Section

2 A Business Boom

READING FOCUS

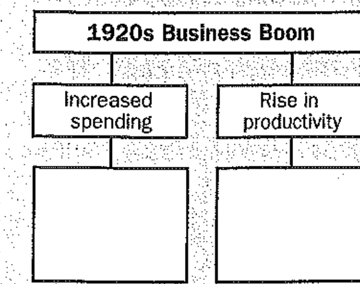
- What role do businesses and consumers play in a consumer economy?
- How were Henry Ford and the automobile important to the 1920s?
- In what ways did industrial growth affect the economy of the 1920s?
- Why did the economic boom bypass some people and benefit others?

KEY TERMS

consumer economy
installment plan
Gross National Product (GNP)
assembly line

TAKING NOTES

Copy this flowchart. As you read, fill in the boxes with some of the factors that caused a business boom in the 1920s.



MAIN IDEA

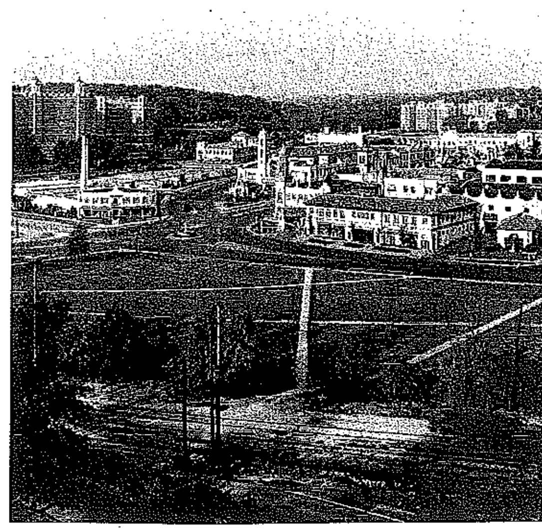
During the 1920s, new products and Americans' power to purchase them grew rapidly, producing a decade of enormous business growth.

Setting the Scene

Until the 1920s, shopping centers did not exist. Food was not "fast." Billboards did not line the nation's highways, because there were no highways, few cars, and relatively few advertisements.

The decade of the 1920s gave birth to much of the popular culture we know in modern America. The nation's first shopping center opened in Kansas City, giving consumers a more convenient way to shop. The first fast-food chain, A&W Root Beer, began selling burgers and soft drinks.

A popular roadside advertising campaign for shaving cream found its start in the mid-1920s. Signs that were evenly spaced apart compelled motorists to read each successive message: "Your shaving brush . . . has had its day . . . so why not . . . shave the modern way." Advertising became big business in the 1920s, with companies spending $3.2 billion on ads in 1927.



VIEWING HISTORY The nation's first modern shopping center, the Country Club Plaza, opened in Kansas City, Missouri, in 1922. **Making Comparisons** *How does it compare to the shopping malls of today?*

A Consumer Economy

After a period of uncertainty following World War I, the United States economy made a rapid adjustment. By 1920, incomes had resumed the upward trend begun during the war. Between 1914 and 1926, average wages rose more than 28 percent. The number of millionaires in the United States more than doubled in the same period.

Much of this growth resulted from a new focus on the consumer. In fact, the 1920s saw the development of a **consumer economy**, one that depends on a large amount of spending by consumers—individuals who use, or consume, products. Increased spending leads to larger profits for businesses, which in turn pushes up wages and encourages even more spending.

Traditionally, Americans valued thrift. They bought mainly what they needed, and much less of what they merely wanted, or what was nonessential. Several factors helped spark more buying in this decade, including higher wages, clever advertising, new products, lower costs, and the widespread availability of credit.

Catalogs brimming with exciting new goods tempted consumers to buy on credit.

