



# CHAPTER 3

Industry Comes of Age



# I. The Iron Colt Becomes an Iron Horse

- Industrial development of the United States:
  - *Railroads*
    - Outburst of railroad construction was crucial
    - 1865 there were 35,000 miles of steam railways
    - 1900 there was 192,556 and much west of the Mississippi (see Figure 24.1)
    - Transcontinental railroads building:
      - *Was costly and required government subsidies*
    - The construction of railway systems promised greater national unity and economic growth.

# I. The Iron Colt Becomes an Iron Horse (cont.)

- Arguments from military and postal needs impressed Congress:
  - *To advance liberal loans to two favored cross-continent companies in 1862*
  - *Adding enormous donations for acreage paralleling the tracks*
  - *Washington rewarded the railroads with 155,504,994 acres, and western states contributed 49 million—for a total of an area larger than Texas (see Map 24.1).*
  - *Land grants were made to railroads in broad belts along the proposed route*
  - *Within these belts railroads could chose alternate mile-square in checkerboard fashion.*

# I. The Iron Colt Becomes an Iron Horse (cont.)

- *Until determination of precise routes for tracks, the railroads withheld all the land from other uses*
- *President Cleveland ended the foot-dragging practice in 1887 :*
  - *By throwing open to settlement the still-unclaimed public portion of the land-grant areas.*
- **Government benefits:**
  - *Long-term preferential rates for postal service and military traffic*
  - *Granting land was a “cheap” way to subsidize a much-desired transportation system:*
    - *Avoided new taxes for direct cash grants.*

# I. The Iron Colt Becomes an Iron Horse (cont.)

- *The railroads could turn the land into gold by using it as collateral for loans from private bankers or by selling it*
- *Average price of \$3 per acre.*
- *Critics overlooked that the land had relatively modest value until the railroads had ribboned it with steel.*
- Frontier villages along the route flourished into cities
  - *Those that were bypassed became “ghost towns”*
  - *Ambitious towns customarily held out monetary incentives to the builders:*
    - Sometimes blackmailed them into contributing more generously.

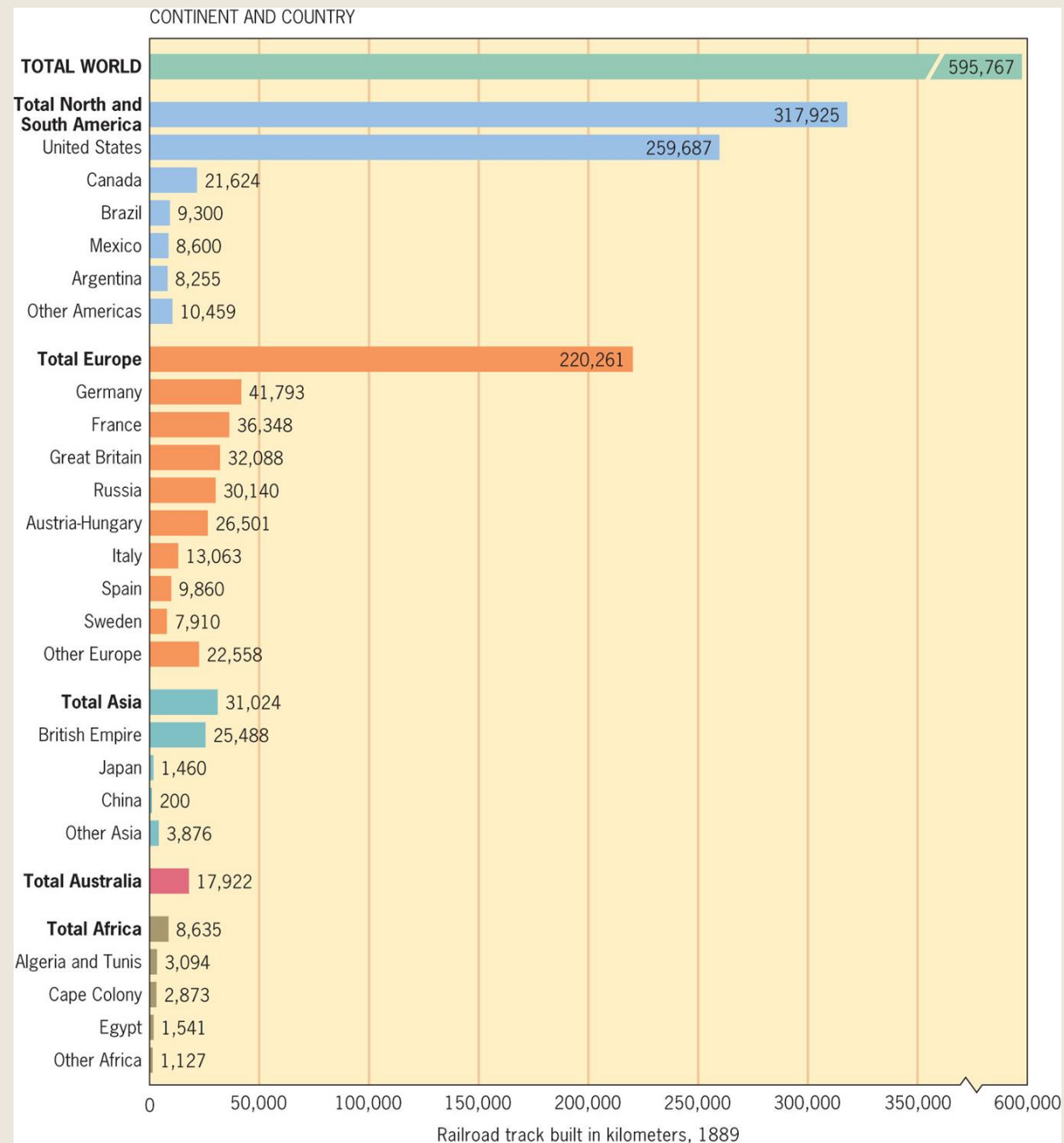


Figure 24-1 p513

## II. Spanning the Continent with Rails

- In 1862 Congress started the long-awaited line:
  - Argument for action was the urgency of bolstering the Union
    - *By binding the Pacific—especially gold-rich California*
    - *more security with the rest of the Republic.*
  - *The Union Pacific Railroad:*
    - Note the word *Union*: to thrust westward from Omaha
    - For each mile of track constructed:
      - *The company was granted 20 square miles of land*

## II. Spanning the Continent with Rails (cont.)

- *Alternating in 640-acre sections on either side of the track*
  - *For each mile, the builders were given generous federal loans from \$16,000 on flat prairie land to \$48,000 for mountainous country*
- The laying of rails began in earnest after the Civil War.
- “groundhog” promoters made haste.
- *Credit Mobilier:*
  - One construction company that reaped fabulous profits
  - Pocketed \$73 million for \$50 million worth of breakneck construction,
  - Spending small change to bribe congressmen to look the other way.



## II. Spanning the Continent with Rails (cont.)

- *Construction work:*
  - Sweaty construction gangs, Irish “Paddies” (Patricks) worked at a frantic pace
  - When hostile Indians, whose land was seized, would attack, the workers would seize their rifles
  - Scores of people lost their lives
  - At the end of the tracks, workers tried to find relaxation and conviviality in their tented towns.

