



cotton culture during the antebellum period

During the first half of the 19th century, cotton defined the South as no other crop did before or since. Its growing range and yield were enormous, encompassing at least a dozen states from North Carolina to Texas and producing at rates that doubled every decade between 1820 and 1860. Already by 1820, cotton accounted for nearly 50 percent of the value of U.S. exports. It also brought great growth to the region, as the population, despite the relocation of thousands of Native Americans, increased fivefold. During the 1840s and 1850s, the population grew from 7 million to 11 million. Among them were as many as 3.5 million slaves, whose labor was central to the success of medium-sized farmers and large planters alike. By midcentury cotton was indelibly associated with the southern economy, lifestyle, and political outlook, and for good reason: By 1860 the United States produced and exported 4.5 million bales of cotton (2 billion pounds), which constituted twothirds of the world's total cotton production and nearly 60 percent of the nation's exports by value. And while 75 percent of all cotton was exported to England and the mid-Atlantic states, the remainder ended up in the textile mills of New England, where a cordial and profitable economic connection had evolved between factory and plantation owners.

Accounting for more than 65 percent of the world's cotton by the 1850s, the south was a major contributor to the U.S. national economy. In 1855, David King published *Cotton Is King*, in which he noted that cotton was royalty, in constant international demand for textiles and other uses. The erosion of the practices that built an effective single-crop economy—on economic, political, and moral grounds—marked the later antebellum years and laid the foundation for the coming civil war. This dogged overreliance on a single crop, however, stagnated the southern economic infrastructure, especially compared with the rising industrialization and central financing of the North. This ultimately laid the seeds for defeat in the Civil War. But the cotton culture ran deep throughout the fabric of southern life, and it was not until 1865—and then at the point of Union

bayonets—that "King Cotton" and the slavery sustaining it were effectively dethroned.

Before the early 18th century, tobacco and rice were the primary commercial crops in the South, and both depended on slave labor. Although the southern states of Virginia and Maryland had successfully raised tobacco in the late 18th and early 19th centuries, with production levels climbing to what they had been before the Revolutionary War, by the 1810s and 1820s they had become transformed by cotton. Tobacco, which had yielded 15 percent of the value of U.S. exports in 1820 brought only 6 percent of that amount in 1845. Rice had also been an important export crop, but beginning at the end of the 18th century, exports stagnated and remained low until the 1850s. In the early 19th century, sugar developed into an important commercial crop, first in the Upper South and later in the Gulf region, and would be another slave-based crop that provided no economic reason for the South to free slaves, as would occur in the North during the late 18th and early 19th centuries.

At the same time, a new crop was being grown: cotton. It arose to serve an increasing export market for textile businesses in the newly industrialized Britain. But the type of cotton being grown, long-staple cotton, could be raised successfully only in the sea-island areas of Georgia and North and South Carolina. Another variety, short-staple cotton, was more geographically adaptable but had gummy seeds that were too labor-intensive to remove by hand and keep the crop profitable. The success in 1793 of Eli Whitney's invention of the cotton gin, which removed seeds from cotton, transformed short-staple cotton harvesting and began its titanic expansion across the South and West. In 1815, southern cotton production stood at 150,000 bales (one bale equals 500 pounds); by 1826, it was 600,000 bales per year; by 1851, it had reached 2.4 million bales per year.

Since their initial migration south and west to Alabama and the western parts of the Carolinas, Florida, and Arkansas, white planters fought with several Native American nations including the Creek, Cherokee, and Choctaw for control of the region. Agreements such as the 1814 Treaty of Fort Jackson ceded former Native American lands to the U.S. In the 1830s, nations in the Southeast including the Choctaw, Cherokee, and Chickasaw were relocated west of the Mississippi River, some traveling along the Trail of Tears to Oklahoma. Even nations that adopted settlers' ways, such as the Cherokee, were forced to remove themselves from the South during the 1830s. Ironically, many of the so-called Five Civilized Tribes

adopted slavery and cotton growing in their new homeland, a circumstance that contributed to their siding with the Confederacy in 1861.