Buying on Credit Until the 1920s, middle-class Americans generally paid cash for everything. Borrowing money for any purchase but a house or land was considered unthrifty, even immoral. During the 1920s, new kinds of consumer goods, such as automobiles and refrigerators, became widely available. Americans wanted these modern conveniences, but they cost a great deal. Unless manufacturers sold more of these goods, they would go out of business. To increase their profits, manufacturers developed and financed buying on the **installment plan.** On an installment plan, the customer makes partial payments (installments) at set intervals over a period of time until the total debt is paid. Installment plans fueled the growth of consumer spending.

Clever advertising made this form of buying acceptable to the American people. People who otherwise would not spend beyond their means were encouraged to buy all kinds of items, even though interest charges ranged from 11 to 40 percent. By 1929, Americans were using the installment plan to buy 60 percent of all cars sold; 70 percent of all furniture; 80 percent of all vacuum cleaners, radios, and refrigerators; and 90 percent of all washing machines.

Electric Power Refrigerators, washing machines, and other power-hungry appliances created a surge in the demand for electricity. Between 1913 and 1927, the number of electric power customers more than quadrupled. The number of people who had electric lights jumped from 16 percent to 63 percent in about the same time. Part of this increase came from the expanding housing industry. New homes, wired for electricity, could now be filled with electric appliances.

Although cities gained electric power rapidly, the countryside did not. By 1925, for example, power plants supplied only 4 percent of American farms with electricity. Running power lines to scattered farming communities simply cost too much. Instead, some farmers created their own source of electricity by building wind-powered generators.

The growth of General Electric Company illustrates how the increasing use of electricity went hand in hand with the jump in consumer sales. General Electric was formed in 1892 to take over Thomas Edison's electric light business. During the 1920s, the company grew dramatically by selling a variety of household electric appliances. It also sold electric motors and other products for industry. Between 1919 and 1929, the value of electrical products of this kind more than doubled, from nearly $1 billion to $2.3 billion. General Electric rode this wave of consumer buying to become one of the world's largest companies.

Spending on Goods and Services, 1928

Item	Percent of Budget Spent
Food	27%
Clothing	13%
Shelter	12%
Fuel and light	4%
Furniture and furnishings	2%
Health and education	3%
Automobile	5%
Sundries:	
Tobacco, candy, soft drinks, gum	5%
Recreation (theater, ball games)	3%
Miscellaneous (trolley, stationery)	4%
Savings and insurance	12%
Taxes	10%
Total	100%

SOURCE: *Setting a Course: American Women in the 1920s*

INTERPRETING TABLES A study of family spending habits during the late 1920s reveals lifestyle choices as well as economic realities. **Drawing Conclusions** *What does the sundries category say about life in the 1920s?*

Advertising General Electric's product line included electric toasters, ovens, sewing machines, coffee pots, irons, and vacuum cleaners. Other companies offered similar appliances, as well as a vast array of other goods, from telephones to cosmetics. To rise above the competition, manufacturers needed an edge: mass-media advertising.

By the 1920s, marketers had developed a new approach to advertising. In the past, advertisements had provided fairly basic information about a product. A magazine ad for clothing, for example, might have noted its quality of fabric, smart design, and affordable price. Advertising in the 1920s, especially in mass magazines, spoke less about the product and more about how the product could enhance the consumer's image. "A woman is only as old as her complexion," stated one cosmetics ad from 1923. For postal service, consumers were advised, "Air mail is socially correct." Ads like these appealed to such emotions as insecurity and fear. Other ads used celebrities to associate an image with their products. This kind of ad might show a movie star using a product and claiming to adore it. The ad implied that anyone who used the product could be as stylish as a movie star.