## II. Spanning the Continent with Rails (cont.)

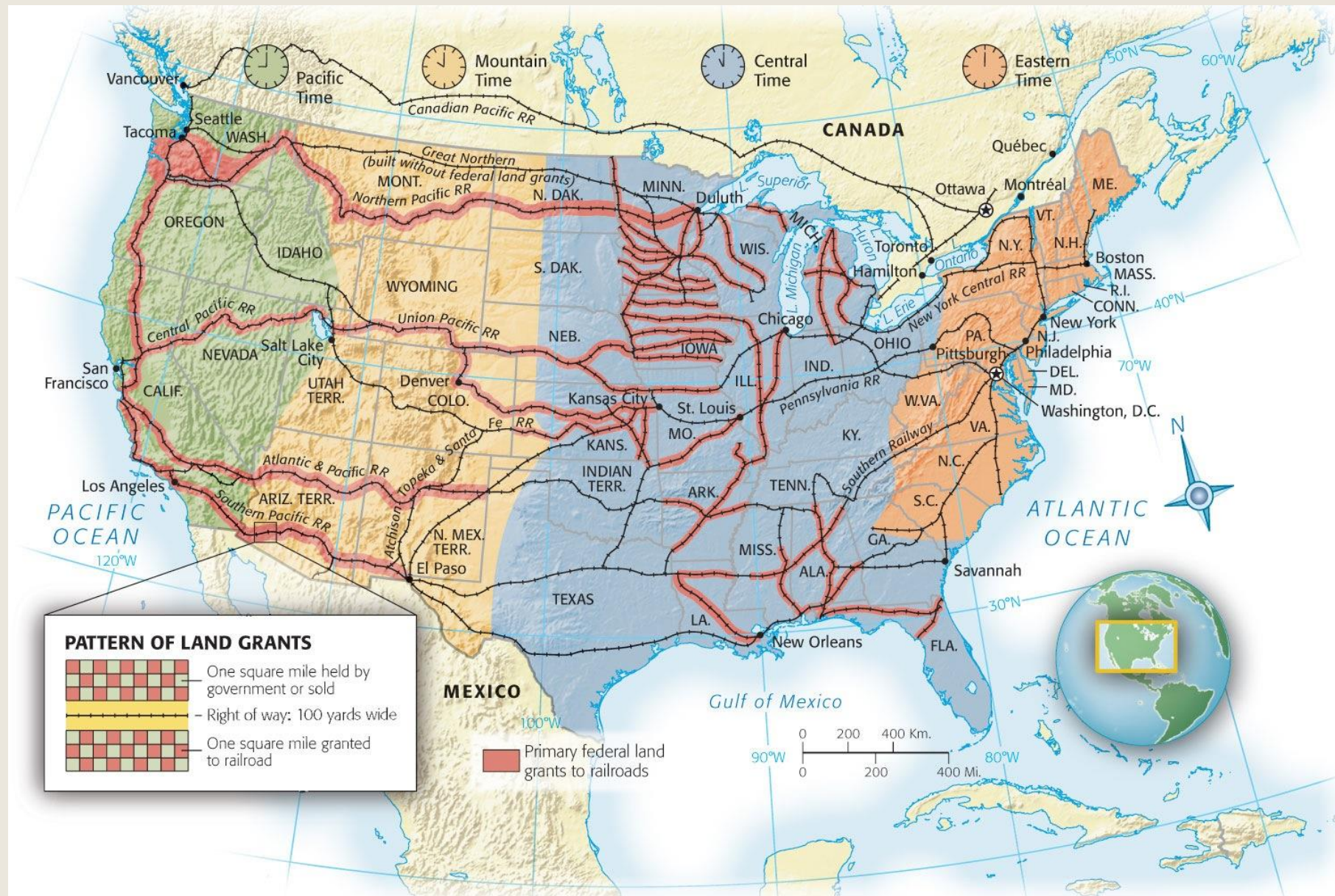
- Central Pacific Railroad:
  - The line pushed eastward from boomtown Sacramento, through the towering snow-clogging Sierra Nevada
  - Four far-seeing men—Big Four—were the chief financial backers of the enterprise:
    - *Enterprising ex-governor Leland Stanford of California, who used his political connections*
    - *Collis P. Huntington, an adept lobbyist*
    - *They operated two construction companies, pocketed tens of millions in profits, kept their hands clean from bribes.*

## II. Spanning the Continent with Rails (cont.)

- *Granted the same princely subsidies as the Union Pacific*
- *Had the same incentive to haste*
- *Had ten thousand Chinese laborers:*
  - *Sweat from dawn to dusk*
  - *Proved to be cheap, efficient, and expendable*
- *Over the Sierra Nevada only a few inches a day tunneling through the solid rock*
- *While the sledgehammering westward groups cross the open plains.*
- *“Wedding of the rails” consummated near Ogden, Utah, 1869 with a colorful ceremony.*
- *In all, the Union Pacific built 1,086 miles, the Central Pacific 689 miles.*

## II. Spanning the Continent with Rails (cont.)

- Results of the railroad construction:
  - *One of America's most impressive peacetime undertakings*
  - *Welded the West Coast more firmly to the Union*
  - *Facilitated a flourishing trade with Asia*
  - *Penetrated the arid barriers of the deserts, paving the way for the phenomenal growth of the Great West.*







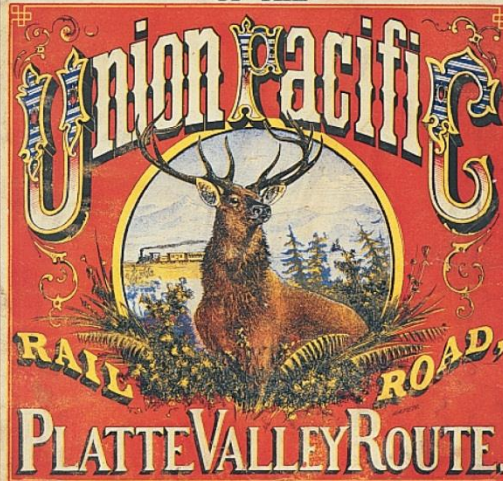


1869. May 10th. 1869.

# GREAT EVENT

Rail Road from the Atlantic to the Pacific

**GRAND OPENING**



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# III. Binding the Country with Railroad Ties

- Four other trans-continental lines were completed:
  - None secured monetary loads from the government
  - All of them except the Great Northern received generous grants of land.
- *The Northern Pacific—stretched from Lake Superior to Puget Sound, finished in 1883*
- *The Atchison, Topeka, and Santa Fe—stretched from the southern deserts to California, finished in 1884*



# III. Binding the Country with Railroad Ties (cont.)

- *The Southern Pacific ribboned from New Orleans to San Francisco, consolidated in 1884*
- *The Great Northern ran from Duluth to Seattle, hammered home in 1893:*
  - The creation of far-visioned Canadian American James J. Hill, probably the greatest railroad builder
  - His enterprise was so soundly organized that it rode through later financial storms with flying colors.
- *Sometimes rails were laid “from nowhere to nothing”*
- *There were endless bankruptcies, mergers, and reorganizations.*

# IV. Railroad Consolidation and Mechanization

- Western lines was facilitated by welding and expanding the older eastern networks
  - *Notably the New York Central:*
    - Leader was “Commodore” Cornelius Vanderbilt
    - Offering superior railway service at lower rate, Vanderbilt amassed a fortune of \$100 million.



# V. Revolution by Railways

- The railroads intimately touched countless phases of American life:
  - *The first time the sprawling nation became united in a physical sense, bound with ribs of iron and steel:*
    - America's biggest industry:
      - *Employing more people than any other industry*
      - *Gobbling up nearly 20% of investment dollars from foreign and domestic investors:*
  - *Spurred the amazing economic growth of post-Civil War years.*

# V. Revolution by Railways (cont.)

- *Opened the west with its wealth of resources*
- *Made America the largest integrated national market in the world*
- *Generated the largest single source of orders for the adolescent steel industry*
- *Stimulated mining and agriculture in the West*
- *Clusters of farm settlements paralleled the railroads*
- *Railways boon to cities and leading the great city-ward movement of the last decades of the century*

# V. Revolution by Railways (cont.)

- *Stimulated the mighty stream of immigration*
- The land also felt the impact of railroad:
  - Especially the broad, ecologically fragile midsection
  - Settlers plowed up the tallgrass prairies and planted well-drained, rectangular cornfields
  - The range-fed cattle rapidly displaced the buffalo, hunted to near-extinction
  - The white pines forest disappeared into lumber to build houses and fences



# V. Revolution by Railways (cont.)

- Time itself was bent to the railroad's needs:
  - *Until the 1880s each town had its own “local” time*
  - *On November 18, 1883, the major rail line decreed the continent would be divided in four “time zones”*
  - *Most communities quickly adopted “standard” time*
- Railroads were the maker of millionaires:
  - *Colossal wealth was amassed by stock speculators and railroad wreckers.*

# VI. Wrongdoing in Railroading

- Corruption lurks when fortunes can materialize overnight:
  - *Jay Gould was the most adept of the ringmasters of rapacity*
    - For years he boomed and busted the stocks of major railroad companies by means of speculation
      - “Stock watering” making cattle thirsty by feeding them salt and bloating them with water before weighing them in for sale
      - Using the method, railroad stock promoters grossly inflated their claims about a given line’s assets and profitability, and sold stocks and bonds far in excess of actual value.



