

- Poll tax starting 1877
 - Remains legal until amendment in 1960s
 - Splitting boxes - illiterate votes don't get counted
 - Illiteracy tests + grandfather clauses
- Civil rights still an issue
 - Republicans want blacks in the south to be able to vote
- Tariff remains high
- New England and Northern states vote generally republican
- Balance of political power
 - No election in this frame is won by more than 1%
- Name Gilded Age
 - At the top, everyone is doing well
 - * Rockefellers doing extremely well, etc
 - Below that, much worse
- National GNP increases greatly
 - Growth rate is 4% per annum
- National resources
 - Cheap Labor
 - Etc
- Growth leads to rising social friction
- By the end of the Gilded age, it looks ready for a revolution
- Bimetallic standard of money
 - Set of laws which consolidated to a 16:1 conversion from silver to gold
 - Problem is that the supply of gold and silver fluctuates because of the gold strikes in the west
- Invention becomes a business
 - (Think Bell Labs today)

- Railroad construction going on mostly in the North
 - Not in the south
 - Related to iron and steel
 - Allows production to assemble resources and spread products quickly
 - Hauls thousands of tons of raw resources each year
- Railroads need to raise capital
 - By 1900, as capital flows in railroads become much more common and become a network
 - Railroad debt is 5x the national debt (What the railroads owe since they had to borrow it to build the railroad)
 - Private investment is important
 - Government funds are only about 13%
 - Telegraph allows communication to coordinate all of the railroad stuffs
- Soon, the US has twice as much railroad as all of Europe combined
- Railroads are very competitive
 - Publish conflicting schedules
 - Et cetera
 - Pooling agreements are made (sometimes in writing)
 - * These always fall apart due to cheating
 - Laws are passed to prevent pools, etc
 - Regulations are ignored by the railroads
 - * Government brings suit, but the railroads hire very good lawyers
 - * Railroads win every case
- J Pierpont Morgan
 - Dominated US big business 1850-1900
- Different gauge railroads are consolidated
 - 4 feet, 8.5 inches
- Standards are set to allow for cooperational purposes
 - Before now, there are tons of time zones since the clocks are set when the sun rises

- Makes it impossible to coordinate railroads
 - 1883 - Standard four timezones
 - Increases efficiency
- 1887 - Air brakes are agreed on
- Consolodation patterns
 - Either buy all of the other companies (Horizontal integration)
 - Or consolidate vertically to control the entire process from raw to refined
- Carnegie steel corporation
 - Social Darwinism
 - Increase production of US steel
 - Starting with Bessemer Process, switch to Open Hearth Process
 - Increase of 3000%
 - Price per ton of steel steadily drops
 - Becomes US Steel when sold to J P Morgan
- Stock system
 - Holding Companies
 - Only need to control 51% of the company
 - In practice, 2% works
 - Voting power greatly exceeds the amount of votes you hold, since other votes will be split
- PA Oil Field - Titusville
 - Oil field looks just like the mine field
 - Oil towers everywhere
 - Oil initially used for lighting, then to reduce friction, then for heating
 - Rockefeller is the Carnegie of oil
- Regulations on how much people can own and what they can hold
 - Leads to the trust
 - * Allows you to vote their shares in return for the income
 - * More efficient to entrust your shares than to try to compete
 - * Legal tax dodge

- * Reduces the cost of oil by half
- Influx of consumer goods
 - Two types based on length of ownership
 - * Clothes, food, etc (short)
 - * Sewing machines, etc (long)
 - Advertising switches from needs to wants
 - * Etc: Floating soap
- Patents become more common
 - Encouragement for inventing things
 - Some inventions do occur at the individual level
 - Bell creates the telephone
 - * By the time his first patent expires, there's a quarter of a million telephones
 - * Expands extremely fast
- 1881 - Bonsack cigarette rolling machine
- Edison creates a business of inventing
 - More than anyone else, he makes it a business
 - Famous laboratory in 1876
 - Minor invention every 10 days, major invention every 6 months
 - Edison finds a way to distribute electricity as a source of power
 - Creates electric company in NYC
 - * Uses direct current until the improvement of alternating current is discovered (Nikola Tesla)
- Edison sells out in 1892 to JP Morgan
 - Morgan establishes General Electric
 - By 1902 - More than 2000 electric companies in US and almost every business will have an associated laboratory