Lessons Ideas & Links: Connecting to Standards

Curiosity in the Classroom: A Closer Look

Without informing students of the name or function of this primary source, have students examine images of the object and infer as to its creation and function. Click here for a viewing guide with more images, details and a 3-D model of this cotton gin.

Ask students:
- What do you see?
- How do you imagine each part functions? How does each part contribute to the function of the whole?
- What materials were used to create this item?
- Was this a mass produced item or one of a kind? What do you see that informs your inference?
- What was its purpose?
- What does this primary source say about Fulton County at this time?

Lesson Ideas & Links:
- Elementary School Connections
- Middle School Connections
- High School Connections
- Related Primary Sources
- Ask the Teaching Museum
- Additional Online Resources

For more information and resources or to connect with staff at the Teaching Museum, contact us at archives@fultonschools.org

Technology & History: The Cotton Gin

As a society obsessed with new technologies and inventions, marvelling over the latest cell phone and the promise of driverless cars, we often do not consider the full impact of these inventions on the world around us. This edition of Curiosity Corner explores how one device—invented over two centuries ago in Georgia—dramatically changed the American economy and impacted the lives of millions across the world. This invention was the cotton gin (patent 72X), created by Eli Whitney in 1793. While its purpose was simple—to separate cotton seeds from cotton lint—its legacy is complicated.

This Eagle Cotton Gin from the 1880s is on exhibit at Teaching Museum North in Roswell, on loan from the Rich Hawkins Family. Although it is similar in size and function to Whitney’s original, this design was produced nearly a century later and drew its power from a compact combustion engine—an even newer invention of the 1800s. (Click here to see a similar model in action.) Connected to the engine, a wide belt turned the metal, side-mounted wheel, which powered the gin’s system of cylinders and “teeth” through which the cotton travelled. Previously, cotton gins (short for “engines”) were powered by everything from hand cranks to horses and mules. Gins, like this one, were owned and operated on a single farm. Many variations were created by individual farmers to avoid paying the costs associated with Whitney’s patent.

To understand the impact of the invention of the cotton gin, one must consider the importance of cotton to the American economy. Demand from all over the world made cotton a profitable crop, particularly in the 18th and 19th centuries. Southern planters took full advantage of this market and made huge profits. By the beginning of the Civil War, 80% of all the world’s cotton was produced in the United States.

Prior to the gin, a major obstacle to commercial cotton production was the difficulty in separating the valuable fibers from the seeds. It took a day for one person to remove seeds by hand from one pound of fiber. With a cotton gin, the same person could produce about 50 pounds of cleaned cotton per day. This radically altered the output and dramatically increased the production and profit for southern planters. With this innovation in the processing of cotton came an increase in demand for labor to plant and harvest the crop. In the American South, this labor force was predominately enslaved Africans.

Whitney’s invention permitted a boom in cotton production, resulting in huge profits for growers in the South and textile manufacturers in the North. Likewise, it dramatically increased the demand for slave labor, further perpetuating the human suffering of millions of enslaved workers. The number of the enslaved population reached 4 million by the time of the Civil War, as seen in this graphic of data from US census records.

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<thead>
<tr>
<th>Year (1860)</th>
<th>Slaves of Cotton</th>
<th>Enslaved Population</th>
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<tr>
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<tr>
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<tr>
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Growth of Cotton Production & Slave Labor