

THE RISE OF INDUSTRIAL AMERICA, 1865–1900

As we view the achievements of aggregated capital, we discover the existence of trusts, combinations, and monopolies, while the citizen is struggling far in the rear or is trampled to death beneath an iron heel. Corporations, which should be the carefully restrained creatures of the law and servants of the people, are fast becoming the people's masters.

President Grover Cleveland, 1888

By 1900, the United States was the leading industrial power in the world, manufacturing more than its leading rivals, Great Britain, France, or Germany. Several factors contributed to the rapid growth (about 4 percent a year) of the U.S. economy:

- The country was a treasure-house of raw materials essential to industrialization—coal, iron ore, copper, lead, timber, and oil.
- An abundant labor supply that was, between 1865 and 1900, supplemented yearly by the arrival of hundreds of thousands of immigrants.
- A growing population and an advanced transportation network made the United States the largest market in the world for industrial goods.
- Capital was plentiful, as Europeans with surplus wealth joined well-to-do Americans in investing in the economic expansion.
- The development of labor-saving technologies and an efficient patent system increased productivity. The federal government granted more than 440,000 new patents from 1860 to 1890.
- Businesses benefited from friendly government policies that protected private property, subsidized railroads with land grants and loans, supported U.S. manufacturers with protective tariffs, refrained from regulating business operations, and limited taxes on corporate profits.
- Talented entrepreneurs emerged during this era who were able to build and manage vast industrial and commercial enterprises.

The Business of Railroads

The dynamic combination of business leadership, capital, technology, markets, labor, and government support was especially evident in the development of the nation's first big business—railroads. After the Civil War, railroad mileage increased more than fivefold in a 35-year period (from 35,000 miles in 1865 to 193,000 miles in 1900). Railroads created a market for goods that was national in scale, and by so doing encouraged mass production, mass consumption, and economic specialization. The resources used in railroad-building promoted the growth of other industries, especially coal and steel. Railroads also affected the routines of daily life. Soon after the American Railroad Association divided the country into four time zones in 1883, railroad time became standard time for all Americans. Maybe the most important innovations of the railroads was the creation of the modern stockholder corporation and the development of complex structures in finance, business management, and the regulation of competition.

Eastern Trunk Lines

In the early decades of railroading (1830–1860), the building of dozens of separate local lines had resulted in different gauges (distance between tracks) and incompatible equipment. These inefficiencies were reduced after the Civil War through the consolidation of competing railroads into integrated trunk lines. (A trunk line was the major route between large cities; smaller branch lines connected the trunk line with outlying towns.) “Commodore” Cornelius Vanderbilt used his millions earned from a steamboat business to merge local railroads into the New York Central Railroad (1867), which ran from New York City to Chicago and operated more than 4,500 miles of track. Other trunk lines, such as the Baltimore and Ohio Railroad and the Pennsylvania Railroad, connected eastern seaports with Chicago and other midwestern cities and set standards of excellence and efficiency for the rest of the industry.

Western Railroads

The great age of railroad-building coincided with the settlement of the last frontier. Railroads not only promoted settlement on the Great Plains, but they linked the West with the East to create one great national market.

Federal Land Grants Recognizing that western railroads would lead the way to settlement, the federal government provided railroad companies with huge subsidies in the form of loans and land grants. The government gave 80 railroad companies more than 170 million acres of public land, more than three times the acres given away under the Homestead Act. The land was given in alternate mile-square sections in a checkerboard pattern along the proposed route of the railroad. The government expected that the railroad would sell the land to new settlers to finance construction. Furthermore, the completed railroad might both increase the value of government lands and provide preferred rates for carrying the mail and transporting troops.

The subsidies carried some negative consequences. The land grants and cash loans promoted hasty and poor construction and led to corruption in all levels of government. Insiders used construction companies, like the notorious *Crédit Mobilier* (see Chapter 15), to bribe government officials and pocket huge profits. Protests against the land grants mounted in the 1880s when citizens discovered that the railroads controlled half of the land in some western states.

