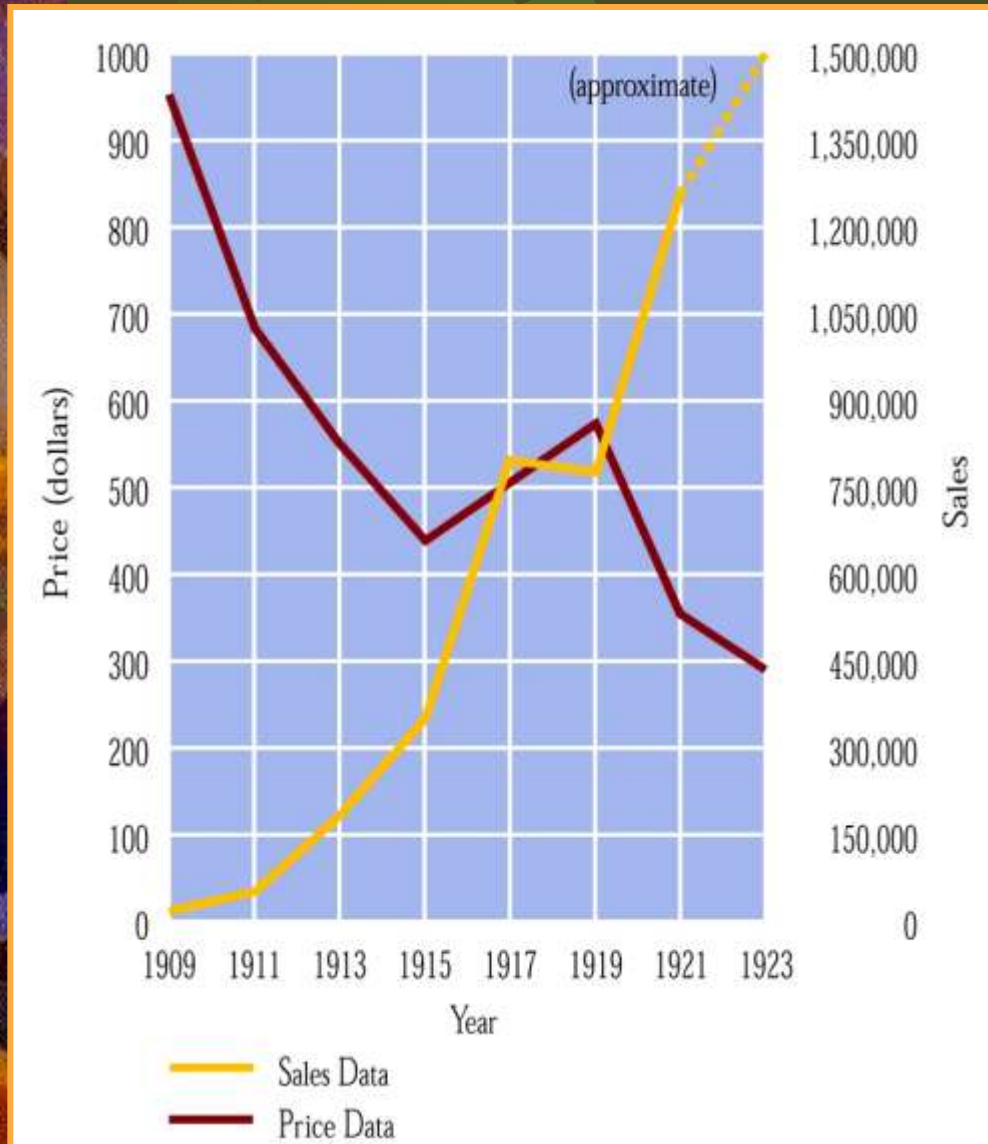
Ford & Mass Production

★ “Taylorism”



Frederick W. Taylor

The Principles of Scientific Management (1911)



