

# 16

## BUILDING FACTORIES, BUILDING CITIES, 1877–1920

### CHAPTER OUTLINE

• Technology and the Triumph of Industrialism • Big Business and its Critics • Mechanization and the Changing Status of Labor • *VISUALIZING THE PAST* *Impact of the 1911 Triangle Shirtwaist Fire* • Growth of the Modern American City • Family Life and Individual Life • New Leisure and Mass Culture • Summary

### TECHNOLOGY AND THE TRIUMPH OF INDUSTRIALISM

While some people chased natural resource opportunities in the West and South, others employed a spirit of inventiveness to drive the new industrialization. Between 1860 and 1930, the U.S. Patent Office, created by the Constitution to “promote the Progress of science and the useful Arts,” granted 1.5 million patents for new inventions; it granted only 36,000 between 1790 and 1860. Inventions often sprang from a marriage between technology and business organization. The harnessing of electricity, internal combustion, steelmaking, and chemistry illustrate how the marriage worked.

#### **Birth of the Electrical Industry**

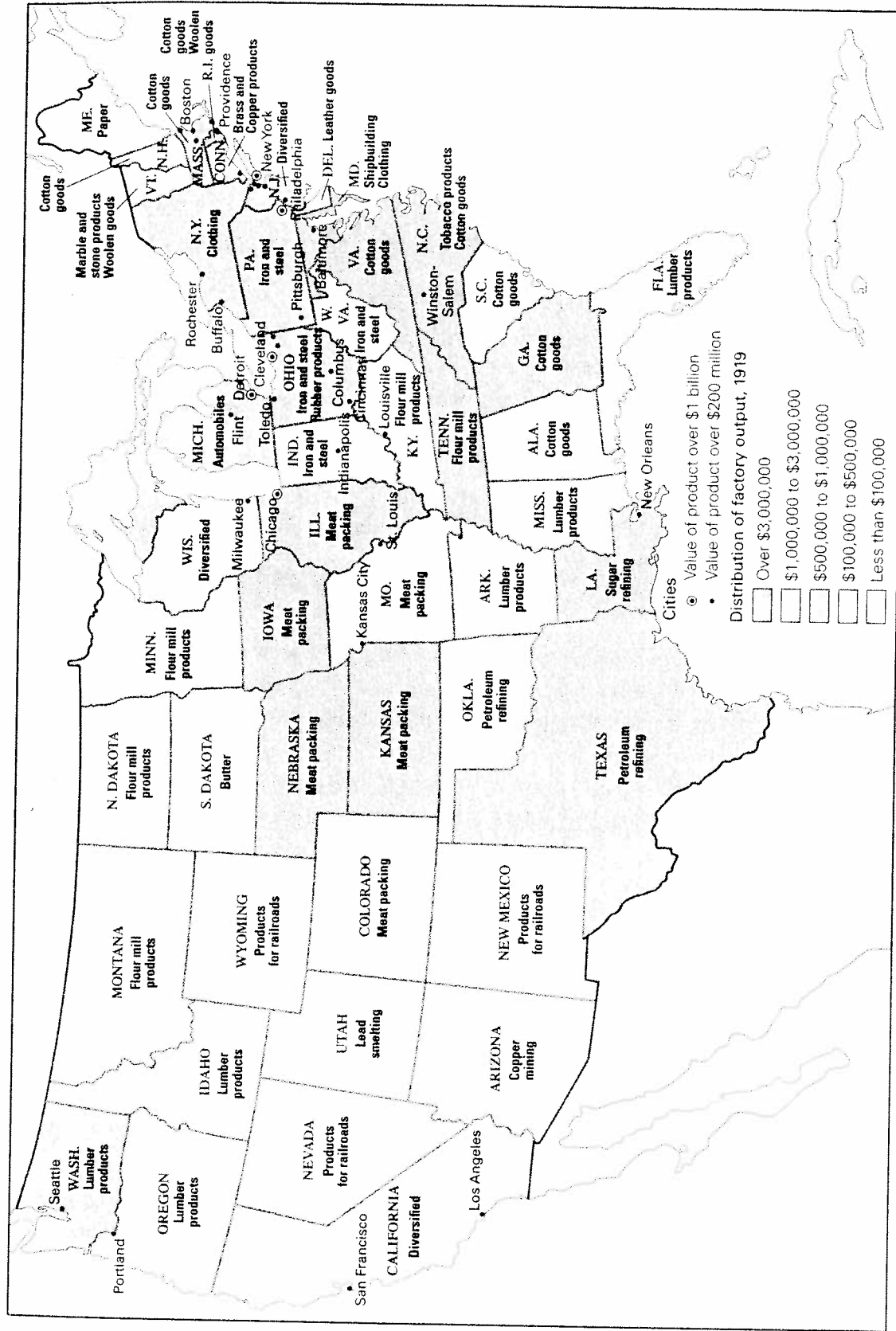
Thomas Edison, who became America’s most celebrated inventor, opened an “invention factory” in Menlo Park, New Jersey, in 1876. There, his application of electricity to light, sound, and images, plus his system of delivering electric power, brought new products to the nation and laid the foundation for how Americans live today. His most notable invention, created after tedious experimentation, was the incandescent light bulb. But also, his Edison Electric Light Company (founded in 1878) devised a system of power generation that provided electricity conveniently to manifold customers. Acting as his own publicist, Edison marketed

## CHRONOLOGY

- |         |   |
|---------|---|
| 1869    | Knights of Labor founded  |
| 1873–78 | Economy declines  |
| 1876    | National League of Professional Baseball Clubs founded  |
| 1877    | Widespread railroad strikes protest wage cuts   |
| 1878    | Edison Electric Light Company founded   |
| 1880s   | “New” immigrants from eastern and southern Europe begin to arrive in large numbers  |
| 1882    | Standard Oil Trust founded  |
| 1883    | Pulitzer buys <i>New York World</i> , creating major publication for yellow journalism  |
| 1886    | Haymarket riot in Chicago protests police brutality against labor demonstrations<br>American Federation of Labor (AFL) founded  |
| 1890    | Sherman Anti-Trust Act outlaws “combinations in restraint of trade”   |
| 1892    | Homestead (Pennsylvania) steelworkers strike against Carnegie Steel Company   |
| 1893–97 | Economic depression causes high unemployment and business failures  |
| 1895    | <i>U.S. v. E. C. Knight Co.</i> limits Congress’s power to regulate manufacturing   |
| 1896    | <i>Holden v. Harcy</i> upholds law regulating miners’ working hours   |
| 1900–10 | Immigration reaches peak  |
| 1905    | <i>Lochner v. New York</i> overturns law limiting bakery workers’ working hours and limits labor protection law<br>Intercollegiate Athletic Association, forerunner of National Intercollegiate Athletic Association (NCAA), is formed, restructuring rules of football |
| 1908    | <i>Muller v. Oregon</i> upholds law limiting women to ten-hour workday<br>First Ford Model T built  |
| 1911    | Triangle Shirtwaist Company fire in New York City leaves 146 workers dead   |
| 1913    | Ford begins moving assembly-line production   |
| 1920    | Majority (51.4 percent) of Americans live in cities   |

his ideas with demonstrations of how electric lighting could transform night into day. Such illumination not only lit homes and offices but enhanced the appeal of Coney Island parks and advertising signs.

Other entrepreneurs adapted electricity for countless purposes. George Westinghouse, for example, showed how alternating current could transmit electricity over long distances. Granville T. Woods, an Ohio engineer sometimes called “the black Edison,” patented thirty-five devices vital to electronics and communications.



**MAP 16.1 Industrial Production, 1919**

By the early twentieth century, each state could boast at least one kind of industrial production. Although the value of goods produced was still highest in the Northeast, states such as Minnesota and California had impressive dollar values of output.

Financiers Henry Villard and J. P. Morgan bought patents from inventors such as Woods and merged equipment manufacturing companies into the General Electric Company and established research laboratories in which scientists created electrical products for practical use.

### Henry Ford and the Automobile Industry

Meanwhile, the gas-powered internal combustion engine, developed in Germany, inspired one of America's most visionary manufacturers, Henry Ford. Originally an electrical engineer, Ford adapted the internal combustion engine to propel a vehicle. Though another inventor had already done the same thing, Ford applied organizational genius to the invention and spawned a massive industry, predicting in 1909, "I am going to democratize the automobile. When I'm through, everybody will be able to afford one, and about everyone will have one." Ford set about mass-producing identical cars on assembly lines that divided the manufacturing process into single tasks repeatedly performed by workers using the same specialized machines. By 1914, the Ford Motor Company outside of Detroit was producing 248,000 cars per year, and auto manufacturing spawned new industries in steel, oil, rubber, and glass, each of which utilized precision machines to standardize production and electricity to power assembly lines. A new Ford cost \$490, still unaffordable to workers who earned at best \$2 a day. To enable his employees to afford a car, as well as reduce labor turnover and head off unionization, Ford began a Five-Dollar-Day pay plan that combined wages and profit sharing.

### Carnegie and Steel, du Pont and Chemicals

In the 1850s, British engineer Henry Bessemer developed a process for producing steel, the strong, durable metal needed for many new products, from molten iron. In America, Scottish immigrant Andrew Carnegie recognized the benefits of the Bessemer process and in the 1870s built steelmaking plants near Pittsburgh that eventually furnished materials for countless rails and bridges, as well as barbed wire, tubing, and household appliances. In 1892, Carnegie combined his assets into the Carnegie Steel Company and by 1900 controlled 60 percent of the country's steel business. In 1901, he retired, selling his holdings to a group led by J. P. Morgan, who formed the huge U.S. Steel Corporation.

Industrial chemistry was pioneered by French immigrant E. I. du Pont, who manufactured gunpowder in Delaware in the early 1890s. In 1902, three du Pont cousins took over the company and expanded production into fertilizer, dyes, and other chemical products. In 1911, du Pont research labs adapted cellulose to the production of consumer goods such as photographic film, textile fibers, and plastics. The company also developed new methods of management and recordkeeping, all leading to higher profits.