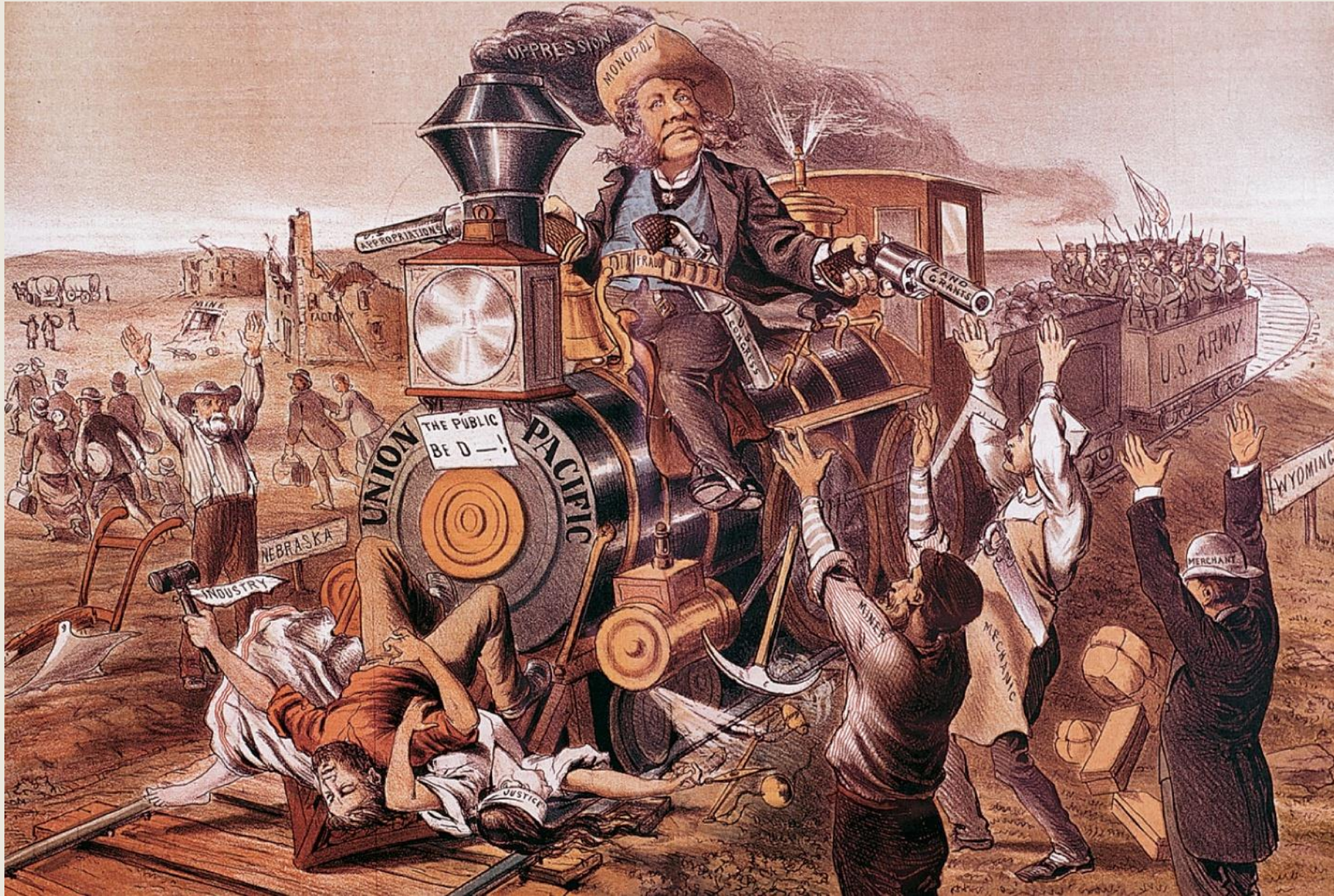
# VI. Wrongdoing in Railroading (cont.)

- Railroad managers were forced to charge extortionate rates and wage ruthless competitive battles to pay off financial obligations
- Public interest was trampled by railroad titans who waged their brutal wars
- The railroaders blandly bought and sold people:
  - *Bribed judges and legislatures*
  - *Employed arm-twisting lobbyists*
  - *Elected their own “creatures” to high offices*
  - *Showered free passes on journals and politicians in the West*
  - *Were for a time, virtual industrial monarchs.*

# VI. Wrongdoing in Railroading (cont.)

- *These industrial monarchs:*
  - Manipulated a huge national monopoly:
    - *Exercised more direct control over people than the president—with no limit to four year terms:*
    - *Evidentially they left the crude bloodletting cutthroat competition for cooperation to rule the railroads*
    - *They entered into defensive alliances to protect profits*
  - Early form of combination was the “pool”:
    - *An agreement to divide the business in a given area and share the profits*
    - *Some granted secret rebates or kickback*
    - *Slashed their rates on competing lines.*







# VII. Government Bridles the Iron Horse

- *The American people were quick to respond to political injustice, but slow to combat economic injustice:*
  - Dedicated to free enterprise and principle that competition is the soul of trade
  - They cherished a traditionally keen pride in progress
  - They remember Jefferson's ideas were hostile to government interference with business
  - There shimmered the "American dream": the hope that in a catch-as-catch-can economic system, anyone might become a millionaire.

## VII. Government Bridles the Iron Horse (cont.)

- Under pressure from the Grange (Patrons of Husbandry)—organized agrarian groups:
  - *Many midwestern legislatures tried to regulate monopoly:*
    - In the famed ***Wabash, St. Louis & Pacific Railroad Company v. Illinois*** case:
      - *The Supreme Court decreed individual states had no power to regulate interstate commerce*
      - *If the mechanical monster were to be corralled, the federal government would have to do it.*
    - Stiff-necked Cleveland did not look kindly on effective regulation.

# VII. Government Bridles the Iron Horse (cont.)

- **Epochal Interstate Commerce Act (1887):**
  - It prohibited rebates and pools
  - Required the railroads to publish their rates openly
  - Forbade unfair discrimination against shippers
  - Outlawed charging more for a short haul than a long one over the same line
  - Most important—it set up the Interstate Commerce Commission (ICC) to administer and enforce new legislation.
  - Despite acclaim, the ICC Act emphatically did not represent a popular victory over corporate wealth.

## VII. Government Bridles the Iron Horse (cont.)

- *What the new (ICC Act) legislation did do was:*
  - Provide an orderly forum where competing business interests could resolve their conflicts in peaceable ways
  - The ICC Act tended to stabilize, not revolutionize, the existing business system
    - *The Act still ranks as a red-letter law*
    - *First large-scale attempt by Washington to regulate business in the interest of society at large*
  - *It heralded the arrival of independent regulatory commissions:*
    - Which commit the government to the daunting task of monitoring and guiding the private economy

# VIII. Miracles of Mechanization

- Postwar industrial expansion:
  - *1860—the Republic ranked fourth*
  - *1894—the Republic ranked first.*
  - *Why the sudden upsurge:*
    - Liquid capita, once scarce, was now abundant
    - The word *millionaire* had not been coined until 1840s
    - 1861 there were only a handful
    - The Civil War profiteering created immense fortunes which were now combined with borrowed foreign capitalists.



# VIII. Miracles of Mechanization (cont.)

- Most of the foreign resources went into private hands not public coffers
- Investors from Britain, followed by France, Germany, the Netherlands and Switzerland:
  - *Owned all or part of an American business*
  - *Other times they simply lent their money to European companies to many investments in the U.S. industry*
  - *Either way Europeans were content to let Americans run the business—until hard times hit—and they demanded more say over company operations or government economic policies.*

# VIII. Miracles of Mechanization (cont.)

- Innovations in transportation fueled growth:
  - *Bringing the nation's abundant resources—coal, oil, iron—to the factory door*
  - *Shipping system through the Great Lakes carried the rich iron deposits in the Mesabi Range, Minnesota to Chicago and Cleveland for refining*
    - This became a corner stone of a vast steel empire
  - *Copper, bauxite, zinc made similar journeys from mine to manufacture*
- The sheer size of American market encouraged innovators to invent mass-production methods:
  - *Anyone could make a new product in large quantities, figure how to market it and thrive.*

# VIII. Miracles of Mechanization (cont.)

- *Industrials continued to refine the pre-Civil War “American System”—using specialized machinery to make interchange-able parts:*
  - Resulting in Henry Ford’s fully developed moving assembly line for his Model T (see pp. 231-232 and 711-712)
- *Captains of industry had a major incentive to invent machines*
  - They made it possible to replace expensive skilled labor with unskilled workers
  - Now cheap and plentiful as a result of massive immigration.

