#### **AP US HISTORY**

Industrialization: "Shaping of Modern America"

## I. Late 19th C. Industrial boom:

#### A. Trends:

- 1. most rapid expansion of industry in world history
- 2. Urbanization and growth of cities
- 3. settling of the west
- 4. Improved agricultural methods => greater yields/larger farms/fewer farmers -Relation of trends: Industrial resources from west, workers in cities, increase food
- -Relation of trends: Industrial resources from west, workers in cities, increase food for more people, etc.
- -WHY?: THÊ CIVIL WAR AND THE FACTORS LISTED BELOW

### B. Factors:

- 1) natural resources (timber, coal, oil, iron, copper, farmland, rivers)
- 2) growing # of workers (high birthrate & migration)
- 3) Increases in capital (factories, transportation)
- 4) Increases in consumers
- 5) Innovation & Inventions (such as....?)
- 6) "Free Enterprise"/laissez-faire
- 7) Protective Tariffs
- =>Birth of the "Robber Barons"

### II. 1st Big Business? = Railroads

- A. In 1890, over \$1 billion in passenger & freights revenue (twice that of Fed. Gov't)
  - How funded? ->private & Gov't Subsidies (R.R. Debt. 5.1 Bil.

Nat'l Debt. 1.1 Bil.)

- B. "System" Builders
  - 1. examples:
    - Cornelius Vanderbilt: N.Y. Central
    - Thomas Scott: Pennsylvania
    - Jay Gould: Union Pacific/ Missouri Pacific
  - 2. used "feeder lines"
  - 3. Standard Gauge 1886: 4' 8.5"
  - 4. Formed Trusts

### C. Effect on Economy:

- 1. Spread growth (economic & settlement)
- 2. Created 1000's of jobs (direct and indirect)
- 3. Many new Technologies -(ex. = air brake, steel (sort of))
- 4. Close ties with telegraph -Western Union
- 5. Time Zones

### III. Innovations/

### **Effects:**

(Henry) Bessemer Process -blast of hot air reduces impurities

(1850's)

-Steel less expensive - Mass Produced - "Iron Belt" - Stronger Bridges

- Better tools & Machines

- Household items - Stronger R.R. Tracks

Oil as fuel

- Better Light (Edwin drake 1st well - Better lubricant

Pennsylvania 1859) - later: combustion engines

**Telegraph** 

- Faster communication (F.B. Morse 1837) - Nat'l System

-Western Union

**Telephone** 

(A.G. Bell 1871)

- Bell Monopoly - Comm. even faster

The Dynamo (Elec. Gen.)

(Michael Faraday, Joe Henry 1831)

- Electricity for Factories

- Inventions

Electric Power Plant (Thomas Edison)

-efficient collection and distribution -lit cities and powered factories

Note: Thomas Edison holds the world record with 1,093 patents - Power Plant - Phonograph - Light bulb -etc.

#### IV. Rise of Big Business:

-There are three kinds of business ownership: (before 1860, most companies were either A or B) A. proprietorship (1 person)

B. partnership (2 or more people -small group)

C. **Corporations** (stockholders -public commodity)

1. a certificate of ownership is granted by the state

2. dividends to stockholders

3. advantages to incorporating:

a. more \$ =more capital =economies of scale (lower cost per unit)

b. Limited Liability (stockholders lose only \$ invested)

c. Not affected by death = greater stability = bank support

- V. <u>The "Robber Barons":</u> The following Corporations became successful monopolies that many saw as being unfair. Hence the term. By the 1890's, both controlled about 90% of their industry.
  - A. **STANDARD OIL** (John D. Rockefeller -1870)
    - 1. sold 10,000 shares totaling \$1 million to start the company
    - 2. **vertical integration:** cut costs by controlling all phases of the business (drilling, refining, transportation, sales, etc. -had refineries, warehouses, pipelines etc.)
    - 3. 1st to establish **departments** for efficiency (billing, shipping, legal, etc.)
    - 4. 1st to set up **trusts** to drive out unwanted competition
  - B. U. S. STEEL (Andrew Carnegie -1870's, sold to J. P. Morgan 1901)
    - 1. Key to his success: \$\$ to research best ways to produce quality steel at the lowest costs. => allowed him to then undersell all competitors
    - 2. used vertical integration (NOTE: THE BOOK EMPHASIZES THIS FOR HIM)
    - 3. horizontal integration: fiercely bought out competitors
- VI. <u>Sales & Marketing reform:</u> Out of the necessity to compete, businesses began to employ new methods and tactics to get consumers to purchase their products. In a way this marked the birth of the **advertising industry**, now one of the five largest in America.
  - A. **The "Cereal Wars"** (Battle Creek Michigan)

KELLOGG (John)

VS.

POST (C. W.)