The new advertising had its critics. Some saw it as a waste of time and money. Others condemned its use of psychology to persuade people to buy products. Advertising also had its defenders. One professional "ad man" claimed that advertising for modern products served a vital educational purpose:

> *"The vacuum cleaner was introduced by educational advertising. The advertising was done partly by manufacturers anxious to sell vacuum cleaners, and partly by electric-light companies anxious to sell current. . . . But the result has been a public benefit, an increasing willingness to spend money to lighten the human burden, to cut down the waste of human energy spent in the operation of living."*
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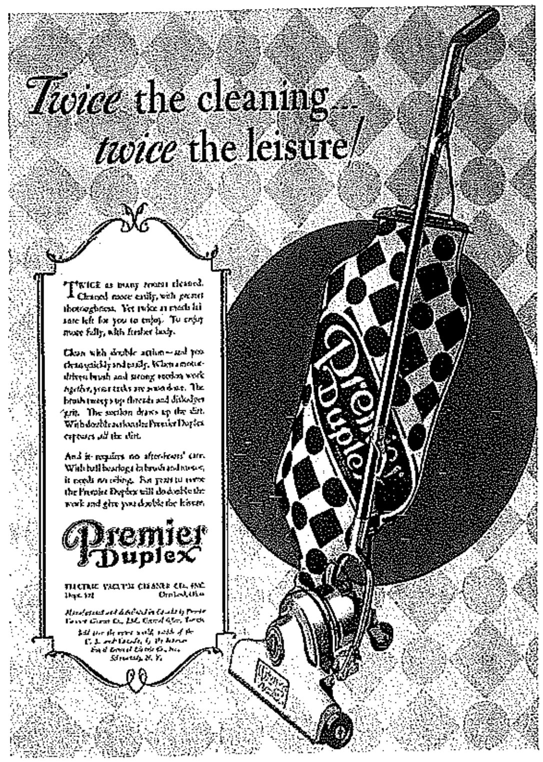
> —Earnest Elmo Calkins, *Business the Civilizer,* 1928



Electrical appliances such as the vacuum cleaner changed the nature of housework.

Rise in Productivity Electric power, persuasive advertising, and the installment plan all helped consumers go on a buying spree in the 1920s. Without an increased volume of goods to buy, however, the consumer economy could not have developed as rapidly as it did. In order to meet consumer demand, productivity needed to increase. Productivity is a worker's level of output, whether in goods or in services, over a given period. One measure of productivity is the **Gross National Product (GNP),** which is the total value of goods and services a country produces annually. From 1921 to 1929, the GNP grew at an average rate of 6 percent per year. The preceding decade had seen a growth rate of less than 1 percent.

Productivity rose in part because the nation developed new resources, new management methods, and new technologies. Major oil fields had been discovered in Texas, Oklahoma, and California around the turn of the century. These discoveries provided the resources to power industrial growth. You have read about Frederick Winslow Taylor's time-and-motion studies in the late 1800s, designed to increase worker efficiency. By the 1920s, industrial managers as well as labor leaders had come to accept Taylor's management principles. Application of those principles helped workers produce more goods. The increasing use of new machines and other kinds of technology also significantly increased workers' output. In addition, technology proved useful in solving production problems, such as how to make more automobiles in less time.

READING CHECK
What factors allowed for a rise in productivity in the 1920s?

Ford and the Automobile

The first automobile appeared in Germany in the 1880s. In 1892, Charles and Frank Duryea of Springfield, Massachusetts, developed a marketable car, and several other American inventors soon followed their lead. Over the next 28 years, about 8 million cars rolled out of factories and onto America's roads. Yet in the ten years after that period, during the 1920s, the number of registered cars rose by more than 15 million. Much of this rapid growth in production resulted from the efforts of the inventive businessman Henry Ford.

Ford and the "Model T" In the late 1880s, Ford worked as an engineer with a lighting company. In his spare time he began inventing a "horseless carriage." In 1896, Ford perfected his first version of a lightweight, gas-powered car he called the "quadricycle." By 1903, he had started his own automobile company. Five years later, Ford sold 30,000 of an improved vehicle that he called the Model T.

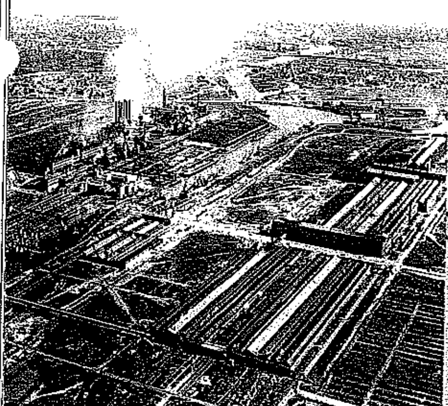
Ford's Assembly Line Ford wanted to "democratize the automobile," producing even more cars and selling them at prices ordinary people could afford. This goal set him apart from all other car makers and made him one of the most influential people of the century.