# VIII. Miracles of Mechanization (cont.)

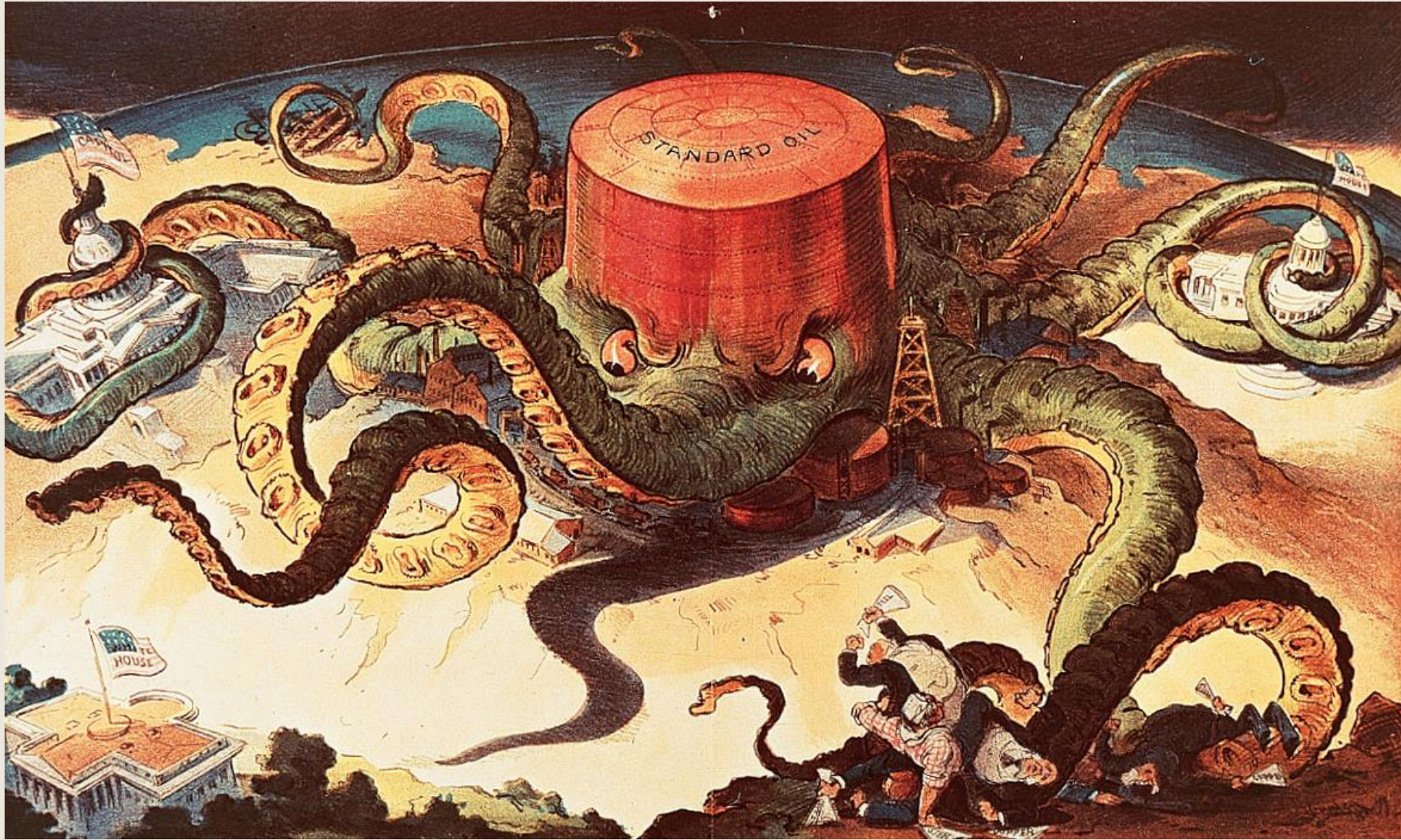
- *Brilliant ideas gave rise to whole new businesses:*
  - Between 1860-1890 some 440,000 patents were issued
  - Business operations were facilitated by machines:
    - *The cash register, the stock ticker, typewriter*
    - *While the refrigerator car, the electric dynamo, and the electric railway speeded urbanization*
- *One of the most ingenious inventions was the telephone—Alexander Graham Bell, 1876:*
  - Created a gigantic communication network
  - Social impact when the lure of “number please” took women away from the stove to the switchboard

# VIII. Miracles of Mechanization (cont.)

- The most versatile inventor—Thomas Alva Edison (1847-1931):
  - *His severe deafness enabled him to concentrate without distraction*
  - *He was a gifted tinkerer and a tireless worker, not a pure scientist*
  - *Wondrous devices poured out of his “invention factory” in New Jersey—the phonograph, the mimeograph, the dicta-phone, and the moving picture*
  - *Best known for his perfection in 1879 of the electric lightbulb*
  - *It turned night into day and transformed human habits*
  - *People who slept an average of 9 hours a night now slept just a bit more than 7.*







# IX. The Trust Titan Emerges

- Most business leaders devised plans to circumvent competition:
  - *Andrew Carnegie, the steel king*
    - Integrated every phrase of his steel-making operation
    - His miners scratched the ore from the Mesabi Range
    - His ships floated it across the Great Lakes
    - His railroads delivered it to the blast factories at Pittsburgh
    - No other hands had touched it when the metal poured into the waiting ingot molds



# IX. The Trust Titan Emerges (cont.)

- He pioneered the creative entrepreneurial tactic of **vertical integration**:
  - *Combining into one organization all phases of manufacturing from mining to marketing*
  - *His goal was to improve efficiency by making supplies more reliable:*
    - Controlling the quality of the product at all stages of production, and eliminating middlemen's fees.
- He was a master of the technique of **horizontal integration**:
  - Meant allying with competitors to monopolize a given market

# IX. The Trust Titan Emerges (cont.)

- He perfected a device for controlling bothersome rivals—the **trust**:
  - *Stockholders in various smaller oil companies assigned their stock to the board of directors of his Standard Oil Company (1870)*
  - *It then consolidated and concerted the operations of the previously competing enterprises*
  - *Ruthlessly wielding vast power, Standard Oil soon cornered virtually the entire world of petroleum market*
  - *He inspired many imitators, and the word trust came to be generally used to describe any large-scale business combination.*

# IX. The Trust Titan Emerges (cont.)

- J. Pierpont Morgan:
  - *Devised other schemes to eliminate “wasteful” competition:*
    - The depression of 1890s drove to Morgan many bleeding businesspeople,
      - *Wounded by cutthroat competition*
      - *His prescribed remedy was to consolidate rival enterprises*
      - *To ensure future harmony he placed officers of his own banking syndicate on their various boards of directors, known as **interlocking directorates**.*

# X. The Supremacy of Steel

- “Steel is king”:
  - *The mighty metal held together new steel civilization—from skyscrapers to coal shuttles:*
    - Steel making, notable rails for railroads, typified the dominance of the “heavy industry”—thus making capital goods
    - Steel had become expensive
    - “Commodore” Vanderbilt was forced to import steel rails from Britain
    - Within 20 years the United States had outdistanced all foreign competitors, pouring out 1/3 of the world’s supply of steel.

# x. The Supremacy of Steel (cont.)

- What wrought the transformation?
  - *The Bessemer process:*
    - Invented in 1850s; was a method of making cheap steel
    - First, William Kelly, a Kentucky manufacturer, developed the new “air blowing” technique
    - Gradually the Bessemer-Kelly process was accepted, and the two “crazy men” ultimately made possible the present steel civilization.

# XI. Carnegie and Other Sultans of Steel

- Andrew Carnegie—kingpin steelmaster:
  - *Gifted organizer and administrator:*
    - He succeeded by picking high-class associates
    - He eliminated many middlemen
    - His business was a partnership that involved, at its maximum, about forty “Pittsburgh millionaires”
  - By 1900 he was producing  $\frac{1}{4}$  of the nation’s Bessemer steel:
    - *Partners, pre-income tax days, were dividing profits of \$40 million a year as their take home pay*
    - *With the “Napoleon of the Smokestacks” himself receiving a cool \$25 million.*



# XI. Carnegie and Other Sultans of Steel (cont.)

- J. Pierpont Morgan: the financial giant
  - *“Jupiter” Morgan made a reputation by:*
    - financing the reorganization of railroads, insurance companies, and banks
    - He did not believe that “money power” was dangerous, except in dangerous hands—and he did not regard his own hands as dangerous.
  - *The force of circumstances brought Morgan and Carnegie into collision:*
    - By 1900 Carnegie was ready to sell his holdings
    - Morgan meanwhile plunged heavily into the manufacture of steel pipe tubing.

# XI. Carnegie and Other Sultans of Steel (cont.)

- Carnegie cleverly threatened to enter the same business if his rival did not receive his price
- Carnegie's agents haggled Morgan for 8 hours until Morgan agreed to buy out Carnegie for over \$400 million
- Carnegie fearing he would die “disgraced” with so much wealth, dedicated the remaining years to giving away his money:
  - Public libraries, pensions for professors, and other philanthropic purposes
  - In all disposing of about \$350 million.

