

Growth of the Cotton Industry

What You Will Learn...

Main Ideas

1. The invention of the cotton gin revived the economy of the South.
2. The cotton gin created a cotton boom in which farmers grew little else.
3. Some people encouraged southerners to focus on other crops and industries.

The Big Idea

The invention of the cotton gin made the South a one-crop economy and increased the need for slave labor.

Key Terms and People

cotton gin, p. 415

planters, p. 416

cotton belt, p. 416

factors, p. 417

Tredegar Iron Works, p. 419

TAKING NOTES

As you read, take notes on the causes of the cotton boom in the South. Record your notes in a graphic organizer like the one shown below.



If YOU were there...

You are a field-worker on a cotton farm in the South in about 1800. Your job is to separate the seeds from the cotton fibers. It is dull, tiring work because the tiny seeds are tangled in the fibers. Sometimes it takes you a whole day just to clean one pound of cotton! Now you hear that someone has invented a machine that can clean cotton 50 times faster than by hand.

How might this machine change your life?

BUILDING BACKGROUND Sectional differences had always existed between different regions of the United States. The revolutionary changes in industry and transportation deepened the differences between North and South. The South remained mainly agricultural. New technology helped the region become the Cotton Kingdom.

Reviving the South's Economy

Before the American Revolution, three crops dominated southern agriculture—tobacco, rice, and indigo. These crops, produced mostly by enslaved African Americans, played a central role in the southern economy and culture.

After the American Revolution, however, prices for tobacco, rice, and indigo dropped. When crop prices fell, the demand for and the price of slaves also went down. In an effort to protect their incomes, many farmers tried, with little success, to grow other crops that needed less labor. Soon, however, cotton would transform the southern economy and greatly increase the demand for slave labor.

Cotton Becomes Profitable

Cotton had been grown in the New World for centuries, but it had not been a very profitable crop. Before cotton could be spun into thread for weaving into cloth, the seeds had to be removed from the cotton fibers.

Cotton Gin

CONNECT TO SCIENCE AND TECHNOLOGY

Eli Whitney's cotton gin enabled workers to easily remove seeds from cotton fibers. The result was a dramatic increase in cotton production in the South.

How did the cotton gin remove seeds from cotton fibers?

- 1 The operator turned the crank.
- 2 The crank turned a roller with teeth that stripped the seeds away from the cotton fiber.
- 3 Brushes on a second roller lifted the seedless cotton off the teeth of the first cylinder and dropped it out of the machine.
- 4 A belt connected the rollers so that they would both turn when the crank was turned.



Long-staple cotton, also called black-seed cotton, was fairly easy to process. Workers could pick the seeds from the cotton with relative ease. But long-staple cotton grew well in only a few places in the South. More common was short-staple cotton, which was also known as green-seed cotton. Removing the seeds from this cotton was difficult and time consuming. A worker could spend an entire day picking the seeds from a single pound of short-staple cotton.

By the early 1790s the demand for American cotton began increasing rapidly. For instance, in Great Britain, new textile factories needed raw cotton that could be used for making cloth, and American cotton producers could not keep up with the high demand for their cotton. These producers of cotton needed a machine that could remove the seeds from the cotton more rapidly.

Eli Whitney's Cotton Gin

Northerner Eli Whitney finally patented such a machine in 1793. The year before, Whitney had visited a Georgia plantation owned by Catherine Greene where workers were using a machine that removed seeds from long-staple cotton. This machine did not work well on short-staple cotton, and Greene asked Whitney if he could improve it. By the next spring, Whitney had perfected his design for the **cotton gin**, a machine that removes seeds from short-staple cotton. ("Gin" is short for engine.) The cotton gin used a hand-cranked cylinder with wire teeth to pull cotton fibers from the seeds.

Whitney hoped to keep the design of the gin a secret, but the machine was so useful that his patent was often ignored by other manufacturers. Whitney described how his invention would improve the cotton business.

THE IMPACT TODAY

The same patent law that protected Whitney's invention of the cotton gin protects the rights of inventors today.

“One man will clean ten times as much cotton as he can in any other way before known and also clean it much better than in the usual mode [method]. This machine may be turned by water or with a horse, with the greatest ease, and one man and a horse will do more than fifty men with the old machines.”

—Eli Whitney, quoted in *Eli Whitney and the Birth of American Technology* by Constance McLaughlin Green

Whitney’s gin revolutionized the cotton industry. **Planters**—large-scale farmers who held more than 20 slaves—built cotton gins that could process tons of cotton much faster than hand processing. A healthy crop almost guaranteed financial success because of high demand from the textile industry.

