This picture of an 1845 fair suggests the cornucopia of goods made available in the early stages of industrialization. (B. J. Harrison, Fair of the American Institute at Niblo’s Garden, 1845/Museum of the City of New York)

**American Stories**

**Discovering Success in the Midst of Financial Ruin**

For her first 18 years, Susan Warner was little touched by the far-reaching economic and social changes that were transforming the character of the country and her own city of New York. Whereas some New Yorkers toiled to make a living by taking in piecework and others responded to unsettling new means of producing goods by joining trade unions to agitate for wages that would enable them to “live as comfortable as
others,” Susan was surrounded by luxuries and privilege. Much of the year was spent in
the family’s townhouse in St. Mark’s Place, not far from the home of the enormously
rich real estate investor and fur trader John Jacob Astor. There Susan acquired the so-
cial graces and skills appropriate for a girl of her position and background. She had
dancing and singing lessons, studied Italian and French, and learned the etiquette in-
volved in receiving visitors and making calls. When hot weather made life in New York
unpleasant, the Warners escaped to the cooler airs of Canaan, where they had a sum-
ner house. Like any girl of her social class, Susan realized that her carefree existence
could not last forever. With her marriage, which she confidently expected some time in
the future, would come significant new responsibilities as a wife and mother but not
the end of the comfortable life to which she was accustomed.

It was not marriage and motherhood that disrupted the pattern of Susan’s life but
financial disaster. Sheltered as she had been from the unsettling economic and social
changes of the early nineteenth century, Susan discovered that she, too, was at the
mercy of forces beyond her control. Her father, heretofore so successful a provider and
parent, lost most of his fortune during the financial Panic of 1837. Like others ex-
periencing a sharp economic reversal, the Warners had to make radical adjustments.
The fashionable home in St. Mark’s Place and the pleasures of New York were ex-
changed for a more modest existence on an island in the Hudson River. Susan turned
“housekeeper” and learned how to do tasks once relegated to others: sewing and
making butter, pudding sauces, and johnny cake.

The change of residence and Susan’s attempt to master domestic skills did not halt
the family’s financial decline. Prized possessions, including the piano and engravings, all
symbols of the life the Warners had once taken for granted, eventually went up for
auction. “When at last the men and the confusion were gone,” Susan’s younger sister,
Anna, recalled, “then we woke up to life.”

Waking up to life meant facing the necessity of making money. But what could Su-
san do to reverse sliding family fortunes? True, some women labored as factory oper-
atives, domestics, seamstresses, or schoolteachers, but it was doubtful Susan could
even imagine herself in any of these occupations. Her Aunt Fanny, however, had a sug-
gestion that was more congenial to the genteel young woman. Knowing that the
steam-powered printing press had revolutionized the publishing world and created a
mass readership, much of it female, Aunt Fanny told her niece, “Sue, I believe if you
would try, you could write a story.” “Whether she added ‘that . . . would sell,’ I am not
sure,” recalled Anna later, “but of course that was what she meant.”

Taking Aunt Fanny’s advice to heart, Susan started to write a novel that would sell.
She constructed her story around the trials of a young orphan girl, Ellen Montgomery.
As Ellen suffered one reverse after another, she learned the lessons that allowed her
to survive and eventually triumph over adversity: piety, self-denial, discipline, and the
power of a mother’s love. Titled The Wide, Wide World, the novel was accepted for pub-
lication only after the mother of the publisher, George Putnam, read it and told her
son, “If you never publish another book, you must make The Wide, Wide World available
for your fellow men.” A modest 750 copies were printed. Much to the surprise of the
cautious Putnam, if not to his mother, 13 editions were published within two years.
The Wide, Wide World became the first American novel to sell more than one million
copies. It was one of the bestsellers of the century.

Long before she realized the book’s success, Susan, who was now much aware of
the need to make money, was working on a new story. Drawing on her own experi-
ence of economic and social reversal, Susan described the spiritual and intellectual life
of a young girl thrust into poverty after an early life of luxury in New York. Titled Queechy,
this novel was also a great success.

Though her fame as a writer made Susan Warner unusual, her books’ popularity
suggested how well they spoke to the concerns and interests of a broad readership.
The background of social and financial uncertainty, with its sudden changes of fortune,
so prominent in several of the novels, captured the reality and fears of a fluid society in the process of transformation. While one French writer was amazed that “in America a three-volume novel is devoted to the history of the moral progress of a girl of thirteen,” pious heroines such as Ellen Montgomery, who struggled to master their passions and urges toward independence, were shining exemplars of the new norms for middle-class women. Their successful efforts to mold themselves heartened readers who believed that the future of the nation depended on virtuous mothers who struggled to live up to new ideals. Susan’s novels validated their efforts and spoke to the importance of the domestic sphere. “I feel strongly impelled to pour out to you my most heartfelt thanks,” wrote one woman. None of the other leading writers of the day had been able to minister “to the highest and noblest feelings of my nature so much as yourself.”

Susan Warner’s life and novels serve as an introduction to the far-reaching changes that this chapter explores and that constitute one of the major themes of this text. Between 1820 and 1860, as Susan Warner discovered, economic transformations in the Northeast and the Old Northwest reshaped economic, social, cultural, and political life. Though most Americans still lived in rural settings, economic growth and the new industrial mode of production affected them through the creation of new goods, opportunities, and markets. In cities and factory towns, the new economic order ushered in new forms of work, new class arrangements, and new forms of social strife.

After placing American economic change in an international context, another focus of this text, and discussing the factors that fueled antebellum growth, the chapter turns to the industrial world, where so many of the new patterns of work and life appeared. An investigation of urbanization reveals shifting class arrangements and values as well as rising social and racial tensions. Finally, an examination of rural communities in the East and on the frontier in the Old Northwest highlights the transformation of these two sections of the country. Between 1840 and 1860, industrialization and economic growth increasingly knit them together.
ECONOMIC GROWTH

Between 1820 and 1860, the American economy entered a new and more complex phase as it shifted from reliance on agriculture as the major source of growth toward an industrial and technological future. Amid general national expansion, real per capita output grew an average of 2 percent annually between 1820 and 1840 and slightly less between 1840 and 1860. This doubling of per capita income over a 40-year period suggests that many Americans were enjoying a rising standard of living.

But the economy was also unstable, as the Warnings discovered. Periods of boom (1822–1834, mid-1840s–1850s) alternated with periods of bust (1816–1821, 1837–1843). As never before, Americans faced dramatic and recurrent shifts in the availability of jobs and goods and in prices and wages. Particularly at risk were working-class Americans, a third of whom lost their jobs in depression years. And because regional economies were increasingly linked, problems in one area tended to affect conditions in others.

The Transatlantic Context for Growth

American economic growth was linked to and influenced by events elsewhere in the world, particularly in Great Britain. Britain was the home of the Industrial Revolution, the event that some historians believe to be among the most important of human history in terms of its impact on material life. For the first time, production of goods proceeded at a faster pace than the growth of population.

The Industrial Revolution beginning in Britain in the eighteenth century involved many technological innovations that spurred new developments and efficiencies. Among the most important developments was the discovery in the 1780s of a way to eliminate carbon and other substances from pig iron. This opened the way for cheap, durable iron machines that led to the increased production of goods. Another milestone, the improvement of the steam engine, originally used to pump water out of coal mines, eventually led to railroads and steamboats, thus revolutionizing transportation. Steam-powered machinery also transformed cloth production, moving it from cottages to factories. The British textile industry was the giant of the early Industrial Revolution. The use of machinery allowed the production of more and cheaper textiles. The industry became a prime market for American cotton as well as cotton from India and Brazil. British demand for raw cotton helped to cement the South's attachment to slavery.

By 1850, Great Britain was the most powerful country in the world, and its citizens were the richest.
In the following decades, its factories and mines churned out most of the world’s coal and more than half of its iron and textiles. Not surprisingly, Americans would look to England and English know-how as they embarked on their own course of industrialization. While American industrial development did not mimic that of the British, there were many similarities between the two countries’ experiences.

**Factors Fueling Economic Development**

The United States enjoyed abundant natural resources that facilitated economic changes and, thanks to European immigration, the expanding population necessary for economic expansion. The size of American families was shrinking—in 1800, the average white woman bore seven children; by 1860, the number had declined to five. Thus immigration from Europe provided the new workers, new households, and new consumers so essential to economic development as well as the capital and technological ideas that helped shape American growth.

Improved transportation played a key role in bringing about economic and geographic expansion. Early in the century, high freight rates discouraged production for distant markets and the exploitation of resources, while primitive transportation hindered western settlement. Canal-building projects in the 1820s and 1830s dramatically transformed this situation. The 363-mile-long Erie Canal, the last link in a chain of waterways binding New York City to the Great Lakes and the Northwest, was the most impressive of these new canals. The volume of goods and people it carried at low cost as well as the economic advantages it conferred on those within its reach (suggested by both the figure on inland freight rates and the table on economic growth) prompted the construction of more than 3,000 miles of canals by 1840, primarily in eastern and midwestern states.

Even at the height of the canal boom, politicians, promoters, and others, impressed with Britain’s success with steam-powered railways, also supported the construction of railroads. Unlike canals that might freeze during the winter, railroads could operate year-round and could be built almost anywhere. These advantages encouraged Baltimore merchants, envious of New York’s water link to the Northwest, to begin the Baltimore & Ohio Railroad in 1828.
Despite the interest in and advantages of railroads, there were technical problems: the first trains jumped their tracks and spewed sparks, setting nearby fields ablaze. But such difficulties were quickly overcome. By 1840, there were 3,000 miles of track, more than in all the countries of Europe. Another 5,000 miles were laid during the 1840s, and by the end of the 1850s, total mileage soared to 30,000. Like the canals, the new railroads strengthened the links between the Old Northwest and the East.

Improved transportation so profoundly influenced American life that some historians use the term transportation revolution to refer to its impact. Canals and railroads bound the country together in a new way. They provided farmers, merchants, and manufacturers with cheap and reliable access to distant markets and goods and encouraged Americans to settle the frontier and cultivate virgin lands. The economic opportunities they opened fostered technological innovations that could increase production. Eventually, the strong economic and social ties the waterways and then the railways fostered between the Northwest and the East led people living in the two regions to share political outlooks.

Railroads exerted enormous influence, especially in terms of the pattern of western settlement. As the railroads followed—or led—settlers westward, their routes could determine whether a city, town, or even homestead survived. The railroad transformed Chicago from a small settlement into a bustling commercial and transportation center. In 1850, the city contained not one mile of track, but within five years, 2,200 miles of track serving 150,000 square miles terminated in Chicago.

The dramatic rise in railroad construction in the two decades before the Civil War contributed to faster economic growth after 1839. Goods, people, commercial information, and mail flowed ever more predictably, rapidly, and cheaply. In 1790, an order from Boston
The Transportation Revolution

This map shows the impact of the transportation revolution. Note the components of that revolution: roads, canals, and then railroad lines. What were the important regional connections opened up by transportation improvements? How would you compare northern and southern development? What were the commercial results of the new transportation networks?

took two weeks to reach Philadelphia; in 1836, it took only 36 hours.