# XI. Carnegie and Other Sultans of Steel (cont.)

- Morgan moved rapidly to expand his new industrial empire:
  - *He took the Carnegie holdings, added others, “watered” the stock liberally and in 1901 launched the enlarged United States Steel Corporation*
  - *Capitalized at \$1.4 billion—America’s first billion-dollar corporation:*
    - A larger sum than the total estimated wealth of the nation in 1800
    - The Industrial Revolution had come into its own.



## XII. Rockefeller Grows an American Beauty Rose

- The emergence of the oil industry—one of the most striking developments before/after the Civil War:
  - *In 1859 the first well in Pennsylvania—Drake’s Folly” poured out its liquid “black gold”*
    - Kerosene, derived from petroleum, was the first major product of the infant oil industry
    - The oil industry boomed
    - By 1870s kerosene was America’s fourth most valuable export.



## XII. Rockefeller Grows an American Beauty Rose (cont.)

- *What technology gives, technology takes away:*
  - By 1886, 250,000 of Edison's electric light bulbs were in use; 15 years later, 15 million
  - The new electric industry rendered kerosene obsolete just as kerosene had rendered whale oil obsolete
  - Oil might have remained a modest, shrinking industry, but for the invention of the automobile:
    - *In 1900 the gasoline-burning internal combustion engine had surpassed its rivals, steam and electricity, as the superior means of automobile propulsion.*
    - *The automobile age gave the oil business a new, long-lasting and hugely profitable lease on life.*

## XII. Rockefeller Grows an American Beauty Rose (cont.)

- John D. Rockefeller comes to dominate the oil industry
  - *In 1870 he organized the **Standard Oil Company** of Ohio:*
    - Nucleus of the great trust formed in 1882
    - Locating his refineries in Cleveland, he sought to eliminate the middlemen and squeeze out competitors
    - Rockefeller flourished in an age of completely free enterprise.

## XII. Rockefeller Grows an American Beauty Rose (cont.)

- He operated “just to the windward of the law,” and pursued a policy of rule or ruin
- By 1877 he controlled 95 percent of all the oil refiners in the country
- Rockefeller—“Reckafellow,” as Carnegie had once called him—showed little mercy:
- Rockefeller’s oil monopoly did turn out a superior product at a relatively cheap price
- It achieved important economies by its large-scale methods of production and distribution.
- The efficient use of expensive machinery and consolidation proved more profitable than ruinous price wars.

## XII. Rockefeller Grows an American Beauty Rose (cont.)

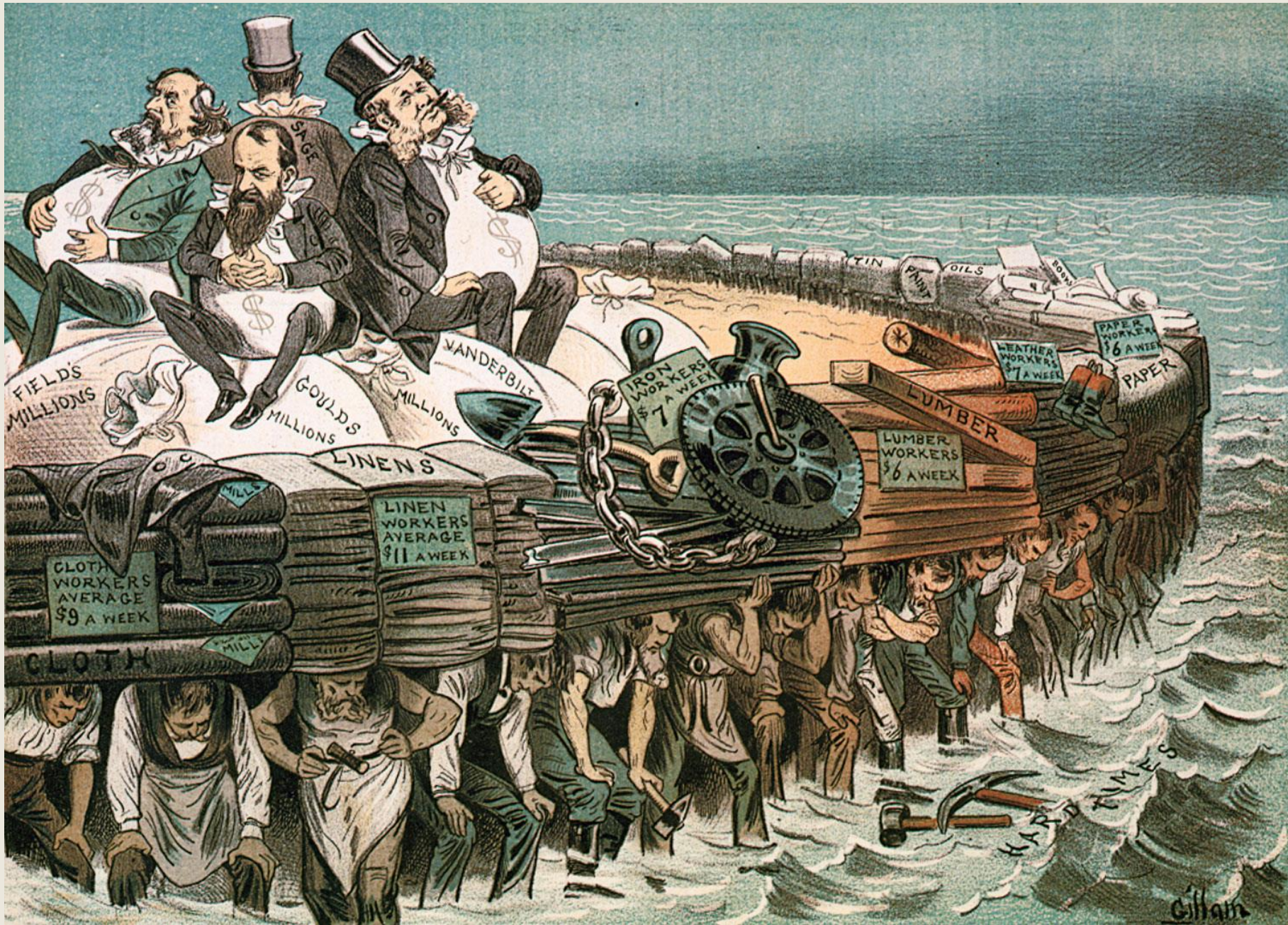
### ■ Other trusts blossomed:

- *Sugar trust, the tobacco trust, the leather trust, the harvester trust—which amalgamated 200 competitors*
- *The meat industry arose on western herds and kings—Gustavus F. Swift and Philip Armour*
- *These untrustworthy trusts, and the “pirates” who captained them, were disturbing new*
- *There was a class of “new rich”.*











# XIII. The Gospel of Wealth

- Credited heavenly help:
  - “the good Lord gave me my money”—J.D. Rockefeller
  - Agreed that wealth, entrusted with society’s riches, had to prove themselves morally responsible according to the “Gospel of Wealth”—A. Carnegie
  - Most defenders of capitalism relied on the survival-of-the fittest theories of Herbert Spencer and William Graham
    - *These **Social Darwinists** argued that individuals won their stations in life by competing on the basis of their natural talents.*

# XIII. The Gospel of Wealth (cont.)

- Evolutionary proponents:
  - *Spence and Sumner likened somewhat to Charles Darwin who stressed the adaptation of organisms*
  - *But more to:*
    - British laissez-faire economists David Ricardo and Thomas Malthus
      - *Spencer, not Darwin, coined the phrase “survival of the fittest”*
      - *The millionaires are a product of natural selection—Sumner.*

# XIII. The Gospel of Wealth (cont.)

- Self-justification by the wealthy inevitably involved contempt for the poor
  - *Reverend Russell Conwell, Philadelphia, became rich by delivering his lecture “Acres of Diamonds” thousands of times.*
  - *Plutocracy took its stand on the Constitution:*
    - The clause that gave Congress sole jurisdiction over interstate commerce was a godsend to the monopolists
    - Giant trusts sought refuge behind the Fourteenth Amendment.

# XIII. The Gospel of Wealth (cont.)

- The courts ingeniously interpreted a corporation to be a legal “person”:
- Therefore it cannot be deprived of its property by a state without “due process of law” (see Amendment XIV, para, 1 in the Appendix)
- Giant industrialist sought to incorporate in “easy states,” like New Jersey, where the restrictions on big business were mild or nonexistent.