### Technology and Southern Industry

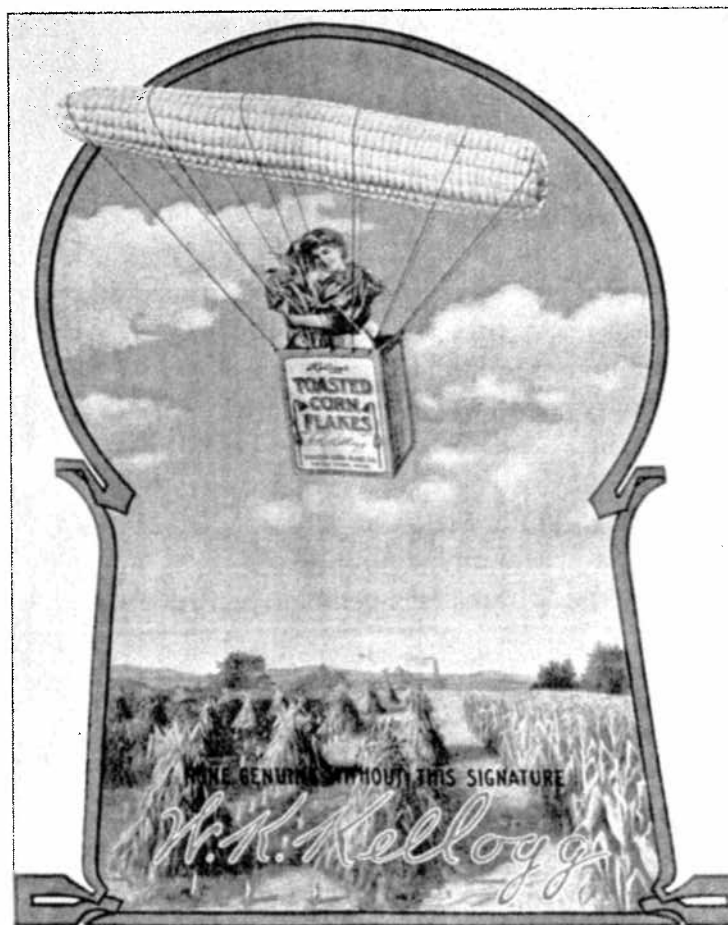
In the South, new industries developed around natural resources. The tobacco crop inspired North Carolinian James B. Duke to create a machine for making cigarettes. He began mass production in 1885. Like Edison and Ford, Duke used marketing and advertising to attract customers. By 1900, his American Tobacco Company was a global business with sales in England and Japan as well as the United States. Also, electric-powered cotton looms and a cheap labor force enabled the southern textile industry to surpass water-powered New England mills and attract investors. Many

textile companies built villages around their mills and controlled housing, stores, schools, and churches. Northern capitalists also invested in southern iron and steel manufacturing, especially in the boom city of Birmingham, Alabama. And between 1890 and 1900, northern lumber syndicates moved into pine forests of the Gulf States, boosting wood production and prompting the relocation of furniture and paper production from North to South.

### Technology and Everyday Life

In all regions, machines and technology altered everyday life. Telephones and typewriters made face-to-face communications less important and facilitated correspondence. Electric sewing machines made mass-produced clothing in standardized sizes available to almost everyone and gave homemakers more convenient ways of creating and mending clothing. Manufacturers of “ready-to-wear” garments emphasized comfort, using less fabric for women’s clothes and creating lighter-weight, yet durable suits for middle-class men and cheaper denim overalls for workingmen. Eating habits also changed. Refrigeration enabled preservation and shipment of fresh meat, produce, and dairy products; canning preserved foods such as tomatoes, fish, and milk that otherwise would have spoiled easily. Dietary reformers William K. Kellogg and Charles W. Post mass-produced new breakfast foods such as corn-flakes and Grape-Nuts, and the discovery of vitamins heightened interest in food’s health. Low-income families still consumed cheap dishes such as corn mush and

*Using color, large-scale scenes, and fanciful images, manufacturers of consumer goods advertised their products to a public eager to buy. This ad from the W. K. Kellogg Company, maker of breakfast foods, shows the increasingly common practice of using an attractive young woman to capture attention.*



hog fatback that were heavy in starches and carbohydrates, but increased availability and variety of processed foods meant that American workers never suffered the severe malnutrition that plagued other developing nations.

New technology even affected personal hygiene. Flush toilets, invented in England, reached American shores in the 1880s. More rapidly than Europeans, middle-class Americans combined a desire for cleanliness with an urge for convenience and began installing modern toilets in their urban houses, making the bathroom a place of utmost privacy. At the same time, brothers Edward and Clarence Scott applied a new process for producing white tissue in perforated rolls, providing Americans a more convenient form of toilet tissue than the rough paper they previously used. All these developments in communications, clothing, food, and plumbing contributed to a democratization of convenience that accompanied mass production and consumerism.

## BIG BUSINESS AND ITS CRITICS

All was not rosy for business, however. New technologies required large capital investments, and the more manufacturers produced, the more they needed to sell. To expand, businesses borrowed from banks and sought higher profits to repay loans and reward stockholders. This spiraling process strangled small firms that could not keep pace and caused uncertainty in transportation and banking. Optimism could vanish at the hint that a large debtor was about to fail. Economic downturns occurred with painful regularity—in 1871, 1884, and 1893—as overproduction, underconsumption, and unregulated banking strained the system, causing business owners to seek ways to create stability.

Corporations proved to be the best instruments for industrial expansion. These were companies that raised capital by selling shares to stockholders who shared company profits without personal risk because laws limited their liability for company debts to the amount of their own investments. Firms such as General Electric and the American Tobacco Corporation won judicial safeguards in 1888 when Chief Justice Morrison R. Waite of the Supreme Court declared that corporations, like ordinary individuals, are protected by laws preventing government from depriving them of property rights without due process of law, an opinion that has lasted to the present day. During the 1880s, a number of corporations in the same industry made agreements, called *pools*, to share markets and profits. But these arrangements often broke down because they lacked dependable enforcement.

### Trusts and Holding Companies

Trusts soon came to dominate a few industries. These were large corporations formed to enable one company to control an industry by luring or forcing stockholders of smaller companies in that industry to yield control of their stock “in trust” to the larger company’s board of trustees. This method enabled a company such as John D. Rockefeller’s Standard Oil to achieve domination by combining with, or *vertically integrating*, other oil refineries. In 1898, New Jersey adopted laws allowing companies chartered there to own stock in other states, facilitating creation of holding companies, which merged the buildings, equipment, inventory, and cash of several firms under single management. Using this *horizontal integration*, holding companies could dominate all aspects of an industry, including

raw-material extraction, manufacture, and distribution. For example, Gustavus Swift's Chicago meat-processing operation controlled livestock, slaughterhouses, refrigerator cars, and marketing.

Trusts and holding companies provided solutions to big corporations' search for orderly profits. Between 1889 and 1903, some three hundred of these combinations formed, including American Sugar Refining Company and U.S. Rubber Company. A new species of businessman, the financier, aided the process by creating a holding company through stock sales and bank loans, then persuading firms to sell out to him. The practice often put small companies out of business and made huge fortunes for shrewd bankers such as J. P. Morgan and Jacob Schiff.

Growth of corporations turned stock and bond exchanges into hubs of activity. In 1869, only 145 industrial corporations traded on the New York Stock Exchange; by 1914, 511 did. Impressed by the safety and opportunity of the American economy, foreign investors poured huge sums into American companies. Banks and insurance companies also invested in railroads and industrial enterprises. As one journal proclaimed, "Nearly the whole country (including the typical widow and orphan) is interested in the stock market."

### **Social Darwinism**

Business leaders involved in the formation of large corporations often justified their actions by invoking Social Darwinism, a theory developed by British philosopher Herbert Spencer. This philosophy loosely grafted Charles Darwin's theory of survival of the fittest onto *laissez-faire*, the doctrine that government should not interfere in private economic matters. Social Darwinists reasoned that in a free-market economy, wealth would naturally flow to those most capable of creating it. Acquisition of wealth thus was a sacred and deserved right. As one proponent of Social Darwinism argued, "If we do not have survival of the fittest, we have only one possible alternative, and that is survival of the unfittest."

Like western entrepreneurs who lauded individual effort while seeking government assistance for their railroads and timber companies, corporation heads praised private initiative while seeking public assistance. They denounced legislation that regulated work hours and factory conditions as interference with natural economic laws, but they lobbied forcefully for subsidies, tax relief, and tariffs that they said encouraged business growth.

### **Dissenting Voices**

Critics, however, charged that new forms of big business were unnatural because they stifled opportunity and fostered greed. Farmers, workers, and intellectuals feared that corporations were creating monopolies—domination of an economic activity by one powerful company—and that companies such as Standard Oil crushed small businesses, fixed prices, and corrupted politicians.

By the mid-1880s, a few intellectuals began to challenge Social Darwinism and *laissez-faire*. For example, sociologist Lester Ward, in his book *Dynamic Sociology* (1883), argued that human control of nature, not natural law, accounted for civilization's advance. A system that guaranteed survival only to the fittest, he wrote, was wasteful and brutal. Instead, cooperative activity fostered by government intervention was more just. Economists Richard Ely and Edward Bemis agreed that natural forces should be harnessed for the public good, and they denounced *laissez-faire*.

At the same time, visionaries such as Henry George and Edward Bellamy questioned why the United States had so many poor people while a few became fabulously wealthy. George, a printer alarmed by the poverty of working people like himself, came to believe that inequality stemmed from the ability of property owners to profit from rising land values and the rents they charged. To prevent profiteering, George proposed to replace all taxes with a “single tax” on the rise in property values caused by increased market demand. George’s scheme, presented in *Progress and Poverty* (1879), had great popular appeal and influenced subsequent reformers.

Unlike George, who accepted private ownership, Edward Bellamy believed competitive capitalism promoted waste. Instead, he proposed a state in which government owned the means of production. Bellamy outlined his dream in *Looking Backward* (1888), a novel that depicted Boston in the year 2000 as a peaceful community where everyone had a job and a “principle of fraternal cooperation” replaced vicious competition and monopoly. Bellamy’s vision, called “Nationalism,” sparked formation of Nationalist clubs across the country and kindled efforts for political reform and government ownership of railroads and utilities.

### **Antitrust Legislation**

Plans by George and Bellamy did not succeed, but several states took steps to prohibit monopolies and regulate business. By 1900, twenty-seven states had laws forbidding pools and fifteen outlawed trusts. Most were agricultural states in the South and West that were responding to antimonopolistic pressure from farmers (see Chapter 17). But states lacked the staff and judicial support for effective attacks on big business, and corporations found ways to evade restrictions. Only national legislation, it seemed, could work.

Congress moved hesitantly but in 1890 passed the Sherman Anti-Trust Act that made illegal “every contract, combination in the form of trust or otherwise, or conspiracy in the restraint of trade.” Those convicted of violating the law could receive fines and jail terms and victims could sue for triple damages. However, the law, under influence from pro-business eastern senators, was left purposefully vague. It did not clearly define “restraint of trade” and left interpretation of its provisions to the courts, which at the time were allies of business. When in 1895 the federal government prosecuted the Sugar Trust for owning 98 percent of the nation’s sugar-refining capacity, eight of nine Supreme Court justices ruled in *U.S. v. E. C. Knight Co.* that control of sugar manufacturing did not necessarily mean control of trade. And because the Knight Company’s manufacturing took place entirely within Pennsylvania, its business could not be considered as interstate commerce. Between 1890 and 1900, the federal government prosecuted only eighteen cases under the Sherman Anti-Trust Act, most of them against railroads. Ironically, the act equipped the government with a tool for breaking up labor unions, which, when they went on strike, were deemed in restraint of trade.