->Postum

- -1877: Granola
  - C
- -1895 Corn Flakes
- -(claimed product could help sick patients)

- ->Grape Nuts ->(claim: remedy for
- ->(claim: remedy for malaria & loose teeth)

#### moves:

- -> Kellogg switches focus to taste
- -> Post attacks Corn Flakes as being "not enough"
- -> Kellogg has big success when it introduces "trinkets"
- B. (Isaac) Singer Sewing Machines:
  - 1. 1851 own style -> straight needle =fast
  - 2. defeated U. S. inventor Elias Howe in a "patent war" (Howe died poor)
  - 3. Eliminated the middleman and opened own stores
    - = high profits and consumer satisfaction
  - 4. **Installment Plan:** allowed for sales to people who might not otherwise buy
  - 5. Consistently offered improved models with new features and took trade-ins

### VII. <u>Utilities & Monopolies:</u>

- A. Unique because patented inventions had to be duplicated for competition which is vital to capitalism => led to court battles for inventors like **Bell** and **Edison**
- B. Edison had less success protecting his patent because electric power was becoming a public necessity or "service."
- C. Edison's main competitors were:
  - -Thomson-Houston
  - -Westinghouse
- D. Edison merged with Thomson-Houston out of necessity in 1892 forming General Electric
- E. Bell successfully established the longest standing monopoly in American history. The government broke it up in the early 1980s

### VIII. The birth of BIG Insurance:

- A. Insurance companies boom because:
  - 1. demand for life insurance following the civil war
  - 2. the wealthy look to protect their acquisitions
- B. Consumers benefit from fierce competition, low rates, and low profits
  - => 3 "survivors" who become GIANTS:
    - 1. The Equitable
    - 2. New York Life
    - 3. Mutual Life
- C. Long term results:
  - 1. Hartford, Connecticut becomes the insurance capital of the U. S. & world
  - 2. One of the three biggest industries in America today

#### IX. Miscellaneous:

-First **department store:** "The Emporium" (8 stories)-New York, Alexander Stewart 1862

"Government & Industrialization"

Definition: "Laissez Faire" - Let the people do as they choose. (loose interpretation)

# X. How did Gov't help?:

- A. High Tariffs Eliminated many foreign competitors
- B. National Banking Act 1863 required federal licensing
  - => stabilized \$ & Banks
- C. Education (Morrill Act 1862)
  - -> land & \$ for "Ag. & Mech." Institutions
  - => Better workers
- D. Postal Reform
  - =>lower rates, direct home delivery, mail order!
- E. Subsidies & tax breaks
  - -(Ex. R.R.'s)

### XI. Gov't attempts to regulate:

- A. Problems of Growth & Competition
  - -> Winner = Monopoly = Higher Prices!!
- B. States began to attempt to Regulate
  - -> Supreme Court decisions protected rights of Corporations.
    - 1. Munn v. Illinois
    - 2. The Wabash Case
- C. Attempts at Federal Regulation: Did not hold up
  - 1. Interstate Commerce Act 1867 "Reasonable & Just Rates"
    - established the **ICC** (Interstate Commerce Commission)
  - 2. Sherman Antitrust Act 1890 (loosely worded)
    - any trust or otherwise in restraint of trade or commerce = illegal. =\$5000 + 1 yr.
- D. U.S. v. E.C. Knight 1895
  - 1. Sugar Trust (98% of industry)
  - 2. Supreme Court recognized companies right to control
    - a. not illegal because no restraint to trade
    - b. similar cases later ended on convictions for others

### XII. The Labor Movement:

- A. Very few Unions before Civil War -esp. in factories
- B. Commonwealth v. Hunt 1842 established their legality
- C. Grew rapidly after war
- D. Knights of labor
  - 1. formed 1869 by Philly garment workers (Uriah Stephens)
  - 2. leaders brought in political objectives
  - 3. wanted workers to be owners
  - 4. although secret, welcomed ALL groups in some form
  - 5. only 10,000 by 1879
  - 6. championed the 8 hr. workday
  - 7. under Terrence Powderly 700,000 by 1886 STRIKES
  - 8. poor organization and factionalization caused collapse

# E. **Haymarket Square Riot** (for 8 hr. day)

- 1. 80,000 protesters
- 2. 1 Protester killed & a bomb killed 7 police
  - =>hurt the labor cause

#### G. AFL (American Federation of Labor) - 1886

- 1. Adolph Strassen & Samuel Gomper
- 2. Accepted that workers were WAGE MAKERS & fought for increases in min. wage
- 3. used the strike
- 4. 1 million members by 1901

#### H. Strikes/Effect

- 1. 1877: *Great R.R. Strike* 
  - a. began in B. & O..
  - b. spread to 2/3 of R.R.
  - c. Pres. Hayes sent in troops
- 2. 1886: # of Strikes doubled
  - -> Pres. Cleveland proposed Arbitration board
- 3. 1892: **Homestead Steel Strike** (Carnegie)
  - a. 7 Guards Killed
  - b. 5 Month walkabout
  - c. failure = setback to ALL UNIONS

#### 4. 1894: Pullman Palace Car strike

- a. Amer. Railway Union Eugene v. Debs
- b. George Pullman holds line on rents
- c. Cleveland sent in troops
- d. Debs jailed = end