# XIV. Government Tackles the Trust Evil

- The masses of the people began to mobilize against monopoly:
  - *First tried to control the trusts through state legislatures*
  - *By failure, they were forced to appeal to Congress:*
    - The **Sherman Anti-Trust Act (1890)**:
      - *It flatly forbade combinations in restraint of trade, without any distinction between “good” trusts and “bad” trusts*
      - *Bigness, not badness, was the sin*

# XIV. Government Tackles the Trust Evil (cont.)

- *The law proved ineffective, largely because it contained legal loopholes*
  - *Effective in one respect: contrary to its original intent, it was used to curb labor unions or labor combinations that were deemed to be restraining trade*
  - *Prosecution of trusts under the Sherman Act (1890) was neither vigorous nor successful*
  - *More new trusts were formed in the 1890s under President McKinley than during any other period*
  - *Only after 1914 were the paper jaws added to the Sherman Act*
- The iron grip of monopolistic corporations were being threatened.



# XIV. Government Tackles the Trust Evil (cont.)

- Revolutionary new principles had been written into the law books by the Sherman Anti-Trust Act of 1890, as well as by the Interstate Commerce Act of 1887.
- Private greed should henceforth be subordinated to public need.







# XV. The South in the Age of Industry

- Economic conditions of the South:
  - *As late as 1900, the South still produced a smaller percentage of the nation's manufactured goods than it had before the Civil War*
    - The plantation system had degenerated into a pattern of absentee landownership
    - White and black sharecroppers tilled the soil for a share of the crop
    - Some became tenants, in bondage to their landlords, who controlled needed credit and supplies.

# XV. The South in the Age of Industry (cont.)

- Southern agriculture:

- *Received a boost when machine-made cigarettes replaced the roll-your-own variety and consumption increased*
- *James Buchanan Duke*
  - Took advantage of new technology to mass-produce the dainty “coffin nails.”
  - In 1890 he absorbed his main competitors into the American Tobacco Company
    - *Showed such generosity to Trinity College, Durham, N. Carolina, that the trustees gratefully changed its to Duke University.*

# XV. The South in the Age of Industry (cont.)

- *The south remained overwhelmingly rural*
- *“New South” booster was Henry W. Grady:*
  - Editor of the *Atlanta Constitution*
  - He tirelessly exhorted the ex-Confederates to become “Georgia Yankees” and outplay the North at the commercial and industrial game
- *Formidable obstacles lay in the path of southern industrialization:*
  - The paper barrier of regional rate-setting systems imposed by the northern-dominated railroad interests



# XV. The South in the Age of Industry (cont.)

- *Railroads gave preferential rates to manufactured goods moving southward from the North*
- *But in the opposite direction they discriminated in favor of southern raw materials*
- *Net affect—keep the South in servitude to the Northeast.*
- *Example—the “Pittsburgh plus” pricing system in the steel industry.*
- *In manufacturing cotton textiles, the South fared better (see Figure 24.2 and Figure 24.3).*
- *The textile mills proved to be a mixed blessing to the economically blighted South.*
- *Cheap labor was the South’s major attraction for potential investors, and keeping labor cheap became almost a religion among southern industrialists.*

# XV. The South in the Age of Industry (cont.)

- *The mills took root in the chronically depressed Piedmont region of southern Appalachia*
- *White rural southerners sought employment in company mill towns*
  - Entire families—“hillbillies” or “lintheads” worked from dawn to dusk
  - Were paid half the rate of their northern counterparts
  - Often received their compensation in the form of credit at a company store, to which they were habitually in debt
  - Many saw employment in the mills as a salvation.



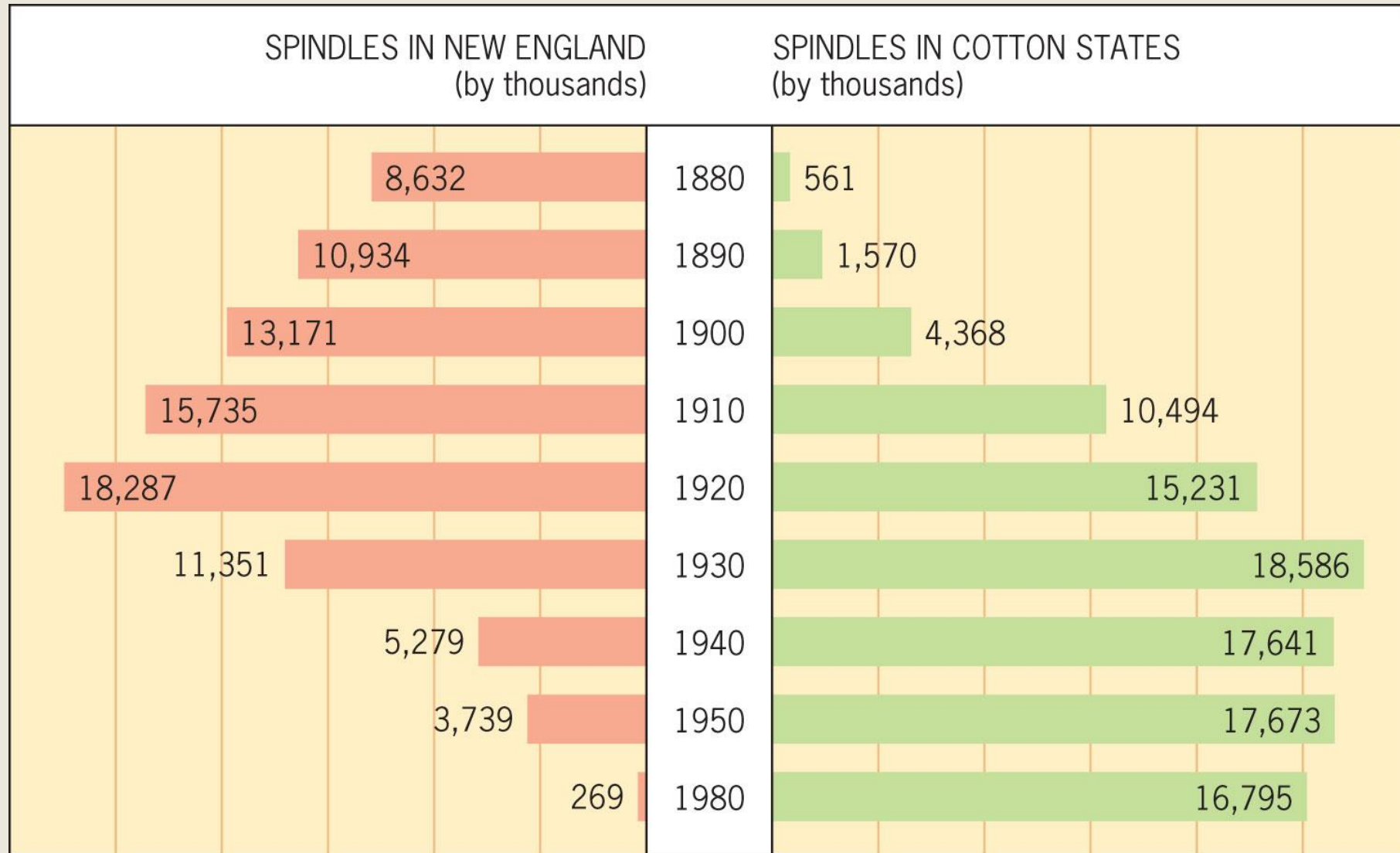
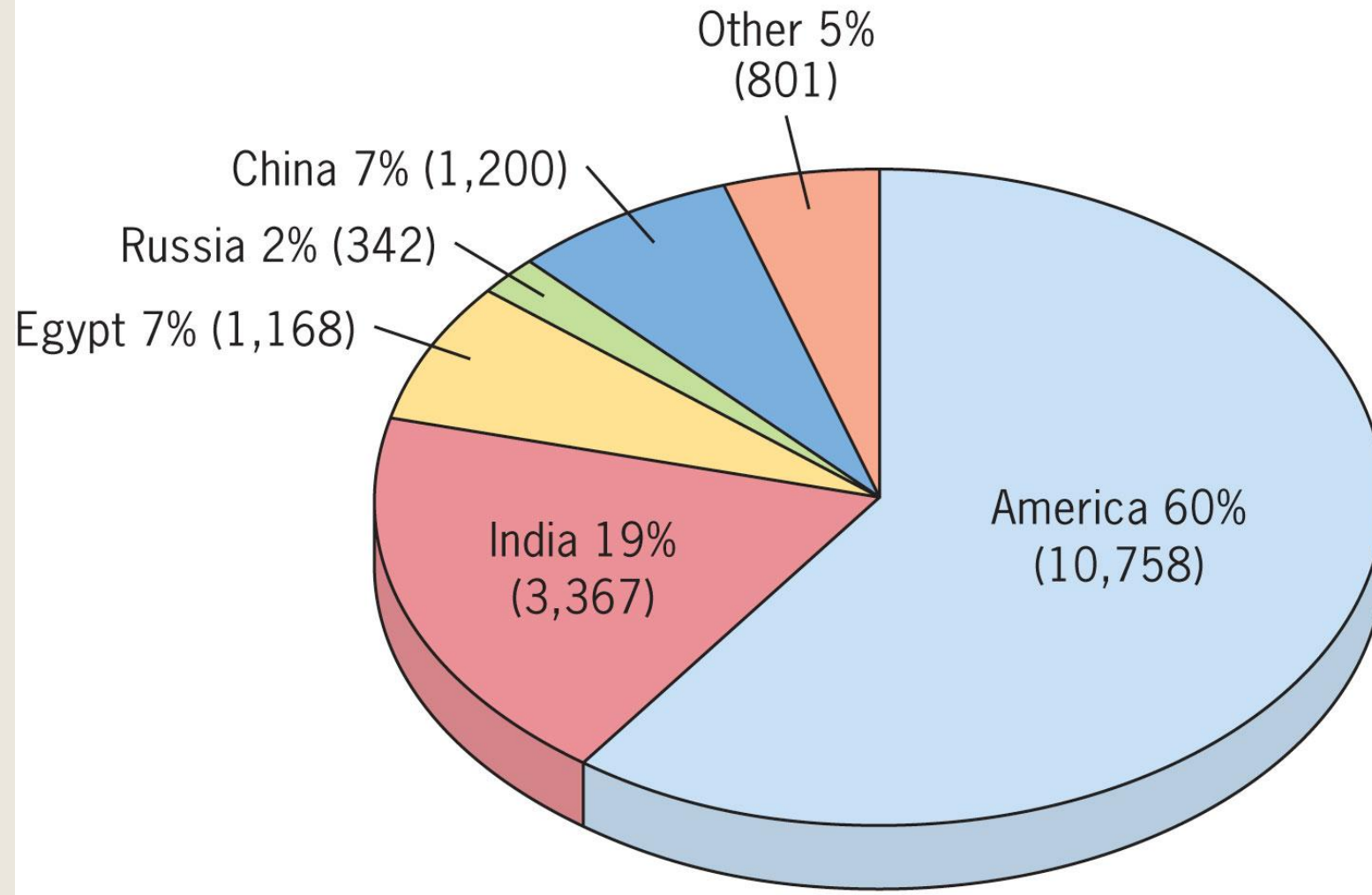


