

CHAPTER TEN AMERICA'S ECONOMIC REVOLUTION

Objectives

A thorough study of Chapter Ten should enable the student to understand:

1. The changes that were taking place within the nation in terms of population growth, population movement, urbanization, and the impact of immigration.
2. The importance of the Erie Canal for the development of the West and of New York City.
3. The changes that were taking place in transportation, business, industry, labor, and commerce as the full impact of the industrial revolution was felt in the United States.
4. The reasons why the Northeast and Northwest tended to become more dependent on each other, while the South became isolated from the rest of the nation in the 1840s and 1850s.
5. The vast changes taking place in the Northeast as agriculture declined while urbanization and industrialization progressed at a rapid rate.
6. The characteristics of the greatly increased immigration of the 1840s and 1850s, and the immigrants' effects on the development of the free states.
7. The reasons for the appearance of the nativist movement in the 1850s.
8. The living and working conditions of both men and women in the northern factory towns and on the northwestern farms.

Main Themes

1. How the American population changed between 1820 and 1840, and the effect this had on the nation's economic, social, and political systems.
2. How the dramatic economic growth of the 1820s and 1830s was accomplished.
3. How the rapid development of the economy and society of the North influenced the rest of the nation.

Glossary

1. **packet line:** A shipping line that carried mail, passengers, and goods on a regular schedule.
2. **technology:** Industrial science. The study of how to improve industries through better machines, work schedules, factory organization.
3. **division of labor:** The assigning of various duties to various workers rather than having one worker do an entire project. As a result, the worker becomes more specialized, more competent, and more productive.
4. **merchant capitalist:** One who invests capital in the buying, selling, and shipping of goods, but not in their production.
5. **industrial capitalist:** One who invests capital in manufacturing.

Pertinent Questions

THE CHANGING AMERICAN POPULATION (262-267)

1. What were the reasons for and the effect of the rapid increase in population between 1820 and 1840?

2. What were the major immigrant groups that came to the United States and where did they settle? What population shifts took place between 1820 and 1840, and how did they affect political divisions?
3. Why was the rise of New York City so phenomenal? What forces combined to make it America's leading city?
4. How did the foreign-born population become a major factor in American political life between 1820 and 1850. What elements considered this an "alien menace," and what was their response?

TRANSPORTATION, COMMUNICATIONS, AND TECHNOLOGY (268-275)

5. Why did Americans continue to use, whenever possible, water routes for transportation and travel? What advantages did water have over land?
6. Why were natural means of carrying commerce (lakes and rivers) unsatisfactory to most Americans?
7. How did Americans propose to overcome the geographical limitations on water travel? What role was the federal government forced to play in this? Why?
8. Which area took the lead in canal development? What was the effect of these canals on that section of the country? How did other sections respond to this example?
9. What were the general characteristics of early railroad development in the United States? What innovations aided the progress of railroads, and what advantages did railroads have over other forms of transportation?
10. How did innovations in communications and journalism draw communities together? How did these innovations help divide the sections?

COMMERCE AND INDUSTRY (275-278)

11. In the broadening of business described here, what shifts in manufacturing took place, what business innovations occurred, and what effect did this have on the general distribution of goods in America?
12. What influence did technology have on the growth of American industry?
13. What forces contributed to the rise of the factory in the Northeast and how did this promote industrial development?
14. What role did American inventors and industrial ingenuity play in the growth of American industry?

MEN AND WOMEN AT WORK (278-283)

15. How did the textile mills recruit and use labor? What was the general response to the Lowell method, by worker and by observer? What caused the breakdown of this system?
16. What was the "lot of working women" in Lowell and other factory towns? How did this differ from conditions in Europe? What problems did these women have in adjusting to factory and factory-town life?
17. With the growth of industry came the growth of labor, but how did the rise of American labor organizations differ from the usual patterns of union growth? What groups organized first, and why?
18. What was the "factory system," and what impact did it have on the American artisan tradition?
19. What was the general condition of workers in northeastern factories?
20. What attempts were made to better conditions in northeastern factories? What role did unions play in these attempts, and what was accomplished?

