Technology and Industry (pages 386–389)

In the early 1800s, machinery replaced much of the work previously done by hand. Industrialization, or the production and sale of goods as a business, and technology changed American life. There were three phases of development of industrialization in the North.

1. Tasks or jobs in the manufacturing process were divided among workers.
2. Factories were built to include all specialized workers under one roof.
3. Machinery performed some of the work.

The factory system made mass production, the process of making many identical items or products at one time, more efficient and the goods less expensive. In the early 1800s, cotton textiles were mass produced in New England. The invention of the sewing machine in 1846 by Elias Howe led to the mass production of clothing. Other types of industry developed during the same period. At least two-thirds of the country’s manufactured goods were made in factories located in the Northeast.

People and industry benefited from improvements in transportation. Robert Fulton improved the steamboat in 1807. Goods and passengers could get from place to place much faster and less expensively. Canals were widened and deepened so that steamboats could travel on them. Cities grew along canals, rivers, and lakes as a result of the steamboat. Clipper ships, with taller sails and sleek hulls, “clipped” travel time in half. They were as fast as most steamships. Steam locomotives replaced horse-drawn trains.

By 1860 the railroad system in the North and Midwest increased dramatically. In 1829 the first steam-powered passenger locomotive was operated in Britain. In 1830 the first American steam locomotive was designed by Peter Cooper. Within ten years these locomotives had improved and were pulling trains in the United States. At first, railroad tracks connected two cities. Builders connected these separate railroad lines, uniting the East and the Midwest by 1860.

The Erie Canal built in 1825 and the railroads of the 1830s allowed for direct movement of goods and passengers between the East and the Midwest. Before, goods and passengers had to be transported down the Mississippi River, through the port of New Orleans, and then to the East coast and other countries. Fast and affordable travel methods saved time and money. The savings resulted in lower priced goods and population growth in the Midwestern states of Ohio, Indiana, and Illinois.
Faster communication was made possible by advances in technology. Samuel Morse invented the **Morse code**, a series of dots and dashes representing the alphabet. The code was tapped out on a **telegraph** machine, which used electric signals to instantly send messages across wires. About 23,000 miles of telegraph lines were constructed in the United States by 1852. Communication helped connect different regions of the United States.

1. What four advances in transportation and communication changed American life and the economy by the 1860s?

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**Agriculture (page 390)**

Advances in transportation and the invention of new machines helped expand agriculture in the early 1800s. Three new machines invented in the 1830s and faster and cheaper methods of transportation led to an increase in cash crops, crops grown and sold for profit.

1. John Deere invented the steel-tipped plow in 1837. This plow could cut through hard-packed sod on the prairies.
2. Cyrus McCormick invented the mechanical reaper, which harvested grain much faster than a hand-operated sickle.
3. A new machine called a thresher quickly separated wheat grain from the stalk. These machines also led to settlement of new farmlands in the West. Wheat became the main cash crop in the Midwest. Fruits and vegetables were grown in the Northeast and Middle Atlantic regions. Industry was more common than agriculture in the North, however.

2. What inventions revolutionized or changed agriculture in the United States?

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Study Guide
Chapter 13, Section 2

For use with textbook pages 391-395

THE NORTH'S PEOPLE

KEY TERMS

- trade union: Organizations of workers with the same trade or skill (page 392)
- strike: Refusing to work in order to put pressure on employers (page 392)
- prejudice: An unfair opinion not based on facts (page 392)
- discrimination: Unfair treatment of a group (page 392)
- famine: An extreme shortage of food (page 393)
- nativist: People opposed to immigration (page 395)

DRAWING FROM EXPERIENCE

Do you have a job? Perhaps you deliver newspapers, walk dogs, or baby-sit children. What kinds of working conditions do you have? How many hours a week do you work?

In the last section, you read about how advances in technology and transportation shaped the North's economy. This section focuses on how the growth of industry and increased immigration changed the North.

ORGANIZING YOUR THOUGHTS

Use the chart below to help you take notes as you read the summaries that follow. Think about how cities grew during this period.

