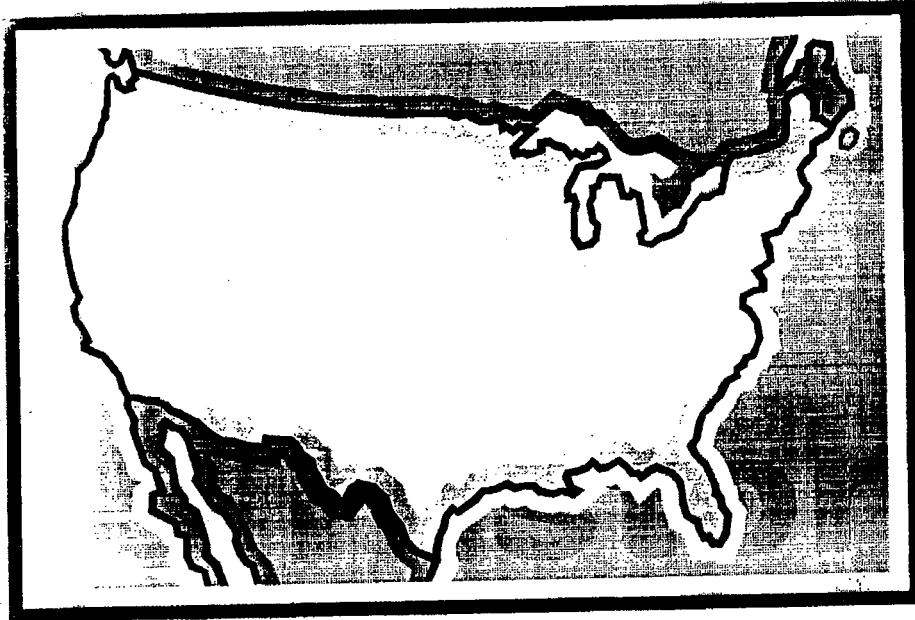


US History



Chapter 14: A New Industrial Age 1877-1900

Section 1: The Expansion of Industry

Section 2: The Age of the Railroads

Section 3: Big Business and Labor

Industrialization Negative Effects

- Mechanization
Reduced workers
Worth + Self-Respect.

Natural Resources fuel Industry

- Causes for growth
- Huge Resources
- Govt. Support for Business
- Large Urban population provides labor @ cheap rate
- Markets for New goods
- Changes for Industry;
- Black Gold or oil becomes New energy source for Industry
- Edwin L. Drake uses Steam Engine to drill oil in Pa.
- Later gasoline, a byproduct of oil
- Bessemer Steel Process developed by British manufacturer Henry Bessemer + Ironmaker American, William Kelly who inject molten Iron to remove carbon + create rust-resistant steel

Positive Effects

• Consumers gain power

The Expansion of Industry

New Uses for Steel

- Railroads become customer for steel
- Steel used to make barbed wire, steel plow, John Deere farm machines
- Made Innovative Construction possible
- Steel cables support Brooklyn Bridge
- William Le Baron Jenney designs 1st Skyscraper with steel frame
- Strong enough to build new heights.

Christopher Sholes

- 1867 Invents typewriter + creates New office jobs
- Invention puts more women to work

Thomas Edison + Electricity

- 1876 Establishes 1st Research Lab in Menlo Park, NJ + perfects lightbulb
- Patented in 1880
- George Westinghouse along w/ Edison added innovations to electricity to make it safer + cheaper
- Changes Nature of Business • Not Reliant on Water Power only

Alexander Graham Bell

- Bell + Thomas Watson Invent telephone + open worldwide communication

- Telephone + Typewriter help women get jobs
- Women make up 40% of Clerical Work force

Industrialization + Freedom

- Machinery Frees workers from hard labor + Improves their standard of living by reducing workday to 10 hrs.

GRANGER LAWS

- Grangers Take Political Action + Sponsor state political Candidates
- Grangers pushes Regulatory laws through Congress
- Railroads fight back with *Munn v. Illinois* but Court Rules Granger laws were Constitutional + Hold up Fed Govt's Right to Regulate Industry
- 1886 Supreme Court Rules states could not set rates on Interstate Commerce
- Congress Responds with Interstate Commerce Act 1887

- Panic of 1893 Railroads + other Businesses to Consolidate under Financial Companies
- Long legal Process made it difficult for ICC to Regulate
- Also to Establish 5 member Interstate Commerce Commission (ICC)
- The Act established Right of Fed Govt to regulate Railroads