At the same time (and continuing through 1860), up to a million slaves were brought to the South, particularly to the millions of acres of the soil-rich Lower South. To farmers and planters, slaves provided a secure, self-perpetuating source of labor that increased at the rate of 30 percent each decade between 1820 and 1860. Slaves were considered even more valuable to agricultural success than they had been two or three decades earlier, before the rise of cotton. As a result, the South considered any move away from slavery to be a threat to self-preservation. Accordingly, southern support for the emancipation of slaves nearly vanished. While in the 1820s southern antislavery societies outnumbered those in the North, they were virtually nonexistent in the South by the late 1830s. In addition, the number of slave states in the region more than doubled, from six to 15. Following the abolition of the African slave trade in 1808, there arose an equally insidious domestic slave trade, whereby surplus chattels from the tidewater regions of Virginia and Maryland were sold to new masters in the cotton-producing regions of the Old Southwest. Not only were slaves transported there in chains and work gangs, but their sale frequently involved the breakup of established family units. It is estimated that by 1860 nearly 1 million blacks had been forcibly relocated to a harsh existence in the Deep South.

Yet only a minority of the population was slaveholders, a number that decreased due to increased slave costs over the course of the 19th century. In 1850, 347,825 of 6 million white residents of the South owned slaves. Further, as fewer planters owned slaves, cotton production, property, and wealth became concentrated in those families holding the largest number of slaves. Of the 10,000 families holding 50 or more slaves, the wealthiest among them were the 3,000 families owning more than 100 slaves each. About 90,000 farmers owned between 10 and 99 slaves; about 255,000 other farmers owned fewer than 10 slaves. Two percent of slaveowners owned half of all U.S. slaves.

There was great variety among slave-owning cotton farms in the South. While the 3,000–4,000 large slave-owning plantations had a greater role in cotton production by mid-century, much of 19th-century cotton was grown on small to medium-sized farms with limited slave labor. For example, a middle-class planter might have 10–50 slaves on his farm, which, if managed correctly, could yield substantial profit; a workingman's farm would have less than 10 slaves. Generally,

such small farms were characterized by their overall poverty, with owner and slave working side by side in the field on cotton that yielded only \$125 per year. As Mark Twain described it in *The Adventures of Huckleberry Finn*, this was "one of those little one-horse cotton plantations" with a "rail fence around a two-acre yard ... [and] some sickly grass-patches in the big yard."

Life on large plantations was vastly different. The family home on the site would have been fashioned in what architect Frederick Law Olmstead called "a Grecian style," with wooden slave housing situated far from the house. Slave labor was monitored by the overseer, whom the plantation owner hired to discipline slaves and maintain profits. An intelligent and able slave was given the job of driver; he was the overseer's closest subordinate and was responsible for managing the slaves. One common factor for all slaves was the long workday, which ran for 12–15 hours per day, and longer if the moon allowed.

The demands and rewards of the "King Cotton" economy resulted in a fivefold population increase during the first six decades of the 19th century, but it kept the South an unsophisticated agricultural economy. Because it produced few other goods, it needed to import goods from northern manufacturing states; and because prices for cotton fluctuated greatly, the South had little capital to invest in manufacturing and therefore had to purchase goods and rent storage space for cotton from northern suppliers on credit. In the 19th century, such practices left the South in a chronic state of financial instability. The social implications of the cotton culture were equally stark; the rise of large plantation systems retarded the growth and maturation of urbanized areas and, with it, viable banking and transportation systems. An unsavory result of this state of affairs was that yeoman farmers were forced to turn to their richer neighbors for assistance in marketing their produce. Given the near-total absence of social services, virtually every aspect of social life was the de facto domain of the landed gentry, including community services, education, and government. Church life was the only facet of private life available to non-slaveholding whites. This overt dependency stimulated the rise of a dominant planter class wielding political influence far in excess of its actual numbers, and it is no exaggeration to say that the abiding interests of the planters came to represent or embody the basic interests of the South in general.

Some southern spokesmen attempted to counter encroaching northern dominance by rallying the next generation to embrace industrialism. In 1849, according to an editorial in the *Sumpter Banner* of South Carolina, the current generation should feel compelled to cast aside the timeworn call to preserve gentility and prepare "the rising generation for mechanical business." But it was too late to catch up to the urbanized, industrialized North. In the northeast, one-third of residents lived in cities and towns; less than 13 percent of residents of the Southeast were similarly urbanized. The distinction between industry and agriculture was similar: As late as 1860, 60 percent of northern workers were employed in nonagricultural jobs, while only 16 percent of southerners were employed in nonagricultural work. That meant there were 1.3 million industrialized workers in the North but only 110,000 in the South.