## **MECHANIZATION AND THE CHANGING STATUS OF LABOR**

Technology made possible higher profits for factory owners at lower costs. Workers faced less rewarding results. Skilled crafts such as cabinetmaking and metalworking survived, but as mechanized assembly lines made large-scale production more economical, owners invested in machines and hired fewer workers. Profitability relied as much on efficient methods of production as on the machines in use. Where previously

workers controlled much of the methods and timing of production, by the 1890s, engineers and managers with expert knowledge were assuming this responsibility, using planning and standardization to reduce the need for human skills and judgment.

**Frederick W. Taylor** The most influential advocate of efficiency was Frederick W. Taylor. As engineer for a Pennsylvania steel company in the 1880s, Taylor concluded that the best way a company could reduce costs and increase profits was to study “how quickly the various kinds of work ... ought to be done.” The “ought” in Taylor’s scheme signified more output at lower costs, usually by eliminating workers. The “how quickly” meant that time and money were equivalent. He called his system “scientific management,” which he later outlined in his book, *Principles of Scientific Management* (1911). In 1898, Taylor took his stopwatch to Bethlehem Steel Company to apply his principles. After observing workers shoveling iron ore, he designed fifteen kinds of shovels and prescribed proper motions for their use, enabling the plant to reduce a crew of 600 men to 140. Soon other companies began implementing Taylor’s theories. Taylor had little respect for ordinary laborers, calling steelworkers “stupid” and “rarely able to comprehend the science of handling pig iron.” His principles, he believed, needed to be enforced by management.

**Workers Become Employees** Workers increasingly came to fear that they were becoming another kind of interchangeable part in an industrial machine. No longer able to consider themselves producers, who like farmers and craftsmen were paid according to the quality of what they produced, industrial workers instead were becoming employees, wage earners who worked not on their own but when someone hired them and paid them for time spent on the job. Mass production standardized manufacturing so that tasks were regulated by the clock, and carefully supervised. As a Massachusetts factory hand testified in 1879, “during working hours the men are not allowed to speak to each other, though working close together, on pain of discharge. Men are hired to watch and patrol the shop.” Such work was dangerous as well as tedious. The slightest mistake on high-speed machinery could be serious, if not fatal, and accidents occurred often, killing hundreds of thousands each year. For those with mangled limbs, infected cuts, and chronic illnesses, there was no disability insurance to replace lost income, and families stricken by such misfortune suffered acutely.

Workers attempted to retain autonomy and self-respect in the face of employers’ ever-increasing power. Artisans such as glassworkers and printers fought to preserve traditional customs, such as appointing a fellow worker to read a newspaper aloud while they labored. Immigrants working in factories tried to persuade foremen to hire their relatives and friends. Off the job, workers gathered in saloons and parks for relaxation, drinking, and holiday celebrations, ignoring employers’ attempts to control their social lives.

**Women and Children in the Workforce** Employers cut labor costs another way by hiring women and children and paying them low wages. Between 1880 and 1900, numbers of employed women soared from 2.6 million to 8.6 million. As Figure 16.1 shows, the proportion of women



**FIGURE 16.1** Distribution of Occupational Categories Among Employed Men and Women, 1880–1920

The changing lengths of the bar segments of each part of this graph represent trends in male and female employment. Over the forty years covered by this graph, the agriculture, fishing, and mining segment for men and the domestic service segment for women declined the most, whereas notable increases occurred in manufacturing for men and professional services (especially store clerks and teachers) for women.

Source: U.S. Bureau of the Census, *Census of the United States, 1880, 1890, 1900, 1910, 1920* (Washington, D.C.: U.S. Government Printing Office).

working in domestic service (maids, cooks, laundresses), the most common and lowest paid form of female employment, dropped as clerical jobs (typists, filing clerks, and store clerks) expanded. Inventions such as the typewriter and cash register simplified clerical tasks, and employers replaced males with lower-paid females. By 1920, women filled nearly half of all clerical jobs; they held only 4 percent of them in 1880. Although poorly paid, women were attracted to sales and secretarial positions because of the respectability and pleasant surroundings compared with factory and domestic work. Nevertheless, for women lacking skills and education, jobs at low pay were the only choice. In manufacturing, women usually held menial positions in textile mills and food-processing plants that paid as little as \$1.56 a week for seventy hours of work. (Unskilled men received \$7 to \$10 for a similar workweek.)

Although most children who worked toiled on their parents' farms, they too entered new occupations. In 1890, more than 18 percent of all children between ages ten and fifteen held paying jobs. Mechanization in textile and shoe production

## VISUALIZING THE PAST

## *Impact of the 1911 Triangle Shirtwaist Fire*

On March 25, 1911, the worst factory fire in U.S. history occurred at the Triangle Shirtwaist Company, which occupied the top three floors of a building in New York City. Fed by piles of fabric, the fire spread quickly, killing 146 of the 500 young women, mostly Jewish immigrants, employed in the factory.

Many of the victims were burned to death because they were locked inside workrooms by their employer; others plunged from windows. These images show two ways the public received news of the tragedy: through friends and relatives who came to identify and claim the bodies of victims, and through a critical



Bettmann/Corbis

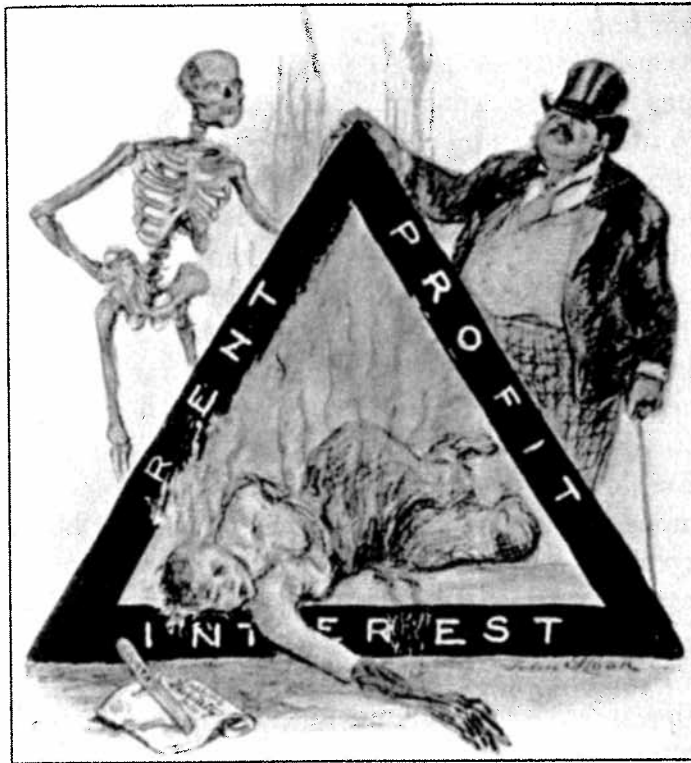
*Many of the victims of the Triangle Shirtwaist fire of 1911 were lined up in coffins, and their bodies were identified by relatives arriving at a makeshift morgue.*

created light tasks such as running errands and helping machine operators, which children could handle at a fraction of adult wages. In the South, textile mill owners induced sharecroppers, who desperately needed extra income, to bind their children over to factories at miserably low wages. Several states, especially in the Northeast, passed laws limiting ages and hours of child laborers. But large firms evaded regulations, which applied only to companies operating solely within a state's borders, exempting those involved in interstate commerce. Also, parents needing income from child labor lied about their children's ages, and employers seldom asked. Children also contributed to family needs by engaging in informal street trades, such as peddling newspapers, shining shoes, and scavenging for discarded wood, coal, and furniture.

### **Freedom of Contract**

To justify their treatment of employees, employers said laborers had "freedom of contract," meaning that workers operated in a free market in which they sold their labor. By

cartoon. Which of these images seems most powerful and likely to inspire reform? How do mass tragedies get communicated to the public today? What limitations in communications existed in 1911?



The Granger Collection, NYC

*John French Sloan, an artist with radical leanings, drew this cartoon in the wake of the Triangle fire. Eager to assert that profit-minded capitalists were responsible for unnecessary deaths, Sloan used stark images to convey his message.*

this principle, a worker who did not like the wages and hours being offered was free to decline a job and seek better conditions from another employer. In practice, however, employers used supply and demand to set wages as low as laborers would accept, forcing those needing work to take whatever they could get. When some states tried to improve working conditions through regulatory legislation, business interests enlisted courts, including the U.S. Supreme Court, to oppose such measures. Though the Court in *Holden v. Hardy* (1891) did uphold a law restricting miners' working hours because an overly long workday increased the threat of injury, it voided a law limiting bakery workers to a sixty-hour week and ten-hour day (*Lochner v. New York*, 1905), reasoning that baking was not dangerous enough to prevent workers from selling their labor freely.

In one case, *Muller v. Oregon* (1908), the Supreme Court made an exception for women. It concluded that a law regulating hours of female laundry workers was constitutional because a woman's well-being as bearer of children was "an object of

TABLE 16.1 | AMERICAN LIVING STANDARDS, 1890–1910

	1890	1910
<b>Income and Earnings</b>		
Annual income		
Clerical worker	\$848	\$1,156
Public schoolteacher	256	492
Industrial worker	486	630
Farm laborer	233	336
Hourly wage		
Soft-coal miner	0.18*	0.21
Ironworker	0.17*	0.23
Shoe worker	0.14*	0.19
Paper worker	0.12*	0.17
<b>Labor Statistics</b>		
Number of people in labor force	28.5 million	41.7 million**
Average workweek in manufacturing	60 hours	51 hours

\* 1892

\*\* 1920

public interest ...” The case represented a victory for reform groups such as the Consumers’ League, which wanted to safeguard women from exploitation. As a result of the *Muller* decision, however, labor laws effectively prevented women from being hired for physically demanding jobs such as printing and transportation, further confining women to low-paying, dead-end occupations.

Workers adjusted to mechanization as best they could. Some adapted to assembly lines and time clocks. Others resisted. Individuals challenged the system by ignoring management’s rules or quitting. Still others, disgruntled over low wages and anxious to restore independence and better conditions, joined unions and went out on strikes.

**Railroad Strikes of 1877** In 1877, a crisis in the railroad industry caused by four years of wage cuts, layoffs, and increased workloads climaxed with a series of strikes in which workers attacked railroad property from Pennsylvania and West Virginia to Texas and California. State militia, organized and commanded by employers, broke up picket lines and fired upon strikers, and railroads hired strikebreakers to replace union men. The worst violence occurred in Pittsburgh, where in July 1877, troopers attacked demonstrators, killing ten and wounding many more. After over a month of fighting in which more were killed and much property was destroyed, President Rutherford B. Hayes sent in federal soldiers—the first significant use of the army to quell labor unrest.