PATTERNS OF INDUSTRIAL SOCIETY (283-292)

21. Why was the increasing wealth of America not widely or equitably distributed? What effect did this pattern of distribution have on mobility?
22. How did middle-class life in the years before the Civil War establish itself as the most influential cultural form of urban America?
23. What "profound change in the nature and function of the family" took place during this era? What caused this change?
24. What conditions put women in a "separate sphere," and what were the characteristics of the "distinctive female culture" women developed?
25. What was the "cult of domesticity," and what costs and benefits did it bring to middle-class women? working-class women?
26. Explain the "culture of public leisure" that existed in the mid-nineteenth century. What were its elements and who took part?

THE AGRICULTURAL NORTH (292-295)

27. What caused the decline of farming in the Northeast? What did farmers in the Northeast do to overcome this decline, and what new patterns in agriculture resulted?
28. What industries were found in the Northwest? How did industrial growth in the area compare with that in the rest of the nation?
29. What was the basis of the economy in the Northwest? What goods were produced there?
30. Where were most of the goods produced in the Northwest marketed? What role did this play in the pre-1860 sectional alignment?
31. What factors contributed to the growth and expansion of the Northwest's economy? Who were the men responsible for this?
32. Why was the Northwest considered the most democratic of the three sections?
33. What were the elements that defined rural life in America at mid-nineteenth century?

THE AMERICAN ENVIRONMENT (270-271)

34. Explain how "water was the catalyst that made trade and settlement possible" during the first half of the nineteenth century.
35. What were "water power towns" and how did they relate to the streams that served them?

PATTERNS OF POPULAR CULTURE (290-291)

36. Explain how the popularity of the theater, and especially the works of Shakespeare, reflected the society of Jacksonian America.
37. How does the theater fit into the "culture of public leisure" discussed in this chapter?

Identification

Identify each of the following, and explain why it is important within the context of the chapter.

1. Native American Association
2. Erie Canal
3. Mohawk and Hudson Railroad
4. Samuel F. B. Morse
5. "corporations"
6. interchangeable parts

7. Lowell or Waltham system
8. Factory Girls Association
9. "express contract"
10. Central Park
11. "safety valve"
12. Oberlin College
13. "domestic virtues"
14. Sarah Hale
15. P. T. Barnum
16. Cyrus H. McCormick

Document 1

Few places better reflected the growth and diversity of the United States than the city of New York. With the opening of the Erie Canal, New York City became the gateway to the West, and its size grew with its importance. The following account of the city was written by James Silk Buckingham, an Englishman who visited America between 1837 and 1840. What impressed him most about the city? How did his English experience seem to shape these impressions? What evidence did Buckingham find of social customs and distinctions being different from those of Europe? What do you feel accounted for this?

What accounted for New York's growth and diversity? What forces combined to make it America's principal city? Considering the nationalistic spirit of the age, how would Americans have responded to Buckingham's description? Assuming that his assessment was accurate, would they have pointed with pride to the city? Why?

The hotels are generally on a larger scale than in England. The great Astor House, which overlooks the Park from the west side of Broadway, is much larger in area than the largest hotels in London or Paris; it makes up 600 beds, and has a proportionate establishment to suit the scale of its general operations. It is built wholly of granite, is chaste in its style of architecture, and is called after the rich John Jacob Astor . . .

Of places of public amusement there are a great number, including six theatres, which are well filled every night, though the majority of what would be called the more respectable classes of society, the most opulent, and the most religious members of the community do not generally patronize or approve of theatrical exhibitions under the present management.