Figure 24-2 p527

## World cotton production, 1903 (Bales of approx. 500 lbs, in thousands)



**Total: 17,636**

# XVI. The Impact of the New Industrial Revolution on America

- Economic miracles:
  - The standard of living rose sharply
  - Well-fed American workers enjoyed more physical comforts
  - Urban centers mushroomed as the insatiable factories demanded more American labor and increased immigration for the new jobs (see Map 24.2)
  - Federal authority was now committed to decades of corporation curbing and “trust-busting”
  - The very concept of time was revolutionized
    - *Not by the clock of nature but the factory whistle.*



# XVI. The Impact of the New Industrial Revolution of America

- Most affected group were the women
  - *Propelled into industry by new inventions, they discovered new economic and social opportunities*
  - *The “Gibson Girl” created by Charles Dana Gibson showed an image of an independent and athletic “new woman”*
  - *Most women workers toiled neither for independence nor for glamour, but out of economic necessity*
  - *They faced long hours and dangerous working conditions as did their mates and brothers*
  - *They earned less, as wages for “women’s jobs” were usually set below those for men’s*

# XVI. The Impact of the New Industrial Revolution in America

- *The clattering machine age accentuated class division:*
  - “industrial buccaneers” flaunted bloated fortunes
  - Their rags-to-riches spouses displayed glittering diamonds
  - Such extravagances evoked bitter criticism
  - Some of it was envious
    - *But much arose from socialists and other radicals, some recent European immigrants.*
- The existence of an oligarchy of money was amply demonstrated by the fact that in 1900 about one-tenth of the people owned nine-tenths of the nation’s wealth.

# XVI. The Impact of the New Industrial Revolution in America

- *A nation of famers and independent farmers were becoming a nation of wage-earners*
  - In 1860 half of all workers were self-employed
  - By century's end, two of every three working Americans depended on wage
  - With dependence of wages came the vulnerability to swings of economy and the whims of the employer
  - The fear of unemployment was never distant
  - Reformers struggled to introduce a measure of security—job and wage protection, provision for temporary unemployment—into the lives of the working class.

# XVI. The Impact of the New Industrial Revolution in America

- *Strong pressures from foreign trade developed*
  - International trade became cheaper, faster, and easier
  - The flag follows trade, and empire tends to follow the flag—a harsh lesson that America was soon to learn.









# XVII. In Unions There Is Strength

- Workers did not share proportionately with their employers:
  - *The workers:*
    - Were becoming a lever-puller in a giant mechanism
    - Individual originality and creativity were stifled
    - Less value was placed on manual labor
    - Now the factory hand was employed by a corporation –depersonalized, bodiless, soulless and often conscienceless
    - The directors knew the worker not, and in fairness to their stockholders, they were not inclined to engage in large-scale private philanthropy.

# XVII. In Unions There Is Strength (cont.)

- *New machines displaced employees*
  - In the long run more jobs were created
  - A glutted market severely handicapped wage earners
  - Individual workers were powerless to battle single-handedly against giant industry:
    - *Forced to organize and fight for basic rights, they found it very difficult*
    - *The corporation could dispense with the individual worker much more easily than the worker could dispense with the corporation*
    - *Employers could pool vast wealth through thousands of stockholders*

# XVI. In Unions There is Strength (cont.)

- Retain high-priced lawyers
- Buy up the local press
- Put pressure on the politicians
- They could import strikebreakers (“scabs”) and employ thugs to beat up labor organizers.
- Corporations had other weapons in their arsenals:
  - *They could call upon the federal courts to issue injunctions ordering the strikers to cease striking*
  - *If defiance and disorder ensued, the company could request the state and federal authorities to bring in troops*
  - *Employers could lock the doors against rebellious workers—a procedure called the “lockout”—and starve them into submission.*