Transcontinental Railroads During the Civil War, Congress authorized land grants and loans for the building of the first transcontinental railroad to tie California to the rest of the Union. Two newly incorporated railroad companies divided the task. The Union Pacific (UP) started from Omaha, Nebraska, and built westward across the Great Plains. The UP employed thousands of war veterans and Irish immigrants under the direction of General Grenville Dodge. The Central Pacific started from Sacramento, California, and built eastward. Led by Charles Crocker, the workers, including 6,000 Chinese immigrants, took on the great risks of laying track and blasting tunnels through the Sierra Nevada mountains. The two railroads came together on May 10, 1869, at Promontory Point, Utah, where a golden spike was ceremoniously driven into the rail tie to mark the linking of the Atlantic and the Pacific states.

In 1883, three other transcontinental railroads were completed. The Southern Pacific tied New Orleans to Los Angeles. The Atchison, Topeka, and Santa Fe linked Kansas City and Los Angeles. The Northern Pacific connected Duluth, Minnesota, with Seattle, Washington. In 1893, a fifth transcontinental railroad was finished, the Great Northern, which ran from St. Paul, Minnesota, to Seattle. It was built by James Hill. The transcontinental railroads may have helped to settle the West, but many proved failures as businesses. They were built in areas with few customers and with little promise of returning a profit in the near term.

Competition and Consolidation

During speculative bubbles, investors often overbuild new technologies, as did railroad owners in the 1870s and 1880s. Railroads also suffered from mismanagement and outright fraud. Speculators such as Jay Gould entered the railroad business for quick profits and made their millions by selling off assets and watering stock (inflating the value of a corporation's assets and profits before selling its stock to the public). In a ruthless scramble to survive, railroads competed by offering rebates (discounts) and kickbacks to favored shippers while charging exorbitant freight rates to smaller customers such as farmers. They also attempted to increase profits by forming pools, in which competing companies agreed secretly and informally to fix rates and share traffic.

A financial panic in 1893 forced a quarter of all railroads into bankruptcy. J. Pierpont Morgan and other bankers quickly moved in to take control of the bankrupt railroads and consolidate them. With competition eliminated, they could stabilize rates and reduce debts. By 1900, seven giant systems controlled nearly two-thirds of the nation's railroads. The consolidation made the rail system more efficient. However, the system was controlled by a few powerful men

TRANSCONTINENTAL RAILROADS, 1865–1900



such as Morgan, who dominated the boards of competing railroad corporations through interlocking directorates (the same directors ran competing companies). In effect, they created regional railroad monopolies.

Railroads captured the imagination of late-19th century America, as the public, local communities, states, and the federal government invested in their development. At the same time, however, customers and small investors often felt that they were the victims of slick financial schemes and ruthless practices. Early attempts to regulate the railroads by law did little good. The Granger laws passed by midwestern states in the 1870s were overturned by the courts, and the federal Interstate Commerce Act of 1886 was at first ineffective (see Chapter 17). Not until the Progressive era in the early 20th century did Congress expand the powers of Interstate Commerce Commission to protect the public interest.

Industrial Empires

The late 19th century witnessed a major shift in the nature of industrial production. Early factories had concentrated on producing textiles, clothing, and

leather products. After the Civil War, a “second Industrial Revolution” resulted in the growth of large-scale industry and the production of steel, petroleum, electric power, and the industrial machinery to produce other goods.

The Steel Industry

The technological breakthrough that launched the rise of heavy industry was the discovery of a new process for making large quantities of steel (a more durable metal than iron). In the 1850s, both Henry Bessemer in England and William Kelly in the United States discovered that blasting air through molten iron produced high-quality steel. The Great Lakes region, from Pennsylvania to Illinois, used its abundant coal reserves and access to the iron ore of Minnesota’s Mesabi Range to emerge as the center of steel production.