Meanwhile, the South encountered an immediate, chronic threat to cotton planting: overplanted, exhausted crop land. In 1826, the Upper, or old, South, accounted for more than half of cotton produced. But the cultivation of a single crop depleted the soil and reduced yields dramatically—in some areas, up to 50 percent. In response, planters entered what would become a common situation: being compelled to move westward for fresh soil. In the 1840s and 1850s, planters and slaves from the formerly fertile cotton states of Maryland, Virginia, and South Carolina moved to the rich Gulf and Mississippi River states of Louisiana, Alabama, Arkansas, Mississippi, and Texas. Over the next several decades, they moved even farther west, to Arizona and California.

While cotton production in the Lower South soon doubled or tripled the production of the old South, it resulted in wealth for only the few large plantations and farms, which were able to replenish their ranks of slaves from within. In response, smaller farms unable to find or afford slaves called for the resumption of African slave trade, which had been outlawed for several decades. This position, which stood in opposition to national law and Northern sensibilities, became one of the many factors that hastened the Civil War and brought an end to the "peculiar institution" of slavery and the cotton culture it supported.

Further Information

American Social History Project, *Who Built America: Working People and the Nation's Economy, Politics, Culture, and Society,* Vol. 1 (New York: Pantheon Books, 1989–92)

David L. Cohn, *The Life and Times of King Cotton* (New York: Oxford University Press, 1956)

Neil Foley, *The White Scourge: Mexicans, Blacks, and Poor Whites in Texas Cotton Culture* (Berkeley: University of California Press, 1997)

Angela Lakwete, *Inventing the Cotton Gin: Machine and Myth in Antebellum America* (Baltimore, Md.: Johns Hopkins University Press, 2003)

John Mayfield, *The New Nation:* 1800-1845, rev. ed. (New York: Hill & Wang, 1982).

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Agriculture in the South

IN THE 1700s a variety of crops was grown alongside cotton in the southern United States: Georgia and the Carolinas produced rice and indigo, tobacco thrived in Virginia and Maryland, and Louisiana grew sugar cane. Cotton was profitable but difficult to raise because of the laborious process of separating the seeds from the fiber by hand. But after Eli Whitney's invention of the cotton gin in 1793, cotton became the number one crop in the South. "King Cotton's" reign spread across multiple states, taking hold also in the new southern states of Alabama, Mississippi, and Louisiana. The cotton industry not only formed the foundation of the region's economy but institutional-

ized the practice of slavery. When cotton became the South's principal moneymaker, the South became even more dependent on the use of slave labor for its economic well-being. Many poor to mid-level farmers embraced slaveownership as a goal, for it meant an increase in social status as well as in their standard of living. Thus, attitudes among southerners began to change: Instead of defining slavery as a necessary evil that would eventually wither away in a free-market system, southern planters adopted a paternalistic outlook that trumpeted slavery as a way to care for workers from cradle to grave.

Facts and Figures

1790 Total exported cotton: 18,000 pounds.

1800 Total exported cotton: 150,000 pounds.

1790 Tobacco equaled 15% of America's exports.

1860 Tobacco equaled 6% of America's exports.

Between 1800 and 1860, cotton production doubled every 10 years.

By 1860 cotton had become the United States' number one export.

By the mid-1850s northern bankers profited over \$100 million annually from the slave-based cotton industry.

By 1860 the value of U.S. slaves totaled over \$2 billion.

1820–1860 Slaveowning population doubled from 200,000 to

Division of Labor

400,000.