To achieve his goal, he adapted the **assembly line** for his factories. An assembly line is a manufacturing process in which each worker does one specialized task in the construction of the final product. In the past, an individual worker might build an entire product from start to finish. Since that type of manufacturing process required each worker to master hundreds of tasks, it was too inefficient for the mass production of something as complex as an automobile. On an assembly line, one worker might install windshields on all the cars. Another might mount the tires or weld a certain part in place or apply the paint.

Ford did not invent the assembly line, but he made it more efficient. His specially designed assembly line moved while each worker stayed in place, instead of moving from vehicle to vehicle. Critics of Ford's system claimed that the assembly line, with its endless repetition of tasks, strained workers both physically and mentally. Ford admitted that he would be bored working on an assembly line but insisted that his employees enjoyed it. At Ford's Highland Park, Michigan, factory, the assembly line turned out a Model T every 24 seconds. Between 1908 and 1927, Ford built half of the automobiles produced in the entire world, more than 15 million cars.

By making large numbers of identical automobiles in an identical way, Ford could take advantage of economies of scale, a concept you have read about in an earlier chapter. The more automobiles he made, the less each one cost. In 1914,

INTERPRETING DIAGRAMS
The layout of the main buildings at Ford's River Rouge facility was designed to maximize efficiency. Locate the power house in the late 1920s photo by its eight smoke stacks. **Analyzing Information** *Trace the work process from delivery of raw materials to finished automobile. What steps must be taken along the way?*