Improved transportation stimulated agricultural expansion and regional specialization. Farmers began to plant larger crops for the market, concentrating on those most suited to their soil and climate. By the late 1830s, the Old Northwest had become the country’s granary, and New England farmers turned to dairy or produce farming. In 1860, American farmers were producing four to five times as much wheat, corn, cattle, and hogs as they had in 1810. Their achievements meant plentiful, cheap food for American workers and more income for farmers to spend on the new consumer goods.

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Capital and Government Support

Internal improvements, the exploitation of natural resources, and the cultivation of new lands all demanded capital. Between 1790 and 1861, more than $500 million in foreign capital, most of it from Great Britain, was invested in state bonds, transportation, and land. Foreign investors financed as much as one-third of all canal construction and bought about one-quarter of all railroad bonds.

American mercantile capital fueled growth as well. As Chapter 8 suggested, the merchant class prospered in the half century after the Revolution. Now merchants invested in schemes ranging from canals to textile factories. Many ventured into the production of goods and became manufacturers themselves. Other prosperous Americans also eagerly sought opportunities to put their capital to work.

Local and state government played their part by enthusiastically supporting economic growth. States often helped new ventures raise capital by passing laws of incorporation; by awarding entrepreneurs special privileges such as tax breaks or monopolistic control; by underwriting bonds for improvement projects, which increased their investment appeal; and by providing loans for internal improvements. New York, Pennsylvania, Ohio, Indiana, Illinois, and Virginia publicly financed almost 75 percent of the canal systems in their states between 1815 and 1860.

The national government also encouraged economic expansion by cooperating with states on some internal improvements, such as the National Road linking Maryland and Illinois. Federal tariff policy shielded American products, and the Second Bank of the United States provided the financial stability investors required. So widespread was the enthusiasm for growth that the line separating the public sector from the private often became unclear.

The law also helped promote aggressive economic growth. Judicial decisions created a new understanding of property rights. The case of Palmer v. Mulligan, decided by the New York State Supreme Court in 1805, laid down the principle that property ownership included the right to develop property for business purposes. Land was increasingly defined as a productive asset for exploitation, not merely subsistence, as earlier judicial rulings had suggested.

Investors and business operators alike wanted to increase predictability in the conduct of business. Contracts lay at the heart of commercial relationships, but contract law hardly existed in 1800. A period of rapid development ensued. A series of important Supreme Court decisions between 1819 and 1824 established the basic principle that contracts were binding. In Dartmouth College v. Woodward, the Court held that a state charter could not be modified unless both parties agreed, and it declared in Sturges v. Crowninshield that a New York law allowing debtors to repudiate their debts was unconstitutional.

A New Mentality

Economic expansion also depended on intangible factors. When a farmer decided to specialize in apples for the New York market rather than to concentrate on raising food for his family, he was thinking in a new way. So was a merchant who invested in banks that would, in turn, finance a variety of economic enterprises. The entrepreneurial outlook—the “universal desire,” as one newspaper editor put it, “to get forward”—was shared by millions of Americans. By encouraging investment, new business and agricultural ventures, and land speculation, it played a vital role in antebellum development.

Europeans often recognized other intangible factors. As one Frenchman observed in 1834, Americans established the basic principle that contracts were binding. In Dartmouth College v. Woodward, the Court held that a state charter could not be modified unless both parties agreed, and it declared in Sturges v. Crowninshield that a New York law allowing debtors to repudiate their debts was unconstitutional.

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How Others See Us

Alexis de Tocqueville, An Analysis of the Lure of Commerce and Manufacturing

In 1831 a French magistrate, Alexis de Tocqueville, came to the United States to examine the American prison system. While the exploration of the penal system was his official reason for spending nine months in the United States, he was actually more interested in understanding how American democracy operated. His book Democracy in America, published in 1835 and 1840, has become a classic study of this country in the 1830s.

Agriculture is, perhaps, of all the useful arts, that which improves most slowly amongst democratic nations. Frequently, indeed, it would seem to be stationary, because other arts are making rapid strides toward perfection. On the other hand, almost all the tastes and habit which the equality of condition produces naturally lead men to commercial and industrial occupations.

Suppose an active, enlightened, and free man, enjoying a competency, but full of desires: he is too poor to live in idleness; he is rich enough to feel himself protected from the immediate fear of want, and he thinks how he can better his condition....life is slipping away time is urgent....The cultivation of the ground promises an almost certain result to his exertions, but a slow one; men are not enriched by it without patience and toil.

Agriculture is therefore only suited to those who have already larger superfluous wealth, or to those who penury bids them only seek a bare subsistence. The choice of such a man as we have supposed is soon made; he sells his plot of ground, leaves his dwelling, and embarks in some hazardous but lucrative calling.

Democratic communities abound in men of this kind.... Thus, democracy not only swells the number of working-men, but it leads men to prefer one kind of labor to another; and, whilst it diverts them from agriculture, it encourages their taste for commerce and manufactures.

What argument does de Tocqueville make to explain the American interest in commerce and manufacturing work?

Does the discussion in this chapter support de Tocqueville's analysis about the supposed preference of Americans for industrial and commercial rather than agricultural pursuits?


were energetic and open to change. “All here is circulation, motion, and boiling agitation. Experiment follows experiment; enterprise succeeds to enterprise.” Some saw an American mechanical “genius.” “In Massachusetts and Connecticut,” one Frenchman insisted, “there is not a labourer who had not invented a machine or tool.” He exaggerated (many American innovations drew on British precedents and were introduced by immigrants familiar with the British originals), but every invention did attract scores of imitators.

Mechanically minded Americans prided themselves on developing efficient tools and machines. The McCormick harvester, the Colt revolver, Goodyear vulcanized rubber products, and the sewing machine—all were developed, refined, and developed further. Such improvements cut labor costs and increased efficiency. By 1840, the average American cotton textile mill was about 10 percent more efficient and 3 percent more profitable than its British counterpart.

Although the shortage of labor in the United States stimulated technological innovations that replaced humans with machines, the rapid spread of education after 1800 also spurred innovation and productivity. By 1840, most whites were literate, and public schools were educating 38.4 percent of white children between ages 5 and 19. The belief that education meant economic growth fostered enthusiasm for public education, particularly in the Northeast.

The development of the Massachusetts Common School illustrates the connections many saw between education and progress. Although several states had decided to use tax monies for education by 1800, Massachusetts was the first to move toward mass education. In 1827, it mandated that taxes pay the whole cost of the state’s public schools, and in 1836 it forbade factory managers to hire children who had not spent 3 of the previous 12

Source: Horace Mann, Report of the Massachusetts Board of Education (1848)

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months in school. Still, the Massachusetts school system limped along with run-down school buildings, nonexistent curricula, and students with nothing to do.

Under the leadership of Horace Mann, the reform of state education for white children began in earnest in 1837. He and others pressed for graded schools, uniform curricula, and teacher training, and fought the local control that often blocked progress. Mann’s success inspired reformers everywhere. For the first time in American history, primary education became the rule for most children outside the South between ages 5 and 19. The expansion of education created a whole new career of school teaching, mostly attracting young women.

Mann believed that education promoted inventiveness. Businessmen often agreed. Prominent industrialists in the 1840s were convinced that education produced reliable workers who could handle complex machinery without undue supervision. Manufacturers valued education not merely because of its intellectual content, but also because it encouraged habits necessary for a disciplined and productive workforce.

Ambivalence Toward Change
While supporting education as a means to economic growth, many Americans, like their European counterparts, also firmly believed in its social value. They expected the public schools to mold student character and promote “virtuous habits” and “rational self-governing” behavior. Many school activities sought to instill good habits. Students learned facts by rote because memory work and recitation taught them discipline and concentration. Nineteenth-century schoolbooks reinforced classroom goals. "It is a great sin to be idle," children read in one 1830 text, and another encouragingly pointed out, "He who rises early and is industrious and temperate will acquire health and riches."

The concern with education and character indicates that Americans both welcomed economic progress and feared its results. The improvements in transportation that encouraged trade and emigration, for example, created anxieties that civilization might disintegrate as people moved far from their place of birth and familiar institutions. Others worried that rapid change undermined the American family. Schools, which taught students to be deferential, obedient, and punctual, could counter the worst by-products of change. The schools served as much as a defense against change as they did its agent.

Other signs of cultural uneasiness appeared. In the eighteenth century, Benjamin Franklin emphasized the importance of hard work in his celebrated Poor Richard’s Almanack. In the 1830s, popularizers restated Franklin’s message. As the publishing revolution lowered costs and speeded the production of printed material, authors poured out tracts, stories, and manuals on how to get ahead. Claiming that hard work and good character led to success, they touted the virtues of diligence, punctuality, temperance, and thrift. These habits probably did assist economic growth. Slothful workers are seldom productive. Industry and perseverance often pay off. But the success of early nineteenth-century economic ventures frequently depended on the ability to take risks and to think daringly. The emphasis these publicists gave to the safe but stolid virtues and behavior suggests their fear of social disintegration. Their books and tracts aimed to counter unsettling effects of change and ensure the dominance of middle-class values.

The Advance of Industrialization
As had been true for Great Britain in the eighteenth century, the advance of industrialization in the
AMERICAN VOICES

Julia Hieronymus, Trials of a Teacher

After her father’s financial reversals, Julia Hieronymus left home in 1819 to “commence life’s struggle in earnest.” Deciding to teach school in the Virginia town of Wytheville, Hieronymus rented a room capable of holding up to 40 students. She discovered that her work was not all smooth sailing, however.

My first serious difficulty was with a little girl about ten years of age, the youngest child of a large family, who had been badly spoiled at home. She was noisy, indolent, and impatient under restraint. Continually teasing and annoying others, this little nettle-top went on from bad to worse, until endurance was no longer a virtue. I was anxious to keep her in school, as I had five from the same family, and it was quite to my interest to get along pleasantly with her. But it could not be. One afternoon her resistance to my authority reached its climax; so I quietly removed her from the school-room to an adjoining apartment and gave her the well-merited punishment with my slipper, the first she had ever had in her life. Her screams were terrific. There was an awful silence in the school-room, and you might have heard a pin drop, as I led her back, and, placing the bonnet on her head, ordered her to go home and never return. I then quietly resumed my seat, and the lessons proceeded as usual until the hour of dismissal.

What does this passage reveal about Hieronymus’s expectations about her students’ behavior?

What does it reveal about the realities of teaching?

Hieronymus went on to explain that following this incident she wept and prayed. Why do you think she was so upset?

United States fueled economic growth in the decades before the Civil War. As was also the case in Britain, economic changes spilled over to transform many other aspects of life. The types of work people did, the places where they labored, and the relationships they had with their bosses were all affected by new modes of production. The American class system was modified as a new working class dependent on wages emerged and as a new middle class took shape.

Factory production moved away from the decentralized system of artisan or family-based manufacturing using hand tools and reorganized work by breaking down the manufacture of an article into discrete steps. Initially, early manufacturers often relied on what came to be called the “putting-out” system. Their strategy was to gain control of the raw materials from which goods were fashioned—leather in the case of shoes; cotton, flax, and wool for textiles—and the arrangements for marketing the finished products. Some steps in the manufacturing process they farmed out to workers in shops and homes, paying them on a piecework basis, for the pieces they were able to “put out.” Manufacturers consolidated other steps in their own central shops.