**Knights of Labor**

Railroadmen struck in their own interest, but about the same time an organization called the Knights of Labor tried to organize a broad base of laborers. Aided by Terrence Powderly, a machinist and mayor of Scranton, Pennsylvania, who was elected grand master in 1879, the Knights built a membership of 730,000 by 1886. In contrast to most craft unions, Knights welcomed unskilled and semiskilled workers, including women, African Americans, and immigrants (but not Chinese). The organization tried to bypass conflict between labor and management by establishing a cooperative society in which workers, not capitalists, owned factories, mines, and railroads. This ideal was difficult to achieve because employers held economic leverage and could outcompete laborers who might try to operate their own businesses. Powderly discouraged Knights members from going on strike, arguing that the goal of a cooperative society was more important than conflict and that workers too often lost strikes. Some Knights, however, chose militant action. In 1886, they struck against railroads in the Southwest. When owner Jay Gould refused to negotiate, the strike spread and violence increased. Powderly tried to negotiate, but Gould refused and the Knights gave in. Thereafter membership in the Knights dwindled, although its cooperative vision inspired the Populist movement of the 1890s (see Chapter 17).

The same year that Knights struck against railroads, unionized and nonunionized workers staged strikes in favor of an eight-hour workday. On May 1, 1886, in Chicago, one hundred thousand workers massed for a huge demonstration. Two days later, fearing that anarchists in the crowd were fomenting antigovernment violence, Chicago police mobilized at the McCormick reaper plant and broke up a battle between unionists and strikebreakers, killing two and wounding others. On May 4, demonstrators gathered at Haymarket Square near downtown Chicago to protest police brutality. As police approached, a bomb exploded, killing seven and injuring sixty-seven. In reaction, authorities arrested several anarchists, eight of whom were convicted of the bombing though evidence of their guilt was weak. Four were executed, one committed suicide in jail, and three received pardons from Governor John Altgeld in 1893. The presence of foreign-born anarchists and socialists at the Haymarket violence created fear among civic leaders that labor turmoil threatened social order. In response, governments strengthened police forces and employer associations circulated blacklists of union activists whom they would not employ and began hiring private detectives to protect company property.

**American Federation of Labor**

The American Federation of Labor (AFL), an alliance of craft unions, emerged from the 1886 upheavals as the major workers' organization. Led by Samuel Gompers, former head of the Cigar Makers Union, the AFL avoided the Knights' idealistic goals in favor of concrete issues of higher wages, shorter hours, and the right to bargain collectively. A pragmatist rather than a radical, Gompers and the AFL accepted capitalism and worked to improve conditions within it.

The union avoided party politics, adhering instead to Gompers's policy of supporting labor's friends and opposing its enemies regardless of party. AFL membership grew from 140,000 in 1886 to 1 million in 1901 and 2.5 million in 1917, when it consisted of 111 national unions.

Organized by craft rather than by workplace, the AFL rebuffed unskilled laborers and excluded women. Male unionists insisted that women would depress wages and should stay at home because, as one put it, "Woman is not qualified for the conditions of wage labor.... The mental and physical makeup of woman is in revolt against wage service. She is competing with the man who is her father or husband or is to become her husband." Most unions also excluded immigrants and African Americans, fearing job competition from men who might work for less pay. Long-held prejudices were reinforced when blacks and immigrants, eager for any work they could get, accepted jobs as strikebreakers to replace striking native whites.

**Homestead and Pullman Strikes** The AFL and entire labor movement suffered setbacks in the early 1890s when once again violence stirred public fears. In July 1892, the AFL-affiliated Amalgamated Association of Iron and Steelworkers struck Homestead Steel in Pennsylvania over pay cuts. Henry Frick, president of Carnegie Steel Company, Homestead's owner, hired three hundred guards from the Pinkerton Detective Agency to protect the factory, but angry strikers attacked the guards, sending them into retreat. State troopers intervened and, after five months, the strikers gave up.

In 1894, employees at the Pullman Palace Car Company, maker of railroad passenger cars, walked out over exploitive policies at the company town near Chicago. The owner, George Pullman, controlled nearly everything in the so-called model town of twelve thousand: land, buildings, school, bank, and rents. Pullman refused to negotiate with workers, and when he cut wages without reducing rents, the American Railway Union, led by charismatic Eugene Debs, went on strike. Pullman closed the factory and the union retaliated by refusing to handle all Pullman cars attached to any train. The railroad owners' association enlisted aid from the federal government and Debs was arrested for defying a court injunction against the strike. President Grover Cleveland ordered federal troops to Chicago, ostensibly to protect rail-carried mail but in reality to crush the strike. The union ended the strike and Debs received a six-month prison sentence.

**Labor Violence in the West** In the West, unionized mine workers, led by the Western Federation of Miners (WFM), engaged in violent strikes during the 1890s. In 1894, fighting erupted in Cripple Creek, Colorado, when mine owners increased work hours without increasing pay. The governor called in state militia after two weeks of battles, and the owners agreed to restore the eight-hour workday. In Idaho, federal troops intervened three times in strikes by miners. In 1905, former Idaho governor Frank Steuenberg was assassinated and speculation arose that the WFM was exacting revenge for when Steuenberg imposed martial law during a strike in 1899. After the assassination, authorities arrested WFM activist William "Big Bill" Harwood, a brawny, one-eyed radical, and tried him for murder in 1907. He was acquitted after his famous defense attorney, Clarence Darrow, proved that a key witness was being paid by the mine owners.

In 1905, radical laborers formed the Industrial Workers of the World (IWW). Unlike the AFL, but like the Knights of Labor, the IWW tried to unite unskilled workers under the motto, "An injury to one is an injury to all." Embracing violent tactics and the rhetoric of class conflict and socialism, the "Wobblies," as IWW

members were known, believed workers should seize and run the nation's industries. Their leaders, including Haywood, Mary "Mother" Jones, a coalfield organizer; Elizabeth Gurley Flynn, a fiery orator; Italian radical Carlo Tresca; and songwriter Joe Hill, headed strife-torn strikes in steel towns, textile communities, and lumber camps. The union attracted much publicity but collapsed during the First World War when federal prosecutors sent many of its leaders to prison and local police harassed IWW activities.

### **Women Unionists**

Though generally excluded from unions, some female workers organized and battled employers as strenuously as men did. In 1909, male and female members of the International Ladies Garment Workers' Union staged a strike known as "Uprising of the 20,000" in New York City. Women also were prominent in the 1912 "Bread and Roses" strike against textile owners in Lawrence, Massachusetts, and their Telephone Operators' Department of the International Brotherhood of Electrical Workers sponsored a strike over wage issues that paralyzed the New England Bell telephone system in 1919. Without aid from male electrical workers, the telephone operators nevertheless won concessions of higher wages and the right to bargain collectively.

The Women's Trade Union League (WTUL), founded in 1903, played a key role in representing laboring women. Patterned after a British women's league, WTUL sought legislation to establish shorter hours and better working conditions, supported strikes such as the "Uprising of the 20,000," sponsored educational activities, and campaigned for woman suffrage. At first, sympathetic middle-class women held most WTUL offices, but after 1910 control shifted to working-class leaders such as Agnes Nestor, a glove maker, and Rose Schneiderman, a capmaker. By inspiring working women to press for rights and by training leaders, WTUL provided a vital link between labor and the women's movement into the 1920s.

### **The Nonunionized Workforce**

The high-profile activities of organized labor obscure the fact that the vast majority of American wage workers in these years did not belong to unions. In 1877, less than a million workers were unionized; by 1920, union membership had grown to 5 million but accounted for only 13 percent of the total labor force. For many, getting and keeping a job took priority over bargaining for higher pay and shorter hours. Few companies employed a full workforce year round; they hired during peak seasons and laid off employees during slack times. Moreover, union organizers took no interest in unskilled laborers and intentionally excluded women, blacks, and immigrants.

The millions of men, women, and children who were not unionized coped with pressures of the industrial age as best they could. They joined societies such as the Polish Roman Catholic Union, African American Colored Brotherhood, and Jewish B'nai Brith, which for small fees provided services such as life insurance, sickness benefits, and burial costs. For these Americans as well as for those in unions, the machine age had mixed results. Though wages generally rose between 1877 and 1914, boosting purchasing power and consumerism, hourly pay averaged around 20 cents for skilled work and 10 cents for unskilled. And even as wages rose, living costs rose faster. Those two dimensions of industrialism—work and lifestyle—displayed their most dramatic effects in cities.

## GROWTH OF THE MODERN AMERICAN CITY

Though their initial functions had been as centers for trade, cities became the arenas for industrial development in the late nineteenth century. As hubs for labor, transportation, communications, and consumption, cities supplied everything factories needed. Most cities housed a variety of manufacturing enterprises, but product specialization was common. Mass-produced clothing concentrated in New York City, the shoe industry in Philadelphia, food processing in Minneapolis, meat processing in Chicago, fish canning in Seattle, steelmaking in Pittsburgh and Birmingham, and oil refining in Houston and Los Angeles. Such activities increased cities' magnetic attraction for people and capital.

### **Mechanization of Mass Transportation**

As cities grew, the compact landscape of earlier eras, where residences mingled among shops and factories, burst open as settlement sprawled beyond original boundaries. No longer did walking distance determine a city's size. Instead, cities separated into distinct districts: working- and middle-class neighborhoods, commercial strips, downtown, and suburbs. Two forces created this new arrangement. One, mass transportation, propelled people and enterprises outward. The other, economic change, drew human and material resources inward.

By the 1870s, horse-drawn vehicles began sharing city streets with motor-driven conveyances that moved riders faster and farther. Commuter railroads and cable cars came first, followed by electric-powered streetcars. In a few cities, such as New York and Chicago, companies raised track onto trestles, enabling "elevated" trains to move above jammed streets. In others, such as Boston and New York, underground subways avoided traffic congestion. Also, electric interurban railways, linking neighboring cities in the Midwest and West, furthered urban development.

These forms of mass transit launched urban dwellers into outlying neighborhoods and created a commuting public. The development mainly benefited the middle class. Working-class families, who needed every cent, found streetcar fares, usually five cents a ride, too high. But those with means could move to single-family bungalows in tree-lined, outlying neighborhoods and travel to the central city for work, shopping, and entertainment. Mass transit also altered commercial patterns. When consumers moved outward, shops, banks, and taverns followed, locating at trolley-line intersections and creating secondary business districts. Meanwhile, the urban core became a work zone, where tall buildings loomed over streets clogged with people, horses, and vehicles.