The private dwellings contain, as must be the case in all large cities, a great variety of kinds and descriptions. The older houses are small, and mostly built of wood, painted yellow or white. These are now confined to the residences of the poorer classes, and are fast disappearing in every quarter, their places being occupied by substantial buildings of brick, though here and there are a few with granite fronts. The style of decoration, in the steps of ascent, the area of railings, and the doors, is more florid and ornamental than in the best parts of London, and the interior of the principal houses may be described as spacious, handsome, and luxurious, with lofty passages, good staircases, large rooms, and costly and gorgeous furniture. There are many individual houses of much greater splendour in London than any to be seen in New York, especially in the mansions of the English nobility; but, on the whole, the number of large, commodious, and elegantly furnished private dwellings in New York is much greater in proportion to the whole population than those in London, and approaches nearer to the ratio of Edinburgh or Paris.

The streets are very unequal in their proportions and conditions. The great avenue of Broadway is striking from its continuous and unbroken length of three miles in a straight line, but its breadth,

reread the section on Lowell and on northern industry in Chapter Nine and the section on the growth of commerce in the Northeast in this chapter.

What impressed Crockett most about the factory at Lowell? How did what he witnessed differ from the economy of the section from which he came? What did Crockett see as the general benefit of an operation such as the one at Lowell? With which political party did his views seem most closely associated?

What gave rise to the "prejudices against these manufactories" Crockett mentions as being held by the West and the South? What was taking place at the time this was written (1834) that would ease the prejudices in the former and heighten them in the latter?

Next morning I rose early, and started for Lowell in a fine carriage, with three gentlemen who had agreed to accompany me. I had heard so much of this place that I longed to see it not because I had heard of the "miles of gals;" no, I left that for the gallantry of the president, who is admitted, on that score, to be abler than myself; but I wanted to see the power of the machinery, wielded by the keenest calculations of human skill; I wanted to see how it was that these northerners could buy our cotton, and carry it home, manufacture it, bring it back, and sell it for half nothing; and, in the mean time, be well to live, and make money besides. . . .

There are about fourteen thousand inhabitants [in Lowell]. It contains nine meeting houses; appropriates seven thousand five hundred dollars for free schools; provides instruction for twelve hundred scholars, daily; and about three thousand annually partake of its benefits. It communicates with Boston by the Middlesex canal (the first ever made in the United States); and in a short time the railroad to Boston will be completed, affording every facility of intercourse to the seaboard.

This place has grown by, and must depend on its manufactures. Its location renders it important, not only to the owners, but to the nation. Its consumption not only employs the thousands of its own population, but many thousands far away from them. It is calculated not only to give individual happiness and prosperity, but to add to our national wealth and independence; and instead of depending on foreign countries, to have our own material worked up in our own country. . . .

I never witnessed such a combination of industry, and perhaps never will again. I saw the whole process, from the time they put in the raw material, until it came out completely finished. In fact, it almost came up to the old story of a fellow walking into a patent machine with a bundle of wood under his arm, and coming out at the other end with a new coat on.

Nothing can be more agreeable that the attention that is paid by every one connected with these establishments. Nothing appears to be kept secret--every process is shown and with great cheerfulness. I regret that more of our southern and western men do not go there, as it would help much to do away with their prejudices against these manufactories.

David Crockett, Life of David Crockett, The Original Humourist and Irrepressible Backwoodsman (Philadelphia: Potter, 1865), pp. 213-317.

Document 3

In spite of what Crockett implied, there were also northerners who had a "prejudice" against the industrial expansion of the United States. Even the railroad, the lifeline of the northern economy, was not free from criticism, as this excerpt from Walden, by Henry David Thoreau, indicates. Why did Thoreau object to the railroad? Consider Thoreau's social philosophy--how did he think that the railroad would alter society, and what effect would that have? What did Thoreau see as the ultimate outcome of the growth of the railroad?