READING CHECK Drawing Conclusions

What effects did the cotton gin have on the southern economy?

The Cotton Boom

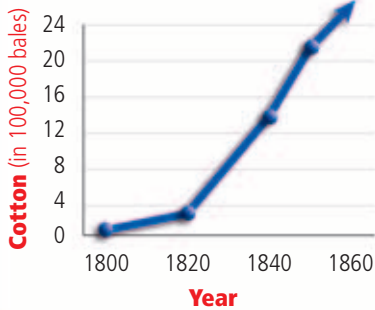
Whitney’s invention of the cotton gin made cotton so profitable that southern farmers abandoned other crops in favor of growing cotton. The removal of Native Americans opened up more land, while the development of new types of cotton plants helped spread cotton production throughout the South as far west as Texas. This area of high cotton production became known as the **cotton belt**.

Production increased rapidly—from about 2 million pounds in 1791 to roughly a billion pounds by 1860. As early as 1840, the United States was producing more than half of the cotton grown in the entire world. The economic boom attracted new settlers, built up wealth among wealthy white southerners, and firmly put in place the institution of slavery in the South.

The Cotton Kingdom

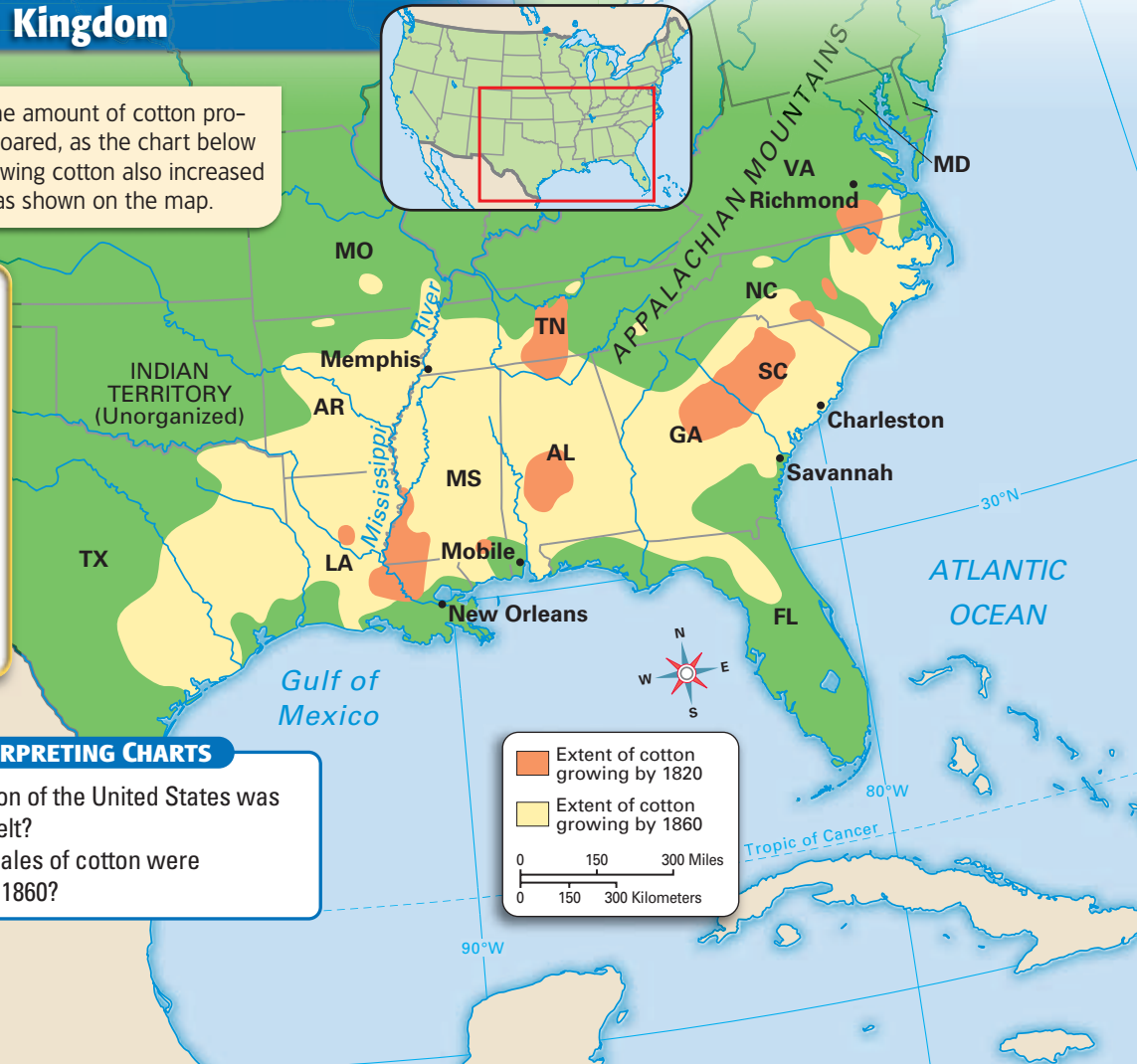
After the invention of the cotton gin, the amount of cotton produced each year in the United States soared, as the chart below shows. The area of land devoted to growing cotton also increased dramatically between 1820 and 1860, as shown on the map.