Andrew Carnegie Leadership of the fast-growing steel industry passed to a shrewd business genius, Andrew Carnegie. Born in 1835 in Scotland, Carnegie immigrated to the United States and worked his way up from poverty to become the superintendent of a Pennsylvania railroad. In the 1870s, he started manufacturing steel in Pittsburgh and soon outdistanced his competitors by a combination of salesmanship and the use of the latest technology. Carnegie employed a business strategy known as vertical integration, by which a company would control every stage of the industrial process, from mining the raw materials to transporting the finished product. By 1900, Carnegie Steel employed 20,000 workers and produced more steel than all the mills in Britain.

U.S. Steel Corporation Deciding to retire from business to devote himself to philanthropy, Carnegie sold his company in 1900 for more than \$400 million to a new steel combination headed by J. P. Morgan. The new corporation, United States Steel, was the first billion-dollar company and also the largest enterprise in the world, employing 168,000 people and controlling more than three-fifths of the nation’s steel business.

Rockefeller and the Oil Industry

The first U.S. oil well was drilled by Edwin Drake in 1859 in Pennsylvania. Only four years later, in 1863, a young John D. Rockefeller founded a company that would come to control most of the nation’s oil refineries by eliminating its competition. Rockefeller took charge of the chaotic oil refinery business by applying the latest technologies and efficient practices. At the same time, as his company grew, he was able to extort rebates from railroad companies and temporarily cut prices for Standard Oil kerosene to force rival companies to sell out. By 1881 his company—by then known as the Standard Oil Trust—controlled 90 percent of the oil refinery business. The trust that Rockefeller put together consisted of the various companies that he had acquired, all managed by a board of trustees that Rockefeller and Standard Oil controlled. Such a combination represented a horizontal integration of an industry, in which former competitors were brought under a single corporate umbrella. By controlling the supply and prices of oil products, Standard Oil’s profits soared and

so did Rockefeller's fortune, which at the time of his retirement amounted to \$900 million. By eliminating waste in the production of kerosene, Standard Oil was also able to keep prices low for consumers. Emulating Rockefeller's success, dominant companies in other industries (sugar, tobacco, leather, meat) also organized trusts.

Antitrust Movement

The trusts came under widespread scrutiny and attack in the 1880s. Middle-class citizens feared the trusts' unchecked power, and urban elites (old wealth) resented the increasing influence of the new rich. After failing to curb trusts on the state level, reformers finally moved Congress to pass the Sherman Antitrust Act in 1890, which prohibited any "contract, combination, in the form of trust or otherwise, or conspiracy in restraint of trade or commerce."

Although a federal law against monopolies was now on the books, it was too vaguely worded to stop the development of trusts in the 1890s. Furthermore, the Supreme Court in *United States v. E. C. Knight Co.* (1895) ruled that the Sherman Antitrust Act could be applied only to commerce, not to manufacturing. As a result, the U.S. Department of Justice secured few convictions until the law was strengthened during the Progressive era (see Chapter 21).

Laissez-Faire Capitalism

The idea of government regulation of business was alien to the prevailing economic, scientific, and religious beliefs of the late 19th century. The economic expression of these beliefs was summed up in the phrase "laissez-faire."

Conservative Economic Theories

As early as 1776, the economist Adam Smith had argued in *The Wealth of Nations* that business should be regulated, not by government, but by the "invisible hand" (impersonal economic forces) of the law of supply and demand. If government kept its hands off, so the theory went, businesses would be motivated by their own self-interest to offer improved goods and services at low prices. In the 19th century, American industrialists appealed to laissez-faire theory to justify their methods of doing business—even while they readily accepted the protection of high tariffs and federal subsidies. The rise of monopolistic trusts in the 1880s seemed to undercut the very competition needed for natural regulation. Even so, among conservatives and business leaders, laissez-faire theory was constantly invoked in legislative halls and lobbies to ward off any threat of government regulation.