about eighty feet, is not sufficiently ample for the due proportion of its length. It is, moreover, wretchedly paved, both in the centre and on the sides. Large holes and deep pits are frequently seen in the former; and in the latter, while before some houses the slabs of stone are large, uniform, and level, there is often an immediate transition from these to broken masses of loose stones, that require the greatest caution to pass over, especially in wet or frosty weather. The lighting and cleansing of the streets are not nearly so good as in the large towns of England, the gas being scanty in quantity, the lamps too far removed from each other, and the body of scavengers both weak in numbers and deficient in organizations. Some of the smaller streets are almost impassable in times of rain and snow; and, when not incumbered by a profusion of mud or water, they are prolific in their supply of dust. Many of the streets have trees planted along the edge of the foot pavement on each side, which in summer affords an agreeable shade, but in autumn it has the disagreeable effect of strewn the path with falling leaves, and in winter it makes the aspect more dreary.

A custom prevails, in the principal streets for shops, of having wooden pillars planted along the outer edge of the pavement, with horizontal beams reaching from pillar to pillar, not unlike the stanchions and crosspieces of a ropewalk. . . .

Broadway, which is greatly disfigured by these, is therefore much inferior to Regent Street in London in the general air of cleanliness, neatness, light, spaciousness, good pavement, and fine shops, by which the latter is characterized; and although the number of beautiful and gayly dressed ladies, who make Broadway their morning promenade, uniting shopping, visiting, and walking at the same time, gives it a very animated appearance of a fine day, between twelve and two o'clock, yet the absence of handsome equipages and fine horses, and the fewness of well-dressed gentlemen who have leisure to devote to morning promenades of pleasure occasions Broadway to be inferior in the general effect of brilliancy and elegance to the throng of Regent Street on a fine day in May, between three and four o'clock. . . .

The population of New York is estimated at present to be little short of 300,000. Of these perhaps there are 20,000 foreigners, including English and persons from Canada and the British possessions, and 30,000 strangers from other states of the Union, making therefore the fixed resident population 250,000 and the floating population about 50,000 more. The greatest number of these are engaged in commerce or trade, with a due admixture of professional men, as clergy, physicians, and lawyers. But among them all there are fewer than perhaps in any other community in the world who live without any ostensible avocation. The richest capitalists still take a part in the business proceedings of the day; and men who have professedly retired and have no counting-house or mercantile establishment still retain so much of the relish for profitable occupation that they mingle freely with the merchants, and are constantly found to be the buyers and sellers of stock, in funds, or shares in companies, canals, railroads, banks, et cetera.

The result of all this is to produce the busiest community that any man could desire to live in. In the streets all is hurry and bustle; the very carts, instead of being drawn by horses at a walking pace, are often met at a gallop, and always in a brisk trot.

J. S. Buckingham, America, Historical, Statistic, and Descriptive (New York: Harper and Brothers, 1841), pp. 42-46.

Document 2

The growth of American industry was one of the more remarkable aspects of the pre-Civil War era, and the town and factory of Lowell, Massachusetts, became known as the finest example of what American ingenuity could accomplish. One of those impressed by what he found at Lowell was the frontiersman and folk hero David Crockett, who left the following account. Before you read what Crockett describes,