Model T Prices & Sales, 1909-1923

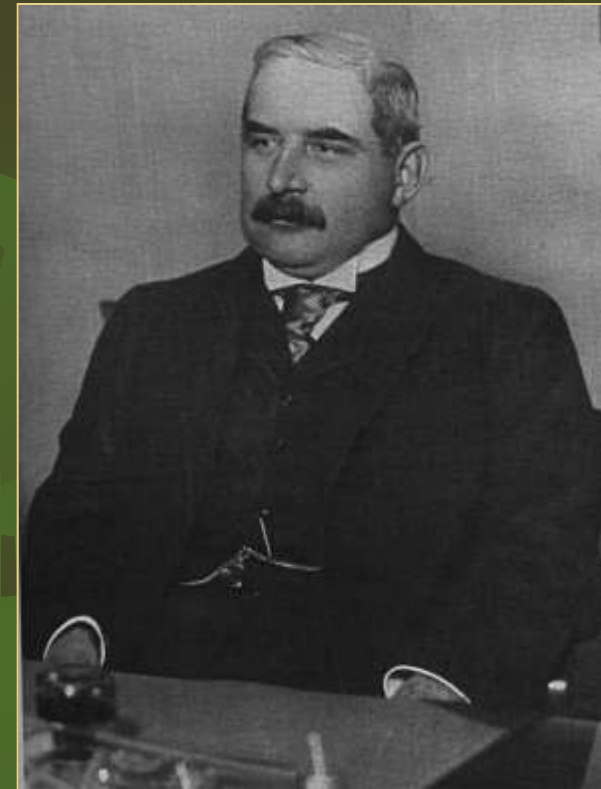
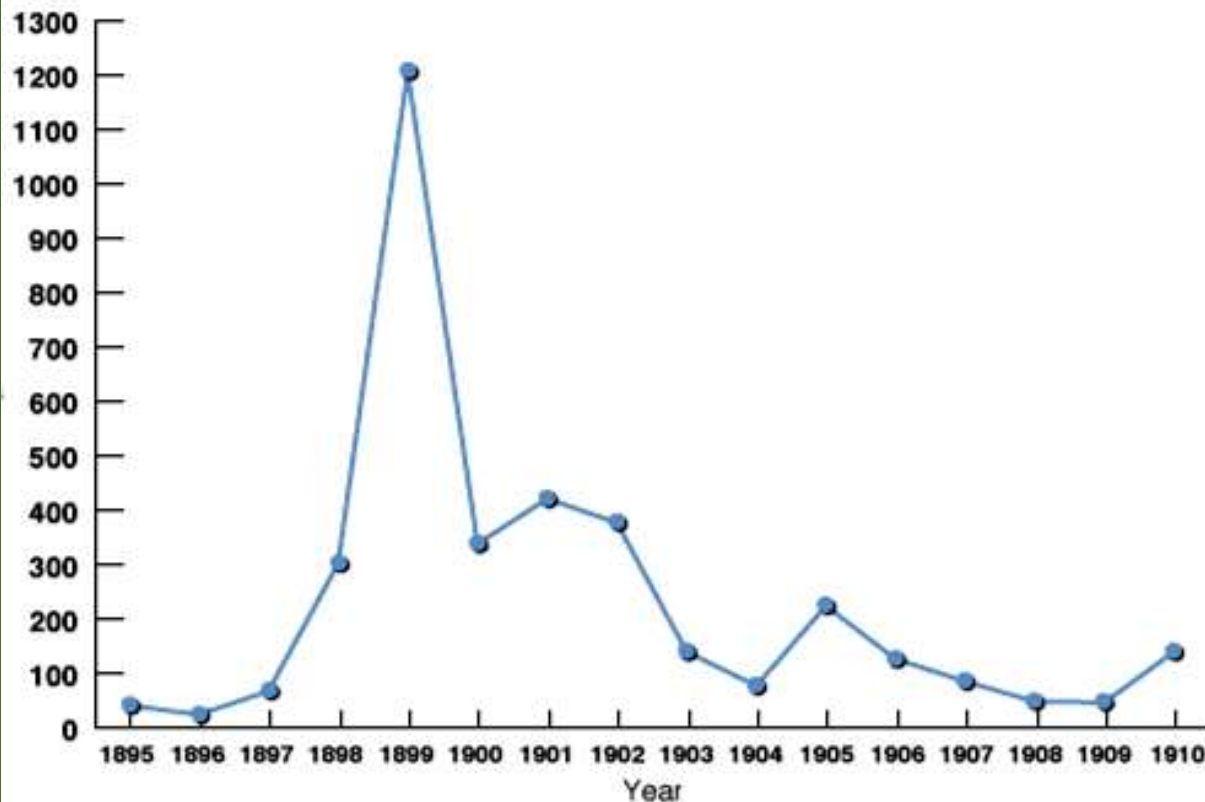
6. Consolidation