On Large Plantations:

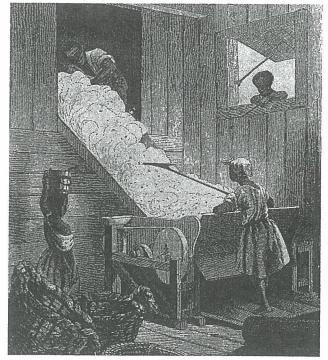
- · Slaves did all hard labor.
- Overseers managed work flow and "motivated" slaves through verbal intimidation and physical violence.
- Plantation owner was boss of all; took care of financial transactions, legal agreements, and contractual matters.
- Cotton plantations used the gang labor system—gangs of slaves worked under close supervision of overseers, with pace of work set by fastest-working slave.
- Tobacco and rice plantations required more skilled labor and used the task-based system—groups of slaves assigned specific tasks by day, week, or season.

On small farms:

 Slaves did most of the hard labor, while the farm owner acted as overseer and deal maker.

Tasks Involved in Cotton Production

- · Plow fields
- Plant seeds
- · Weed, water, and fight pests
- Harvest cotton (pull fiber out of boll portion of plant)
- Remove seeds from fiber (one at a time by hand, until invention of cotton gin)
- · Clean fiber
- · Air-dry fiber
- Pack fiber into large bales for shipping
- Drive wagonloads of bales to boats
- Load boats (though sometimes immigrant labor was hired for this task)
- The labor involved in tobacco production was basically the same, except for harvest. Tobacco leaves were first primed by picking leaves off the stalk as they opened, then the entire stalk was cut down with a hatchet-type tool. Finally, the leaves were cured (preserved) by air-drying, controlled fire, or use of a fluevent system.



Slaves working with a cotton gin, 1800

The Cotton Gin

In 1793 Massachusetts-born manufacturer and inventor Eli Whitney (1765-1825) invented a machine called the cotton gin, which revolutionized the processing of cotton and the economic structure of the South. Prior to the cotton gin, seeds were removed from cotton fiber by hand, a tedious process that confined southern planters to growing only "long-staple" cotton, as it contained fewer seeds than the "short-staple" variety. Whitney's machine used a crankoperated tooth-edged cylinder that sped up seed removal. One cotton gin could do the work of 50 people. The machine became an instant success, but it did not decrease the workload of slaves. because the booming new industrial textile mills of Great Britain and New England greatly increased the demand for raw cotton. This in turn demanded an increase in the slave population in order to work the fields and process bigger and bigger loads of cotton. The slave population of the southern states grew from 200,000 in 1790 to nearly 4 million by 1860. By that time America's southern plantations were producing two-thirds of the world's cotton. Northern merchants and bankers also profited from the cotton industry, a business that institutionalized the use of slave labor in the United States.

Inventions That Shaped the World

COTTON COTTON GIN

NANCY ROBINSON MASTERS

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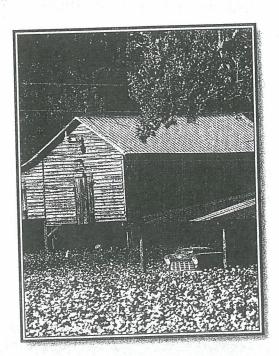
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Avalanche of Change

"An invention can be so valuable as to be worthless to its inventor."—Eli Whitney, 1804



Cotton is grown on many farms in the southern United States.

The Cotton Belt began as a vast area of the southeastern United States where cotton was the main cash crop before the Civil War. Today, the Cotton Belt stretches from North Carolina to California. Between fifteen and twenty million bales of cotton are produced there each year, making the United States the second-largest cotton-producing country in the world.

Top Ten

According to the U.S. Department of Agriculture, in 2003–2004 the top ten cotton-producing countries in the world were:

1. China

6. Turkey

2. United States

7. Greece

3. India

8. Australia

4. Pakistan

9. Syria

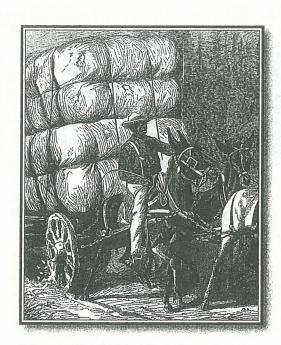
5. Brazil

10. Mali

Paving the Way

Southern planters were not prepared two hundred years ago for the transportation problem that accompanied the increase of ginned cotton. Wagons loaded with 400-pound (181-kg) bales had to travel from the plantation gin to canals, rivers, and seaports for shipment to textile mills. The wagons routinely sank into the roads that were hardly more than dirt trails. Slaves had to lay wooden planks to "pave" the wagon roads.