Social Darwinism Charles Darwin's theory of natural selection in biology offended the beliefs of many religious conservatives, but it bolstered the views of economic conservatives. Led by English social philosopher Herbert Spencer, some people argued for Social Darwinism, the belief that Darwin's ideas of natural selection and survival of the fittest should be applied to the marketplace.

Spencer believed that concentrating wealth in the hands of the “fit” benefited everyone. An American Social Darwinist, Professor William Graham Sumner of Yale University, argued that helping the poor was misguided because it interfered with the laws of nature and would only weaken the evolution of the species by preserving the unfit. Social Darwinism gave some during this period a “scientific” sanction for their racial intolerance. Race theories about the superiority of one group over others would continue to produce in problems in the 20th century.

Gospel of Wealth A number of Americans found religion more convincing than social Darwinism in justifying the wealth of successful industrialists and bankers. Because he diligently applied the Protestant work ethic (that hard work and material success are signs of God’s favor) to both his business and personal life, John D. Rockefeller concluded that “God gave me my riches.” In a popular lecture, “Acres of Diamonds,” the Reverend Russell Conwell preached that everyone had a duty to become rich. Andrew Carnegie’s article “Wealth” argued that the wealthy had a God-given responsibility to carry out projects of civic philanthropy for the benefit of society. Practicing what he preached, Carnegie distributed more than \$350 million of his fortune to support the building of libraries, universities, and various public institutions.

Technology and Innovations

Vital to industrial progress were new inventions. These led to greater productivity in the workplace and mass-produced goods in the home.

Inventions

The first radical change in the speed of communications was the invention of a workable telegraph by Samuel F. B. Morse, initially demonstrated in 1844. By the time of the Civil War, electronic communication by telegraph and rapid transportation by railroad were already becoming standard parts of modern living, especially in the northern states. After the war, Cyrus W. Field’s invention of an improved transatlantic cable in 1866 suddenly made it possible to send messages across the seas in minutes. By 1900, cables linked all continents of the world in an electronic network of nearly instantaneous, global communication. This communication revolution soon internationalized markets and prices for basic commodities, such as grains, coal, and steel, often placing local and smaller producers at the mercy of international forces.

Among the hundreds of noteworthy inventions of the late 19th century were the typewriter (1867), the telephone developed by Alexander Graham Bell (1876), the cash register (1879), the calculating machine (1887), and the adding machine (1888). These new products became essential tools for business. Products for the consumer that were in widespread use by the end of the century were George Eastman’s Kodak camera (1888), Lewis E. Waterman’s fountain pen (1884), and King Gillette’s safety razor and blade (1895).

Edison and Westinghouse

Possibly the greatest inventor of the 19th century, Thomas Edison was a young telegraph operator and patented his first invention, a machine for recording votes in 1869. Income from his early inventions enabled Edison to establish a research laboratory in Menlo Park, New Jersey, in 1876. This was the world's first modern research laboratory. It ranks among Edison's most important contribution to science and industry because it introduced the concept of mechanics and engineers working on a project as a team rather than as lone inventors. Out of Edison's lab came more than a thousand patented inventions, including the phonograph, the improvement of the incandescent lamp in 1879 (the first practical electric lightbulb), the dynamo for generating electric power, the mimeograph machine, and the motion picture camera.

Another remarkable inventor, George Westinghouse, held more than 400 patents and was responsible for developing an air brake for railroads (1869) and a transformer for producing high-voltage alternating current (1885). The latter invention made possible the lighting of cities and the operation of electric streetcars, subways, and electrically powered machinery and appliances.

Marketing Consumer Goods

The increased output of U.S. factories as well as the invention of new consumer products prompted businesses to find ways of selling their merchandise to a large public. R.H. Macy in New York and Marshall Field in Chicago made the large department store the place to shop in urban centers, while Frank Woolworth's Five and Ten Cent Store brought nationwide chain stores to the towns and urban neighborhoods. Two large mail-order companies, Sears, Roebuck and Montgomery Ward, used the improved rail system to ship to rural customers everything from hats to houses ordered from their thick catalogs, which were known to millions of Americans as the "wish book."