- ★ J.P. Morgan

- ★ consolidation

 - holding companies

 - corporate mergers



J.P. Morgan

Number of corporate
mergers, 1895-1910

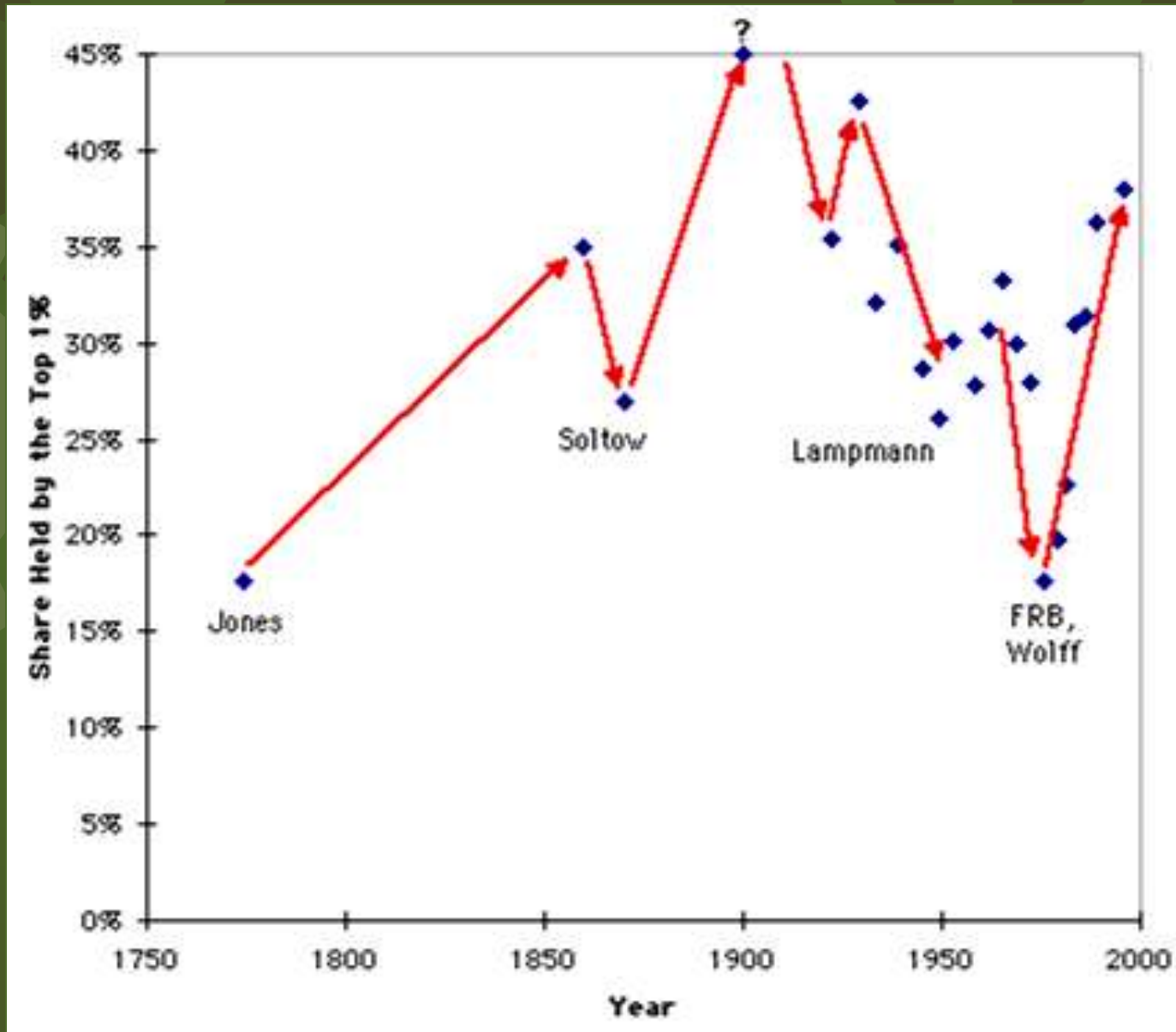
Industrial Consolidation: Iron & Steel Firms