These plank-paved roads established the routes that are now part of the modern highway system of the South. Better roads are just one example of how people using Whitney's cotton gin started an avalanche of change in



Wagons loaded with bales of cotton traveled over dirt roads to get to rivers or ports where the cotton could be shipped to textile mills.

the South. This avalanche also altered the course of the entire nation.

The Road to Economic Prosperity

By 1801, cotton produced in Georgia and South Carolina had soared from 2 million to 37 million pounds (907,185 kg to 16,783,000 kg)! Production doubled in the United States each decade thereafter as horse-driven and water-powered gins began whirring in other southern

states. In 1850, almost 60 percent of the United States' exports came from the cotton gins of the South.

Planters used their profits to purchase more land to grow more cotton. More cotton resulted in cheaper prices, and cheaper prices made cotton the most desired fabric in the textile industry. David Christy, author of *Cotton Is King*, later restated what many southerners had been saying for a long time: "The cotton gin made the cotton plant the sole possessor of the South. It was, in fact, the soul of the South."

Did You Know 3

The cottonseed from one bale of cotton will produce enough oil to cook nearly six thousand snack-sized bags of potato chips.

The road to economic prosperity in the South had plenty of rough spots:

- Competition among wealthy southern planters increased the price of land so much that it hindered the growth of industry and cities.
- The price paid for cotton by textile mills rose and fell frequently. It was said that a planter could "get out of bed poor and go to bed rich," or vice versa!
- Drought and destruction from infestations of insects such as the boll weevil constantly threatened to ruin those who planted all of their cropland in cotton. Boll weevils, such as those that invaded the South in the late nineteenth century, could destroy a crop in one day.

Many southern planters were convinced they could overcome any economic adversity as long as they had cheap labor. Just as northern industrialists relied on low-paid workers, including children, to keep factories and mills operating, planters relied on slave labor to keep the South's agricultural economy moving.

From Bags to Bales

Ginned cotton was originally packed into long, round bags. Each bag filled with cotton weighed 150 to 250 pounds (68 kg to 113 kg) and could be carried by two people. By 1800, large presses were used to squeeze cotton into 400-pound (181-kg) square bales. Mules or oxen harnessed to a lever walked in a circle turning a wooden screw press that packed the cotton into square molds. The bales turned out of the molds were weighed, covered with cloth, tied with ropes or metal bands, and stacked several layers high onto wagons for transport.

Screw presses were used extensively for almost one hundred years. Today, there are four types of gin presses. Each type is named according to the bale it produces—flat bale, modified flat bale, gin standard density bale, and gin universal density bale. These presses produce different sizes of bales. In most cotton gins today, cotton is packaged in a double-box press. The lint is first compacted in one press box by a piece of machinery called a tramper. The press box is rotated, and the lint is pressed into gin universal density bales, bales that are pressed to weigh 28 pounds (13 kg) per square foot each. More than 90 percent of the bales produced at gins in the United States are gin universal density bales.

The Road to Social Tragedy

Although Whitney's cotton gin had many positive effects on the economy of the South, it had disastrous effects on the institution of slavery. Instead of reducing the need for slaves as he had hoped, the cotton gin created the need for more and more workers to plant, harvest, bale, and transport cotton grown on the plantations, which were spreading westward.