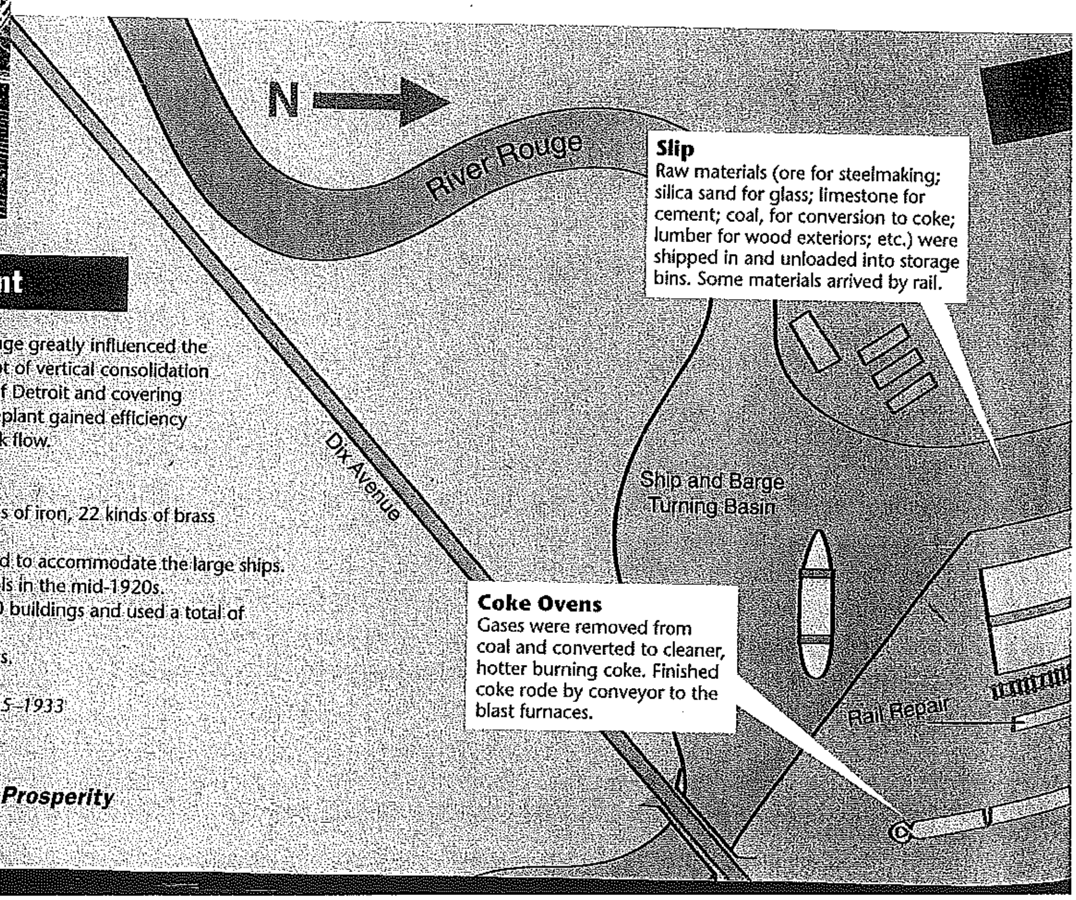


The Ford River Rouge Plant

Henry Ford's colossal plant on the River Rouge greatly influenced the auto industry. Never before had the concept of vertical consolidation been so keenly focused. Located just west of Detroit and covering more than 1,000 acres by 1926, the Rouge plant gained efficiency from careful attention to economy and work flow.

About the Rouge Plant
- The plant used 49 types of steel, four types of iron, 22 kinds of brass and bronze, and five types of aluminum.
- The river had to be deepened and widened to accommodate the large ships.
- The plant used about 43,000 machine tools in the mid-1920s.
- By 1926, the plant occupied more than 90 buildings and used a total of about 160 acres of floor space.
- The Rouge plant employed 75,000 workers.

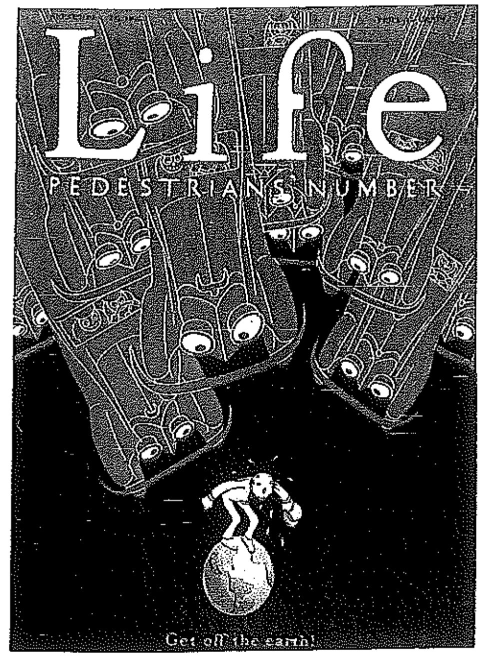
SOURCE: *Ford: Expansion and Challenge, 1915–1933*



the first year Ford's assembly line was in full swing, his company sold Model T's at $490 each. This price was almost half of what a car had cost in 1910. The following year he dropped the price to $390.