The putting-out system not only reorganized production but also entangled rural families in the market economy and affected their relationships with one another. Early pieceworkers might labor as a family unit, leaving men to exercise their power as fathers and husbands. But by the 1830s, men were moving into the workplace, while wives and daughters continued to take in piecework. Usually, the women worked only intermittently. They took in shoes or made palm-leaf hats to pay off a family debt or to earn some cash for a desirable new good like cotton cloth or an iron cookstove. While most outworkers were not highly paid, they enjoyed earning their own cash and store credit. Piecework provided them with a new kind of independence even as they continued to stay at home.

The putting-out system persisted even as some manufacturers moved to consolidate all the steps of production under one roof. Hand labor gradually gave way to power-driven machinery such as wooden “spinning jennies.” Often manufacturers sought the help of British immigrants who had the practical experience and technical know-how that few Americans possessed. As factory workers replaced artisans and home manufacturers, the volume of goods rose, and prices dropped dramatically. The price of a yard of cotton cloth fell from 18 cents to 2 cents over the 45 years preceding the Civil War.

The transportation improvements that provided the opportunity to reach large markets encouraged the reorganization of the production process and the use of machinery. The simple tastes and rural
character of the American people suggested the wisdom of manufacturing inexpensive everyday goods such as cloth and shoes rather than luxuries for the rich.

Between 1820 and 1860, textile manufacturing became the country’s leading industry. Textile mills sprang up across the New England and mid-Atlantic states, regions with swift-flowing streams to power the mills, capitalists eager to finance the ventures, children and women to tend the machines, and numerous cities and towns with ready markets for cheap textiles. Early mills were small affairs, containing only the machines for carding and spinning. The thread was then put out to home workers to be woven into cloth. The early mechanization of cloth production did not replace home manufacture but supplemented it.

Experiments were underway that would further transform the industry. Closeted in the attic of a Boston house in 1813, Francis Cabot Lowell, a merchant, and Paul Moody, a mechanic, worked to devise a power loom capable of weaving cloth. Lowell’s study of mechanical looms during his earlier tour of English and Scottish cotton factories guided their work. Eventually, they succeeded, and the loom they devised was soon installed in a mill at Waltham, Massachusetts, capitalized at $300,000 by Lowell and his Boston Associates.

The most important innovation of the Waltham operation was Lowell’s decision to bring all the steps of cotton cloth production together under one roof. The Waltham mill thus differed from mills in Rhode Island and Great Britain, where spinning and weaving were separate operations. Through this centralizing of the entire manufacturing process and workforce in one factory, cloth for the mass market could be produced more cheaply and more profitably. The work of maintaining the equipment in good order encouraged machinists to improve existing machines. Constant innovation thus helped mills make cloth ever more cheaply and quickly. In 1823, the Boston Associates expanded their operations to East Chelmsford on the Merrimack River, a town they renamed Lowell.

Most New England mills followed the Lowell system. But in the mid-Atlantic states, the textile industry was more varied. Philadelphia became a center for fine textiles, and Rhode Island factories produced less expensive materials. Maryland manufacturers, like those in Philadelphia, focused on quality goods. The cumulative impact of the rise of the textile industry
was to supplant the home production of cloth, even though some women would continue to spin and weave for their families for some years to come, and hand-loom weavers would survive for another generation. In the process, Americans were transformed from a people clad in earth-colored homespun into a nation decked out in more colorful clothing.

Textile mills were an important component of the increasingly industrial character of the Northeast. The majority of the South's cotton went to England, but an increasing share flowed to northeastern mills. Other manufacturing concerns, such as shoemaking, also contributed to the Northeast's economy. By 1860, fully 71 percent of all manufacturing workers lived in this region of the country. Still other important manufacturing operations reached west and south from New England. The processing of wheat, timber, and hides using power-driven machinery was common in most communities of 200 families or more. Although one-third of them were clustered in Philadelphia, paper mills were widespread. The ironworking and metalworking industry stretched from Albany, New York, south to Maryland, and west to Cincinnati.

Environmental Consequences
Although canals, railroads, steamboats, and the growth of industry undergirded economic growth, their impact on the environment was far-reaching and often harmful. Steamboats and early railroads, for example, depended on wood for fuel. So, too, did home heating stoves. Armed with new steel axes, lumbermen and farmers kept up with the increased demand for wood, and the eastern forest and the wildlife that lived there rapidly disappeared. Better transportation, which encouraged western settlement, also promoted forest clearance as individual settlers cleared land for crops and cut wood for housing. Sawmills and milldams interfered with spawning habits of fish, clogged their gills with sawdust, and even changed the flow of rivers. The process of ecological change, spurred by the desire for wood, recurred as lumber companies and entrepreneurs moved from the East to exploit the forests of the Great Lakes and the Gulf states.

As late as 1840, wood was the main source for the country's energy needs. But the high price of wood and the discovery of anthracite coal in Pennsylvania signaled the beginning of a shift to coal as the major source of power. While the East gradually regained some of its forest cover, the heavy use of coal resulted in air pollution. Steam engines and heating stoves poured out dirty fumes into the air. In New York City, one could see the evidence of pollution everywhere—in the gray cloud hanging over the city; in the smoke rising from its machine shops, refineries, and private houses; and in the acrid smells

**A New Hampshire Printing Factory**  Gleason's Pictorial, one of the many modestly priced publications that the introduction of steam-powered printing presses put within reach of the reading public, pictures the Manchester Print Works in New Hampshire in 1854. How has the mill complex been depicted? What signs of pollution does the picture convey? Men appear in the foreground, but more than half the workers in this calico factory were female. *(Library of Congress)*
and black soot that were a part of daily life. Pittsburgh, considered by some the dirtiest city in the United States, was surrounded by “a dense black smoke” and rained down “flakes of soot” on houses and people alike.

Textile mills located along rivers and streams might present a prettier picture than the shops and refineries of New York because they used water as the source of power. But mills also adversely affected the environment. Dams and canals supporting industrial activities contributed to soil erosion. “Industrial operations,” declared the Vermont fish commissioner in 1857, are “destructive to fish that live or spawn in fresh water. . . . The thousand deleterious mineral substances, discharged into rivers from metallurgical, chemical, and manufacturing establishments, poison them by shoals.”

Some Americans were aware of the environmental consequences of rapid growth and change. Author James Fenimore Cooper had one of his characters in his novel The Pioneers condemn those who destroyed nature “without remorse and without shame.” The popularity in the 1820s of a song with the lines “Woodman, / Spare that tree / Touch not a single bough” suggested sympathy for that point of view. Yet most Americans accepted the changing environment as an inevitable part of progress.
**EARLY MANUFACTURING**

Industrialization created a more efficient means of producing more goods at much lower cost than had been possible in the homes and small shops of an earlier day. Philadelphian Samuel Breck's diary reveals some of the new profusion and range of goods. "Went to town principally to see the Exhibition of American Manufactures at the Masonic Hall," he noted in 1833. "More than 700 articles have been sent... porcelains, beautiful Canton cotton... soft and capacious blankets, silver plate, cabinet ware, marble mantels, splendid pianos and centre tables, chymical drugs, hardware, saddlery, and the most beautiful black broadcloth I ever saw."

Two examples illustrate how industrialization transformed American life in both simple and complex ways. Before the nineteenth century, local printing shops depended on manual labor to produce books, newspapers, and journals. The cost of reading material was high enough to make a library a sign of wealth. Many literate families of moderate means had little in their homes to read other than a family Bible and an almanac.

Between 1830 and 1850, however, adoption and improvement of British inventions revolutionized the printing and publishing industries. Like other changes in production, the transformation of publishing involved not only technological but also managerial and marketing innovations. A $2.5 million market in 1830, the book business quintupled by 1850.

As books and magazines dropped in cost and grew in number, far more people could afford them. Without this new mass market of readers, Susan Warner's literary success would hardly have been possible. But the implications of the changes in publishing went beyond best sellers. The presence of inexpensive reading material inspired and nourished literacy. Easy access to reading material also encouraged a new sort of independence. No longer needing to rely solely on the words of the "better sort" for information, people could form their own views on the basis of what they read. At the same time, however, readers everywhere were exposed repeatedly to the mainstream norms, values, and ideas expressed in magazines and books. Even on the frontier, pioneer women could study inexpensive ladies' magazines and books of domestic advice or be inspired by the pious example of Ellen Montgomery in *The Wide, Wide World*. Their husbands could follow the latest political news, market prices, or theories about scientific farming while the children learned their letters and the moral lesson in McGuffey readers. The proliferation of printed material had an enormous impact on people's stock of information, values, tastes, and use of leisure time.

Just as printed materials wrought great changes in American life, the making of inexpensive timepieces affected its pace and rhythms. Before the 1830s, when few Americans could afford a clock, it was difficult to make exact plans or to establish rigid schedules. But the production of timepieces soared in the 1830s, and by midcentury, peddlers had carried inexpensive, mass-produced wooden clocks everywhere. Even on the frontier, "in cabins where there was not a chair to sit on," according to one observer, "there was sure to be a Connecticut clock." Free of nature's irregular divisions of the day, Americans could decide how to use their time and coordinate their activities. Clocks encouraged a more disciplined use of time and undergirded the economic changes taking place. Timepieces, for example, were essential for the successful operation of steamboats and railroads, which ran on schedules.

Clocks also imposed a new rhythm in many workplaces. For some Americans, the clock represented a form of oppression rather than liberation.
An early mill song put it directly: “The factory bell begins to ring / And we must all obey, / And to our old employment go / Or else be turned away.”

**A NEW ENGLAND TEXTILE TOWN**

The process of industrialization and its impact on work and the workforce are well illustrated by Lowell, the “model” Massachusetts textile town, and Cincinnati, a bustling midwestern industrial center. Though the communities shared certain traits, there were also significant differences. Lowell reveals the importance of women in the early stages of industrialization while Cincinnati shows that industrialization was often an uneven and complex process.

Lowell was planned and built for industrial purposes in the 1820s. Planners focused on its shops, mills, and worker housing, but the bustling town had a charm that prompted visitors to see it as a model factory community. In 1836, Lowell, with 17,000 inhabitants, was the country’s most important textile center.

Lowell’s planners, understanding the difficulty of luring men away from farming, realized that they might recruit unmarried women relatively cheaply for a stint in the mills. Unlike factory owners farther south, they decided not to depend on child labor. By hiring women who would work only until marriage, they hoped to avoid the depraved and depressed workforce so evident in Great Britain. New England factory communities, they hoped, would become models for the world. By 1830, women composed nearly 70 percent of the Lowell textile workforce. As the first women to labor outside their homes in large numbers, they were also among the first Americans to experience the full impact of the factory system.

**Working and Living in a Mill Town**

At age 15, Mary Paul wrote to her father asking him “to consent to let me go to Lowell if you can.” This young woman from Vermont was typical of those drawn to work in Lowell. In 1830, more than 63 percent of Lowell’s population was female, and most were between ages 15 and 29.

Women workers came from New England’s mid-dling rural families and took jobs in the mills for a variety of reasons, but desperate poverty was not one of them. The decline of home manufacture deprived many women, especially daughters in farming families, of their traditional productive role. Some had already earned money at home by taking in piecework. Millwork offered them a chance for economic independence, better wages than domestic service, and an interesting environment. Few made a permanent commitment by coming to Lowell. They came to work for a few years, felt free to go home or to school for a few months, and then return to millwork. Once married—and the majority of women did marry—they left the mill workforce forever.