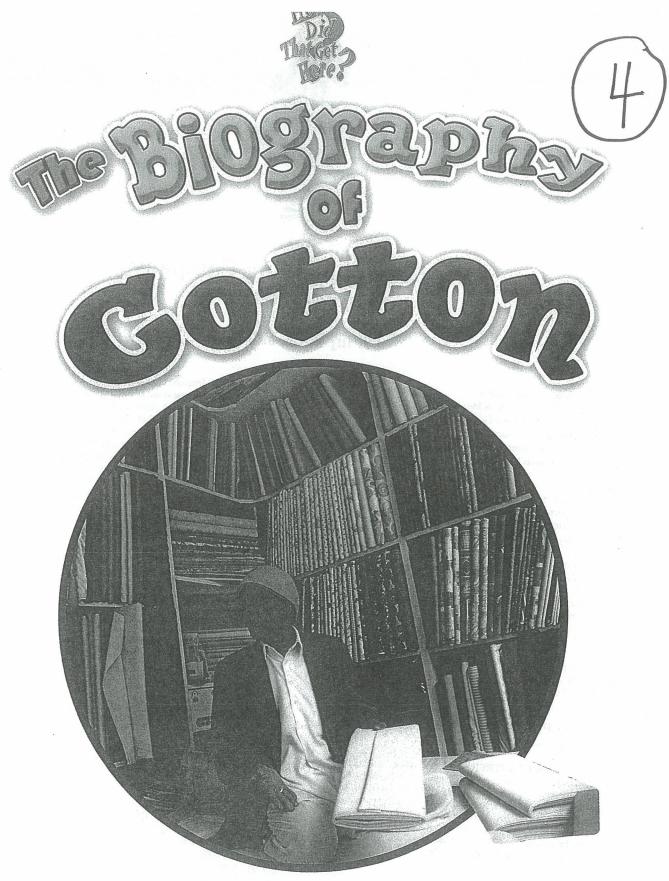
The slave trade flourished. From 1790 until Congress banned the importation of slaves in 1808, more than eighty thousand slaves were brought to the United States. By 1860, there were fifteen slave states instead of six. One out of every three people living in the South was a slave.

The Road to Political Catastrophe

"You dare not make war on cotton! Cotton is king." These fiery words, spoken by South Carolina senator James Henry Hammond in 1858, were directed at New York senator William H. Seward, a determined abolitionist. Seward had warned Hammond that war might be necessary in order to stop slavery in the southern states.

Like most southerners, Hammond believed cotton was a more powerful weapon than any sword the North could wield to abolish slavery. The political battles among the cotton-producing states of the South and the antislavery states of the North climaxed in 1861 in the political catastrophe known as the American Civil War.

The Confederate States of America, consisting of eleven Southern states that seceded from the United States, relied on sales of cotton to foreign countries for the money it needed to buy supplies. This reliance on cotton



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For my mom, Sandy

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Cover: In India, most of the cotton crop is still picked by hand. India is a top producer of cotton.

Title page: A cloth merchant in a bazaar stall pulls out a bolt of cotton fabric to show his customers. Cotton fabric is sold this way in the cities and towns of India and Pakistan.

Contents page: Rows of cotton plants with bolls ready for picking.

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The Cotton Gin

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New inventions sped up the process for making cotton cloth and the demand for raw cotton rose. It took about one full day to pull free one pound of cotton fiber from the seeds. Farmers in the southern United States were limited in the amount of cotton they could produce because cotton was so difficult to harvest by hand. Most of the raw cotton needed to feed England's cotton factories was being supplied by India.

 Eli Whitney's cotton gin was a revolution in cotton processing.

Supply and Demand

Along the coasts of the southeastern United States, a variety of cotton called Sea Island cotton was grown and harvested. Sea Island cotton has long fibers that are easily removed from the seeds, but it only grows in coastal areas. In the interior, a type of cotton called upland cotton grew. Few planters grew upland cotton as a cash crop because the seeds were hard to extract from the sticky fibers. Other cash crops that grew in the South at this time were rice, which required a large amount of labor, and tobacco, which quickly drained the soil of its nutrients.

Whitney's Cotton Gin

Eli Whitney invented a machine called a

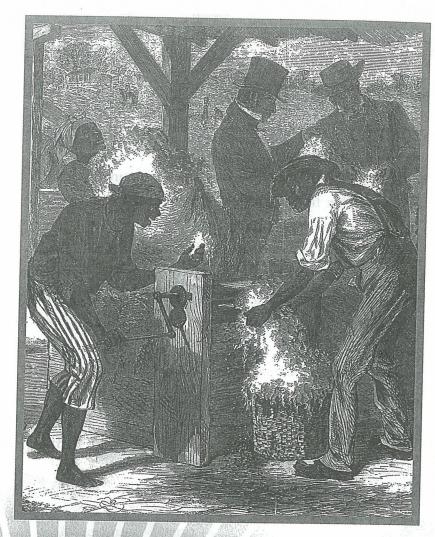
cotton gin, or engine, in 1794. The cotton gin sped up the amount of cotton that could be pulled free of the seeds to 50 pounds (23 kilograms) by one worker in a single day. Whitney invented the machine after watching a slave do the work by hand. His gin worked by mimicking the movements of human hands picking seeds. To do the work of fingers pulling apart the fibers, Whitney built a rotating drum with little hooks on it. A wire

filter held the seeds back while the fibers were pulled away. A brush rotating faster than the drum cleaned the lint off the hooks.

