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**Industry Comes of Age,
1865-1900****PART I: Reviewing the Chapter****A. Checklist of Learning Objectives**

After mastering this chapter, you should be able to

1. explain how the transcontinental railroad network provided the basis for the great post-Civil War industrial transformation.
2. identify the abuses in the railroad industry and discuss how these led to the first efforts at industrial regulation by the federal government.
3. describe how the economy came to be dominated by giant "trusts," such as those headed by Carnegie and Rockefeller in the steel and oil industries.
4. discuss the growing class conflict caused by industrial growth and combination, and the early efforts to alleviate it.
5. explain why the South was generally excluded from industrial development and fell into a "third world" economic dependency.
6. analyze the social changes brought by industrialization, particularly the altered position of working men and women.
7. explain the failures of the Knights of Labor and the modest success of the American Federation of Labor.

B. Glossary

To build your social science vocabulary, familiarize yourself with the following terms.

1. **pool** In business, an agreement to divide a given market in order to avoid competition. "The earliest form of combination was the 'pool' . . ." (p. 535)
2. **rebate** A return of a portion of the amount paid for goods or services. "Other rail barons granted secret rebates. . . ." (p. 535)
3. **free enterprise** An economic system that permits unrestricted entrepreneurial business activity; capitalism. "Dedicated to free enterprise . . . , they cherished a traditionally keen pride in progress." (p. 535)
4. **regulatory commission** In American government, any of the agencies established to control a special sphere of business or other activity; members are usually appointed by the president and confirmed by Congress. "It heralded the arrival of a series of independent regulatory commissions in the next century. . . ." (p. 536)
5. **trust** A combination of corporations, usually in the same industry, in which stockholders trade their stock to a central board in exchange for trust certificates. (By extension, the term came to be applied to any large, semi-monopolistic business.) "He perfected a device for controlling bothersome rivals—the 'trust.' " (p. 538)

6. **syndicate** An association of financiers organized to carry out projects requiring very large amounts of capital. "His prescribed remedy was to . . . ensure future harmony by placing officers of his own banking syndicate on their various boards of directors." (p. 538)
7. **patrician** Characterized by noble or high social standing. "An arrogant class of 'new rich' was now elbowing aside the patrician families. . . ." (p. 542)
8. **plutocracy** Government by the wealthy. "Plutocracy . . . took its stand firmly on the Constitution." (p. 542)
9. **Third World** Term developed during the Cold War for the non-Western (first world) and noncommunist (second world) nations of the world; most of them formerly under colonial rule and still economically poor and dependent. "The net effect was to keep the South in a kind of 'Third World' servitude to the Northeast. . . ." (p. 544)
10. **socialist (socialism)** Political belief in promoting social and economic equality through the ownership and control of the major means of production by the whole community rather than by individuals or corporations. "Some of it was envious, but much of it rose from the small and increasingly vocal group of socialists. . . ." (p. 548)
11. **radical** One who believes in fundamental change in the political, economic, or social system. ". . . much of [this criticism] rose from . . . socialists and other radicals, many of whom were recent European immigrants." (p. 548)
12. **lockout** The refusal by an employer to allow employees to work unless they agree to his or her terms. "Employers could lock their doors against rebellious workers—a process called the 'lockout' . . ." (p. 549)
13. **yellow dog contract** A labor contract in which an employee must agree not to join a union as a condition of holding the job. "[Employers] could compel them to sign 'ironclad oaths' or 'yellow dog contracts' . . ." (p. 549)
14. **cooperative** An organization for producing, marketing, or consuming goods in which the members share the benefits. ". . . they campaigned for . . . producers' cooperatives. . . ."
15. **anarchist (anarchism)** Political belief that all organized, coercive government is wrong in principle, and that society should be organized solely on the basis of free cooperation. (Some anarchists practiced violence against the state, while others were nonviolent pacifists.) "Eight anarchists were rounded up, although nobody proved that they had anything to do directly with the bomb." (p. 551)

PART II: Checking Your Progress

A. True-False

Where the statement is true, mark **T**. Where it is false, mark **F**, and correct it in the space immediately below.

- ___ 1. Private railroad companies built the transcontinental rail lines by raising their own capital funds without the assistance of the federal government.
- ___ 2. The rapid expansion of the railroad industry was often accompanied by rapid mergers, bankruptcies, and reorganizations.
- ___ 3. The railroads created an integrated national market, stimulated the growth in cities, and encouraged European immigration.
- ___ 4. Railroad owners were generally fair and honest in their dealings with shippers, the government, and the public.