U.S. Cotton Production, 1800–1860



ANALYSIS SKILL INTERPRETING CHARTS

1. In what region of the United States was the cotton belt?
2. How many bales of cotton were produced in 1860?



Cotton Belt

Cotton had many advantages as a cash crop. It cost little to market. Unlike food staples, harvested cotton could be stored for a long time. Because cotton was lighter than other staple crops, it also cost less to transport long distances.

Farmers eager to profit from growing cotton headed west to find land. Farmers also began to apply scientific methods to improve crop production. Cotton had one disadvantage as a crop—it rapidly used up the nutrients in the soil. After a few years, cotton could make the land useless for growing anything. Some agricultural scientists recommended crop rotation—changing the crop grown on a particular plot of land every few years. Different crops needed different nutrients, so crop rotation would keep the land fertile longer. Other agricultural scientists began to study soil chemistry, in an effort to keep the land rich and productive.

As the cotton belt grew, farmers continued trying to improve the crop. Agricultural scientists worked at crossbreeding short-staple cotton with other varieties. As a result, new, stronger types of cotton were soon growing throughout the cotton belt. This led to expansion of the cotton industry through the 1860s.

The cotton boom involved much more than growing and harvesting cotton. Harvested cotton had to be ginned, pressed into bales, and then shipped to market or to warehouses. Special agents helped do everything from marketing cotton to customers to insuring crops against loss or damage. Factories were built to produce items needed by cotton farmers, such as ropes to bale cotton.

Growing and harvesting cotton required many field hands. Rather than pay wages to free workers, planters began to use more slave labor. Congress had made bringing slaves into the United States illegal in 1808. However, the growing demand for slaves led to an increase in the slave trade within the United States.

Cotton Trade

In an 1858 speech before the U.S. Senate, South Carolina politician James Henry Hammond declared, “Cotton is King!” Without cotton, Hammond claimed, the global economy would fail. He believed that southern cotton was one of the most valuable resources in the world. Southern cotton was used to make cloth in England and the North. Many southerners shared Hammond’s viewpoints about cotton. Southerner David Christy declared, “King cotton is a profound [learned] statesman, and knows what measures will best sustain [protect] his throne.”

The cotton boom made the South a major player in world trade. Great Britain became the South’s most valued foreign trading partner. Southerners also sold tons of cotton to the growing textile industry in the northeastern United States. This increased trade led to the growth of major port cities in the South, including Charleston, South Carolina; Savannah, Georgia; and New Orleans, Louisiana.

In these cities, crop brokers called **factors** managed the cotton trade. Farmers sold their cotton to merchants, who then made deals with the factors. Merchants and factors also arranged loans for farmers who needed to buy supplies. They often advised farmers on how to invest profits. Once farmers got their cotton to the port cities, factors arranged for transportation aboard trading ships.

However, shipping cotton by land to port cities was very difficult in the South. The few major road projects at the time were limited to the Southeast. Most southern farmers had to ship their goods on the region’s rivers. On the Ohio and Mississippi rivers, flatboats and steamboats carried cotton and other products to port. Eventually, hundreds of steamboats traveled up and down the mighty Mississippi River each day.

READING CHECK Identifying Cause and Effect

What effect did the cotton boom have on the slave trade within the United States?

THE IMPACT TODAY

The Port of New Orleans remains a major seaport. It handles about 85 million tons of cargo annually.