Millwork was regimented and exhausting. Six days a week, the workers began their 12-hour day at dawn or earlier with only a half hour for breakfast and lunch. Within the factory, the organization of space facilitated production. In the basement was the waterwheel, the source of power. Above,
successive floors were completely open, each containing the machines necessary for the different steps of cloth making. Elevators moved materials from one floor to another. Under the watchful eyes of male overseers, the women tended their machines. Work spaces were noisy, poorly lit, and badly ventilated, the windows often nailed shut.

Millwork required the women to adapt to both new work and new living situations. Hoping to attract respectable and productive female workers, mill owners built company boardinghouses for them. Headed by female housekeepers, the boardinghouse maintained strict rules, including a 10 P.M. curfew, and afforded little personal privacy. The cramped quarters encouraged close ties and a sense of community. Group norms dictated acceptable behavior, clothing, and speech. Shared leisure activities included lectures, night classes, sewing and literary circles, and church.

Female Responses to Work

Although millwork offered better wages than other occupations open to women, all female workers had limited job mobility. The small number staying in the mills for more than a few years did receive increases in pay and promotions to more responsible positions. A top female wage earner took home 40 percent more than a newcomer. But she never could earn as much as male employees, who at the top of the job ladder earned 200 percent more than men at the bottom. Because only men could hold supervisory positions, economic and job discrimination characterized the early American industrial system.

Job discrimination generally went unquestioned, for most female operatives accepted gender differences as part of life. But the sense of sisterhood, so much a part of the Lowell work experience, supported open protest, most of it focused against a system that workers feared was turning them into a class of dependent wage earners. Lowell women’s critique of the new industrial order drew on both the sense of female community and the revolutionary tradition and exposed the social gap between owners and operatives.

Trouble broke out when hard times hit Lowell in February 1834. Falling prices, poor sales, and rising inventories prompted managers to announce a 15 percent wage cut. This was their way of protecting profits—at the expense of their employees. The millworkers sprang into action. Petitions circulated, threatening a strike. Meetings followed. At one lunchtime gathering, when the company agent fired an apparent ringleader,” she declared that every girl in the room should leave with her,” then “made a signal, and . . . they all marched out & few returned the ensuing morning.” The strikers roamed the streets, appealing to other workers, and they visited other mills. In all, about a sixth of the town’s workforce turned out.

Though this work stoppage was brief, involved only a minority of workers, and failed to prevent the wage reduction, it demonstrated some women’s concern about the impact of industrialization on the labor force. Strikers, taunted as unfeminine for their “amazonian display,” refused to agree that workers were inferior to bosses. Pointing out that they were daughters of free men, strikers (as the words of their song suggest) sought to link their protest to their fathers’ and grandfathers’ efforts to throw off the bonds of British oppression during the Revolution.

Female Responses to Work

The women viewed threatened wage reductions as an unjust attack on their economic independence and also on their claim to equal status with their employers. Revolutionary rhetoric that once held only political meaning took on economic overtones as Lowell women confronted industrial work.

During the 1830s, wage cuts, long hours, increased workloads, and production speedups, mandated by owners’ desires to protect profits, constantly reminded Lowell women and other textile workers of the possibility of “wage slavery.” In Dover, New Hampshire, 800 women turned out and formed a union in 1834 to protest wage cuts. In the 1840s, women in several New England states agitated for the 10-hour day, and petitions from Lowell prompted the Massachusetts legislature to hold the first government hearing on industrial working conditions.

The Changing Character of the Workforce

Most protest efforts met with limited success. The short tenure of most female millworkers prevented permanent labor organizations. Protests mounted
in hard times often failed because mill owners could easily replace striking workers. Increasingly, owners found that they could do without the Yankee women altogether. The waves of immigration in the 1840s and 1850s created a new pool of labor. The newcomers were desperate for jobs and would accept lower wages than New England farm girls. Gradually, the Irish began to replace Yankee women in the mills. Representing only 8 percent of the Lowell workforce in 1845, the Irish composed nearly half the workers by 1860.

As the example of Lowell suggests, the reality of massive immigration had a far-reaching effect on American life in the antebellum period. Immigration, of course, had been a constant part of the country’s experience from the early seventeenth century. But it occurred on an unprecedented scale after 1845, as the nearby figure makes clear. What had been a trickle in the 1820s—some 128,502 foreigners came to U.S. shores during that decade—became a torrent in the 1850s, with more than 2.8 million migrants to the United States. Although families and single women emigrated, the majority of the newcomers were young European men of working age.

This vast movement of people, which began in the 1840s and continued throughout the nineteenth century, resulted from Europe’s population explosion and the new farming and industrial practices that undermined or ended traditional means of livelihood. Poverty and the lack of opportunity heightened the appeal of leaving home. As one Scottish woman wrote to an American friend in 1847, “we can not mak it better [here]. All that we can duo is if you can give us any encouragement [is] to amagrate? to your Country.”

Famine uprooted the largest group of immigrants: the Irish. In 1845, a terrible blight attacked and destroyed the potato crop, the staple of the Irish diet. Years of devastating hunger followed. One million Irish starved to death between 1841 and 1851; another million and a half emigrated. Although not all came to the United States, those who did arrived almost penniless in eastern port cities without the skills needed for good jobs. With only their raw labor to sell, employers, as one observer noted, “will engage Paddy as they would a dray horse.” Yet, limited as their opportunities were, immigrants saved money to send home to help their families or to pay for their passage to the United States.

German immigrants, the second-largest group of newcomers during this period (1,361,506 arrived between 1840 and 1859), were not facing such drastic conditions. But as Henry Brokmeyer observed, “Hunger brought me . . . here [and] hunger is the cause of European immigration to this country.” Some Germans, however, arrived with sufficient resources to go west and buy land. (The significance of this German midwestern presence is suggested by the fact that as late as 1940, German was one of the most common “street” languages in Minnesota.) Others like Brokmeyer had the training to join the urban working class as shoemakers, cabinetmakers, or tailors.

The arrival of so many non-British newcomers made American society more diverse than it had ever been. The consequences of this diversity were complex, as discussions in this and subsequent chapters will make clear. Because more than half of the Irish and German immigrants were Roman Catholics, a religion long feared and disliked by Protestants, religious differences exacerbated economic and ethnic tensions.

The impact of the Irish presence in Lowell was far-reaching. As the ethnic makeup of the workforce changed in the city, so did its gender composition. More
men came to work in the mills. By 1860, some 30 percent of the Lowell workers were male. All these changes made the Yankee women expendable and increased the costs of going "against the mill."

It was easy for New England women to blame the Irish for declining pay and deteriorating conditions. Gender no longer unified female workers, not only because there were more men in the mills but also because Irish women and New England women had little in common. The Irish mill girl who started working as early as age 13 to earn money for her family's survival had a different perspective on work from that of the older Yankee woman who was earning money for herself. Segregated living conditions further divided the workforce and undermined the likelihood of united worker actions in the 1850s.

Lowell itself changed as the Irish crowded into the city and New England women gradually left the mills. With owners no longer feeling the need to continue paternalistic practices, boardinghouses disappeared. A permanent workforce, once a nightmare to owners, had become a reality by 1860, and Lowell's reputation as a model factory town faded away.

Factories on the Frontier

Cincinnati, a small Ohio River settlement of 2,540 in 1810, grew to be the country's third-largest industrial center by 1840. With a population of 40,382, it contained a variety of industries at different stages of development. Cincinnati manufacturers who turned out machines, machine parts, hardware, and furniture were quick to mechanize for increased volume and profits. Other trades such as carriage making and cigar making moved far more slowly toward mechanization. Alongside these concerns, artisans such as coopers, blacksmiths, and riverboat builders still labored in small shops, using traditional hand tools. The new and the old ways coexisted in Cincinnati, as they did in most manufacturing communities.

No uniform work experience prevailed in Cincinnati. The size of the shop, the nature of work, the skills required, and the rewards all varied widely. In 1850, most Cincinnati workers toiled in small or medium-sized shops, but almost 20 percent labored in factories with more than 100 employees. Some artisans continued to use a wide array of skills as they produced goods in time-honored ways. Others used their skills in new factories, but they tended to focus on more specialized and limited tasks. In furniture factories, for example, machines did the rough work of cutting, boring, and planing, while some artisans worked exclusively as varnishers, others as carpenters, and still others as finishers. No single worker made a chair from start to finish. But all used some of their skills and earned steady
wages. Though in the long run, machines threatened to replace them, these skilled factory workers often had reason in the short run to praise the factory’s opportunities.

Less fortunate was the new class of unskilled factory laborers who performed limited tasks either with or without the assistance of machinery. In the meat-packing industry, for example, workers sat at long tables. Some cleaned the ears of the hogs, others scraped the bristles, others had the unenviable task of gutting the dead animals. Whereas owners in the industry profited from efficient new operations, workers received low wages and had little job security. Because they had no skills to sell, they were easily replaced and casually dismissed during business slowdowns.

The experience of Cincinnati’s working women differed from that of their male counterparts. Cincinnati’s large black community was so economically marginal that a majority of black women labored as washerwomen, cooks, or maids. Many white women were “outworkers” for the city’s growing ready-to-wear clothing industry. Manufacturers purchased the cloth, cut it into basic patterns, and then contracted the work out to women to be finished in small workshops or at home. Like many other urban women, Cincinnati women sought this employment because husbands or fathers could not earn enough to support the family and because outwork often allowed them to labor at home. Middle-class domestic ideology prescribed that home was the proper sphere for women. Many working men supported this view because they feared that female labor would undercut their wages and destroy order in the family. Outwork, then, allowed poor married women to supplement their family income while honoring social norms.

Paid by the piece, female outworkers were among the most exploited of Cincinnati’s workers. Long days spent sewing in darkened rooms not only often failed to bring an adequate financial reward but also led to health problems, including ruined eyes and curved spines. The successful marketing of sewing machines in the 1850s contributed to worsening working conditions and lower pay. The sewing machine made stitching easier, so the pool of potential workers increased and the volume of work that bosses expected grew. As tasks were further subdivided, work also became more monotonous. As one Cincinnati citizen observed, “As many as 17 hands” were employed on a single pair of pants.

Cincinnati employers claimed that the new industrial order offered great opportunities to most of the city’s male citizens. Manufacturing work encouraged the “manly virtues” so necessary to the “republican citizen.” Not all Cincinnati workers agreed. Like workers in Lowell and other manufacturing communities, Cincinnati’s laborers rose up against their bosses in the decades before the Civil War.

The working man’s plight, as Cincinnati labor leaders analyzed it, stemmed from his loss of independence. Even though a manufacturing job provided a decent livelihood for some people, the new industrial order was changing the nature of the laboring class itself. A new kind of worker had emerged. Rather than selling the products of his skills, he had only his raw labor to sell. His “wage slavery,” or dependence on wages, promised to be lifelong. The reorganization of work signaled the end of the progression from apprentice to journeyman to master and undermined traditional skills. Few workers could expect to rise to the position of independent artisan. Most would labor only for others, just as slaves labored for their masters. Nor would wages bring to most that other form of independence: the ownership of shop and home. The expression “wage slavery” contained a deep truth about the changed conditions of many American working men.