### **Population Growth**

Between 1870 and 1920, the number of Americans living in cities increased from 10 million to 54 million, and the number of places with more than 100,000 people swelled from fifteen to sixty-four. Several cities grew big in a hurry. Chicago, with 109,000 people in 1860, grew to 2.2 million by 1910. Pittsburgh had just 49,000 in 1860; by 1910, it housed 534,000. Only in the South did urbanization not keep pace. Cities there also grew, just not as explosively. Baltimore and New Orleans, the region's largest places in 1860 with 212,000 and 169,000, respectively, remained the largest

in 1910, with 558,000 and 339,000. Urban growth derived mainly from two sources. One was annexation of nearby territory, such as when Chicago tripled its area by adding three surrounding towns in 1889 and when New York City (Manhattan) merged with Brooklyn, Staten Island, and part of Queens in 1898, doubling from 1.5 million to 3 million people. Most communities agreed to be annexed because they could take advantage of the schools, water, and fire protection that could be obtained from the nearby city. More importantly, in-migration from the countryside and abroad contributed to urban population growth.

As debt and crop prices worsened, many rural dwellers fled to big cities such as Chicago and San Francisco, and smaller places such as Indianapolis and Nashville. Both men and women, especially young adults, were attracted by the independence that city life offered. Rural African Americans felt the additional pressures of discrimination that drove them cityward. By 1900, thirty-two cities, mostly in the South but in the North also, had more than ten thousand black residents. Because few factories would employ African Americans, most found jobs in the service sector—cleaning, cooking, and driving—usually at very low wages. But such jobs were usually better than tenant farming.

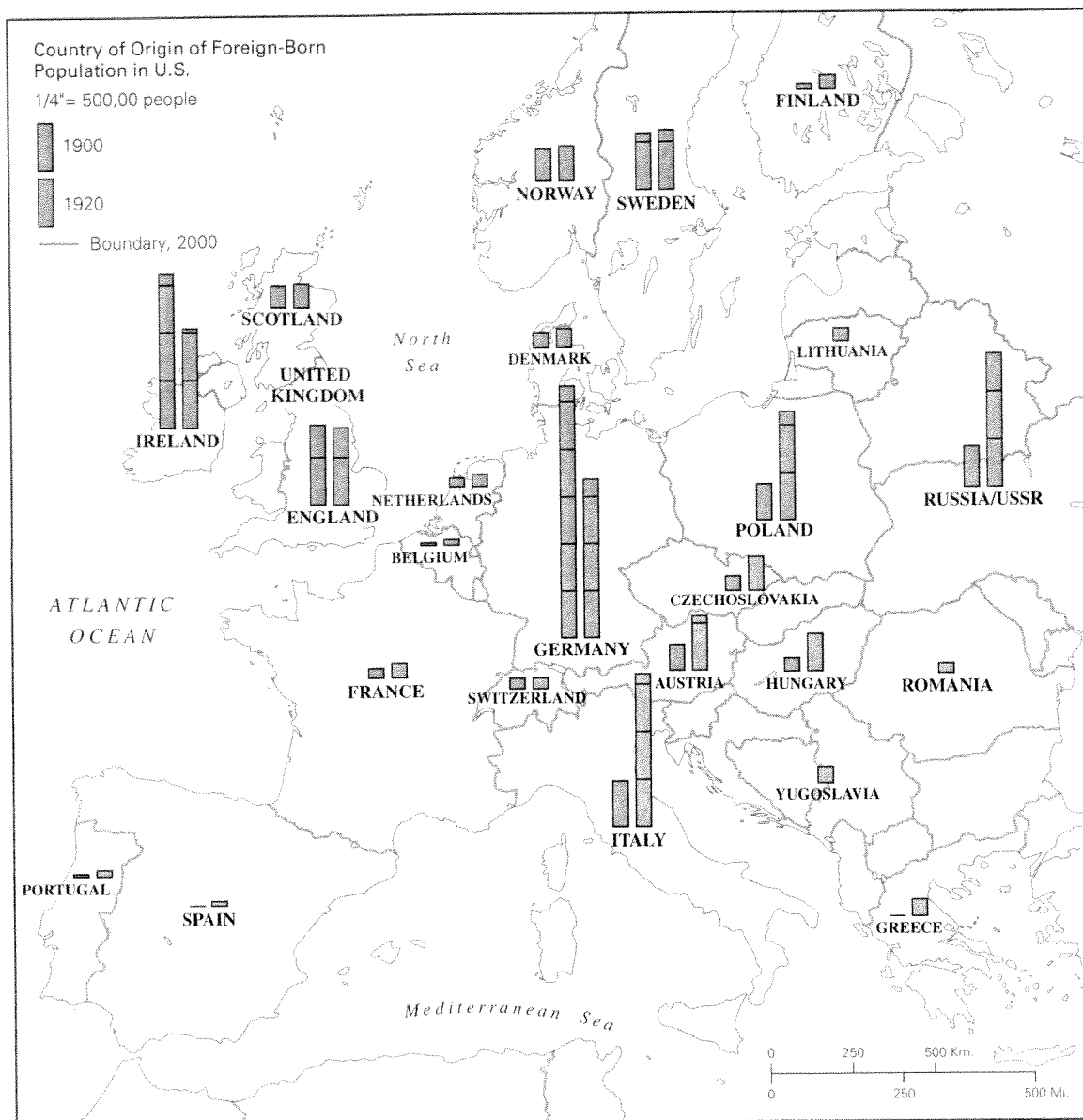
### **New Foreign Immigrants**

More newcomers were immigrants who came from a foreign country. They were part of a global movement resulting from population pressures, land redistribution, religious persecution, and industrialization that induced millions of families and individuals to leave Europe and Asia for Canada, Australia, Brazil, Argentina, and the United States. Migration had always characterized human history, but in the late nineteenth century advances in communications and transportation spread news of opportunities and made travel cheaper and safer. Before 1880, most immigrants had come from northern and western Europe—England, Ireland, and Germany. But after 1880, a second wave from eastern and southern Europe, plus immigrants from Canada, Mexico, and Japan, joined the first groups (see Map 16.2). Between 1900 and 1910, two-thirds of immigrants came from Italy, Austria-Hungary, and Russia, and by 1910 arrivals from Mexico outnumbered those from Ireland. (See website for nationalities of immigrants.) Some wanted only to make enough money to return home and live in greater security. Still, most of the 26 million arriving between 1870 and 1920 remained and settled in cities where they helped to reshape American culture.

Many long-settled Americans feared those they called “new immigrants,” whose customs, Catholic and Jewish faiths, unfamiliar languages, low-skill occupations, and poverty made them seem more alien than previous newcomers. Yet old and new immigrants resembled each other in their strategies for coping. The majority of both groups hailed from societies that made family the focus of life, and they sustained family bonds after reaching America. New arrivals often received aid from relatives who had already immigrated, and family members pooled resources to help them adapt.

### **Geographical and Social Mobility**

Once in America, newcomers seldom stayed put. Each year, millions of families packed up and moved, some to another neighborhood, others to a new town or the countryside. Migration was a means by which people tried to escape



**MAP 16.2 Sources of European-Born Population, 1900 and 1920**

In just a few decades, the proportion of European immigrants to the United States who came from northern and western Europe decreased (Ireland and Germany) or remained relatively stable (England and Scandinavia), while the proportion from eastern and southern Europe increased dramatically.

Source: Data from U.S. Census Bureau, "Historical Census Statistics on the Foreign-Born Population of the United States: 1850–1990," February 1999, <http://www.census.gov/population> (accessed February 12, 2000).

from poor housing and employment, and move to a place where they hoped conditions and jobs would be better. Advances through work were available mostly to white males. Thousands of businesses were needed to serve burgeoning urban populations, and growing corporations were hiring new personnel. An aspiring merchant could open a saloon or shop for a few hundred dollars, and knowledge

of accounting could qualify one for clerical jobs with higher income than manual labor. Women also migrated within and between cities, but they usually went with fathers and husbands whose economic standing defined their class. For African Americans, American Indians, Mexican Americans, and Asian Americans, opportunities were scarcer. Assigned to low-paying occupations by prejudice, they made fewer gains.

Few individuals became rich from these moves, but many traveled the road from poverty to moderate success. In fast-growing cities such as Atlanta and Los Angeles, approximately one in five white manual workers rose to white-collar or owner positions within ten years. In older cities, upward rates were slightly lower, perhaps one in six. Some men chose the security of a steady job over the risk of starting a business or the stigma of an unmanly clerical job. A Sicilian who lived in Bridgeport, Connecticut, observed, “The people that come here they afraid to get in business because they don’t know how that business goes. In Italy these people don’t know much about things because most of them work on farms or in a trade.” Many, particularly unskilled workers, did not improve their status. They could not maintain Old World occupations and were forced to accept low-paying jobs and frustrated hopes. Still, the possibilities for upward mobility seemed to temper people’s dissatisfactions. Although gaps between rich and poor widened and discrimination dashed hopes, expanding urban economies created enough opportunities for those in between.

### **Cultural Retention**

Despite the constant movement that made them turbulent places, cities consisted of collections of functioning sub-communities where people, most of whom had migrated from somewhere else, coped with daily challenges. Rather than yield completely to pressures to assimilate, migrants and immigrants interacted with their environment in a way that enabled them to retain their identity while also altering their outlook and the society in which they lived. Where the English language was a struggle, where the clock regulated their day, and where housing and employment were uncertain, immigrants first anchored their lives to what they knew best: their culture. Old World customs persisted in districts of Italians from the same province, Japanese from the same island, and Jews from the same Russian *shtetl*. Newcomers created aid organizations known in their homelands, such as Japanese *ken* societies that sponsored holiday celebrations and relief services and Chinese loan associations called *whay*, that helped members start businesses. Southern Italians transferred the *padrone* system, whereby for a payoff a boss found jobs for immigrants. Newcomers practiced religion as they always had, married within their group, and pursued long-standing feuds with people from rival villages.

### **Urban Borderlands**

In large cities, such as Chicago and Philadelphia, immigrants initially clustered in inner neighborhoods where jobs and cheap housing were available. These districts often were multi-ethnic “urban borderlands,” where a diversity of people and lifestyles coexisted. Even in districts identified with a specific group, such as “Little Italy” or “Greektown,” rapid mobility constantly undermined homogeneity as former inhabitants dispersed to other

neighborhoods and new residents moved in. Often, an area's institutions such as bakeries, butcher shops, and churches, usually operated by and for one ethnic group and accessible by mass transportation, gave a neighborhood its identity more than the people who lived there.

For first- and second-generation immigrants, their neighborhoods acted as havens until they were ready to leave the borderlands for other districts where neighbors were of the same class but not necessarily the same nationality. Discrimination persisted as Jews were excluded from certain neighborhoods and Italians found it hard to break into political positions. But prejudice was rarely systematic for Europeans. For African Americans, Asians, and Mexicans, however, borderlands kept a more persistent and homogeneous character, largely due to discrimination.