- ___ 5. The early, weak federal efforts at railroad regulation did bring some order and stability to industrial competition.
- ___ 6. The Rockefeller oil company technique of "horizontal integration" involved combining into one organization all the phases of manufacturing from the raw material to the customer.
- ___ 7. Rockefeller, Morgan, and others organized monopolistic trusts and "interlocking directorates" in order to consolidate business and eliminate cutthroat competition.
- ___ 8. Corporations effectively used the Fourteenth Amendment and sympathetic court rulings to prevent much effective government regulations of their activities.
- ___ 9. The pro-industry ideology of the "New South" enabled that region to make rapid economic gains by 1900.
- ___ 10. Two new inventions that brought large numbers of women into the workplace were the typewriter and the telephone.
- ___ 11. Industrialization generally gave the industrial wage earner greater status and control over his or her own life.
- ___ 12. The impact of new machines and mass immigration held down wages and gave employers advantages in their dealings with labor.
- ___ 13. The Knights of Labor organized skilled and unskilled workers, blacks and whites, women and men.
- ___ 14. The Knights of Labor were severely hurt by the Haymarket Square episode, even though they had no connection with the bombing.
- ___ 15. The American Federation of Labor tried hard but failed to organize unskilled workers, women, and blacks.

B. Multiple Choice

Select the best answer and write the proper letter in the space provided.

- ___ 1. The federal government contributed to the building of the national rail network by
 - a. importing substantial numbers of Chinese immigrants to build the railroads.
 - b. providing free grants of federal land to the railroad companies.
 - c. building and operating the first transcontinental rail lines.
 - d. transporting the mail and other federal shipments over the rail lines.
- ___ 2. The most efficient and public-minded of the early railroad-building industrialists was
 - a. Collis P. Huntington.
 - b. Leland Stanford.
 - c. Cornelius Vanderbilt.
 - d. James J. Hill.

- ___ 3. The railroad most significantly stimulated American industrialization by
- opening up the West to settlement.
 - creating a single national market for raw materials and consumer goods.
 - eliminating the inefficient canal system.
 - inspiring greater federal investment in technical research and development.
- ___ 4. The railroad barons aroused considerable public opposition by practices such as
- forcing Indians off their traditional hunting grounds.
 - refusing to pay their employees decent wages.
 - refusing to build railroad lines in less settled areas.
 - stock watering and bribery of public officials.
- ___ 5. The railroads affected even the organization of time in the United States by
- introducing regularly scheduled departures and arrivals on railroad timetables.
 - introducing the concept of daylight savings time.
 - introducing four standard time zones across the country.
 - turning travel that had once taken days into a matter of hours.
- ___ 6. The first important federal law aimed at regulating American industry was
- the Federal Communications Act.
 - the Pure Food and Drug Act.
 - the Interstate Commerce Act.
 - the Federal Trade Commission.
- ___ 7. Financier J. P. Morgan exercised his economic power most effectively by
- developing "horizontal integration" in the oil industry.
 - lending money to the federal government.
 - consolidating rival industries through "interlocking directorates."
 - serving as the middleman between American industrialists and foreign governments.
- ___ 8. Two late-nineteenth-century technological inventions that especially drew women out of the home and into the workforce were
- the railroad and the telegraph.
 - the electric light and the phonograph.
 - the cash register and the stock ticker.
 - the typewriter and the telephone.
- ___ 9. Andrew Carnegie's industrial system of "vertical integration" involved
- the construction of large, vertical steel factories in Pittsburgh and elsewhere.
 - the cooperation between manufacturers like Andrew Carnegie and financiers like J. P. Morgan.
 - the integration of diverse immigrant ethnic groups into the steel industry labor force.
 - the combination of all phases of the steel industry from mining to manufacturing into a single organization.