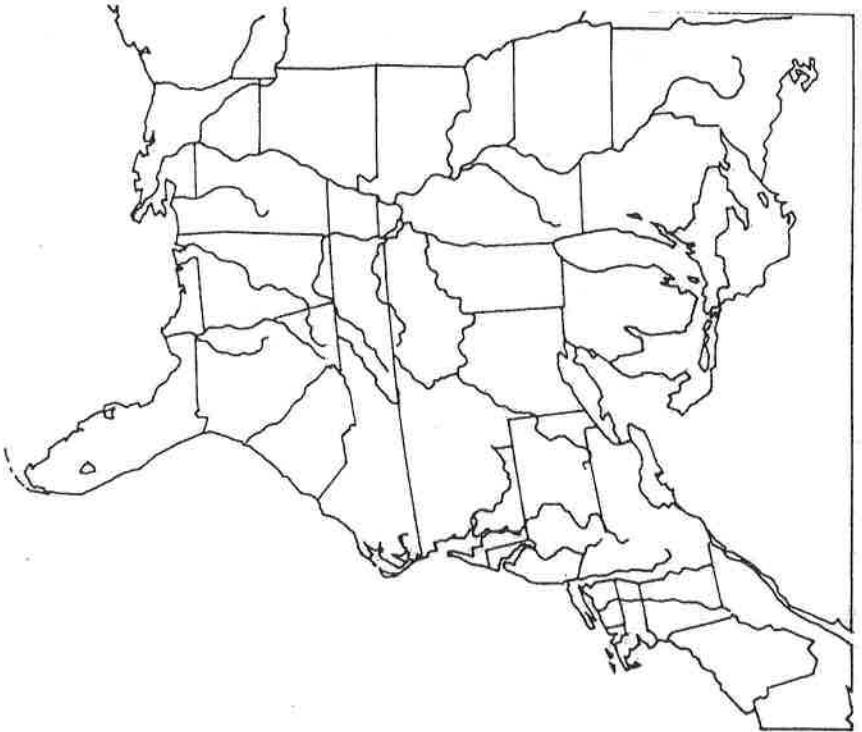
Men think that it is essential that the Nation have commerce, and export ice, and talk through a telegraph, and ride thirty miles an hour, without a doubt, whether they do or not; but whether we should live like baboons or like men, is a little uncertain. If we do not get our sleepers, and forge rails, and devote days and nights to the work, but go to tinkering upon our lives to improve them, who will build railroads? And if railroads are not built, how shall we get to heaven in season? But if we stay at home and mind our business, who will want railroads? We do not ride on the railroad; it rides upon us. Did you ever think what those sleepers are that underlie the railroad? Each one is a man, an Irishman, or a Yankee man. The rails are laid on them, and they are covered with sand, and the cars run smoothly over them. They are sound sleepers, I assure you. And every few years a new lot is laid down and run over; so that, if some have the pleasure of riding on a rail, others have the misfortune to be ridden upon. And when they run over a man that is walking in his sleep, a supernumerary sleeper in the wrong position, and wake him up, they suddenly stop the cars, and make a hue and cry about it, as if this were an exception. I am glad to know that it takes a gang of men for every five miles to keep the sleepers down and level in their beds as it is, for this is a sign that they may sometime get up again.

Henry David Thoreau, *Walden* (Boston: Houghton Mifflin, 1893), pp. 145–146.

Map Exercise

Fill in or identify the following on the blank map provided. Use the map in the text as your source.

1. Principal rivers.
2. Principal canals.
3. Railroad routes in 1850.
4. Principal cities on the 1850 routes.
5. Railroad routes in 1860.
6. Principal cities on the 1860 routes.
7. Main East-West lines.



Interpretive Questions

Based on what you have filled in, answer the following. On some of the questions you will need to consult the narrative in your text for information or explanation.

1. Note the relationship between canals and railroads. Why did railroads better meet the nation's transportation needs?
2. Compare and contrast the 1850 and 1860 maps. Where did most of the railroad construction take place? How did this construction change earlier transportation patterns?

3. Where railroads went, industry followed (and vice versa). What does the growth of railroads between 1850 and 1860 suggest about the industrial development of the nation?
4. Compare the principal cities in 1850 to those in 1860. Where were most of the rising urban centers located? What does this indicate about the economy and way of life of the North and the South?
5. Identify the railroad lines that linked North to South in 1850. In 1860. What does this suggest about how this transportation network united or divided the nation?

Summary

During this period a combination of a rapid growth in population, the expansion of communication and transportation systems, and the development of an agricultural system sufficient to feed an urban population gave rise to the American industrial revolution. The two sections of the nation most affected by this were the Northeast and the Northwest, which were drawn closer together as a result. Canals, railroads, and the telegraph made it easier to move goods and information. Business expanded as corporations began to shape the world of trade and commerce. Technological innovations helped expand industries, and soon the factory system began to replace the artisan tradition. In the Northwest, agriculture also expanded to meet the increasing demand for farm products. All of this had profound implications for American men and women, both in the way they worked and in their family lives.