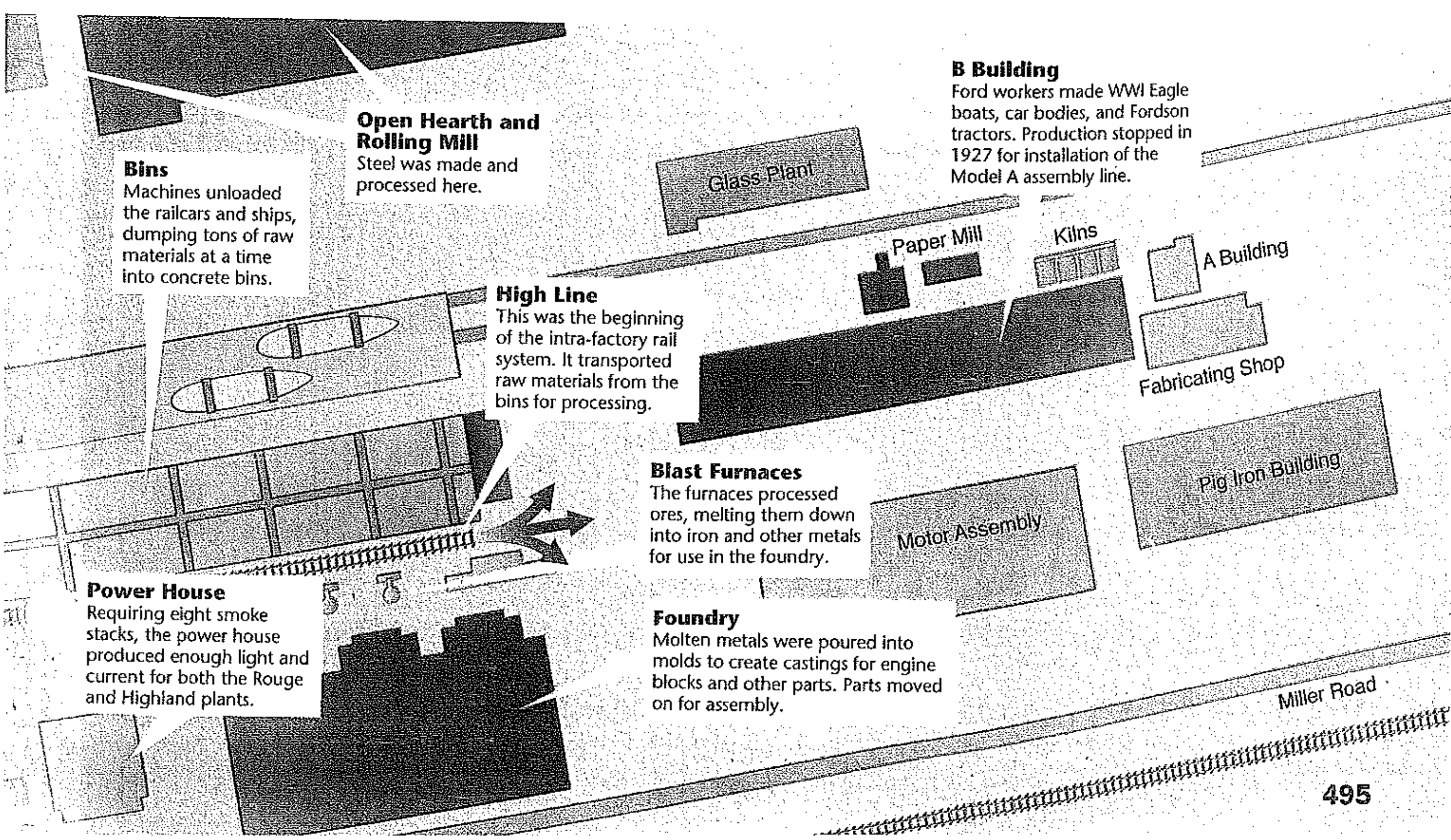
The Model T was a utilitarian, or practical, vehicle. It was available in a limited range of styles, all built with essentially the same engine and other basic parts. While early Model T's came in a variety of colors, Ford eventually switched to cheaper and more durable black paint. Ford's competitors, however, realized that the American public wanted different colors and styles of cars. When General Motors introduced its low-priced Chevrolet in several colors, Ford lost many customers. Not until 1925 did he introduce a choice of colors for his "improved" Model T. The last Model T was produced in 1927, making way for the Model A.

Ford's success came partly from vertical consolidation, which, as you have read, means controlling the businesses that make up phases of a product's development. From Ford's huge new plant built on the River Rouge, he was able to take a load of raw ore on any morning and roll it off the line as a car the next day. Much of the ore came from Ford's own iron mines and was forged in his own blast furnaces and steel mills, which were fired by coal from his 16 coal mines. Wood used in the car came from his 700,000 acres of forests, and glass for windshields from his own glassworks. He hauled materials over his own railroad and on his own fleet of ships. Company workshops made nearly all the tools used in his factories. Furthermore, he built this entire empire with profits from the Model T.