Packaged foods under such brand names as Kellogg and Post became common items in American homes. Refrigerated railroad cars and canning enabled Gustavus Swift and other packers to change the eating habits of Americans with mass-produced meat and vegetable products. Advertising and new marketing techniques not only promoted a consumer economy but also created a consumer culture in which shopping became a favorite pastime.

Impact of Industrialization

The growth of American industry raised the standard of living for most people. However, growth also created sharper economic and class divisions among the rich, the middle class, and the poor.

The Concentration of Wealth

By the 1890s, the richest 10 percent of the U.S. population controlled 90 percent of the nation's wealth. Industrialization created a new class of millionaires, some of whom flaunted their wealth by living in ostentatious mansions, sailing enormous yachts, and throwing lavish parties. The Vanderbilts graced

the waterfront of Newport, Rhode Island, with summer homes that rivaled the villas of European royalty. Guests at one of their dinner parties were invited to hunt for their party favors by using small silver shovels to seek out the precious gems hidden in sand on long silver trays.

Horatio Alger Myth Many Americans ignored the widening gap between the rich and the poor. They found hope in the examples of “self-made men” in business such as Andrew Carnegie and Thomas Edison and novels by Horatio Alger Jr. Every Alger novel portrayed a young man of modest means who becomes wealthy through honesty, hard work, and a little luck. In reality, opportunities for upward mobility (movement into a higher economic bracket) did exist, but the rags-to-riches career of an Andrew Carnegie was unusual. Statistical studies demonstrate that the typical wealthy businessperson of the day was a white, Anglo-Saxon, Protestant male who came from an upper- or middle-class background and whose father was in business or banking.

The Expanding Middle Class

The growth of large corporations required thousands of white-collar workers (salaried workers whose jobs generally do not involve manual labor) to fill the highly organized administrative structures. Middle management was needed to coordinate the operations between the chief executives and the factories. In addition, industrialization helped expand the middle class by creating jobs for accountants, clerical workers, and salespersons. In turn, these middle-class employees increased the demand for services from other middle-class workers: professionals (doctors and lawyers), public employees, and storekeepers. The increase in the number of good-paying occupations after the Civil War significantly increased the size of the middle class.

Wage Earners

By 1900, two-thirds of all working Americans worked for wages, usually at jobs that required them to work ten hours a day, six days a week. Wages were determined by the laws of supply and demand, and because there was usually a large supply of immigrants competing for factory jobs, wages were barely above the level needed for bare subsistence. Low wages were justified by David Ricardo (1772–1823), whose famous “iron law of wages” argued that raising wages would only increase the working population, and the availability of more workers would in turn cause wages to fall, thus creating a cycle of misery and starvation. Real wages (income adjusted for inflation) rose steadily in the late 19th century, but even so most wage earners could not support a family decently on one income. Therefore, working-class families depended on the income of women and children. In 1890, 11 million of the 12.5 million families in the United States averaged less than \$380 a year in income.

Working Women

One adult woman out of every five in 1900 was in the labor force working for wages. Most were young and single—only 5 percent of married women worked outside the home. In 1900, men and women alike believed that, if a

family could afford it, a woman's proper role was in the home raising children. Factory work for women was usually in industries that people perceived as an extension of the home: the textile, garment, and food-processing industries, for example. As the demand for clerical workers increased, women moved into formerly male occupations as secretaries, bookkeepers, typists, and telephone operators. Occupations or professions that became feminized (women becoming the majority) usually lost status and received lower wages and salaries.