Workers also resented the masters’ attempts to control their lives. In the new factories, owners insisted on a steady pace of work and uninterrupted production. Artisans who were used to working in spurts, stopping for a few moments of conversation or a drink, disliked the new routines. Those who took a dram or two at work found themselves discharged. Even outside the workplace, manufacturers attacked Cincinnati’s working-class culture. Crusades to abolish volunteer fire companies and to close down saloons, both attacked as nonproductive activities, suggested how little equality the Cincinnati worker enjoyed in an industrializing society.

The fact that workers’ wages in Cincinnati, as in other cities, rose more slowly than food and housing costs compounded discontent over changing working conditions. The working class sensed it was losing ground at the very time the city’s rich were growing visibly richer. In 1817, the top tenth of the city’s taxpayers owned more than half the wealth, whereas the bottom half possessed only 10 percent. In 1860, the share of the top tenth had increased to two-thirds, while the bottom half’s share had shrunk to 2.4 percent. Cincinnati workers may not have known these exact percentages, but they could see growing social and economic inequality in the luxurious mansions that the city’s rich were building and in the spreading blight of slums.

In the decades before the Civil War, Cincinnati workers formed unions, turned out for fair wages, and rallied in favor of the 10-hour day. Like the Lowell mill girls, they cloaked their protest with the mantle of the Revolution. Striking workers staged
Changing Occupational Distribution, 1820–1860

<table>
<thead>
<tr>
<th></th>
<th>1820</th>
<th>1840</th>
<th>1860</th>
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</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>78.8%</td>
<td>63.1%</td>
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<tr>
<td>Mining</td>
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<td>0.6</td>
<td>1.6</td>
</tr>
<tr>
<td>Construction</td>
<td>—</td>
<td>5.1</td>
<td>4.7</td>
</tr>
<tr>
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<td>2.7</td>
<td>8.8</td>
<td>13.8</td>
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<tr>
<td>Trade</td>
<td>—</td>
<td>6.2</td>
<td>8.0</td>
</tr>
<tr>
<td>Transport</td>
<td>1.6</td>
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</tr>
<tr>
<td>Service</td>
<td>4.1</td>
<td>5.0</td>
<td>6.4</td>
</tr>
<tr>
<td>Other</td>
<td>12.4</td>
<td>9.4</td>
<td>10.6</td>
</tr>
</tbody>
</table>

Source: U.S. Bureau of the Census

The decline of agriculture and the increased involvement in industrial pursuits are represented in this table. In what 20-year period did agriculture decline most dramatically? In what 20-year period did manufacturing increase most?

parades with fifes and drums and appropriated patriotic symbols to bolster their demands for justice and independence. Although they did not see their bosses as a separate or hostile class, labor activists insisted that masters were denying workers a fair share of profits. This unjust distribution doomed them to economic dependency. Because the republic depended on a free and independent citizenry, the male workers warned that their bosses’ policies threatened to undermine the republic itself.

Only in the early 1850s did Cincinnati workers begin to suspect that their employers formed a distinct class of parasitic “nonproducers.” Although most strikes still revolved around familiar issues of better hours and wages, signs appeared of the more hostile labor relations that would emerge after the Civil War.

As elsewhere, skilled workers were in the forefront of Cincinnati’s labor protest and union activities. But their victories proved temporary. Depression and bad times always harmed labor organizations and canceled out employers’ concessions. Furthermore, Cincinnati workers did not readily unite to protest new conditions. The uneven pace of industrialization meant that these workers, unlike the Lowell mill women, had no common working experience. Moreover, growing cultural, religious, and ethnic diversity compounded differences in the workplace. By 1850, almost half the people in the city were foreign born, most of them German, whereas only 22 percent had been in 1825.

As the heterogeneity of the American people increased, ethnic and religious tensions simmered. Immigrants, near the bottom of the occupational ladder, faced limited job choices and suspicion of their faith, habits, and culture. Protestant workers frequently felt that they had more in common with their Protestant bosses than with Catholic Irish or German fellow workers. These tensions exploded in Cincinnati in the spring of 1855. Americans attacked barricades erected in German neighborhoods, crying out death threats. Their wrath visited the Irish as well. Ethnic, cultural, and social differences often drove workers apart and concealed their common grievances. In many cases, disunity served economic progress by undermining workers’ efforts for higher pay, shorter hours, and better working conditions, thus enabling businesses to maximize productivity and profits while minimizing the cost of labor.
Americans experienced the impact of economic growth most dramatically in the cities. In the four decades before the Civil War, the rate of urbanization in the United States was faster than ever before or since. In 1820, about 9 percent of the American people lived in cities (defined as areas containing a population of 2,500 or more). Forty years later, almost 20 percent of them did. Older cities such as Philadelphia and New York mushroomed, while new cities such as Cincinnati, Columbus, and Chicago sprang up. Although urban growth was not confined to the East, it was most dramatic there. By 1860, more than one-third of the people living in the Northeast were urban residents, compared with only 14 percent of westerners and 7 percent of southerners. Although the majority of northerners still lived on farms or in small farm towns, the region was clearly urbanizing.

The Process of Urbanization

Three distinct types of cities—commercial centers, mill towns, and transportation hubs—emerged during these years of rapid economic growth. Although a lack of water power limited industrial development, commercial seaports such as Boston, Philadelphia, and Baltimore expanded steadily and developed diversified manufacturing to supplement the older functions of importing, exporting, and providing services and credit. New York replaced Philadelphia as the country’s largest and most important city. The completion of the Erie Canal allowed New York merchants to gain control of much of the trade with the West. By 1840, they had also seized the largest share of the country’s import and export trade.
Access to water power spurred the development of a second kind of city, exemplified by Lowell, Massachusetts; Trenton, New Jersey; and Wilmington, Delaware. Situated inland along the waterfalls and rapids that provided the power to run their mills, these cities burgeoned.

A third type of city arose between 1820 and 1840, west of the Appalachian Mountains, where one-quarter of the nation’s urban growth occurred. Louisville, Cleveland, and St. Louis typified cities that served as transportation and distribution centers from the earliest days of frontier settlement. In the 1850s, Chicago’s most significant business was selling lumber to prairie farmers.

Until 1840, the people eagerly crowding into cities came mostly from the American countryside. Then ships began to spill their human cargoes into eastern seaports. Immigrants who could afford it, many of them Germans or Scandinavians, left crowded port cities for the interior. Those who were penniless sought work in eastern cities. By 1860, fully 20 percent of those living in the Northeast were immigrants; in some of the largest cities, they and their children composed more than half the population. The Irish were the largest foreign group in the Northeast.

While a few cities, such as New York and Boston, provided parks where residents could escape from the sounds, noises, and smells of urban life, much about urban life was grimy and difficult, especially for those who belonged to the working class. Speculators, finding the grid pattern the cheapest and most efficient way to divide land for development, created miles of monotonous new streets and houses. Overwhelmed by rapid growth, city governments provided few of the services we consider essential today, and usually only to those who paid for them. Poor families devoted many hours to securing necessities, including water. The ability to pay for services determined not only comfort, but health.

Class Structure in the Cities

The drastic differences in the quality of urban life reflected social fluidity and the growing economic inequality that characterized many American cities. In contrast to the colonial period, the first half of the nineteenth century witnessed a dramatic rise in the concentration of wealth in the United States. The pattern was most extreme in cities.

Because Americans believed that capitalists deserved most of their profits, the well-to-do profited handsomely from this period of growth whereas workers lost ground. Philadelphia provides one example of these economic trends. The merchants, brokers, lawyers, bankers, and manufacturers of Philadelphia’s upper class gained increasing control of the city’s wealth. By the late 1840s, the wealthiest 4 percent of the population held about two-thirds of the wealth. Because more wealth was being generated, the widening gap between the upper class and the working class did not cause mass suffering. But growing inequality hardened class lines and contributed to labor protests.

Between 1820 and 1860, a new working and middle class took shape in Philadelphia and elsewhere. As preindustrial ways of producing goods yielded to factory production and as the pace of
340 Part 3 An Expanding People, 1820–1877

Economic activity quickened, some former artisans and skilled workers seized newly created opportunities. Perhaps 10 to 15 percent of Philadelphians in each decade before the Civil War improved their occupations and places of residence. Increasingly, membership in this middle class meant having a nonmanual occupation and a special place of work suited to activities depending on brainpower rather than brawn. But downward occupational mobility increased. Former artisans or journeymen became part of a new class of permanent manual workers, dependent on wages. Fed by waves of immigrants, the lower class grew at an accelerating rate. The percentage of unskilled wage earners living in poverty or on its brink increased from 17 to 24 percent between 1820 and 1860, while the proportion of artisans, once the heart of the laboring class, shrank from 56 to 47 percent.

The Urban Working Class
As with so much else in urban life, housing patterns reflected social and economic divisions. The poorest rented quarters in crowded shacks, shanties, and two-room houses. Because renters moved often, from one cramped lodging to another, it was difficult for them to create close-knit neighborhoods that might offer fellowship and assistance to offset the harsh conditions of daily life. Substantial houses fronting the main streets concealed the worst urban housing, which was in back alleys or even in backyards. Many visitors did not even realize slums lay behind the rows of brick housing, nor did they know of the uncollected garbage, privy runoffs, and fetid decay in the dark, unpaved alleys. In his diary, Philadelphia shopkeeper Joseph Sill left a description of living conditions at the bottom. "In the afternoon," he wrote, "Mrs. S & I went to the lowest part of the City to see some poor persons who had call'd upon us for Charity. We found one woman, with two children, & expecting soon to be confined, living in a cellar, part of which was unfloored, & exhibited much wretchedness; but it was tolerably clean. Her husband is a Weaver, & had his loom in the Cellar, but has only occasional work."
Wealth Distribution in Three Eastern Cities in the 1840s

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<th>Level of Wealth</th>
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</tbody>
</table>


What the Sills witnessed during their visit to the weaver’s family was not just poverty but the transformation of working-class family life. Men could no longer be sure of supporting their wives and children, even when they were employed. Children as young as 10 might be working for wages or helping with piecework. Women might be taking in work at home. Making ends meet colored family relations. Men felt they had lost much of their authority and power. Sons, earning their own money, did not necessarily respect their fathers. Husbands found themselves having to help with housework when wives were too busy. Observed one immigrant, “the idea of either husband or wife acknowledging one or the other to be ‘Boss’ [was] quite out of the question.” With wives responsible for buying food at urban markets, husbands sometimes felt their wives were careless with their hard-earned money. When one woman failed to explain clearly what she had done with the grocery money, her angry husband “said if she did not give him a full account . . . he would kill her or something like that.” The squabble ended in murder. This family was an extreme case, but family violence was not uncommon in working-class quarters.

Middle-Class Life and Ideals

Like the Sills, other members of the new middle class profited from the dramatic increase in wealth in antebellum America. They lived in pleasantly furnished houses, enjoying more peace, more privacy, and more comfort than the less affluent. Franklin stoves gave warmth in winter, and iron cookstoves made cooking easier. Conveniences such as Astral lamps made it possible to read after dark. Bathing stands and bowls ensured higher standards of cleanliness. Rugs muffled sounds and kept in the heat.