The South's Cotton Economy

Eli Whitney's cotton gin began the cotton boom. Soon, the Cotton Kingdom stretched across the South. For the cotton planters to succeed, they had to get their cotton to market.



Enslaved African Americans did most of the planting, harvesting, and processing of cotton.



Cotton was shipped on river steamboats to major ports such as Charleston.



From southern ports, sailing ships carried the cotton to distant textile mills.

Other Crops and Industries

Some leaders worried that the South was depending too much on cotton. They wanted southerners to try a variety of cash crops and investments.

ACADEMIC VOCABULARY

primary
main, most important

Food and Cash Crops

One such crop was corn, the **primary** southern food crop. By the late 1830s the top three corn-growing states in the nation were all in the South. The South's other successful food crops included rice, sweet potatoes, wheat, and sugarcane.

Production of tobacco, the South's first major cash crop, was very time consuming because tobacco leaves had to be cured, or dried, before they could be shipped to market. In 1839 a slave discovered a way to improve the drying process by using heat from burning charcoal. This new, faster curing process increased tobacco production.

Partly as a result of the cotton boom, hemp and flax also became major cash crops. Their fibers were used to make rope and sackcloth. Farmers used the rope and sackcloth to bundle cotton into bales.

Industry

Many of the first factories in the South were built to serve farmers' needs by processing crops such as sugarcane. In 1803 the nation's first steam-powered sawmill was built in Donaldsonville, Louisiana. This new technology enabled lumber companies to cut, sort, and clean wood quickly.

By the 1840s, entrepreneurs in Georgia began investing in cotton mills. In 1840, there were 14 cotton mills; by the mid-1850s, there were more than 50. A few mill owners followed the model established by Francis Cabot Lowell. However, most built small-scale factories on the falls of a river for waterpower. A few steam-powered mills were built in towns without enough waterpower.

Southerners such as Hinton Rowan Helper encouraged industrial growth in the South.

“We should . . . keep pace with the progress of the age. We must expand our energies, and acquire habits of enterprise and industry; we should rouse ourselves from the couch of lassitude [laziness] and inure [set] our minds to thought and our bodies to action.”

— Hinton Rowan Helper, *The Impending Crisis of the South: How to Meet It*



A large amount of cotton was sold to textile mills in the northeastern United States.



Textile mills in Great Britain were the largest foreign buyers of southern cotton.

ANALYSIS SKILL

DRAWING CONCLUSIONS

Why do you think cotton was so important to the South's economy?

Joseph R. Anderson followed Helper's advice. In 1848 Anderson became the owner of the **Tredegar Iron Works** in Richmond, Virginia—one of the most productive iron works in the nation. It was the only factory to produce bridge materials, cannons, steam engines, and other products.

Industry, however, remained a small part of the southern economy. Southern industry faced stiff competition from the North and from England, both of which could produce many goods more cheaply. And as long as agricultural profits remained high, southern investors preferred to invest in land.

READING CHECK Making Inferences Why were there fewer industries in the South?

SUMMARY AND PREVIEW You have read about how southern farmers worked to improve farming methods. In the next section you will read about the structure of southern society.

FOCUS ON READING

What kind of Web site would you look for to learn more about the Tredegar Iron Works?

Section 1 Assessment

go.hrw.com

Online Quiz

KEYWORD: SC7 HP13

Reviewing Ideas, Terms, and People

- a. Describe** How did the **cotton gin** make processing cotton easier?

b. Draw Conclusions Why had slavery been on the decline before the invention of the cotton gin? How did slavery change as a result of the cotton gin?

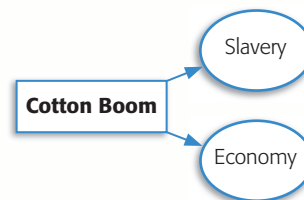
c. Predict How might the rise of cotton production and slavery affect Southern society?
- a. Identify** What areas of the United States made up the **cotton belt**?

b. Evaluate Do you think the South should have paid more attention to its industrial growth? Why?
- a. Describe** What other crops and industries were encouraged in the South?

b. Make Inferences Why were some southern leaders worried about the South's reliance on cotton?

Critical Thinking

- Identifying Cause and Effect** Review your notes on the causes of the cotton boom. Then add to your graphic organizer by identifying the effects of the cotton boom on the South.



FOCUS ON WRITING

- Noting Life on the Cotton Farm** In your notebook, note how Whitney's gin changed life on the farm. Also note other details about cotton farming you could include in your sketch.