- ___ 10. The large trusts like Standard Oil and Swift and Armour justified their economic domination of their industries by claiming that
- they were fundamentally concerned with serving the public interest over private profit.
 - only large-scale methods of production and distribution could provide superior products at low prices.
 - competition among many small firms was contrary to the law of economics.
 - only large American corporations could compete with huge British and German international companies.
- ___ 11. The oil industry first thrived in the late 1880s by producing
- natural gas and heating oil for home heating purposes.
 - kerosene for oil lamps.
 - gasoline for automobiles.
 - heavy-duty diesel fuel for the railroads and industry.
- ___ 12. Andrew Carnegie's "Gospel of Wealth" proclaimed his belief that
- wealth was God's reward for hard work, while poverty resulted from laziness and immorality.
 - churches needed to take a stronger stand on the economic issues of the day.
 - faith in capitalism and progress should take the place once reserved for religion.
 - those who acquired great wealth were morally responsible to use it for the public good.
- ___ 13. The attempt to create an industrialized "New South" in the late nineteenth century generally failed because
- the South was discriminated against and held down as a supplier of raw materials to northern industry.
 - southerners were too bitter at the Union to pursue national goals.
 - continued political violence made the South an unattractive place for investment.
 - there was little demand for southern products like textiles and cigarettes.
- ___ 14. For American workers, industrialization generally meant
- a steady, long-term decline in wages and the standard of living.
 - an opportunity to create small businesses that might eventually produce large profits.
 - a long-term rise in the standard of living but a loss of independence and control of work.
 - a stronger sense of identification with their jobs and employers.
- ___ 15. In contrast to the Knights of Labor, the American Federation of Labor advocated
- uniting both skilled and unskilled workers into a single large union.
 - concentrating on improving wages and hours and avoiding general social reform.
 - working for black and female labor interests as well as those of white men.
 - using secrecy and violence against employers.

C. Identification

Supply the correct identification for each numbered description.

- _____ 1. Federally owned acreage granted to the railroad companies in order to encourage the building of rail lines
- _____ 2. The original transcontinental railroad, commissioned by Congress, which built its rail line west from Omaha
- _____ 3. The California-based railroad company, headed by Leland Stanford, that employed Chinese laborers in building lines across the mountains
- _____ 4. The northernmost of the transcontinental railroad lines, organized by economically wise and public-spirited industrialist James J. Hill
- _____ 5. Dishonest device by which railroad promoters artificially inflated the price of their stocks and bonds
- _____ 6. Supreme Court case of 1886 that prevented states from regulating railroads or other forms of interstate commerce
- _____ 7. Federal regulatory agency often used by rail companies to stabilize the industry and prevent ruinous competition
- _____ 8. Late-nineteenth-century invention that revolutionized communication and created a large new industry that relied heavily on female workers
- _____ 9. First of the great industrial trusts, organized through a principle of "horizontal integration" that ruthlessly incorporated or destroyed competitors
- _____ 10. The first billion-dollar American corporation, organized when J. P. Morgan bought out Andrew Carnegie
- _____ 11. Term that identified southern promoters' belief in a technologically advanced industrial South
- _____ 12. Black labor organization that briefly flourished in the late 1860s
- _____ 13. Secret, ritualistic labor organization that enrolled many skilled and unskilled workers but collapsed suddenly after the Haymarket Square bombing
- _____ 14. Skilled labor organizations, such as those of carpenters and printers, that were most successful in conducting strikes and raising wages
- _____ 15. The conservative labor group that successfully organized a minority of American workers but left others out

D. Matching People, Places, and Events

Match the person, place, or event in the left column with the proper description in the right column by inserting the correct letter on the blank line.

- | | |
|--------------------------|---|
| _____ 1. Leland Stanford | A. Inventive genius of industrialization who worked on devices such as the electric light, the phonograph, and the motion picture |
| _____ 2. Russell Conwell | B. The only businessperson in America wealthy enough to buy out Andrew Carnegie and organize the United States Steel Corporation |
| _____ 3. James J. Hill | |

- | | |
|------------------------------|--|
| ___ 4. Cornelius Vanderbilt | C. Illinois governor who pardoned the Haymarket anarchists |
| ___ 5. Charles Dana Gibson | D. Southern newspaper editor who tirelessly promoted industrialization as the salvation of the economically backward South |
| ___ 6. Alexander Graham Bell | E. Aggressive energy-industry monopolist who used tough means to build a trust based on "horizontal integration" |
| ___ 7. Thomas Edison | F. Magazine illustrator who created a romantic image of the new, independent woman |
| ___ 8. Andrew Carnegie | G. Aggressive eastern railroad builder and consolidator who scorned the law as an obstacle to his enterprise |
| ___ 9. John D. Rockefeller | H. Pro-business clergyman whose "Acres of Diamonds" speeches criticized the poor |
| ___ 10. J. Pierpont Morgan | I. Scottish immigrant who organized a vast new industry on the principle of "vertical integration" |
| ___ 11. Henry Grady | J. Former California governor and organizer of the Central Pacific Railroad |
| ___ 12. Terence V. Powderly | K. Organizer of a conservative craft-union group and advocate of "more" wages for skilled workers |
| ___ 13. Haymarket Square | L. Eloquent leader of a secretive labor organization that made substantial gains in the 1880s before it suddenly collapsed |
| ___ 14. John P. Altgeld | M. Public-spirited railroad builder who assisted farmers in the northern areas served by his rail lines |
| ___ 15. Samuel Gompers | N. Site of a bombing, during a labor demonstration, that aroused public hysteria against strikes |
| | O. Former teacher of the deaf whose invention created an entire new industry |