Material circumstances were one badge of middle-class status, but there were others as well. The acceptance of certain norms and values also identified a person as a member of the new middle class. Genteel behavior and the careful observance of elaborate rules of etiquette (for example, a gentleman was expected to back out of a parlor after making a call upon a lady), the appropriate clothes and conversation, an elegantly furnished parlor for the entertainment of visitors—all served to establish the standing of a middle-class family.

New expectations about the roles of men and women, prompted partly by economic change, also shaped middle-class life. In the seventeenth and eighteenth centuries, the labor of men and women, adults and children, all contributed to the family’s economic welfare. But improved transportation, new products, and the rise of factory production and large businesses changed the family economy. Falling prices for processed and manufactured goods such as soap, candles, clothing, and even bread made it unnecessary for women, except on the frontier, to continue making these items at home.

As men increasingly involved themselves in a money economy, whether through commerce or...
market farming, women's and children's contributions to the family welfare became relatively less significant. Although middle-class women and children still worked in their homes as their husbands left to "bring home the bacon," they often neither produced vital goods nor earned money. Even the rhythm of their lives, oriented to housework rather than the demands of the clock, separated them from the bustling commercial world in which their husbands now labored. By 1820, the notion that the sexes occupied separate spheres emerged. Men's sphere was the public world, whereas women's was the domestic.

Men were charged with the task of financial support, a responsibility that (as Susan Warner's family experience suggested) was a heavy one in a changing economy. Women's duties included working at home—not as producer but as housekeeper. As the popular book *Whisper to a Bride* counseled readers, "For his sake . . . acquaint thyself with the knowledge that appertaineth unto a wife and housekeeper. If thou art deficient in this knowledge, rest not, till thou hast acquired it. It cometh readily to an attentive mind, and growth with experience."

The role of housekeeper had both pleasure and frustration built into it. Susan Warner's celebration of domestic life in her novels suggested the satisfactions derived from a cozy household. Yet it was sometimes impossible to achieve the new standards of cleanliness, order, and beauty. Catharine Beecher's "Words of Comfort for a Discouraged Housekeeper" listed just a few of the problems—an inconvenient house, sick children, poor domesticities—that undermined efforts to create a perfect, harmonious home.

Although women were expected to become "systematic, neat and thorough" housekeepers, whatever the personal costs might be, they were also given more elevated responsibilities as moral and cultural guardians of their own families and, by extension, of society as a whole. Believing that women were innately pious, virtuous, unselfish, and modest (all characteristics that men lacked), publicists built on the argument developed during the Revolutionary era. By training future citizens and workers to be obedient, moral, patriotic, and hardworking, mothers ensured the welfare of the republic. Just as important, they preserved important values in a time of rapid change. Because men had none of women's virtues and were daily caught up in the fast-paced world of business, wives were responsible for helping husbands cope with temptations and tensions. In the words of one preacher, a wife was the "guardian angel" who "watches over" her husband's interests, "warns him against dangers, comforts him under trial; and by . . . pious, assiduous, and attractive deportment, constantly endeavors to render him more virtuous, more useful, more honourable, and more happy."

This view, characterizing women as morally superior to and different from men, had important consequences for female life. Although the concept of domesticity seemed to confine women to their homes, it actually prompted women to take on activities in the outside world. If women were the guardians of morality, why should they not carry out their tasks in the public sphere? "Woman," said Sarah Hale, editor of the popular magazine *Godey's Lady's Book*, was "God's appointed agent of morality." Such reasoning lay behind the tremendous growth of voluntary female associations in the early decades of the nineteenth century. Initially, most involved religious and charitable activities. Women supported orphanages, paid for and distributed religious tracts and Bibles, established Sunday schools, and ministered to the poor. The associations provided women with congenial companions and suitable tasks for their "moral character." In the 1830s, as we shall see in Chapter 12, women added specific moral concerns such as the abolition of slavery to their missionary and benevolent efforts. As these women took on more active and controversial tasks, they often clashed with men and with social conventions about "woman's place."

The notion of separate spheres established norms for middle-class men and women but were far more flexible than they appeared. Men played a much greater part in the household and in child rearing than gender proscriptions would suggest. Many women were active in the public world. Obviously, men were not always aggressive and rational nor were all women pious, disinterested, selfless, virtuous, cheerful, and loving. But these ideas influenced how men and women thought of themselves. It helped promote "male" and "female" behavior by encouraging particular choices, and it helped many men and women make psychological sense of their lives.

New norms, effectively spread by the publishing industry, also influenced rural and urban working women. The insistence on marriage and service to family discouraged married women from entering the workforce. Many took in piecework so that they could remain at home. Those who had to work often bore a burden of guilt. Though the new feminine ideal may have suited urban middle-class women, it created difficult tensions in the lives of working-class women.

As family roles were reformed, a new view of childhood emerged. Working-class children still
worked or scavenged for goods to sell or use at home, but middle-class children were no longer expected to contribute economically to the family. Middle-class parents now came to see childhood as a special stage of life, a period of preparation for adulthood. In a child’s early years, mothers were to impart important values, including the necessity of behaving in accordance with gender prescriptions. Harsh punishments lost favor. As Catharine Beecher explained, “Affection can govern the human with a sway more powerful than the authority of reason or [even] the voices of conscience.” Schooling also prepared a child for the future, and urban middle-class parents supported the public school movement.

Children’s fiction, which poured off the printing presses, also socialized children. Stories pictured modest youngsters happily making the correct choices of playmates and activities, obeying their parents, and being dutiful, religious, loving, and industrious. Occasionally, as in The Child at Home (1833), the reader could discover the horrible consequences of wrongdoing. The young girl who refused to bring her sick mother a glass of water saw her promptly die. Heavy-handed moralizing made sure that children got the proper message.

The growing publishing industry helped spread new ideas about family roles and appropriate family behavior. Novels, magazines, etiquette and child rearing manuals, and schoolbooks all carried the message from northern and midwestern centers of publishing to the South, to the West, and to the frontier. Probably few Americans lived up to the new standards established for the model parent or child, but the standards increasingly influenced them.

New notions of family life supported the widespread use of contraception for the first time in American history. Because children required so much loving attention and needed careful preparation for adulthood, many parents desired smaller families. The declining birthrate was evident first in the Northeast, particularly in cities and among the middle class. Contraceptive methods included abortion, which was legal in many states until 1860. This medical procedure terminated perhaps as many as one-third of all pregnancies. Other birth control methods included coitus interruptus and abstinence. The success of these methods for family limitation suggests that many men and women adopted the new definitions of the female as naturally affectionate but passionless and sexually restrained.

Mounting Urban Tensions

The social and economic changes transforming American cities and festering ethnic and racial tensions in the half century before the Civil War produced unprecedented urban violence. Baltimore, Philadelphia, Boston, and New York experienced at least 35 major riots between 1830 and 1860, while cities whose populations reached 20,000 by 1850 also witnessed scenes of urban disorder. Mob actions sometimes lasted for days because there was no force strong enough to quell group disorder. American cities were slow to establish modern police forces. Traditional constables and night watches did not try to stop crimes, discover offenses, or “prevent a tumult.”

An unsavory riot in Philadelphia in August 1834 revealed not only racial and social antagonisms but the inability of the city’s police force to control the mob. Starting off with the destruction of a merry-go-round patronized by both blacks and whites, the riot turned into an orgy of destruction, looting, and intimidation of black residents. In the several days of violence, at least one black person was killed, and numerous others injured. As one shocked eyewitness reported, “The mob exhibited more than fiendish brutality, beating and mutilating some of the old, confiding and unoffending blacks with a savageness surpassing anything we could have believed men capable of.”

This racial explanation overlooked the range of causes underlying the rampage of fury and destruction. The rioters were young and generally of low
Although paintings are often admired and studied for artistic reasons alone, their value as historical documents should not be overlooked. In an age before the camera, paintings, sketches, and even pictures done in needlework captured Americans at different moments of life and memorialized their significant rituals. Paintings of American families in their homes, for example, reveal both an idealized conception of family life and the details of its reality. In addition, the paintings provide us with a sense of what the houses of the middle and upper classes (who could afford to commission art) were like.

Artists trained in the European tradition of realism painted family scenes and portraits, but so did many painters who lacked formal academic training, the so-called primitive artists. Their art was abstract in the sense that the artists tended to emphasize what they knew or felt rather than what they actually saw.

Some primitive artists were women who had received some drawing instruction at school. They often worked primarily for their own pleasure. Other artists were artisans, perhaps house or sign painters, who painted pictures in their leisure time. Some traveling house decorators made a living by making paintings and wall decorations. Many primitive paintings are unsigned, and even when we know the painter’s identity, we rarely know more than a name and perhaps a date. Primitive artists flourished in the first three-quarters of the nineteenth century, eventually supplanted by the camera and inexpensive prints.

We see below a painting of the Sargent family done by an unknown artist around 1800. Though not an exact representation of reality, it does convey what the artist and the buyer considered important. Like any piece of historical evidence, this painting must be approached...
critically and carefully. Our questions focus on four areas: (1) the individual family members and their treatment, (2) the objects associated with each, (3) the implied or apparent relationship between family members, and (4) the domestic environment. The painting gives us an idealized version of what both the painter and the subjects felt ought to be as well as what actually was. First, study the family itself. Describe what you see. How many family members are there, and what is each one doing? What seems to be the relationship between husband and wife? Why do you think Mr. Sargent is painted with his hat on? Who seems to dominate the painting, and how is this dominance conveyed (positioning, attitude or facial expression, eye contact, clothing)? What can you conclude about different “spheres” and roles for men and women?

Why do you think the artist painted two empty chairs and included a ball and a dog in this scene of family life? What do these choices suggest about attitudes toward children and their upbringing? What seems to be the role of the children in the family? What does the painting suggest about how this family wished to be viewed? How do your conclusions relate to information discussed in this chapter?

Take a look at the room in which the Sargents are gathered. Make an inventory of the objects and furnishings in it. The room seems quite barren in comparison with present-day interiors. Why? Why do you think the chairs are placed near the window and door? What kind of scene does the window frame?

The Family at Home, painted by H. Knight in 1836, is a more detailed painting showing a larger family gathering almost 40 years later. Similar questions can be asked about this painting, particularly in relationship to the different treatment of boys and girls and the positioning and objects associated with each gender. There are many clues about the different socialization of male and female children. The family’s living room can be contrasted with the Sargent family’s room to reveal some of the changes brought about by industrialization.

**Reflecting on the Past** How do these nineteenth-century homes and gender roles differ from those in colonial New England and the Chesapeake?
social standing. Many were Irish; some had criminal records. A number of those arrested, however, were from a "class of mechanics of whom better things are expected," and middle-class onlookers egged the mob on. The rioters revealed that in the event of an "attack by the city police, they confidently counted" on the assistance of these bystanders.