<table>
<thead>
<tr>
<th>Cause</th>
<th>Cause/Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Failed German movement</td>
<td></td>
</tr>
<tr>
<td>2. Irish Potato Famine</td>
<td></td>
</tr>
</tbody>
</table>

Effect
**Study Guide**

**Chapter 13, Section 2 (continued)**

**READ TO LEARN**

- **Northern Factories** *(pages 391–393)*

  The development of the factory system changed the way goods were produced and the types of jobs available. Factory workers produced textiles, clothing, shoes, watches, guns, sewing machines, and farm machines. All steps in the manufacturing process took place under one roof. Working conditions were hard. Employees worked long hours for little pay. Accidents were common. Young children worked in factories. Factories had no air-conditioning or heating systems. Owners worried more about making a profit than the working conditions of their employees. There were no laws to protect workers.

  To fight for higher pay, shorter hours, and better working conditions, skilled laborers formed *trade unions*, organizations joined by workers with similar skills or trades. To convince factory owners to listen to their concerns and improve working conditions, factory workers went on *strike*. They refused to work to pressure the factory owners. In the early 1800s, workers who went on strike were breaking the law and could be punished. They could lose their jobs. That changed, however, when a Massachusetts court ruled that workers had the right to strike.

  In the 1830s *discrimination*, or the unfair treatment of groups of people, was common. African Americans and women did not have the same rights as white males. Slavery was rare in the North at this time, but racial *prejudice*, unfair opinions not based on facts, remained. Few African Americans were allowed to vote, attend public schools, or enter many public facilities. Most were forced to use separate or segregated schools, hospitals, and other facilities. A few African Americans became successful business leaders, but most were poor.

  Women received lower pay for the same factory work as men. They were not allowed to join the trade unions. Men wanted women out of the workforce to create more available jobs for men. Female workers in Massachusetts organized the Lowell Female Labor Reform Organization. They petitioned the legislature for a 10-hour workday. The legislature would not consider their petition because they were women. The early attempts by women to achieve justice and equality failed.

1. Why did factory workers organize trade unions?
Study Guide
Chapter 13, Section 2 (continued)

• The Rise of Cities (page 393–395)

    Industrial cities grew as people moved closer to their jobs. Living in cities was expensive. Most workers lived in overcrowded, run-down buildings without plumbing or heat. Disease and fire were constant dangers.

    People from other countries, or immigrants, moved to American cities in search of a better life. Immigration increased greatly between 1840 and 1860. Many immigrants agreed to work long hours for little pay. Between 1846 and 1850, most immigrants came from Ireland because of the potato famine. A famine is an extreme food shortage. Millions of Irish citizens died of starvation. Irish immigrants found work in factories in the Northeast, performed manual labor, or worked to build the railroad system. They were farmers from Ireland who could not afford to buy land in the United States. Women became servants or factory workers.

    Germans were the second largest group of immigrants at this time. Some came to the United States for a better life. Others came after the democratic revolution in 1848 failed. More than one million German immigrants came, often in family groups. Many arrived with money to buy land or start businesses.

    Immigrants brought their own languages, customs, and traditions with them. American culture began to change with the increase in immigration. A large percentage of Irish and German immigrants were Roman Catholic. The community life of immigrants revolved around the Church. Many immigrants settled together and formed communities in crowded slums.

    Nativists, people born in America and opposed to immigration, felt threatened by and began to resent the immigrants. They were afraid the immigrants would take their jobs and change their way of life. They were upset that immigrants were willing to work for lower pay. Immigrants were blamed for crime and disease. Nativists formed secret anti-Catholic groups. They formed a new political party called the American or Know-Nothing Party. When they were asked about their group or organization, members replied, “I know nothing.” Their new political party wanted stricter citizenship laws and to make it impossible for immigrants to hold government offices. The American Party divided over the issue of slavery in the mid-1850s.