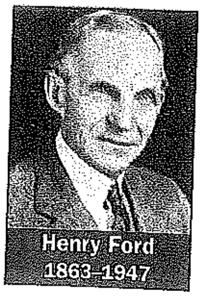


VIEWING HISTORY Automobiles are the subject of this 1925 *Life* magazine cover. **Making Comparisons** *What do the illustration and its caption, "Get off the earth," say about the impact of the automobile on society in the 1920s?*

A Complex Businessman Like the empire he ran, Henry Ford was complex. He had both admirable qualities and personal failings. For example, he won praise in 1914 for introducing a $5-a-day pay rate for many of his workers. At the time, other factories paid only about half that amount. Yet he was not always so generous. He ran his company harshly and used violence to fight unions. During World War I, Ford devised an Americanization program for his



American BIOGRAPHY



Henry Ford
1863–1947

Henry Ford was born on a Michigan farm during the Civil War, the son of Irish immigrants. Although Ford is best known as an industrialist, not all his energies were devoted to the Ford Motor Company. His pursuits were diverse, at the very least.

In 1915, he sailed a rented ocean liner across the Atlantic in a hopeless effort to talk Europe out of fighting World War I. He purchased the *Dearborn Independent* in 1918, but then used his newspaper to run a series of articles that blamed Jews for the world's problems. In 1927, however, after being sued for slander, he apologized for these attacks and sold the paper.

As a nod to his early years on the farm, he recreated a rural American town, Greenfield Village, as well as a museum of American artifacts that can still be visited today.

foreign-born workers. In return for higher pay, workers had to enroll in English and civics classes and let investigators inspect their homes. The company held elaborate graduation ceremonies in which workers shed their previous ethnic identities and became "Americans." When postwar inflation made the pay incentive less attractive, the program declined. Although he showed genius in giving millions of Americans a car they could afford, he stubbornly refused to keep up with their changing tastes. By 1936, the Ford Motor Company had slipped to third place in the automobile industry.

Industrial Growth

Through Ford's genius, automobile making became the nation's biggest single manufacturing industry in the 1920s. By the late twenties, automakers used 15 percent of America's steel, 80 percent of its rubber, half of its glass, 65 percent of its leather upholstery, and 7 billion gallons of its gasoline every year. Naturally, the industries that provided those materials, such as steelmaking and oil refining, also grew.

Thousands of new businesses arose to serve automobile travel, including garages, car dealerships, motels ("motor hotels"), campgrounds, gas stations, and restaurants. Thanks to the automobile, suburbs expanded, in turn boosting the housing industry. Truck lines began hauling the nation's freight, and motorized buses traveled new routes through both city and countryside. By 1929, about 3.7 million people owed their jobs directly or indirectly to the automobile industry. In that year, the nation spent nearly $2 billion to build and maintain its roads and bridges.

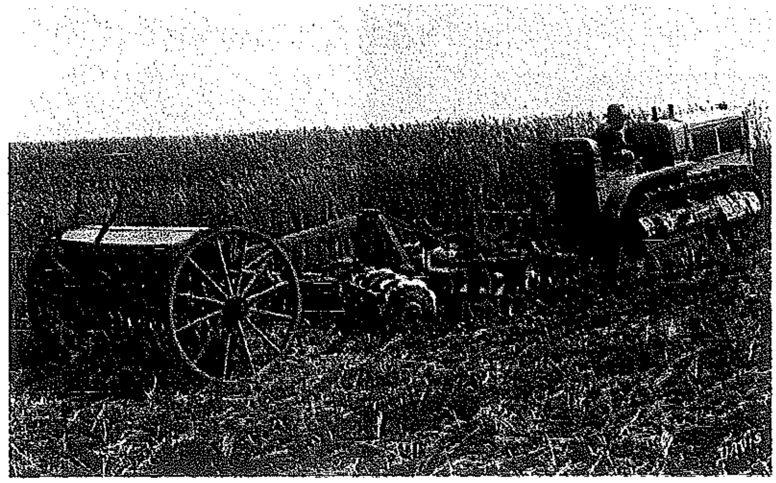
Businesses unrelated to the automobile industry also boomed. As you have read, movie making, radio broadcasting, and publishing all flourished. One industry that greatly expanded during the late 1920s was aviation. This industry had begun to develop during the war, with the production of military aircraft. The first domestic airlines, however, had limited success. They flew small planes, mainly over local routes, and many of them stayed in business only a short time. The public's fascination with Charles Lindbergh and Amelia Earhart helped boost the industry's fortunes. Aircraft companies began designing larger, faster planes. By late in the decade, air transport of mail and other goods, as well as passengers, had improved.