### **Racial Segregation and Violence**

By the late nineteenth century, racial bias forced African Americans into highly segregated ghettos. In cities such as Chicago, Cleveland, and Detroit, two-thirds or more of the black population inhabited only 10 percent of total residential area. Within their neighborhoods, blacks, like other urban dwellers, nurtured institutions such as churches, newspapers, and clubs that helped them cope with city life. Branches of Baptist and African Methodist Episcopal (AME) Protestantism were especially active in aiding members. In virtually all cities, religious associations dominated African American communities and fostered cooperation across class lines.

Often, the only way African Americans could relieve pressures of crowding in ghettos was to expand residential borders into surrounding, previously white neighborhoods, a process that resulted in harassment and attacks by white residents whose intolerance intensified from fears that property values would decline if they had black neighbors. Competition between blacks and whites for housing, jobs, and political influence in the North and South sparked incidents of racial violence. In Atlanta in 1906, newspaper accounts alleging attacks by black men against white women provoked whites into an outburst of shooting that left twelve blacks dead and several injured. An influx of black strikebreakers into East St. Louis, Illinois, in 1917 heightened racial tensions. When some blacks fired back at a car from which they believed shots had been fired at their homes, they mistakenly killed two policemen. The next day, whites retaliated. The riot ended only after nine whites and thirty-nine blacks had been killed and three hundred buildings destroyed.

Though Chinese and Japanese immigrants usually preferred to live apart from Anglos and maintain their own business and social institutions in San Francisco, Seattle, Los Angeles, and New York, Anglos made every effort to keep them separate. In San Francisco, Denis Kearney, an Irish immigrant labor leader, blamed the Chinese for job competition and white unemployment in the 1870s. Promoting the slogan, "The Chinese must go," Kearney and his followers tried to prevent employers from hiring Chinese, often resorting to violence. In 1880, San Francisco banned Chinese laundries, which were social centers for immigrants, from locating in white neighborhoods, justifying the ban by saying they were fire hazards. In 1882, the U.S. Congress passed the

Chinese Exclusion Act, suspending the immigration of Chinese laborers, and in 1892 the Geary Act extended previous restrictions and required Chinese Americans to carry certificates of residence. Japanese suffered similar restrictions, prevented by law from becoming citizens.

**Mexican Barrios** In southwestern cities such as Los Angeles, Tucson, Albuquerque, and San Antonio, Mexicans had been the original inhabitants, Anglos the newcomers. But as Anglo arrivals increased, they pushed Mexicans into isolated residential and commercial districts called *barrios*. These areas tended to be located away from multi-ethnic borderlands housing European immigrants. To a considerable extent, then, racial and ethnic bias made urban experiences of African Americans, Asians, and Mexicans unique and hindered their opportunities to remake their lives.

Virtually everywhere newcomers lived, immigrant culture mingled with existing realities. Although many foreigners identified themselves by their village or regional birthplace, native-born Americans simplified by categorizing them by nationality. Thus people born in County Cork and County Limerick were merged into Irish. Those from Calabria and Campobasso became Italians. At the same time, the diversity of American cities prompted foreigners to modify attitudes and habits. They could not avoid contact with people different from themselves on the streets and in workplaces. They learned the English language, used locally grown foods for traditional meals, fashioned mass-produced clothing into Old World styles, and went to American doctors while still practicing folk medicine. Music especially revealed adaptation. Polish polka bands blended American and homeland folk music; Mexican ballads reflected new themes about hardship in the United States.

**Religious  
Diversity**

The influx of multiple immigrants transformed the United States into a religiously diverse nation. Newcomers from Italy, Polish lands, and Slovakia joined Irish and Germans to increase Catholic populations significantly in cities such as Buffalo, Cleveland, and Milwaukee. Catholic Mexicans constituted over half the population of El Paso, and New York City came to house one of the largest Jewish populations in the world. By 1920, Buddhism was well established among Japanese immigrants on the West Coast and in Hawai'i. As they coped with new conditions, Catholics and Jews tried to adjust their faiths to their environments by adopting English in services and altering traditional rituals. Changes were not complete, however. Catholic immigrant parishes pressured bishops into appointing priests of the same ethnicity as parishioners, and Orthodox Jews retained Old World customs such as separating men and women in services. An exchange of cultural patterns occurred when Catholics and Jews married co-religionists of different nationality groups—an Italian marrying a Pole, for example, kept religious identity strong while blending ethnic identities.

Each of the major migrant groups that peopled cities—native-born whites, foreigners, and native-born blacks—created the pluralism of modern American culture. The nation's broad diversity prevented domination by a single racial or ethnic

majority and nurtured rich cultural variety: American folk literature, Italian and Mexican cuisine, Yiddish theater, African American music and dance, and much more. Newcomers changed their environment as much as it changed them.

Though rich in varied cultures, central sections of cities often were places challenged by crowding, poverty, crime, and disease. People coped as best they could, and technology, private enterprise, and government achieved some remarkable advances. But many problems evaded permanent solution.

### **Housing**

Population growth created scarcity of adequate housing.

Those with low incomes adapted to high rents and short supply by sharing space, resulting in homes and apartments intended for one family being occupied by two or three families plus boarders. The result was unprecedented crowding. In 1890, New York City's immigrant-packed Lower East Side averaged 702 people per acre, one of the highest population densities in the world. Inside tenements and row houses in New York, Philadelphia, and New Orleans spaces were cramped and interior rooms lacked light and fresh air. States such as New York passed regulations to establish ventilation and safety codes for new tenement buildings, but such measures could not remedy ills of existing buildings.

Eventually, technology and science brought about important changes in home life. Improved furnaces, electric lighting, and indoor plumbing created more comfort for middle-class households and, later, for most others. These advances occurred as a result of private enterprise; landlords and humanitarians alike opposed government financing of better housing, fearing that such a step would undermine profits. The major government-sponsored improvements occurred outside of buildings, where publicly financed street paving, modernized firefighting equipment, and electric street lighting made cities safer.

### **Poverty and Crime**

Poverty, however, continued to burden many urbanites.

Employment, especially for unskilled workers, fluctuated with business cycles, causing low-income families to live on the margins of survival. Since colonial days, an attitude that anyone could escape poverty through hard work and clean living had prevailed in American culture. According to this reasoning, poor people were morally weak and aiding them would encourage dependence on public support. Only those incapable of supporting themselves—orphans, people with disabilities, and widows—deserved relief. Close observance of the urban poor, however, prompted reformers such as Jacob Riis, a New York journalist, to conclude that people's environment contributed to hardship and that society ought to shoulder greater responsibility for improving conditions. Riis's series of articles, combined into a book, *How the Other Half Lives* (1890), alerted readers to the deplorable conditions of slum housing. Other reformers advocated public efforts to improve housing, education, and job opportunities to help the poor help themselves. Others, however, clung to the tenet that in a society of abundance, poverty relief could be tolerated but never encouraged. As one charity worker observed, relief "should be surrounded by circumstances that shall ... repel everyone ... from accepting it."



Library of Congress Prints and Photographs Division [LC-USZ64-2654]

*Inner-city dwellers used not only indoor space as efficiently as possible, but also what little outdoor space was available to them. Scores of families living in this cramped block of six-story tenements in New York strung clotheslines behind the buildings. Notice that there is virtually no space between buildings—only rooms at the front and back received daylight and fresh air.*

Crime and violence increased at an alarming rate in American cities in contrast to falling rates in other industrializing nations such as England and Germany. The American murder rate, for example, rose from 25 per million people in 1881 to 107 per million in 1898. Though police forces were becoming more professionalized, law enforcement was complicated because various urban groups differed in their views of how laws should be enforced. Ethnic and racial minorities were more likely to be arrested than those with economic or political influence. Also, while moralists clamored for crackdowns on drinking and gambling, those who enjoyed a drink or a card game favored personal freedom to indulge in these activities. Nativists were quick to blame immigrants for urban crime, but urban lawlessness probably did not exceed that of mining camps and southern plantations, and the lawbreaking population included native-born offenders as well as foreigners.

### **Water Purity and Waste Disposal**

Finding sources of pure water and a way to dispose of waste also challenged city dwellers. Old methods of sinking wells for water and dumping human and industrial waste in rivers and streams no longer could suffice. By the 1880s, doctors began to accept the theory that microorganisms caused disease, prompting new concerns over purity of water sources, where germs were believed to breed. Most cities had replaced private water companies with more copious public supplies, but

sewers, flush toilets, and factory waste created noxious pollution and sometimes disease. By 1900, for example, the Passaic River in New Jersey, once a popular recreation site, had been ruined by discharge from cities along its banks. Improvements came slowly as states passed laws prohibiting disposing of raw sewage into rivers, and a few cities began to filter their water and use chemicals to treat sewage. Though death rates from tuberculosis remained high, public regulation of water and food purity helped control diseases such as cholera, typhoid fever, and diphtheria.

Trash, however, was a growing problem. Experts in 1900 estimated that every New Yorker annually generated 160 pounds of garbage (food), 1,200 pounds of ashes (from stoves and furnaces), and 105 pounds of rubbish (other discarded items). Europeans of that era produced half as much trash. Factories created tons of solid waste (scrap metal, wood), and each of the 3.5 million horses in American cities daily dumped 20 pounds of manure and a gallon of urine on the streets. All this refuse created health and safety hazards. At the urging of women's groups, some cities hired engineers to address the dilemma. One such engineer, George Waring, Jr., designed efficient systems for sewage disposal and street cleaning in Memphis and New York. As a result of such efforts, cities became cleaner, but the trash problem continues to nag urban communities to the present.

### **Political Machines**

The necessity for health and safety protection, schools, parks, and more strained the resources of growing cities. Most urban governments were complex entities, with power shared among a mayor, city council, and numerous boards and agencies. Philadelphia at one time had thirty different boards to administer health, poverty relief, public works, and more. Moreover, state laws often limited a city's ability to levy taxes to fund its needs. Out of the apparent confusion surrounding urban management arose political machines, organizations whose goals were to obtain and retain power. Machine politicians used fraud and bribery to further their ends. But they also provided relief and service to those who voted for them. By meeting people's needs, machine politicians accomplished things that others had been unable or unwilling to attempt.

Most big cities were run by political machines at one time or another and for varying lengths of time. The most notable machines existed in New York, Philadelphia, and Chicago, but they also arose in places as varied as Cincinnati, Memphis, Kansas City, New Orleans, and San Francisco. These organizations bred leaders, called bosses, who built power bases among immigrant working classes. Bosses understood people's problems from firsthand experience and dealt with people on a personal basis. Martin Lomasney, a Boston boss, once remarked, "There's got to be in every ward somebody that any bloke can come to—no matter what he's done—and get help. Help, you understand, none of your law and justice, but help." To bosses, politics was a full-time profession. They attended weddings and wakes, sponsored picnics, and held open house in saloons where neighborhood folk could speak to them. In return for jobs, food and clothing, and intervention when someone got arrested, people gave machine politicians the votes that kept them in power.