Review Questions

These questions are to be answered with essays. This will allow you to explore relationships between individuals, events, and attitudes of the period under review.

1. Examine the development of the system of railroads and canals during this period. What geographical factors contributed to this? What sections did this transportation system link together, and what effect did this have on the economy of each? How might this transportation network have influenced political alliances?
2. What were the reasons behind the increase in population during this period? What impact did this have on the nation's economic, social, and political system?
3. It has been said that the most conspicuous changes in American life in the 1840s and 1850s took place in the Northeast. What were these changes, and what impact did they have on the northwestern section of the nation?
4. What effect did the economic changes of this era have on the American family and especially on the lives of American women in the Northeast? the Northwest?
5. What were the major technological inventions and innovations of this period? How did they both unify and divide the nation?

Chapter Self Test

After you have read the chapter in the text and done the exercises in the Study Guide, take the following self test to see if you understand the material you have covered. Answers appear at the end of the Study Guide.

MULTIPLE-CHOICE QUESTIONS

Circle the letter of the response which best answers the question or completes the statement.

1. The rise of New York City in the first half of the nineteenth century was the result of all of the following except:

- a. a superior natural harbor.
 - b. liberal state laws that made the city attractive for both foreign and domestic commerce.
 - c. an absence of "nativist" sentiment.
 - d. unrivaled access to the interior.
2. At the time it was completed, the Erie Canal was:
 - a. already obsolete.
 - b. beginning to fill with silt from the Great Lakes.
 - c. the greatest construction project Americans had ever undertaken.
 - d. cited as an example of how not to construct a canal.
 3. Which of the following helped enlarge the urban population in this era?
 - a. Immigrants from Europe.
 - b. Northeast farmers.
 - c. The growth of the population as a whole.
 - d. All of the above.
 - e. Both a. and c.
 4. The nativist movement wanted to:
 - a. return all land to Native Americans.
 - b. enact more restrictive naturalization laws.
 - c. increase aid to education so voters would be literate.
 - d. make immigrants feel this was their home.
 5. One of the immediate results of the new transportation routes constructed during the "canal age" was:
 - a. an increased white settlement in the Northwest.
 - b. an increased white settlement in the Southwest.
 - c. the renewed cooperation between states and the national environment on internal improvement projects.
 - d. the conviction that the national government should be responsible for all internal improvements.
 6. During the 1820s and 1830s, railroads:
 - a. played only a secondary role in the nation's transportation system.
 - b. replaced canals as the most important means of transportation.
 - c. generated little interest among American businessmen.
 - d. consisted of a few long lines, which were not connected to water routes.
 7. The most profound economic development in mid-nineteenth-century America was the:
 - a. development of a national banking system.
 - b. creation of corporations.
 - c. decline of the small-town merchant and general store.
 - d. rise of the factory.
 8. The great technical advances in American industry owed much to:
 - a. American inventors.
 - b. national research universities.
 - c. innovative businessmen.