Labor Discontent

Before the Industrial Revolution, workers labored in small workplaces that valued an artisan's skills. They often felt a sense of accomplishment in creating a product from start to finish. Factory work was radically different. Industrial workers were often assigned just one step in the manufacturing of a product, performing semiskilled tasks monotonously. Both immigrants from abroad and migrants from rural America had to learn to work under the tyranny of the clock. In many industries, such as railroads and mining, working conditions were dangerous. Many workers were exposed to chemicals and pollutants that only later were discovered to cause chronic illness and early death.

Industrial workers rebelled against intolerable working conditions by missing work or quitting. They changed jobs on the average of every three years. About 20 percent of those who worked in factories eventually dropped out of the industrial workplace rather than continuing. This was a far higher percentage than those who protested by joining labor unions.

The American Workforce, 1900 –1960				
Year	Farm		Nonfarm	
	Total in millions	Percentage	Total in millions	Percentage
1900	11,050	41	15,906	59
1910	11,260	32	23,299	68
1920	10,440	27	28,768	73
1930	10,340	22	33,843	78
1940	9,540	20	37,980	80
1950	7,160	12	51,760	88
1960	5,458	8	60,318	92

Source: U.S. Bureau of the Census. *Historical Statistics of the United States, Colonial Times to 1970*

The Struggle of Organized Labor

The late 19th century witnessed the most deadly—and frequent—labor conflicts in the nation’s history. Many feared the country was heading toward open warfare between capital and labor.

Industrial Warfare

With a surplus of cheap labor, management held most of the power in its struggles with organized labor. Strikers could easily be replaced by bringing in strikebreakers, or scabs—unemployed persons desperate for jobs. Employers also used all of the following tactics for defeating unions:

- *the lockout*: closing the factory to break a labor movement before it could get organized
- *blacklists*: names of pro-union workers circulated among employers
- *yellow-dog contracts*: workers being told, as a condition for employment, that they must sign an agreement not to join a union
- calling in *private guards* and *state militia* to put down strikes
- obtaining *court injunctions* against strikes

Moreover, management fostered public fear of unions as anarchistic and un-American. Before 1900, management won most of its battles with organized labor because, if violence developed, employers could almost always count on the support of the federal and state governments.

Labor itself was often divided on the best methods for fighting management. Some union leaders advocated political action. Others favored direct confrontation: strikes, picketing, boycotts, and slowdowns to achieve union recognition and collective bargaining.

Great Railroad Strike of 1877 One of the worst outbreaks of labor violence in the century erupted in 1877, during an economic depression, when the railroad companies cut wages in order to reduce costs. A strike on the Baltimore and Ohio Railroad quickly spread across 11 states and shut down two-thirds of the country’s rail trackage. Railroad workers were joined by 500,000 workers from other industries in an escalating strike that quickly became national in scale. For the first time since the 1830s, a president (Rutherford B. Hayes) used federal troops to end labor violence. The strike and the violence finally ended, but not before more than 100 people had been killed. After the strike, some employers addressed the workers’ grievances by improving wages and working conditions, while others took a hard line by busting workers’ organizations.

Attempts to Organize National Unions

Before the 1860s, unions had been organized as local associations in one city or region. They usually focused on one craft or type of work.

National Labor Union The first attempt to organize all workers in all states—both skilled and unskilled, both agricultural workers and industrial workers—was the National Labor Union. Founded in 1866, it had some 640,000 members by 1868. Besides championing the goals of higher wages and the eight-hour day, the first national union also had a broad social program: equal rights for women and blacks, monetary reform, and worker cooperatives. Its chief victory was winning the eight-hour day for workers employed by the federal government. It lost support, however, after a depression began in 1873 and after the unsuccessful strikes of 1877.

Knights of Labor A second national labor union, the Knights of Labor, began in 1869 as a secret society in order to avoid detection by employers. Under the leadership of Terence V. Powderly, the union went public in 1881, opening its membership to all workers, including African Americans and women. Powderly advocated a variety of reforms: (1) worker cooperatives “to make each man his own employer,” (2) abolition of child labor, and (3) abolition of trusts and monopolies. He favored settling labor disputes by means of arbitration rather than resorting to strikes. Because the Knights were loosely organized, however, he could not control local units that decided to strike. The Knights of Labor grew rapidly and attained a peak membership of 730,000 workers in 1886. It declined just as rapidly, however, after the violence of the Haymarket riot in Chicago in 1886 turned public opinion against the union.