2. How did the large wave of Irish and German immigration impact life in the United States?
Study Guide
Chapter 13, Section 3

For use with textbook pages 397–400

SOUTHERN COTTON KINGDOM

KEY TERMS

cotton gin  A machine that removed seeds from cotton fibers (page 398)
capital     Money to invest in businesses (page 399)

DRAWING FROM EXPERIENCE

What is the economy based on where you live? Is it mostly agricultural, fishing, mining, manufacturing, or something else? How does the economy in your area affect the way you live?

In the last section, you read about how the growth of industry and increased immigration changed the North. This section focuses on the factors that led to the cotton boom in the South.

ORGANIZING YOUR THOUGHTS

Use the chart below to help you take notes as you read the summaries that follow. Think about how important cotton was to the economy of the South.

<table>
<thead>
<tr>
<th>Southern Economy</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Agriculture</strong></td>
</tr>
<tr>
<td>1.</td>
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<tr>
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<td>3.</td>
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<td>4.</td>
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<tr>
<td>5.</td>
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</tbody>
</table>
**Rise of the Cotton Kingdom** *(pages 397–399)*

Between 1790 and 1850, the economy of the South changed greatly. In 1790 most Southerners lived along the Atlantic coast in the Upper South: Maryland, Virginia, and North Carolina. By 1850 many Southerners lived farther inland in the states of the Deep South: Georgia, South Carolina, Alabama, Mississippi, Louisiana, and Texas. In earlier times tobacco, rice, sugarcane, and indigo were important cash crops in the South. By the 1850s cotton changed the economy of the South, becoming the leading cash crop.

The great demand from textile mills and Eli Whitney’s invention of the cotton gin made it possible to make large profits from the growth of cotton. The *cotton gin*, a lightweight machine that separated seeds from cotton fibers, increased the amount of cotton that a worker could clean in one day from 1 pound by hand to 50 pounds with the new invention. Farmers wanted to grow more cotton and needed more workers to plant and pick it. The demand for enslaved Africans grew. The main crops in the Upper South were tobacco, hemp, wheat, and vegetables. The main crop in the Deep South was cotton, and in some places rice and sugarcane. The Upper South became the center of the slave trade in the United States.

1. What effect did the cotton gin have on the lives of Southerners?

**Industry in the South** *(page 399–400)*

The South was mainly a rural, agricultural region. Little industry was found in the South. Farmers made so much money growing cotton that they were not interested in starting businesses. Farmers also had their money invested in enslaved African Americans and land. They did not have enough money, or *capital*, to invest in starting businesses. Many people in the South were enslaved African Americans who did not buy goods from merchants, so there was less demand for manufactured goods in the South. Some leaders worried that the South was too dependent on the North for manufactured goods. They wanted to see industry develop in the South. Some believed that factories might help the economy of the Upper South, which was less successful than the economy of the Deep South. While industry in the South was limited, it did exist.
Study Guide

Chapter 13, Section 3 (continued)

The South had few canals or roads on which to move goods and people from place to place. They relied instead on natural waterways. As a result, Southern cities grew slowly. The lack of railroads would negatively impact the South during the Civil War.

2. Why was there so little industry in the South?
Study Guide
Chapter 13, Section 4

For use with textbook pages 401–407

THE SOUTH’S PEOPLE

KEY TERMS

- yeomen: Farmers who did not have slaves (page 402)
- tenant farmers: Farmers who rented land and worked on a landlord’s estate (page 402)
- fixed cost: Regular expenses that remain about the same each year (page 403)
- credit: A form of loan (page 403)
- overseer: A plantation manager (page 403)
- spiritual: An African American religious folk song (page 405)
- slave code: Law in the Southern states that controlled enslaved people (page 405)

DRAWING FROM EXPERIENCE

Do you have an extended family—grandparents, aunts, uncles, and cousins? Are they important in your life? How often do you see them? What kinds of things do you do together?

In the last section, you read about how the economy of the South depended on cotton. This section focuses on the Southern way of life.

ORGANIZING YOUR THOUGHTS

Use the chart below to help you take notes as you read the summaries that follow. Think about how Southerners relied on agriculture during the first half of the 1800s.