E. Putting Things in Order

Put the following events in correct order by numbering them from 1 to 5.

- ___ J. P. Morgan buys out Andrew Carnegie to form the first billion-dollar U.S. corporation.
- ___ The first federal law regulating railroads is passed.
- ___ The killing of policemen during a labor demonstration results in the execution of radical anarchists and the decline of the Knights of Labor.
- ___ A teacher of the deaf invents a machine that greatly eases communication across distance.
- ___ A golden spike is driven, fulfilling the dream of linking the nation by rail.

F. Matching Cause and Effect

Match the historical cause in the left column with the proper effect in the right column by writing the correct letter on the blank line.

- | Cause | Effect |
|--|---|
| ___ 1. Federal land grants and subsidies | A. Eliminated competition and created monopolistic "trusts" in many industries |
| ___ 2. The building of a transcontinental rail network | B. Fostered growing class divisions and public demands for restraints on corporate trusts |
| | C. Created a strong but narrowly based union organization |

- ___ 3. Corrupt financial dealings and political manipulations by the railroads
 - ___ 4. New developments in steel making, oil refining, and communication
 - ___ 5. The ruthless competitive techniques of Rockefeller and other industrialists
 - ___ 6. The growing concentration of wealth and power in the new corporate "plutocracy"
 - ___ 7. The North's use of discriminatory price practices against the South
 - ___ 8. The growing mechanization and depersonalization of factory work
 - ___ 9. The Haymarket Square bombing
 - ___ 10. The American Federation of Labor's concentration on skilled craft workers
- D. Stimulated the growth of a huge unified national market for American manufactured goods
 - E. Created a public demand for railroad regulation, such as the Interstate Commerce Act
 - F. Often made laborers feel powerless and vulnerable to their well-off corporate employers
 - G. Helped destroy the Knights of Labor and increased public fear of labor agitation
 - H. Laid the technological basis for huge new industries and spectacular economic growth
 - I. Encouraged the railroads to build their lines across the North American continent
 - J. Kept the South in economic dependency as a poverty-stricken supplier of farm products and raw materials to the Northeast

G. Developing Historical Skills

Interpreting Historical Paintings and Photographs

Historical paintings, lithographs, and photographs not only convey substantive information; they can also tell us how an artist or photographer viewed and understood the society and events of his or her day. Examine the photographs and painting indicated below and answer the following questions about them.

1. Examine the working people in the images on pp. 542, 544, 546, and 547. What is the relationship of the workers in each image to their workplace? What is their relation to one another? What does each of the photos reveal about the nature of industrial labor?
2. Examine the painting of "The Strike" by Robert Koehler on p.550. Where is the scene taking place? What is the relationship between the place of work and the scene in the painting? What has likely happened to bring the workers to this scene?

PART III: Applying What You Have Learned

1. What was the impact of the transcontinental rail system on the American economy and society in the late nineteenth century?
2. How did the huge industrial trusts develop in industries such as steel and oil, and what was their effect on the economy?
3. What early efforts were made to control the new corporate industrial giants, and how effective were these efforts?
4. What was the effect of the new industrial revolution on American laborers, and how did various labor organizations attempt to respond to the new conditions?
5. Compare the impact of the new industrialization on the North and the South. Why was the "New South" more a slogan than a reality?
6. William Graham Sumner said that the wealth and luxury enjoyed by millionaires was justifiable as a "good bargain for society." Based on the industrialists' role in the late 1800s, support or criticize Sumner's assertion.
7. How did the industrial transformation after the Civil War compare with the earlier phase of American economic development? (See Chapter 14.) Why were the economic developments of 1865–1900 often seen as a threat to American democracy, whereas those of 1815–1860 were not?