To finance their activities, bosses used political influence to control the awarding of public contracts and streetcar and utility franchises. In return, recipients of city business and jobs were expected to repay the machine with a portion of their profits or salaries. Critics called this process graft; bosses called it gratitude. Though waste and corruption were often involved, bosses could boast major achievements. Aided by engineers, machine-led governments constructed much of the new urban infrastructure—public buildings, sewer systems, schools, and streetcar lines—and expanded services such as firefighting, police, and public health.

Machines were rarely neutral or fair, however. Racial minorities and new immigrant groups such as Italians and Poles received only token favors and jobs, if any. And bribes and kickbacks made machine projects costly. Unable to raise enough revenue from taxes and fees, bosses financed expansion with loans in the form of municipal bonds. As a result, public debts soared. Also, payoffs from gambling and illegal liquor traffic were important sources of machine revenues. But bosses likely were no guiltier of greed and discrimination than were those businessmen who exploited workers, spoiled the environment, and manipulated government in pursuit of profits. Sometimes humane, sometimes criminal, bosses acted as brokers between sectors of urban society and an uncertain world.

### **Civic and Social Reform**

Reacting to the ways bosses exercised power and disturbed by mounting costs and corruption in government, reformers tried to unseat machines. One group, mostly middle- and upper-class types called civic reformers, sought to replace boss politics with government run according to business principles of economy and efficiency. They wanted structural changes such as tighter control of budgets, city manager and commission forms of government, and nonpartisan elections. In several places reform campaigns managed to oust machines, and a few reform mayors, such as Hazen Pingree of Detroit and Tom Johnson of Cleveland, worked not only for governmental change but to provide jobs and better housing for poor people. But most civic reformers only wanted to economize and root out dishonesty; they seldom held office for very long.

Beyond politics and government, another group, social reformers, undertook efforts to investigate and solve everyday problems. Mostly middle class, this group pressed government for building codes to ensure safer tenements, improved public and vocational schools to better prepare immigrants for citizenship, and medical care for those unable to afford it. Often led by women such as Jane Addams and Florence Kelley, social reformers also promoted safer food, public playgrounds, and school nurses. Environmental reformers, such as those in the City Beautiful movement, sought to improve cities' built environments. Inspired by the World's Columbian Exposition of 1893, a dazzling fair built on Chicago's South Side, architects and planners urged construction of civic centers, parks, and boulevards that would make cities economically efficient as well as more attractive. Many plans, however, were only dreams. Neither government nor private businesses could finance large-scale projects, and planners disagreed among themselves over whether beautification would really solve urban problems.

Regardless of their focus, urban reformers wanted to save cities, not abandon them. They believed they could improve urban society by fostering cooperation among all citizens. They often failed, however, to understand a city's diversity and that different people had conflicting goals. To civic reformers, appointing government workers on the basis of civil service exams rather than party loyalty meant progress, but to working-class men, jobs given for party loyalty were what counted. Moral reformers believed that restricting the sale of alcoholic beverages would prevent husbands from squandering wages and ruining their health, but immigrants saw such crusades as interference in their private lives. Planners envisioned boulevards and buildings as modern necessities, but such structures often displaced the poor. Well-meaning humanitarians tried to change the ways immigrant mothers shopped, cooked, and raised children without regard for mothers' inability to afford new products of the consumer economy. Thus urban reform merged idealism with insensitivity.

### FAMILY LIFE AND INDIVIDUAL LIFE

For the majority of urban dwellers, family, not government, was the most crucial institution. But increasingly, new institutions—schools, political organizations, unions—competed with the family to provide education and security. Still, the family unit retained its fundamental role as a cushion in a harsh, uncertain world.

Throughout modern western history, most people have lived in two overlapping social units: household and family. A household is a grouping of related and/or unrelated people who share the same residence. A family is a group related by kinship, some of whom live together. Until recently, when the number of single people living alone has increased markedly, most American households (75 percent or more) have consisted of nuclear families—usually a married couple with or without children. About 15 to 20 percent of households have consisted of extended families—usually a nuclear family plus one or more adult relatives. This pattern held relatively consistent among various ethnic, racial, and socioeconomic groups.

Several factors explain this pattern. Because immigrants tended to be young, the population as a whole was young. In 1880, the median age of the American population was under twenty-one, and by 1920 it was still only twenty-five. (Median age at present is thirty-seven.) Moreover, death rates among people aged forty-five to sixty-four were double what they are today, and the proportion of the population aged sixty-five and older was just 4 percent in 1900; it is 13 percent today. Thus in the late nineteenth century and early twentieth, fewer children than today had living grandparents, and three-generation households of children, parents, and grandparents were rare.

Falling birth rates reduced family sizes. In 1880, there were 40 live births per 1,000 people; by 1900 the rate had dropped to 32; and by 1920 it was 28. Several factors explain this pattern. First, the United States was becoming an urban nation, and birth rates are historically lower in cities than in rural areas. Second, as nutrition and medical care improved, infant mortality fell and families did not have to bear as many children to ensure that some would

survive. Third, awareness that smaller families meant improved quality of life for each surviving child influenced parents' decisions to limit family size so that three or four children instead of five or six became the norm. Birth-control technology—diaphragms and condoms—had existed for centuries, but in this era new materials such as vulcanized rubber made devices more convenient and dependable.

### **Family as a Resource**

Young adults who left home to work altered household composition, especially in cities, as many became boarders in homes and lodging houses. For people on the move, boarding was a transitional stage before setting up their own household. It also allowed families with spare space to obtain extra income by renting rooms to boarders. Families also took in widowed parents or unmarried adult siblings.

At a time when welfare agencies were rare, the family was the resource to which people could turn in times of need. Relatives often resided near each other and aided one another with child care, meals, advice, and consolation. As one family member recalled, "After two days my brother took me to the shop he was working in and his boss saw me and he gave me the job." But obligations of kinship were not always welcome. Immigrant parents pressured daughters to stay at home to help with housework and child care, stifling opportunities for education and independence. Tensions also erupted when immigrant parents and their American-born children clashed over the abandonment of Old World ways or the amount of wages employed children should contribute to the household. Nevertheless, kinship helped people cope with the stresses of urban-industrial society.

### **The Unmarried**

Although marriage rates were high, large numbers of city dwellers were unmarried, mainly because young people postponed marriage until their late twenties. In 1890 almost 42 percent of adult men and 37 percent of women were single, almost twice as high as in 1960 (though lower than today). About half lived with parents, but others inhabited rented rooms. Mostly young, they developed a subculture that patronized dance halls, saloons, cafes, and organizations such as the YMCA and YWCA.

Some unmarried people were part of homosexual populations that gathered in large cities such as New York, San Francisco, and Boston. Though numbers are difficult to estimate, gay men patronized their own clubs, restaurants, coffeehouses, and theaters. A number of same-sex couples, especially women, formed lasting relationships, sometimes called "Boston marriages." People in this subculture were categorized more by how they acted—men acting like women, women acting like men—than by who their sexual partners were. The term "homosexual" was not used. Men who dressed and acted like women were called "fairies." Gay women remained largely hidden, and a visible lesbian subculture was rare until the 1920s.

### **Stages of Life**

Before the late nineteenth century, stages of life were less distinct than they are today. Childhood, for instance, had been regarded as a period during which youngsters prepared for adulthood by gradually

assuming adult responsibilities. Subdivisions of youth—toddlers, schoolchildren, teenagers—were not recognized. Because married couples had more children over a longer time span, active parenthood occupied most of adult life. Older children who cared for younger siblings might begin parenting responsibilities even before reaching adulthood. Older people often did not retire; they worked until they were physically incapable.

In the late nineteenth century, demographic and social changes altered these patterns. Decreasing birth rates shortened the period of parenting, so more middle-aged couples experienced an “empty nest” once their children grew up and left home. Longer life expectancy and a tendency by employers to force aged workers to retire separated the old from the young. As states passed compulsory school attendance laws and established graded schools in the 1870s and 1880s, children spent more time with others of the same age than with older or younger people. Childhood and adolescence became distinct stages, and peers rather than family influenced youngsters’ behavior more than previously. People’s roles in school, in the family, on the job, and in the community came to be determined by age more than any other characteristic.

By 1900, new agencies were assuming tasks formerly performed by families. Schools made education a community responsibility. Employment agencies, political machines, and labor unions became responsible for getting people jobs and for job security. Age-based peer groups exerted influence over people’s values and sociability. Yet kinship remained a dependable though not always appreciated institution. Family togetherness became especially visible at holiday celebrations. Thanksgiving, Christmas, and Easter were times for family reunions and child-centered activities. Birthdays, too, took on new festive qualities as milestones for measuring age-related norms and life stages. In 1914, President Woodrow Wilson proclaimed the second Sunday in May as Mother’s Day, capping a six-year campaign by schoolteacher Anna Jarvis, who believed children were neglecting their mothers. Ethnic, religious, and racial groups adapted celebrations to their cultures, preparing special foods and engaging in special ceremonies. For many, holidays served as testimony to the vitality of family life.

## NEW LEISURE AND MASS CULTURE

On December 2, 1889, as laborers paraded through Worcester, Massachusetts, seeking shorter working hours, a group of carpenters hoisted a banner proclaiming, “Eight Hours for Work, Eight Hours for Rest, Eight Hours for What We Will.” That last phrase expressed claim to a new segment of daily life: leisure.

### Increase in Leisure Time

By the late 1800s, technology had become truly time-saving. Machines and assembly lines cut average workweeks from sixty-six hours in 1860 to sixty in 1890 and forty-seven in 1920, giving workers shorter workdays and freer weekends. White-collar employees spent eight to ten hours a day on the job and often worked only half a day or not at all on weekends. Many Americans now had time for a variety of diversions, and entrepreneurs profited from their new leisure time.

Amusement became a new commercial activity. Production of games, toys, and musical instruments expanded. Improvements in cardboard production aided increased popularity of board games from manufacturers such as Milton Bradley and Parker Brothers. Significantly, the content of board games shifted from moral lessons to topics involving transportation, finance, and sports. Also, by the 1890s, middle-class families were buying mass-produced pianos and sheet music that made singing a popular home entertainment. The vanguard of new leisure pursuits, however, was sports. Formerly a fashionable indulgence of elites, organized sports became a favorite pastime of all classes.