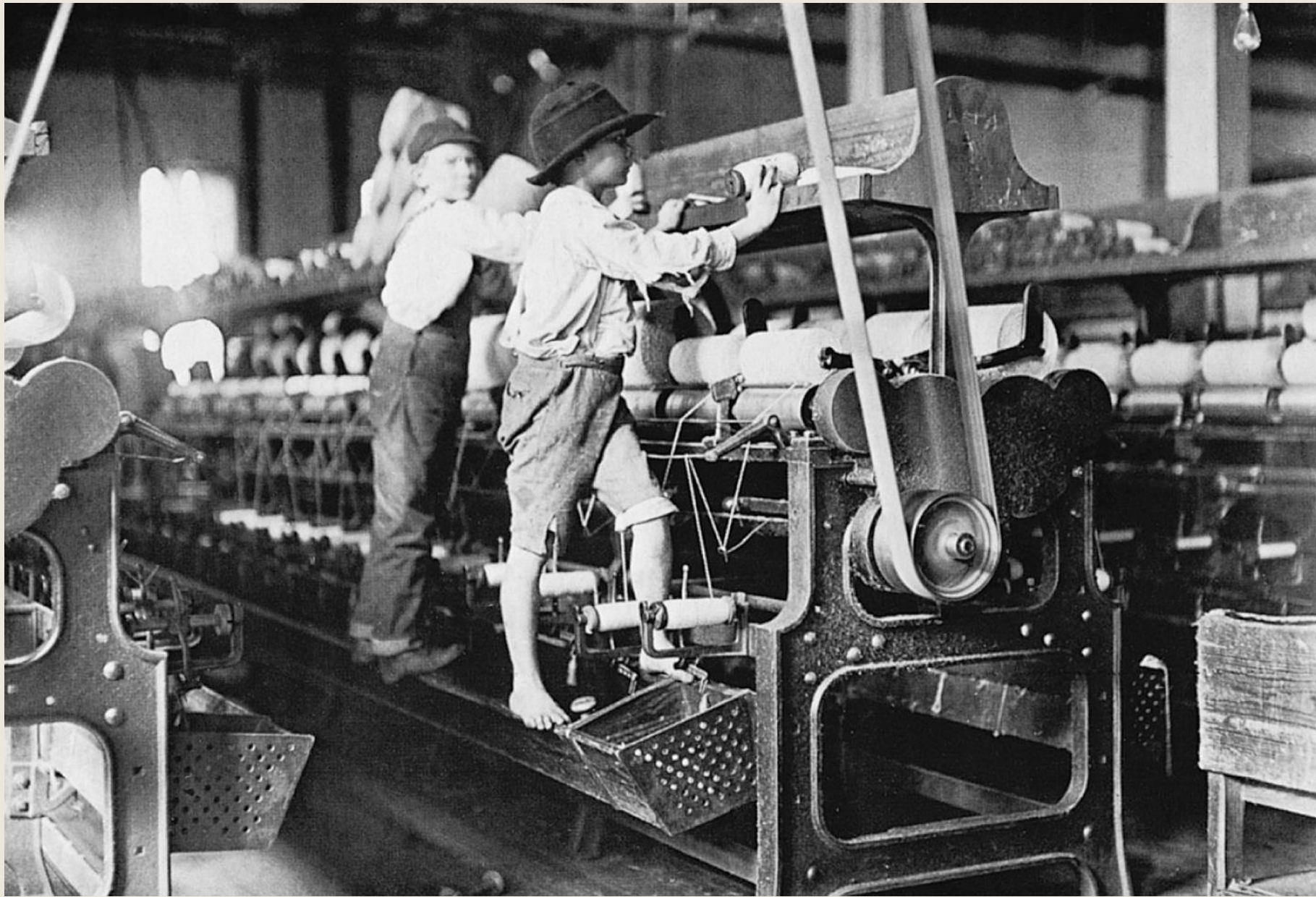


# XVI. In Unions There is Strength (cont.)

- *They could compel them to sign “ironclad oaths” or “yellow-dog contracts”—solemn agreements not to join a labor union*
- *They could put the names of agitators on a “black list” and circulate it among fellow employers*
- *Often workers sank into perpetual debt to the company stores*
- The middle class public, annoyed by recurrent strikes, grew deaf to the outcry of the worker
  - *Strikes seemed like a foreign importation—socialistic and hence unpatriotic*
  - *Big business might combine into trusts to raise prices, but the worker must not combine into unions to raise wages.*











# XVIII. Labor Limps Along

- Labor unions boosted by the Civil War:
  - Lost of human life put a drain on human resources
  - Put more of a premium on labor
  - The mounting cost of living provided an urgent incentive to unionization
  - By 1872 there were several hundred thousand organized workers
  - 32 national unions, representing crafts as bricklayers, typesetters, and shoemakers.



# XVIII. Labor Limps Along (cont.)

## ■ The National Labor Union:

- *Organized in 1866, represented a giant bootstride by workers*
- *One of the first national-scale unions to organize:*
  - It aimed to unify workers across locales and trades to challenge their ever more powerful bosses
  - It lasted 6 years and attracted the impressive total of some 600,000 members:
    - *Including the skilled, unskilled, and farmers*
    - *It excluded the Chinese and made only nominal efforts to include women and blacks.*

# XVIII. Labor Limpers Along (cont.)

- The Colored National Labor Union:
  - *Their support for the Republican Party and the persistent racism of white unionists prevented the two national unions from working together*
- The National Labor Union:
  - Agitated for the arbitration of industrial disputes
  - For the eight-hour workday
  - Winning the latter for government workers.

# XVIII. Labor Limp Along (cont.)

- The Knights of Labor:

- *Seized the torch dropped by the National Labor Union (see pp. 534-535):*
  - Officially known as the Noble and Holy Order of the Knights of Labor
  - Began in 1869 as a secret society, with a private ritual, passwords, and a special handshake
  - Secrecy, which continued until 1881, would forestall possible reprisals by employers
  - They sought to include all workers in “one big union”

# XIII. Labor Limps Along (cont.)

- They sought only to bar:
  - *“Nonproducers”—liquor dealers, professional gamblers, lawyers, bankers, and stockbrokers.*
- They refused to thrust into politics
- Instead they campaigned for economic and social reform:
  - *Including producers’ cooperatives*
  - *Codes for safety and health*
  - *They frowned upon industrial warfare while fostering industrial arbitration*
  - *They waged a determined campaign for the eight-hour day.*

# XIII. Labor Limps Along (cont.)

- Under the leadership of Terence V. Powderly:
  - *The Knights won a number of strikes for the eight-hour day*
  - *When the Knights staged a successful strike against Jay Gould's Wabash Railroad in 1885:*
    - Membership mushroomed to about three quarters of a million workers.



# XIX. Unhorsing the Knights of Labor

- *The Knights were riding for a fall:*
  - *Became involved in a number of May Day strikes in 1886*
  - *About half of them failed*
  - *Focal point was Chicago with 80,000 Knights.*
- **Haymarket Square** episode:
  - *Labor disorders had broken out*
  - *On May 4, 1886 the police advanced on a meeting called to protest alleged brutalities by the authorities*
  - *Suddenly a dynamite bomb was thrown killing or injuring several dozen people, including police:*
  - *Hysteria swept the Windy City:*
    - *Eight anarchists were rounded up*
    - *Tried because they had preached incendiary doctrines*
    - *They were charged with conspiracy.*

# XIX. Unhorsing the Knights of Labor (cont.)

- Five were sentenced to death, one of whom committed suicide, and the other three were given still prison terms.
- *Agitation for clemency mounted*
- John P. Altgeld was elected governor, he had strong liberal tendencies
  - *After Altgeld studied the Haymarket case exhaustively,*
    - Pardoned the three survivors
  - *Violent abuse was showered on Altgeld by conservatives,*
  - *Unstinted praise by those who thought the men were innocent*
  - *Altgeld was defeated for reelection, died a few years later in relative obscurity, “The Eagle Forgotten.”*

# XIX. Unhorsing the Knights of Labor (cont.)

- *The Haymarket Square bomb helped blow the props from under the Knights of Labor*
  - They had been associated with the anarchists
  - Their strikes met with scant success.
- *Another fatal handicap of the Knights was their inclusion of both skilled and unskilled workers:*
  - Unskilled labor could easily be replaced by strikebreaking “Scabs”
  - High-class craft unionists couldn’t be replaced so readily
    - *Hence they enjoyed a superior bargaining position.*

# XIX. Unhorsing the Knights of Labor (cont.)

- *The skilled labor sought refuge in the American Federation of Labor:*
  - A federation of exclusively skilled craft unions.
- *The desertion of the skilled craft unionists dealt the Knights a body blow:*
  - By 1890s they melted down to 100,000 members who gradually fused with other protest groups.











# XX. The AF of L to the Fore

- *The elitist American Federation of Labor: 1886*
  - Largely the brainchild of Samuel Gompers
  - He was pressed into overtime service because of his voice
  - He was elected president of AF of L every year except one from 1886 to 1924
  - The American *Federation* of Labor was—a federation:
    - *It consisted of an association of self-governing national unions*
      - Each of which kept its independence, with the AF of L unifying overall strategy
      - No individual laborer could join the central organization.

# XX. The AF of L to the Fore (cont.)

- *Gompers adopted a down-to-earth approach:*
  - Trying to soft-pedal attempts to engineer sweeping social reform
  - Bitter foe of socialism, he shunned politics for economic strategies and goals
  - Had no quarrel with capitalism:
    - *But demanded a fairer share for labor*
    - *All he wanted, he said, was “more.”*
  - Promoted what he called a “pure and simple” unionism
  - Sought better wages, hours, and working conditions.

## XX. The AF of L to the Fore (cont.)

- He was not concerned with the sweet by-and-by, but with the bitter here and now
- One of his major goals was the “trade agreement” authorizing the **closed shop**—
  - *Of all-union labor.*
- His chief weapons were the walkout and the boycott.
- *The AF of L was established on solid but narrow ground:*
  - It fell short of being representative of them
  - Composed of skilled craftsmen—carpenters and bricklayers:
    - *It was willing to let unskilled laborers, including women and blacks, fend for themselves.*



# XX. The AF of L to the Fore (cont.)

- It weathered the panic of 1893
- By 1900 a membership of 5000,000
- Critics referred to it, with questionable accuracy, as “the labor trust.”
- *Labor conditions:*
  - Labor disorders continued, peppering a total of over 23,000 strikes 1881-1900
  - Disturbances involved 6,610,000 workers, with a total loss to both employers and employees of \$450 million
  - The strikers lost about half of their strikes and won or compromised the remainder.

# XX. The AF of L to the Fore (cont.)

- The gravest weakness of organized labor was that it still embraced only a small minority of all working-people—about 3% in 1900.
- *Attitude toward labor was changing:*
  - The public was conceding the right of workers to organize
  - To bargain collectively and to strike
  - Labor Day was made a holiday by act of Congress 1894
  - Enlightened industrialists saw the wisdom of bargaining with the unions and signing agreements.

## XX. The AF of L to the Fore (cont.)

- *Vast majority of workers continued to fight organized labor*
- *Nothing was handed to the unions on a silver platter*
- *Management still held the whip hand*
- *Time would be taken before labor was to gain a position of relative equality with capital.*
- *If the age of big business had dawned, the age of big labor was still some distance over the horizon.*