The Cotton Rush

Plantation, or large farm, owners immediately began to plant upland cotton after they learned of Eli Whitney's invention. Whitney entered into a partnership with the manager of Mulberry Grove, the plantation in Georgia where he had been staying. Together, the men decided they would build cotton gins and sell them for the price of one-third of plantation owners' cotton crops. Plantation owners found this price too steep. Their cotton was also ready to be harvested faster than the gins were built, so they made their own cotton gins, based on Whitney's design.

(right) Slaves use Whitney's cotton gin to process raw cotton.



Patents and Protection

Eli Whitney was slow in applying for a patent for his cotton gin. A patent is a government license that recognizes the inventor's machine and gives him or her the sole right to make, use, or sell the invention.

Whitney was awarded a patent for his invention in 1794, but by that time, so many planters had built their own gins that Whitney could not protect his patent. In 1801, Whitney received a small compensation from the southern states for the invention that brought great wealth to the South.

Eli Whitney attended Yale College in Connecticut. Before that, he made his living as a blacksmith, a nail maker, and a maker of lady's hat pins.

King Cotton D*** D*** D***

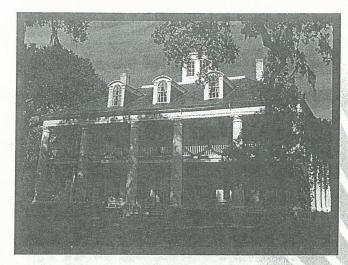
Cotton boomed in the southern United States after the invention of the cotton gin. In an area that came to be known as the Cotton Belt, cotton was the main cash crop from the 1800s to the 1900s. The Cotton Belt included the southeastern states of North Carolina, South Carolina, Georgia, Alabama, and Mississippi, as well as western Tennessee, eastern Arkansas, Louisiana, eastern Texas, southern Oklahoma, and small areas of southeast Missouri, southwest Kentucky, northern Florida, and southeast Virginia. The climate of these areas allowed for cotton to thrive. Many farmers abandoned other crops, such as rice and tobacco, and plantations were established to grow only cotton. On cotton plantations, growing and harvesting cotton was done by slaves.



(above) Slaves who planted, cared for, and harvested the cotton crops lived on the plantations in poorly-built wooden shacks

(below) Major cities, such as New Orleans, Louisiana, became important centers of trade during the cotton boom. Exchange buildings were used to buy and sell cotton.





(above) Planters and their families lived in grand mansions, built with the profits of the cotton trade.

The Cotton Market

Agriculture was the main business of the South and its economy grew because of the demand for cotton. Cotton was shipped to the North and to England to be used in cotton mills. In 1790, the United States produced 10,000 bales of cotton. Fifty years later it produced 1.5 million bales. At that time, American cotton accounted for 60 percent of the world's cotton and two-thirds of American exports.

Life in the South

The owners of cotton plantations were called planters. They grew rich from the sale of cotton. They built large plantation homes on their estates where they lived with their families. Wealthy planters also built magnificent buildings and churches in southern cities such as Savannah in Georgia, Natchez and New Orleans in Louisiana, and Charleston in South Carolina. Most of the people who lived in the South were slaves who worked in the fields. Some slaves also worked in planters' homes, cooking, cleaning, and looking after planters' children.

American Civil War

By the mid-1800s, the South was running out of new land for growing cotton, so southern planters looked to the West for more cotton lands. In the northern states, members of a growing movement called the Abolition movement did not want slave states to exist. In the northern states, the economy was based on industry, which did not rely directly on slave labor. Beginning in 1861, the North and South fought one another in a bloody civil war. One of the main issues of the war was slavery. Southern plantation owners and other white Southerners felt they had a right to own slaves while in the North, abolitionists argued that the slaves should be set free. In 1865 the South lost the American Civil War



Poverty and hunger were a reality for many in the South after the war.