- d. labor unions.
9. The beginnings of an industrial labor supply can be traced to:
- overcrowding in American cities.
 - a dramatic increase in food production.
 - the use of slaves in manufacturing industries.
 - an increase in European immigration.
10. The Lowell or Waltham system of recruiting labor was to:
- enlist young women from farm families.
 - recruit whole families from rural areas.
 - recruit newly arrived immigrants.
 - enlist young men from farm families.
11. The paternalistic factory system of Lowell and Waltham did not last long because:
- workers resented being watched over so carefully.
 - in the highly competitive textile market, manufacturers were eager to cut labor costs.
 - unions undermined the owners' authority.
 - men found jobs in the factories, and they disliked the paternalistic system.
12. Most of the industrial growth experienced in the United States between 1840 and 1860 took place in the:
- South and Southwest
 - Old Northwest
 - New England region and the mid-Atlantic states.
 - Ohio Valley.
13. Which of the following was not a technological advance that sped the growth of industry during this period?
- Better machine tools.
 - Interchangeable tools.
 - Improved water-power generators.
 - New steam engines.
14. The railroad network that developed during this period linked:
- the Northeast to the Northwest.
 - the Northeast to the Gulf Coast.
 - the East Coast to the West Coast.
 - New York to New Orleans.
15. Crucial to the operation of railroads was:
- a system of federal railroad regulations.
 - the invention of the telegraph.
 - slave labor to build the lines.
 - a canal and river system that supported the lines.
16. Which of the following did not inhibit the growth of effective labor resistance?
- Ethnic divisions between natives and immigrants.
 - The availability of cheap labor.

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- Slavery.
17. Why did the unequal distribution of wealth not create more resentment?
- The actual living standard of the workers was improving.
 - There was no social mobility, but people were content to stay where they were in the social system.
 - Geographic mobility was limited, so there were few other opportunities.
 - The political system offered few ways to express resentment.
18. In the middle-class family during this era, the role of women changed from:
- helpmate to workmate.
 - "republican mother" to "democratic female."
 - passive domestic to radical feminist.
 - income producer to income consumer.
19. The growth of the agricultural economy of the Northwest affected the sectional alignment of the United States because:
- northwestern goods were sold to residents of the Northeast.
 - northeastern industry sold its products to the Northeast.
 - northwestern grain was sold to the South, which allowed it to grow more cotton.
 - the Northwest was able to feed itself so it did not align with any other section.
 - of a. and b.
 - of a. and d.
- TRUE-FALSE QUESTIONS**
- Read each statement carefully. Mark true statements "T" and false statements "F."
- During the first half of the nineteenth century the United States grew more rapidly in population than did Britain and Europe.
 - During the first half of the nineteenth century the African-American population increased as fast or faster than did the white population.
 - The city that gained the most from the new transportation routes built in this era was New York.
 - Because it was agricultural, the Northwest experienced little urban growth during this era.
 - Because we are a "nation of immigrants," the Know-Nothing movement had little success.
 - Railroads had so many advantages over canals that, where free competition existed, they almost always prevailed.
 - The consolidation of railroads affected the nature of sectional alignments.
 - Credit mechanisms in the early nineteenth century were well designed and efficient.
 - When compared to working conditions in European industries, the Lowell mills were a paradise for working women.
 - Artisans, displaced by the factory system, formed the first American labor unions.
 - The most conspicuous change in American life in the 1840s and 1850s was the rapid industrialization of the Northeast.
 - During this period international trade became increasingly important for the national economy.
 - The South was an important part of the national railroad network.

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14. The majority of immigrants during this period came from Ireland and Russia.
15. Although conditions got worse in American factories, few workers tried to do anything about it.
16. Industrialization made no change in the nature and function of the American family.
17. Except for teaching and nursing, work by women outside the household gradually came to be seen as a lower-class preserve.
18. The typical white citizen of the Northwest was the owner of a reasonably prosperous family farm.
19. Although agriculture expanded in the Northwest, new agricultural techniques reduced the amount of labor needed to produce a crop.
20. The Northwest was the most self-consciously democratic section of the country.

TERMS, CONCEPTS, NAMES

Mercantile economy	Samuel F.B. Morse	"Know Nothings"
Agrarian economy	Horace Greeley's <i>Tribune</i>	American Party
Market economy	Corporations	Turnpike Era
Free labor	The factory system	Steamboats
Factory system	Merchant capitalists	DeWitt Clinton
Erie Canal	Skilled artisans/unskilled workers	Hudson River
Nativism	Supreme Order of the Spangled Banner	Baltimore and Ohio
Native American Party		Interstate highways
Federal land grants		