	1870	1900
No. of firms	808	669
No. of employees	78,000	272,000
Output (tons)	3,200,000	29,500,000
Capital invested	\$121,000,000	\$590,000,000

Wall Street: 1867 & 1900



Wealth Concentration Held by Top 1% of Households





DEFENDING & CRITICIZING THE NEW INDUSTRIAL CAPITALIST CULTURE

“The Protectors of Our Industries”



The “Bosses” of the Senate



GUIDING QUESTION

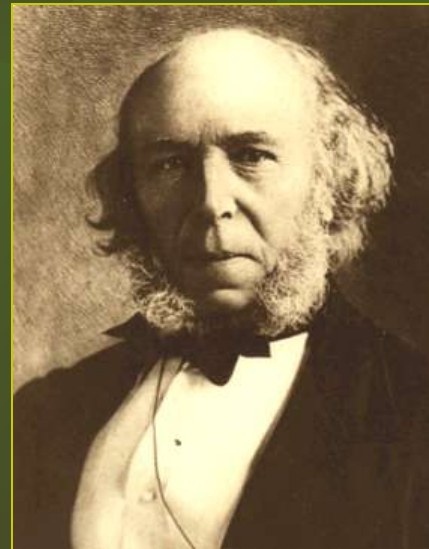
How did proponents justify the extremes of wealth and poverty in the United States in the late 19th and early 20th centuries?

How did critics explain the extremes and what, if anything, did they propose to do about it?

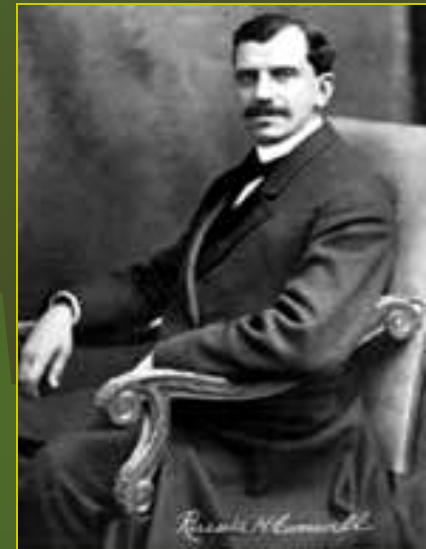
- Herbert Spencer / William Graham Sumner
- Andrew Carnegie, *The Gospel of Wealth*
- Horatio Alger
- Booker T. Washington
- Henry George, *Progress and Poverty*
- Eugene V. Debs

DEFENSES OF THE NEW INDUSTRIAL CAPITALISM

- ★ laissez-faire
 - Adam Smith
- ★ social darwinism
 - Herbert Spencer
 - “survival of the fittest”
- ★ Andrew Carnegie
 - *The Gospel of Wealth*
- ★ Russell Conwell
 - “Acres of Diamonds”
- ★ Horatio Alger
 - Protestant work ethic



Herbert Spencer



Russell H. Conwell





Defenses of Industrial Capitalism

Social Darwinism

“The growth of a large business is merely the survival of the fittest.”

-John D. Rockefeller

CRITICISMS OF INDUSTRIAL CAPITALISM

- ✴ Socialist Labor Party

- ✴ Eugene Debs

- ✴ Henry George, *Progress and Poverty*

- ✴ Edward Bellemey, *Looking Backward*

- ✴ business cycle

- ✴ recessions and panics