ICC

The Age OF THE RAILROADS

Transcontinental Railroad

- Fed Govt Realized Railroads helped settle the West.
- Inspired Govt to grant land + loans to railroad Companies
- 1869 Promontory Utah Golden Spike marks the joining of the Central Pacific + Union Pacific Railroads + the start of the Transcontinental Railroad.
- Romance of Railroad brought adventure land, + A Fresh Start but reality was hardship, segregation, Abuse especially for Chinese + Irish Immigrants

Railroad Time

- 1869 Professor Dowd divides earth into 24 Time Zones or 1 for each hour
- The US has 4 time Zones + was accepted by Congress in 1918, later than others
- Before each Community operated on its own time, with noon when the sun was directly overhead.
- For example Noon in Boston was 12 minutes than noon in New York
- 1884 WorldWide Time Zones are set

George Pullman

- Manufactured sleeper cars + other Railroad Cars on Illinois prairie
- Town of Pullman provided for all of workers' Basic Needs + offered more luxury than for City Dwellers But under Rigid Company Rule + tightly controlled Environment

The Grange + Railroads

- The Grange demands govt. Control over Railroad Industry
- Railroad abuses Include:
 - Misuse of govt land grants
 - Fixing Prices
 - Charge different customers different Rates
 - Monopoly

Credit Mobilier 1864

- Stockholders + Congressmen Conspire to profit by Skimming money off Railroad
- Construction Contracts Such as Union Pacific
- 23 million in Stocks bonds + Cash Stolen
- VP Schuyler Colfax + Congressman James Garfield Implicated

New Towns + Markets

- Railroads foster growth of new towns + markets. + promote trade and Interdependence
- Individual towns specialize in Particular products + grew up along Rail Lines

Labor Unions Grow

Injunction = COURT ORDER

Carnegie's Innovations

Exploitation + UNSAFE WORKING CONDITIONS drew workers together + protest

Long hours, No Vacations, Sick leave, Unemployment or Workers' Compensation

Early Unions formed by SKILLED workers since 1700's = NLU

National Labor Union 1866 Ironworkers

1869 Uriah Stephens' Knights of Labor was open to all workers-Skill + Unskill

UNION Movements Diverge: Craft Unions of more than one skilled Trade such as American Fed of Labor (AFL) Founded by Samuel Gompers

Industrial Unionism in a Specific Industry as Eugene V. Debs forms American Railway Union

Socialist Union OR Industrial Workers of the World by Big Bill Haywood (Wobblies)

Rockefeller The Robber Baron

His Standard Oil Co used Trust Agreements or turning their stock over to a group of trustees or people who ran separate companies as one large Corporation

In Return Separate companies get dividends or profits earned by trust

Trusts were not legal mergers + Rocky used it to gain total control

1880 He controls 90% Refineries

He payed low wages + sold oil cheap until competitors could not compete + then raised prices

Yellow Dog Contract = Pledge not to join Union
Pullman Strike over rising housing costs causes President Cleveland to send Fed Troops to end it - Eugene Debs jailed

Homesstead Strike vs. Carnegie Steel for hiring scabs + Pinkerton Detectives Kills 3 detectives + 9 strikers

Strikers gather at Hay Market Sq. Chicago when bomb tossed at police line - 4 were hanged for causing a riot

Great Strike 1877 stop Railroads from moving freight which state governors claim impedes Interstate Commerce

Sherman Anti-Trust Act used against strikers

Strikes Turn Violent

Big Business And Labor

1848 Andrew Carnegie, Scot born to poor parents

Worked his way up to Superintendent of Pa. R+R

1873 He enters Steel biz

By 1899 Carnegie Steel Co.

He created new Business Strategies

1 Make better products more cheaply 2 Attract Talented people with Stock Options 3 Control Steel Industry as much as possible

VERTICAL Integration OR Buy out your Suppliers + Control Resources + Transport

HORIZONTAL Integration OR buy out competing Steel producers or Monopoly

By 1901 Carnegie controls almost all by being hard working, shrewd, innovative

Social Darwinism

A philosophy using Charles Darwin's theory of biological evolution.

Based on "Natural Selection" or Nature weeds out less-suited + enables the best-adapted to survive,

Herbert Spencer used Darwin's theory to explain evolution of human society + justify laissez-faire OR "hands off" by govt.

ROBBER BARON vs. Capt of Ind

The good + bad of Monopolies

Monopoly or Complete Control over it's Industry's Production, Wages + prices

Some use horizontal Integration in form of a merger or 1 corporation bought out stock of another

Some use holding Company or buy out stocks of other companies

J.P. Morgan (US Steel) buys Carnegie Steel + becomes largest holding

Some were Philanthropists or donated money back to Society

Yale professor William Sumner reasoned that success + failure in business were governed by natural law + govt had no right to regulate

poor people were lazy OR inferior