<table>
<thead>
<tr>
<th>Southern Class System</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest</td>
</tr>
<tr>
<td>1.</td>
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<tr>
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<td>3.</td>
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<tr>
<td>4.</td>
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</tbody>
</table>
Study Guide

Chapter 13, Section 4 (continued)

READ TO LEARN

• Small Farms (pages 401–402)

  There were four groups or classes of white Southerners.

  A. Plantation owners usually owned a handful of slaves and a comfortable house. Only 12 percent of plantation owners could afford the mansions and many enslaved Africans shown in movies about the South.

  B. Most Southerners called yeomen were farmers who owned land but not enslaved laborers.

  C. Tenant farmers rented land and worked on landlords’ estates.

  D. Poor rural farmers lived in small cabins in wooded areas. They took care of themselves, growing what they could, fishing, and hunting.

1. What was the Southern class structure?

   

• Plantations (pages 402–403)

  The goal of all plantation owners was to earn a profit. Prices paid for cotton varied, but farmers’ fixed costs, or regular expenses, remained about the same each year. In order to get the best price, plantation owners sold their cotton crops to agents in big cities who held the crops until prices rose. The agents gave plantation owners loans in the form of credit, which they paid back when the crops were actually sold.

  Wives of plantation owners were in charge of the enslaved Africans who worked in the house. They also took care of enslaved laborers when they were sick. Additionally, wives supervised the fruit and vegetable gardens and buildings. Many kept the plantation’s financial records. Some husbands moved their families westward and traveled a great deal. Wives spent a lot of time at home alone.

  Running a plantation involved a lot of work. Most enslaved Africans worked in the fields. An overseer was hired to manage the plantation and supervise the enslaved Africans who worked in the fields. Domestic enslaved Africans took care of household chores. Some enslaved Africans were taught needed skills such as those required of blacksmiths, carpenters, shoemakers, and weavers. Others took care of the farm animals.
2. What was life like for the wives of plantation owners?

- **Life Under Slavery (pages 403–406)**

  Enslaved Africans endured terrible hardships and much unhappiness. They were often separated from their families and sold to new owners. They had little hope of freedom, no money, and inhumane living and working conditions. Despite the hardships, they developed their own culture and family life. Friends and family became extended families. They lived in crowded log cabins with dirt floors. Families could be separated by sale at any time. Many enslaved Africans were married even though the marriages were not legally recognized. They resisted slavery in different ways.

  After the slave trade was banned by Congress in 1808, all new enslaved people were born in the United States. Many accepted Christianity, but practiced the religious beliefs of their ancestors as well. Enslaved Africans used African American religious folk songs called *spirituals* to secretly communicate with one another.

  The laws in Southern states, called *slave codes*, became harsher because white plantation owners feared an uprising or rebellion. Enslaved Africans could not assemble in groups. They could not learn to read or write. They could not leave their master’s property without written permission. Nat Turner was hanged for leading a group of enslaved Africans in a rebellion where they killed about 55 whites.

  Two successful runaway enslaved African Americans, Harriet Tubman and Frederick Douglass, helped other runaways make it to the North. Free blacks and whites who were against slavery secretly helped the runaway enslaved Africans. The Underground Railroad was a series of stops, or safe hiding places, along the route to the North where enslaved Africans could receive help. Most runaways were caught and returned to their owners who punished them severely. Many enslaved Africans resisted slavery in other ways. They worked slowly or pretended to be sick.

3. What were the slave codes?
Study Guide

Chapter 13, Section 4 (continued)

- City Life and Education (pages 406–407)

  The main cities in the South during the mid-1800s were Baltimore and New Orleans. Charleston, Richmond, and Memphis were growing, too. White people, some enslaved laborers, and free African Americans lived in these cities. African Americans formed their own communities and provided services there. They became barbers, carpenters, and small tradespeople. They established churches and other institutions. They were not permitted to move to other states. Arkansas made all free African Americans move out of state in 1859, however. The rights of free African Americans were limited by laws passed by Southern states between 1830 and 1860.

4. What was life like for free African Americans in Southern cities?