The mob's composition hints at some of the reasons for participation. Many of the rioters were newly arrived Irish immigrants at the bottom of the economic ladder who competed with blacks for jobs. Subsequent violence against blacks suggested that economic rivalry was an important component of the riot. But if blacks threatened the dream of advancement of some whites, this was not the complaint of the skilled workers. These men were more likely to have believed themselves injured by a changing economic system that undermined the small-scale mode of production. Dreams of a better life seemed increasingly illusory as declining wages pushed them closer to unskilled workers than to the middle class. Like other rioters, they were living in some of the poorest and most crowded parts of the city. Their immediate scapegoats were blacks, but the intangible villain was the economic system itself.

Urban expansion also figured as a factor in the racial violence. Most of the rioters lived either in the riot area or nearby. Racial tensions generated by squalid surroundings and social proximity go far to explain the outbreak of violence. The same area would later become the scene of race riots and election trouble and become infamous for harboring criminals and juvenile gangs. The absence of middle- or upper-class participants did not mean that these groups were untroubled during times of growth and change, but their material circumstances cushioned them from some of the more unsettling forces.

Finally, the character of the free black community itself was a factor in producing those gruesome August events. Not only was the community large and visible, but it also had created its own institutions and its own elite. The mob vented its rage against black affluence by targeting the solid brick houses of middle-class blacks and robbing them of silver and watches. Black wealth threatened the notion of the proper social order held by many white Philadelphians and seemed unspeakable when whites could not afford life's basic necessities or lacked jobs.

Ten years later another riot in Philadelphia illustrated the depth of religious and ethnic animosity in
that city. Sparked by Catholic objections to the city’s policy of using the St. James version of the Bible in the public schools, the controversy escalated from a disagreement over the use of the Protestant Bible to the accusation that Irish Catholics intended to “trample our free Protestant institutions in the dust.” A mass rally organized by the nativists in an Irish immigrant neighborhood got out of hand and ended in violence. In the nights and days that followed, six people were killed and much immigrant property destroyed. Two Catholic churches were burned to the ground. As had been the case in 1834, the mob contained working-class men and boys. Also supporting the nativist cause, however, were middle-class men such as lawyers and doctors. Both groups resented the presence of Irish immigrants and feared that these outsiders threatened American culture, religion, and politics.

When the rioters torched St. Augustine’s Catholic Church the second night of the disturbances, the city’s mayor attempted to reason with the crowd. Rather than listen to the mayor, someone in the crowd threw a stone at him, knocking him down. Cheers went up as the church steeple toppled. Without an armed police force, city officials such as the mayor were powerless to stop mob actions. Each chaotic event made the London model more attractive, and eventually residents and city officials in Philadelphia (and in other large cities) supported an expanded, quasi-military, preventive, and uniformed police force. By 1855, most sizable eastern cities had established such forces.

**The Black Underclass**

Between 1800 and 1860, the number of free blacks in the United States grew dramatically, from 108,435 in 1800 to 488,070 in 1860. Most of these lived in northeastern cities, although Baltimore had the largest free African American population of all, and New Orleans also had a sizable free black community. While African Americans constituted a minority of urban residents, whites noted the increased numbers, often with negative feelings. As one African American woman confessed, white prejudice based on “dislike to the color of the skin” had “often embittered” her feelings.

Events in Philadelphia showed how hazardous life for free blacks could be. Although a small elite group of blacks emerged in Philadelphia and in other cities as well, most African Americans did not enjoy the rewards of economic expansion and industrial progress. Black men, often with little or no education, held transient and frequently dangerous jobs. Black women, many of whom headed their households because the men were away working or had died, held jobs before and after marriage. In Philadelphia in 1849, almost half of the black women washed clothes for a living. Others took boarders into their homes, thus adding to their domestic chores.

Northern whites, like southerners, believed in black inferiority and depravity and feared black competition. Although northern states had passed gradual abolition acts between 1780 and 1803 and the national government had banned slaves from entering new states to be formed out of the Northwest Territory, nowhere did any government extend equal rights and citizenship or economic opportunities to free blacks in their midst.

For a time in the early nineteenth century, some blacks living in the North were permitted to vote, but they soon lost that right. Beginning in the 1830s, in part because of the influx of fugitive slaves and manumitted blacks without property or jobs, Pennsylvania, Connecticut, and New Jersey disenfranchised blacks. New York allowed only those with three years’ residence and property valued at $250 or more to vote. Only the New England states (with the exception of Connecticut), which had tiny black populations, preserved the right to vote regardless of color. By 1840, fully 93 percent of the northern free black population lived in states where law or custom prevented them from voting.

Other black civil rights were also restricted. In five northern states, blacks could not testify against whites or serve on juries. In most states, the two races were thoroughly segregated. Blacks increasingly endured separate and inferior facilities in railway cars, steamboats, hospitals, prisons, and other asylums. In some states, they could enter public buildings only as personal servants of white men. They sat in “Negro pews” in churches and took communion only after whites had left the church. Although most Protestant religious denominations in the antebellum period split into northern and southern branches over the issue of slavery, most northern churches were not disposed to welcome blacks as full members.

As the Philadelphia riot revealed, whites were driving blacks from their jobs. In 1839, *The Colored American* blamed the Irish. “These impoverished and destitute beings . . . are crowding themselves into every place of business . . . and driving the poor colored American citizen out.” Increasingly after 1837, these “white niggers” became coachmen, stevedores, barbers, cooks, and house servants—all occupations blacks had once held.
Educational opportunities for blacks were also severely limited. Only a few school systems admitted blacks, in separate facilities. The case of Prudence Crandall illustrates the lengths to which northern whites would go to maintain racial segregation. In 1833, Crandall, a Quaker schoolmistress in Canterbury, Connecticut, announced that she would admit “young colored ladies and Misses” to her school. The outraged townspeople, fearful that New England would become the “Liberia of America,” tried all sorts of persuasion and intimidation to stop Crandall.

Nonetheless, Crandall opened the school. Hostile citizens harassed and insulted students and teachers, refused to sell them provisions, and denied them medical care and admission to churches. Ministers preached against Crandall’s efforts, and local residents poured manure in the school’s well, set the school on fire, and knocked in walls with a battering ram. Crandall was arrested, and after two trials—in which free blacks were declared to have no citizenship rights—she finally gave up and moved to Illinois.

Crandall likely did not find the Old Northwest much more hospitable. The fast-growing western states were intensely committed to white supremacy and black exclusion. In Ohio, the response to talk of freeing the slaves was to pass “Black laws” excluding them from the state. Said one Ohioan, “The banks of the Ohio would be lined with men with muskets to keep off the emancipated slaves.” In 1829 in Cincinnati, where evidence of freedom papers and $500 bond were demanded of blacks who wished to live in the city, white rioters ran nearly 2,000 blacks out of town.

As an Indiana newspaper editor observed in 1854, informal customs made life dangerous for blacks. They were “constantly subject to insults and annoyance in traveling and the daily avocations of life; [and] are practically excluded from all social privileges, and even from the Christian communion.” An Indiana senator proclaimed in 1850 that a black could “never live together equally” with whites because “the same power that has given him a black skin, with less weight or volume of brain, has given us a white skin with greater volume of brain and intellect.” A neighboring politician, Abraham Lincoln of Illinois, would not have disagreed with this assessment.
Although the percentage of American workers involved in farming fell from 71 to 53 percent between 1830 and 1860, agriculture persisted as the country’s most significant economic activity. The small family farm still characterized eastern and western agriculture, and farm products still made up most of the nation’s exports.

Even though farming remained the dominant way of life, agriculture changed in the antebellum period. Vast new tracts of land came under cultivation in the West. Railroads, canals, and better roads pulled rural Americans into the orbit of the wider world. Some crops were shipped to regional markets; others, such as grain, hides, and pork, stimulated industrial processing. Manufactured goods, ranging from cloth to better tools, flowed in return to farm families. Like city dwellers, farmers and their families read books, magazines, and papers that exposed them to new ideas. Commercial farming encouraged different ways of thinking and acting and lessened the isolation so typical before 1820.

Farming in the East
Antebellum economic changes created new rural patterns in the Northeast. Marginal lands in New England, New York, and Pennsylvania, cultivated as more fertile lands ran out, yielded discouraging returns. Gradually, after 1830, farmers abandoned these farms, forest reclaimed farmland, and the New England hill country began a slow decline.

Those farmers who did not migrate west had to transform production. Unable to compete with western grain, they embraced new agricultural opportunities created by better transportation and growing urban markets. The extension of railroad lines into rural areas, for example, allowed farmers as far away as Vermont to ship cooled milk to the city. Other farmers used the new railroads to ship fruit and vegetables to the cities. By 1837, a Boston housewife could buy a wide variety of fresh vegetables and fruits, ranging from cauliflower to raspberries, at the central market. Cookbooks began to include recipes calling for fresh ingredients.

As northern farmers adopted new crops, they began to regard farming as a scientific endeavor. After 1800, northern farmers started using manure as fertilizer; by the 1820s, some farmers were rotating their crops and planting new grasses and clover to restore fertility to the soil. These techniques recovered worn-out wheat and tobacco lands in Maryland and Delaware for livestock farming. While farmers in the Delaware River valley were leaders in adopting new methods, interest in scientific farming was widespread. New journals informed readers of modern farming practices, and many states established agricultural agencies. Although wasteful farming practices did not disappear, they became less characteristic of the Northeast. Improved farming methods...
contributed to increased agricultural output and helped reverse a 200-year decline in farm productivity in some of the oldest areas of settlement. A “scientific” farmer in 1850 could often produce two to four times as much per acre as in 1820. Experimentation and the exchange of information also led to the development of thousands of special varieties of plants for local conditions by 1860.

Rural attitudes also changed. Cash transactions replaced the exchange of goods. Country stores became more reluctant to accept wood, rye, corn, oats, and butter as payment for goods instead of cash. As some farmers adopted the “get-ahead” ethic and entered the market economy, those who were content with just getting along fell behind. Wealth inequality increased throughout the rural Northeast.

Frontier Families

Many people who left the North during these years headed for the expanding frontier. After the War of 1812, Americans flooded into the Old Northwest. Early communities dotted the Ohio River, the link to the South. Concentrating on corn and pork, settlers sent their products down the Ohio and Mississippi rivers to southern buyers. In 1820, less than one-fifth of the American population lived west of the Appalachians; by 1860, almost half did, and Ohio and Illinois had become two of the nation’s most populous states.

By 1830, Ohio, Indiana, and southern Illinois were heavily settled, but Michigan, northern Illinois, Wisconsin, and parts of Iowa and Missouri were still frontier. During the next decade, land sales and settlement boomed in the Old Northwest. Changes in federal land policy, which reduced both prices and the minimum acreage a settler had to buy, helped stimulate migration. Eastern capital also contributed to the boom with loans, mortgages, and speculative buying. Speculators frequently bought up large tracts of land from the government and then subdivided them and sold parcels off to settlers.

Internal improvement schemes after 1830 also contributed to new settlement patterns and tied the Old Northwest firmly to the East. Wheat for the eastern market rather than corn and hogs for the southern market became increasingly important with the transportation links eastward. Between 1840 and 1860, Illinois, southern Wisconsin, and eastern Iowa turned into the country’s most rapidly growing grain regions. In the 1850s, these three states accounted for 70 percent of the increase in national wheat production.