**Baseball** Baseball ruled as the most popular sport. Derived from older bat, ball, and base-circling games, baseball was formalized in 1845 by the Knickerbocker Club of New York City. By 1860 at least fifty baseball clubs existed, and youths played informal games on city lots and rural fields across the nation. In 1866, the Cincinnati Red Stockings became the first fully professional baseball club, compiling a perfect 65–0 record playing local teams across the country. The founding of the National League of Professional Baseball Clubs in 1876 gave the sport a stable business structure, though as early as 1867, a “color line” excluded black players from major professional teams. In 1903 the National League and competing American League (formed in 1901) began a World Series between their championship teams. The Boston Americans (later, Red Sox) defeated the Pittsburgh Pirates five games to three.

**Croquet and Cycling** Croquet and cycling were popular pastimes attracting men and women alike. Played on lawns, sometimes with lighted wickets for nighttime competition, croquet encouraged socializing. Cycling was as popular as baseball, especially after 1885, when the cumbersome velocipede, with its huge front wheel and tall seat, gave way to safety bicycles with pneumatic tires and wheels of identical size. By 1900, Americans owned 10 million bicycles, and cycling clubs lobbied governments to build more paved roads. Cycle races brought international fame to professional riders such as Major Taylor, an African American. Also, bicycles helped free women from constraints of Victorian fashion. In order to ride safety bicycles, women had to wear divided skirts and simple undergarments. As the 1900 census proclaimed, “Few articles ... have created so great a revolution in social conditions as the bicycle.”

**Football** American football, as an intercollegiate competition, attracted players and spectators wealthy enough to have access to higher education. By the late nineteenth century, however, the game was appealing to a wider audience. While the Princeton–Yale game drew fifty thousand spectators, informal games were played in yards and playgrounds throughout the country.

College football’s violence and “tramp athletes”—nonstudents hired to help teams win—sparked a national scandal, climaxing in 1905 when 18 players died from game-related injuries and more than 150 were seriously injured. President Theodore Roosevelt, an advocate of athletics, convened a White House conference to discuss ways of eliminating brutality and foul play. The gathering

founded the Intercollegiate Athletic Association (renamed the National Collegiate Athletic Association, or NCAA, in 1910) to police college sports. In 1906, the association altered football rules to make the game less violent by outlawing the “flying wedge,” extending from five to ten yards the distance needed to make a first down, legalizing the forward pass, and tightening player eligibility.

As more women enrolled in college, they participated in sports such as rowing, track, swimming, archery, and baseball. Eventually, they made basketball their most popular intercollegiate sport. Basketball was invented in 1891 as a winter sport for men, but Senda Berenson of Smith College drafted special women’s rules in 1899, limiting dribbling and running and encouraging passing.

**Show Business** American show business matured in these years, becoming a mode of entertainment created by and for ordinary people. New theatrical performances offered audiences escape into adventure, melodrama, and comedy. Plots were simple, heroes and villains recognizable. For urban people unfamiliar with the other times and places, productions made the Wild West and Old South come alive through dramas of Buffalo Bill, Davy Crockett, and the Civil War. Musical comedies entertained with songs, humor, and dance. Folksy comedy and catchy tunes were performed by popular performers such as George M. Cohan. A singer and dancer born into an Irish family, Cohan drew on patriotism and traditional values in songs such as “The Yankee Doodle Boy” and “You’re a Grand Old Flag.”

By 1900, vaudeville was the most popular mass entertainment because it offered something for everyone. Shows, whose acts followed a fixed schedule just like trains and factory production, featured jugglers, magicians, acrobats, comedians, singers, dancers, and animal acts. Shrewd entrepreneurs made vaudeville a big business. The famous producer Florenz Ziegfeld packaged shows in a stylish format—the Ziegfeld Follies—and created a new form of femininity, the Ziegfeld Girl, whose graceful dancing and alluring costumes suggested a haunting sexuality.

**Opportunities for Women and Minorities** Show business provided new opportunities for female, African American, and immigrant performers, but at the cost of stereotyping and exploitation. Comic opera diva Lillian Russell, vaudeville comedienne-singer Fanny Brice, and burlesque queen Eva Tanguay attracted loyal fans and handsome fees. In contrast to the demure Victorian female, they conveyed images of pluck and creativity. Tanguay, for example, exuded something both shocking and confident when she sang, “It’s All Been Done Before But Not the Way I Do It.” But lesser female performers were often exploited by male promoters and theater owners, who wanted to profit by titillating the public with scantily clad women onstage.

Before the 1890s, the chief form of commercial entertainment employing African Americans was the minstrel show. Vaudeville gave black artists new opportunities but reinforced demeaning social attitudes. Pandering to prejudices of white audiences, composers and white singers degraded blacks in songs such as “You May Be a Hawaiian on Old Broadway, But You’re Just Another Nigger to Me.” Black performers such as Bert Williams, a talented comedian and

dancer who had graduated from high school at a time when most whites did not, achieved success by wearing blackface makeup and playing stereotypical roles of a smiling fool and dandy, living their lives tormented by the humiliation they had to suffer.

Immigrants occupied the core of American popular entertainment. Vaudeville in particular used ethnic humor and exaggerated dialects in skits and songs. Performers reinforced ethnic stereotypes, but such distortions were more self-conscious and sympathetic than those involving blacks. Ethnic comedy often satirized everyday difficulties that immigrants faced. A typical scene featuring Italians, for example, highlighted a character's uncertain grasp of English, which caused him to confuse *diploma* with *the plumber* and *pallbearer* with *polar bear*. Such scenes allowed audiences to laugh with, rather than at, foibles of the human condition.

### **Movies**

Shortly after 1900, live entertainment began to yield to motion pictures. Perfected by Thomas Edison in the 1880s, movies began as slot-machine peep shows in arcades and billiard parlors. Eventually, images were projected onto a screen so that large audiences could view them, and a new medium was born. Producers, many of them from Jewish immigrant backgrounds, discovered that a film could tell an exciting story that catered to viewers' desires. Using themes of patriotism and working-class life, early filmmakers helped shift American culture away from straitlaced Victorian values to a more cosmopolitan outlook. And as new technology enabled movie lengths to expand from minutes to hours, producers presented social messages as well as intense drama. For example, *Birth of a Nation* (1915), directed by D. W. Griffith, was a stunning epic about the Civil War and Reconstruction. But it also fanned racial prejudice by depicting African Americans as threats to white moral values. The National Association for the Advancement of Colored People (NAACP), formed in 1909, led organized protests against it. But the film's pioneering techniques—close-ups, fade-outs, and battle scenes—heightened its appeal.

By mass-producing sound and images, technology made entertainment an important consumer industry. The still camera, modernized by George Eastman, enabled ordinary people to record and preserve family memories. The phonograph, another Edison invention, brought musical performances into the home. News also became a consumer product. Using high-speed printing presses, cheap paper, and profits from advertisements, shrewd publishers created a much-desired medium. Increased leisure time and high literacy rates nurtured a fascination with the sensational, and from the 1880s onward, popular urban newspapers increasingly whetted that appetite.

### **Yellow Journalism**

Joseph Pulitzer, a Hungarian immigrant who bought the *New York World* in 1883, pioneered a new branch of journalism by filling *World* pages with stories of disasters, crimes, and scandals under screaming headlines set in large bold type. Pulitzer also popularized comics, and the yellow ink they were printed in brought about the term “yellow journalism” as a synonym for sensationalism. In one

year, the *World's* circulation rose from 20,000 to 100,000, and by the late 1890s it reached 1 million. Soon other publishers, such as William Randolph Hearst, who bought the *New York Journal* in 1895 and started a newspaper empire, adopted Pulitzer's techniques. Pulitzer, Hearst, and their rivals boosted circulations further by presenting sports and women's news in separate sections. Also, popular magazines, such as *Saturday Evening Post* and *Ladies Home Journal*, increased their circulation with human-interest stories, photographs, and eye-catching ads.

Other forms of communication also expanded, aided by technology. In 1891, there was less than 1 telephone for every 100 people in the United States; by 1901 the number had doubled, and by 1921 it swelled to 12.6. In 1900, Americans used 4 billion postage stamps; in 1922, they bought 14.3 billion. The term *community* took on new dimensions, as people used the media, mail, and telephone to extend their horizons far beyond their immediate locality. More than ever before, people in different parts of the country knew about and discussed the same news event, whether it was a sensational murder, sex scandal, or the fortunes of an entertainer or athlete. American was becoming a mass society where the same products, same technology, and same information dominated everyday life.

To some extent, the new amusements allowed ethnic and social groups to share common experiences. Amusement parks such as at Coney Island, ball fields, vaudeville shows, movies, and feature sections of newspapers and magazines were nonsectarian and apolitical. Yet different groups consumed them to suit their own needs. Immigrants, for example, used parks and amusement areas as sites for special ethnic gatherings. To the dismay of natives who hoped that public recreation and holidays would assimilate newcomers and teach them habits of restraint, immigrants converted picnics and Fourth of July celebrations into occasions for boisterous festivity. Young working-class men and women resisted parents' and moralizers' warnings and frequented dance halls, where they explored forms of courtship and sexual behavior free from adult oversight. And children often used streets, alleys, and rooftops to create their own recreation rather than participate in adult-supervised games in parks and playgrounds. Thus, as the American people learned to play, their leisure—like their work and politics—expressed, and was shaped by, the pluralistic forces that thrived in the new urban-industrial society.

## SUMMARY

Industrialization, propelled by machines and inventions, and urbanization, enriched by waves of newly arrived people and their diverse cultures, altered the United States in dramatic ways in the late nineteenth century and early twentieth. Industrial growth converted the country from a debtor agricultural nation into a manufacturing, financial, and exporting power. Immigrants and their offspring outnumbered the native born in many cities, and the industrial economy depended on these new workers and consumers. And the era's new technologies, whether on assembly lines or in homes, also made cities safer and daily life more comfortable.

But in industry, massive size and aggressive consolidation of businesses engulfed the individual, changing the nature of work from a singular activity undertaken by skilled producers to mass production undertaken by wage earners. Laborers fought to retain control of their work and organized unions to advance their cause. Urban life, for its part, brought forward its own challenges, especially to newcomers, of finding adequate housing, a decent job, and a safe environment. In urban communities, politics and reform took on new meanings, and family life reflected both change and continuity.

An uneven distribution of power and wealth characterized the era. Corporations consolidated to control resources. Workers and their allies had numbers and ideas but lacked influence, believing businesses were profiting at their expense. And the urban society that materialized when native inventiveness met the traditions of European, African, and Asian cultures seldom functioned smoothly, yet cities managed to thrive because of, rather than in spite of, their various fragments. When the desire to hold on to one's culture met with the need to fit in, often the results were compound identifications: Irish American, Italian American, Polish American, and the like. By 1920, the foundation of the country's urban-industrial structure had been laid, climaxing an era of extraordinary dynamism.