Haymarket Bombing Chicago, with about 80,000 Knights in 1886, was the site of the first May Day labor movement. Also living in Chicago were about 200 anarchists who advocated the violent overthrow of all government. In response to the May Day movement calling for a general strike to achieve an eight-hour day, labor violence broke out at Chicago’s McCormick Harvester plant. On May 4, workers held a public meeting in Haymarket Square, and as police attempted to break up the meeting, someone threw a bomb, which killed seven police officers. The bomb thrower was never found. Even so, eight anarchist leaders were tried for the crime and seven were sentenced to death. Horrified by the bomb incident, many Americans concluded that the union movement was radical and violent. The Knights of Labor, as the most visible union at the time, lost popularity and membership.

American Federation of Labor Unlike the reform-minded Knights of Labor, the American Federation of Labor (AF of L) concentrated on attaining narrower economic goals. Founded in 1886 as an association of 25 craft unions, and led by Samuel Gompers until 1924, the AF of L focused on just higher wages and improved working conditions. Gompers directed his local unions of skilled workers to walk out until the employer agreed to negotiate a new contract through collective bargaining. By 1901, the AF of L was by far the nation’s largest union, with 1 million members. Even this union, however, would not achieve major successes until the early decades of the 20th century.

Strikebreaking in the 1890s

Two massive strikes in the last decade of the 19th century demonstrated both the growing discontent of labor and the continued power of management to prevail in industrial disputes.

Homestead Strike Henry Clay Frick, the manager of Andrew Carnegie's Homestead Steel plant near Pittsburgh, precipitated a strike in 1892 by cutting wages by nearly 20 percent. Frick used the weapons of the lockout, private guards, and strikebreakers to defeat the steelworkers' walkout after five months. The failure of the Homestead strike set back the union movement in the steel industry until the New Deal in the 1930s.

Pullman Strike Even more alarming to conservatives was a strike of workers living in George Pullman's company town near Chicago. Pullman manufactured the famous railroad sleeping cars known as Pullman cars. In 1894, he announced a general cut in wages and fired the leaders of the workers' delegation who came to bargain with him. The workers at Pullman laid down their tools and appealed for help from the American Railroad Union whose leader, Eugene V. Debs, directed railroad workers not to handle any trains with Pullman cars. The union's boycott tied up rail transportation across the country.

Railroad owners supported Pullman by linking Pullman cars to mail trains. They then appealed to President Grover Cleveland, persuading him to use the army to keep the mail trains running. A federal court issued an injunction forbidding interference with the operation of the mail and ordering railroad workers to abandon the boycott and the strike. For failing to respond to this injunction, Debs and other union leaders were arrested and jailed. The jailing of Debs and others effectively ended the strike. In the case of *In re Debs* (1895), the Supreme Court approved the use of court injunctions against strikes, which gave employers a very powerful weapon to break unions. After serving a six-month jail sentence, Debs concluded that more radical solutions were needed to cure labor's problems. He turned to socialism and the American Socialist party, which he helped to found in 1900.

By 1900, only 3 percent of American workers belonged to unions. Management held the upper hand in labor disputes, with government generally taking its side. However, people were beginning to recognize the need for a better balance between the demands of employers and employees to avoid the numerous strikes and violence that characterized the late 19th century.

Regional Differences During the Gilded Age, industrial growth was concentrated in the Northeast and Midwest regions, the parts of the country with the largest populations, the most capital, and the best transportation. As industry grew, these regions developed more cities, attracted more immigrants and migrants from rural areas, and created more middle-class jobs. The next chapter will analyze the development of the West and South during this period.