Although the Old Northwest passed rapidly through the frontier stage between 1830 and 1860, its farming families faced severe challenges. Catharine Skinner, who moved from New York to Indiana with her husband when she was 24, described her rigorous existence. “We are poor and live in the woods where deer roam plentifully and the wolf is occasionally heard,” she wrote to her sister in 1849. “We are employed in honest business and trying to do the best we can; we have got 80 acres of land in the
woods of Indiana, a very level country; we have got two acres cleared and fenced and four more pity well under way; we have got about five acres of wheat in the ground; we raised corn enough for our use and to fat our pork . . . we have a cow so that we have milk and butter and plenty of corn bread but wheat is hard to be got in account of our not having mony.”

The Skinners were typical. Western farms were small, for there were limits to what a family with hand tools could manage. A family with two healthy men could care for about 50 acres. In wooded areas, it took several years to get even that much land under cultivation, for only a few acres could be cleared in a year. Even on the prairies, the typical settler needed five years to get his farm in full operation.

Catharine Skinner mentioned the shortage of money and described her family as “poor.” Although money was in short supply in the Northwest, she probably overstated her family’s poverty. It took capital to begin farming—a minimum initial investment of perhaps $100 for 80 acres of government land, $300 for basic farming equipment, and another $100 or $150 for livestock. To buy an already “improved” farm cost more, and free bidding at government auctions could drive the price of unimproved federal land far above the minimum price. Once farmers moved onto the prairies of Indiana and Illinois, they needed an initial investment of about $1,000 because they had to buy materials for fencing, housing, and expensive steel plows. If farmers invested in the new horse-drawn reapers, they could cultivate more land, but all their costs also increased.

**Opportunities in the Old Northwest**

It was possible to begin farming with less, however. Some farmers borrowed from relatives, banks, or insurance companies. Others rented land from farmers who had bought more acres than they could manage. Tenants who furnished their own seeds and animals could expect to keep about one-third of the yield. Within a few years, some saved enough
to buy their own farms. Even those without any capital could work as hired hands. Labor was scarce, so they earned good wages. In Indiana, German settler Jacob Schramm hired men “to help with heavy labors of lumbering and field work, ditch-digging, and so on.” Five to 10 years of frugal living and steady work for men like those hired by Schramm would bring the sum needed to get started.

Probably about one-quarter of the western farm population consisted of young men laboring as tenants or hired hands. Although they stood on the bottom rung of the agricultural ladder, their chances of moving up and joining the rural middle class were favorable. Widespread ownership of land characterized western rural communities. Lucinda Easteen knew as much when she told her younger sister to come to Illinois, where “you can have a home of your own, but never give your hand or heart to a lazy man.”

Rural communities, unlike the cities, had no growing class of propertyless wage earners, but inequalities nevertheless existed in the Old Northwest. In Butler County, Ohio, for example, 16 percent of people leaving wills in the 1830s held half the wealth. By 1860, the wealthiest 8 percent held half the wealth. In a Wisconsin frontier county in 1860, the richest 10 percent owned 40 percent of all property. Although rural wealth was not as concentrated as urban, a few residents benefited more from rapid economic development than others.

Nevertheless, the Northwest offered many American families the chance to become independent producers and to enjoy a “pleasing competence.” The rigors of frontier life faded with time. As Catharine Skinner wrote to her sister from her new Illinois home in 1850, “We here have meetings instead of hearing the hunters gun and the woodman’s ax on the sabbath.”

Commercial farming brought new patterns of family life. As one Illinois farmer told his wife and daughter, “Store away your looms, wheels, [and] warping bars . . . all of your utensils for weaving cloth up in the loft. The boys and I can make enough by increasing our herds.” Many farm families had money to spend on new goods. As early as 1836, the Dubuque Visitor was advertising the availability of ready-made clothing and “Calicoes, Ginghams, Muslins, Cambricks, Laces and Ribbands.” The next year the Iowa News told of the arrival of “Ready Made Clothing from New York.”

### Agriculture and the Environment

Shifting agricultural patterns in the East and expanding settlement into the Old Northwest contributed to the changing character of the American landscape. As naturalist John Audubon mused in 1826, “A century hence,” the rivers, swamps, and mountains “will not be here as I see them. Nature

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will have been robbed of many brilliant charms, the rivers will be tormented and turned astray from their primitive course, the hills will be levelled with the swamps, and perhaps the swamps will have become a mount surmounted by a fortress of a thousand guns.” His sense of the consequences of the movement of peoples and the exploitation of land was shared by one French visitor who remarked that Americans would never be satisfied until they had subdued nature.

More than the subjugation of nature was involved, however. When eastern farmers changed their agricultural practices as they became involved in the market economy, their decisions left an imprint on the land. Selling wood and potash stimulated clearing of forests, as did the desire for new tools, plow castings, threshing machines, and wagon boxes, which were produced in furnaces fueled by charcoal. As forests disappeared, so, too, did their wildlife. Even using mineral manures such as gypsum or lime or organic fertilizers such as guano to revitalize worn-out soil and increase crop yields meant the depletion of land elsewhere.

When farmers moved into the Old Northwest, they used new steel plows, like the one developed in 1837 by Illinois blacksmith John Deere. Unlike older eastern plows, the new ones could cut through the dense, tough prairie cover. Deep plowing and the intensive cultivation of large cash crops had immediate benefits. But these practices could result in robbing the soil of necessary minerals such as phosphorus, carbon, and nitrogen. When farmers built new timber houses as frontier conditions receded, they helped fuel the destruction of the country’s forests.

Conclusion

The Character of Progress

Between 1820 and 1860, the United States experienced tremendous growth and economic development. Transportation improvements facilitated the movement of people, goods, and ideas. Larger markets stimulated both agricultural and industrial production. There were more goods and ample food for the American people. Cities and towns were established and thrived. Visitors constantly remarked on the amazing bustle and rapid pace of American life. The United States was, in the words of one Frenchman, “one gigantic workshop, over the entrance of which there is the blazing inscription ‘NO ADMISS-ION HERE, EXCEPT ON BUSINESS.’”

Although the wonders of American development dazzled foreigners and Americans alike, economic growth had its costs, as Susan Warner’s novel made clear. Expansion was cyclic, and financial panics and depression punctuated the era. Industrial profits were based partly on low wages to workers. Time-honored routes to economic independence disappeared, and a large class of unskilled, impoverished workers appeared in U.S. cities. Growing inequality characterized urban and rural life, prompting some labor activists to criticize new economic and social arrangements. But workers, still largely unorganized, did not speak with one voice. Ethnic, racial, and religious diversity divided Americans in new and troubling ways.

Yet a basic optimism and sense of pride also characterized the age. To observers, however, it frequently seemed as if the East and the Old Northwest were responsible for the country’s achievements. During these decades, many noted that the paths between the East, Northwest, and South seemed to diverge. The rise of King Cotton in the South, where slave rather than free labor formed the foundation of the economy, created a new kind of tension in American life, as the next chapter will show.

Questions for Review and Reflection

1. List what you consider the most significant factors underlying American economic growth and explain why you think the factors you have chosen were so important.

2. Explain the ways in which Great Britain contributed to American economic development. How was American industry both similar to and different from British industry?

3. Compare and contrast industrialism in Lowell and Cincinnati.

4. How did economic changes transform the American class system and the relationship between classes?

5. What were the benefits and drawbacks of the economic and technological changes discussed in this chapter? Consider daily life, work, the division of wealth, gender roles, and community relations.
Nathaniel Hawthorne’s novel *The Scarlet Letter* (1850, but use any edition), although set in the Puritan period, reveals more about the attitudes and controversies of the antebellum period than it does about the seventeenth century. The novels of James Fenimore Cooper provide a picture of the impact of social and economic change on the frontier. Susan Warner’s *The Wide, Wide World* (any edition) as well as her other popular novels provide an excellent picture of female interests and concerns in this period (although certainly not all her readers were women). The feature film *Little Women* (1994) presents a moving picture of the domestic and family life so idealized by the middle class. It also suggests the struggle of the middle class to maintain its status in difficult times. Some critics have pointed out that this adaptation of Louisa May Alcott’s novel has strong overtones of contemporary feminism. *Out of Ireland: The Story of Irish Emigration to America* (1994) gives a vivid picture of Irish emigration between 1840 and 1920.

## Discovering U.S. History Online

**Whole Cloth: Discovering Science and Technology Through American History**
www.si.edu/lemelson/centerpieces/whole_cloth/
The Jerome and Dorothy Lemelson Center for the Study of Invention and Innovation/Society for the History of Technology put together this site, which includes excellent activities and sources concerning early American manufacturing and industry.

**19th-Century Scientific American Online**
www.history.rochester.edu/Scientific_American/
Magazines and journals are windows through which we can view society. This site provides online editions of one of the more interesting nineteenth-century journals.

**Jacksonian Medicine**
www.connerprairie.org/historyonline/jmed.html
Survival was far from certain in the Jacksonian era. This site discusses some of the reasons for this as well as some of the possible cures of the times.

**Penn 1830: A Virtual Tour**
www.archives.upenn.edu/histy/features/1830
This “virtual tour” shows what a fairly typical campus looked like and what student life was like at one of the larger universities in the antebellum era.

**A Brief History of Central Banking in the United States**
http://odur.let.rug.nl/~usa/E/usbank/bankxx.htm
Of particular interest at this site is the section on the Second Bank of the United States (1816–1836).

**The Erie Canal**
www.syracuse.com/features/eriecanal/
This site features an overview of the history of the Erie Canal as well as the section “Life on the Erie Canal,” built around the diary of a 14-year-old girl who traveled from Amsterdam to Syracuse, New York, in the early nineteenth century. It explores the construction and importance of the Erie Canal.

**Inland Navigation: Connecting the New Republic, 1790–1840**
www.xroads.virginia.edu/~HYPER/DETOC/transport/front.html
This illustrated site gives the history of American canals, rivers, railroads, and roads: "early systems of transportation [that] wove the new country together. . . ."

**Lowell National Historic Park**
www.nps.gov/lowe/home.htm
This well-illustrated site offers a detailed history of the Lowell textile mills and gives an overview of early manufacturing.

**19th-Century Schoolbooks**
http://digital.library.pitt.edu/nietz/
This site offers an insight into nineteenth-century education with full-text, digital reproductions of nineteenth-century textbooks as well as two texts on the history of textbooks.

www.lahaca1.org/gentleman/
Drawing from contemporary photographs and nineteenth-century etiquette books, this site lends insight to the attire and behavior expected of urban “gentlemen.”

## Recommended Reading

Recommended Readings are posted on the web site for this textbook. Visit www.ablongman.com/nash

**Connor Prairie Living History Museum**
[www.connerprairie.org/historyonline/](http://www.connerprairie.org/historyonline/)
This is the online counterpart to a nineteenth-century living history museum that offers illustrated essays such as “Clothing of the 1830s,” “The American Woman of the Early Nineteenth Century” and “Jacksonian Medicine.” The site also has a series of articles on “Life in the 1880s” and online versions of the museum’s exhibits, including “Taming the Wilderness: Rivers, Roads, Canals, and Railroads.”

**A History of American Agriculture**
[www.usda.gov/history2/front.htm](http://www.usda.gov/history2/front.htm)
This government Web site offers an interactive timeline of American agriculture that contains several topics, including “Economic Cycles,” “Farm Machinery and Technology,” “Life on the Farm,” and “Government Programs and Policy.”