Under Republican laissez-faire policies, which limited government regulation of business, the value of the nation's businesses soared. Between 1919 and 1929, the 200 top American companies nearly doubled their total worth, which rose from $43 billion to $81 billion. Government and industry seemed eager to prove that the chief business of the American people truly was business.

Even with limited regulation and a business boom, the power of monopolies declined. Rapid business expansion opened up new opportunities for smaller companies. These competitors rushed in to challenge the giant steel and oil monopolies. For example, when banker J. P. Morgan created the U.S. Steel Corporation in 1901, it controlled about 60 percent of the steel business. By 1930, it had grown enormously. Yet its competitors also had grown, and in that year, U.S. Steel controlled only about 39 percent of the steel business. Likewise, the companies that had once made

Electric power fueled homes, businesses, and a consumer economy. Workers stand on an electric power generator in 1924.

up the Standard Oil Trust grew with the demand for oil products during the 1920s. Even so, by 1930 they controlled only about half of the nation's oil business.



Purchasing expensive tractors and other equipment helped put many farmers into debt in the 1920s.

Bypassed by the Boom

While most Americans enjoyed a better standard of living, others struggled to survive. Unskilled laborers, including many African American migrants, remained poor. Their wages and working conditions did not improve, nor did those for workers in several major industries, including agriculture.

For some sectors of the farm economy, the 1920s brought not prosperity but devastation. Farm prices had stayed high during the war and just afterward, as American farmers supplied food to the United States and to war-torn Europe. After the war, however, the recovering European farm industry and cheaper food imports helped to push American products out of the European market. The huge wartime demand shrank, and American farm prices, especially for wheat and hogs, plummeted.

During more prosperous times, many farmers had borrowed money to buy new tractors and other machinery. Their new equipment allowed them to expand their operations, so they bought more land as well. In the late 1920s, when most Americans spent freely on consumer goods, these farmers could not even pay back their loans. Many of them abandoned agriculture. Others hung on to the only way of life they had ever known, going even further into debt every day.

The same dwindling demand for goods hurt producers of cotton textiles and bituminous (soft) coal. These industries had expanded to meet wartime needs, but after the war they failed to uncover new markets for their products. The resulting low profits kept wage rates down. Railroads suffered, too, not just from shrinking demand but also from mismanagement, competition from trucking firms, and labor unions that fought against wage cuts and layoffs.

Section 2 Assessment

READING COMPREHENSION

1. What conditions made a **consumer economy** possible in the 1920s?
2. What is an **installment plan?**
3. How did the **Gross National Product** change during the 1920s?
4. How did Henry Ford change his **assembly line** to increase efficiency?

CRITICAL THINKING AND WRITING

5. **Making Comparisons** How did post-war economic conditions favor automobile workers and yet undermine the farming industry?
6. **Writing a List** List all the factors that led to increased consumer spending in the 1920s.

Take It to the NET

Activity: Writing a Summary
Research several inventions from the 1920s and write a summary of how they affected consumer goods or business in general. Use the links provided in the *America: Pathways to the Present* area of the following Web site for help in completing this activity.
www.phschool.com