HISTORICAL PERSPECTIVES: STATESMEN OR ROBBER BARONS?

Middle-class Americans who enjoyed the benefits of increased industrial production, new consumer goods, and a higher standard of living generally admired the business leaders of the age, viewing them as great industrial statesmen. University professors gave intellectual respectability to this view by drawing upon social Darwinism to argue that business leaders' success was due to their superior intelligence and fitness. Did they not, after all, make the United States the leading economic power in the world?

In the early 20th century, however, a growing number of citizens and historians questioned the methods used by business leaders to build their industrial empires. Charles Beard and other Progressive historians called attention to the oppression of farmers and workers, the corruption of democratic institutions, and the plundering of the nation's resources. Their critical view of 19th-century business leaders received support from historians of the 1930s (the Depression decade). Matthew Josephson, for example, popularized the view that John D. Rockefeller and others like him were robber barons, who took from American workers and small businesses to build personal fortunes. The robber barons were presented as ruthless exploiters who used unethical means to destroy competition, create monopolies, and corrupt the free enterprise system. Any positive contributions that might have been made were merely unplanned by-products of the industrialists' ruthlessness and greed.

The prevailing wisdom of the 1930s shifted in the 1950s, as Allan Nevins urged other historians to right the injustice done to "our business history and our industrial leaders." Nevins and other revisionists argued that the mass production that helped win two world wars and that made the United States an economic superpower far outweighed in significance any self-serving actions by business leaders.

Another approach to the era was taken by historians who analyzed statistical data in an effort to judge the contributions of industrialists and big business. They asked: Were big corporations essential for the economic development of the United States? Did monopolies such as the Standard Oil Trust advance or retard the growth of the U.S. economy? Robert Fogel, for example, used statistical data to prove his startling thesis that railroads were *not* indispensable to the economic growth of the era. The shifting perspectives and criteria of historians from one generation to another may ensure that the question will remain unsettled, yet these perspectives still help to shape economic policy today.

KEY TERMS BY THEME

<p>Transportation (WXT) nation's first big business Cornelius Vanderbilt Eastern trunk lines transcontinental railroads Union and Central Pacific American Railroad Association railroads and time zones speculation and overbuilding Jay Gould, watering stock rebates and pools bankruptcy of railroads Panic of 1893</p>	<p>Alexander Graham Bell telephone Thomas Edison Menlo Park research laboratory electric power; lighting George Westinghouse Eastman's Kodak camera</p> <p>Marketing (WXT) large department stores R. H. Macy mail-order companies Sears, Roebuck packaged foods refrigeration; canning Gustavus Swift advertising consumer economy</p>	<p>railroad strike of 1877 Knights of Labor Haymarket bombing American Federation of Labor Samuel Gompers Pullman Strike Eugene Debs</p>
<p>Large Scale Industry (WXT) causes of industrial growth Andrew Carnegie vertical integration U.S. Steel John D. Rockefeller horizontal integration Standard Oil Trust interlocking directorates J. P. Morgan leading industrial power</p>	<p>Role of Government (WXT) federal land grants and loans fraud and corruption, Crédit Mobilier Interstate Commerce Act of 1886 anti-trust movement Sherman Antitrust Act of 1890 federal courts, <i>U.S. v. E. C. Knight</i></p>	<p>Work and Migration (WXT, MIG) railroad workers: Chinese, Irish, veterans old rich vs. new rich white-collar workers expanding middle class factory wage earners women and children factory workers women clerical workers</p>
<p>Technology (WXT) Second Industrial Revolution Bessemer process transatlantic cable</p>	<p>Organized Labor (WXT) causes of labor discontent "iron law of wages" anti-union tactics</p>	<p>Ideas, Beliefs (CUL) Protestant work ethic Adam Smith laissez-faire capitalism concentration of wealth Social Darwinism William Graham Sumner survival of the fittest Gospel of Wealth Horatio Alger stories "self-made man"</p>