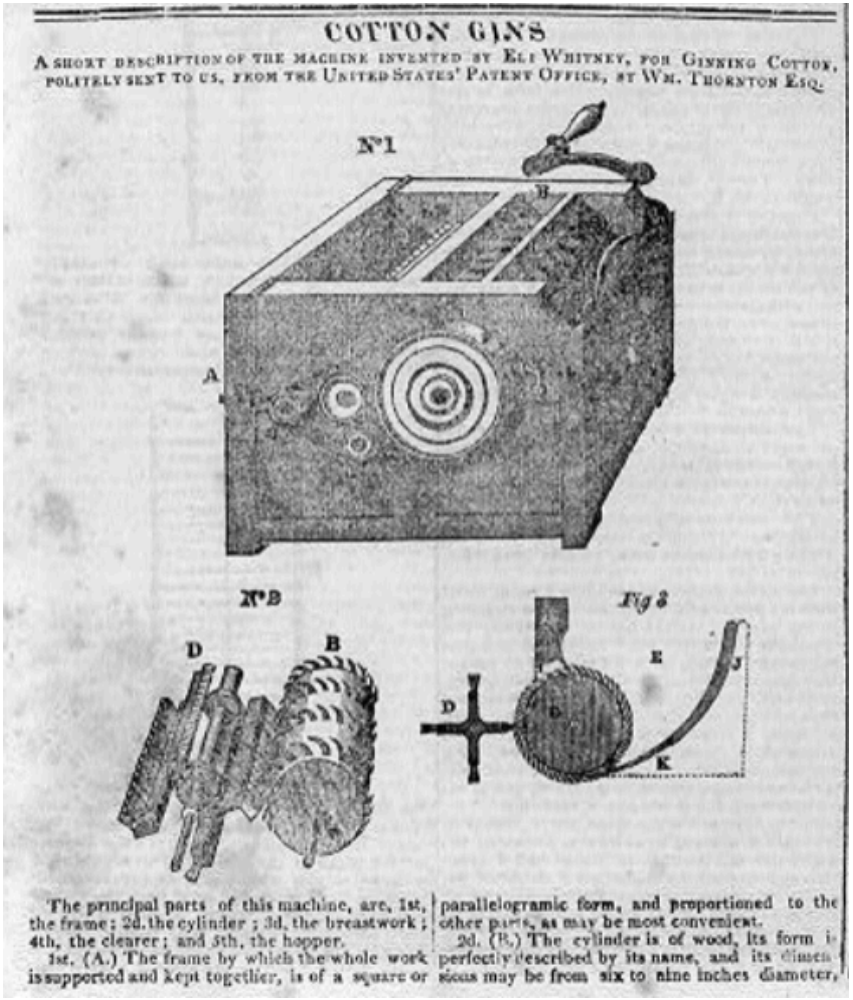
Did the cotton gin make life better?

United States History to 1865



COTTON GINS

A SHORT DESCRIPTION OF THE MACHINE INVENTED BY ELI WHITNEY, FOR GINNING COTTON, POLITELY SENT TO US, FROM THE UNITED STATES' PATENT OFFICE, BY WM. THORNTON ESQ.

N°1

N°2

Fig 3

The principal parts of this machine, are, 1st, the frame; 2d. the cylinder; 3d. the breastwork; 4th, the clearer; and 5th, the hopper.

1st. (A.) The frame by which the whole work is supported and kept together, is of a square or parallelogramic form, and proportioned to the other parts, as may be most convenient.

2d. (B.) The cylinder is of wood, its form is perfectly described by its name, and its diameter may be from six to nine inches diameter,

Newspaper image showcasing the patent for Eli Whitney's cotton gin. Public domain. Available at the Library of Congress: https://www.loc.gov/resource/cph.3b10211/

VIRGINIA SOCIAL STUDIES LEADERS CONSORTIUM

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AMERICAN HISTORICAL ASSOCIATION

Did the cotton gin make life better?	
Standard(s)	**USI.8: The student will apply history and social science skills to explain westward expansion and reform in America from 1801 to 1861 by** e. explaining technological advancements and innovations and their effects on life in America, including but not limited to the cotton gin, the reaper, the steam engine, and the steam locomotive.

The cotton gin, invented by Eli Whitney in 1793, made processing cotton much faster and more efficient, which helped the United States economy grow, especially in the South. It allowed farmers to clean large amounts of cotton quickly, making cotton a highly profitable crop. This led to increased trade, more textile production, and greater wealth for many plantation owners and Northern factory workers. In these ways, the cotton gin improved life for some Americans by boosting economic opportunities and industrial growth. However, the cotton gin also made life much worse for others. Because cotton became so profitable, Southern plantation owners expanded cotton farming and relied even more heavily on enslaved labor. As a result, slavery spread and intensified. This inquiry prompts students to consider how the invention of the cotton gin had positive impacts for certain groups and negative impacts for others.

Featured Sources

- Source A: Newspaper image of Eli Whitney's Cotton Gin
- Source B: New Georgia Encyclopedia Article: Cotton Gins
- Source C: Letters between Thomas Jefferson and Eli Whitney
- Source D: Image of "The First Cotton Gin"
- Source E: Slave Population Map
- Source F: Ship Manifest

Formative Performance Tasks

1. COLLABORATE: Students will work in pairs to analyze the sources and create a cost/benefit analysis of the cotton gin.

2. DELIBERATE: Students will assign weighted values to each of their identified costs and benefits to determine how important each cost and benefit is in addressing the compelling question.

3. PRODUCE: Students will craft a co-constructed answer to the question to be shared with the class.

Instructional Snapshot

Class begins with students considering the following warm up question: Can a new invention have both good and bad impacts? Prompt students to consider this question with some inventions that they would be familiar with like AI, Self Driving Cars or a new social media platform. Have students think-pair-share to discuss their responses and then have them share as a class -5 minutes.

Students will now have the opportunity to learn about an invention from the past that also had both positive and negative impacts. Their goal for the day is to determine whether or not the invention of the cotton gin was good for the United States. To do this students will analyze the source set and complete a costs and benefits chart of the cotton gin. (COLLABORATE) You may also want to frame these as pro's and con's or positives and negatives if you think students will struggle with the terms costs and benefits.

Students can work in partner groups to complete a cost/benefit chart. You may consider assigning each partner to identify either the costs or the benefits and then share with one another. - 20 minutes

After partner groups have completed identifying the costs and benefits presented in the sources, provide them with the opportunity to share their findings with either another partner group or the whole class. Then in groups of four have students deliberate how important each cost and benefit is in terms of answering the compelling question. Once students have completed assigning point values to each cost/benefit (DELIBERATE), have them total their point values to determine if the cotton gin was primarily good or bad for the United States. - 15 minutes

Students can then work in their groups of four or with their original partner to answer the compelling question (PRODUCE) - 5 minutes

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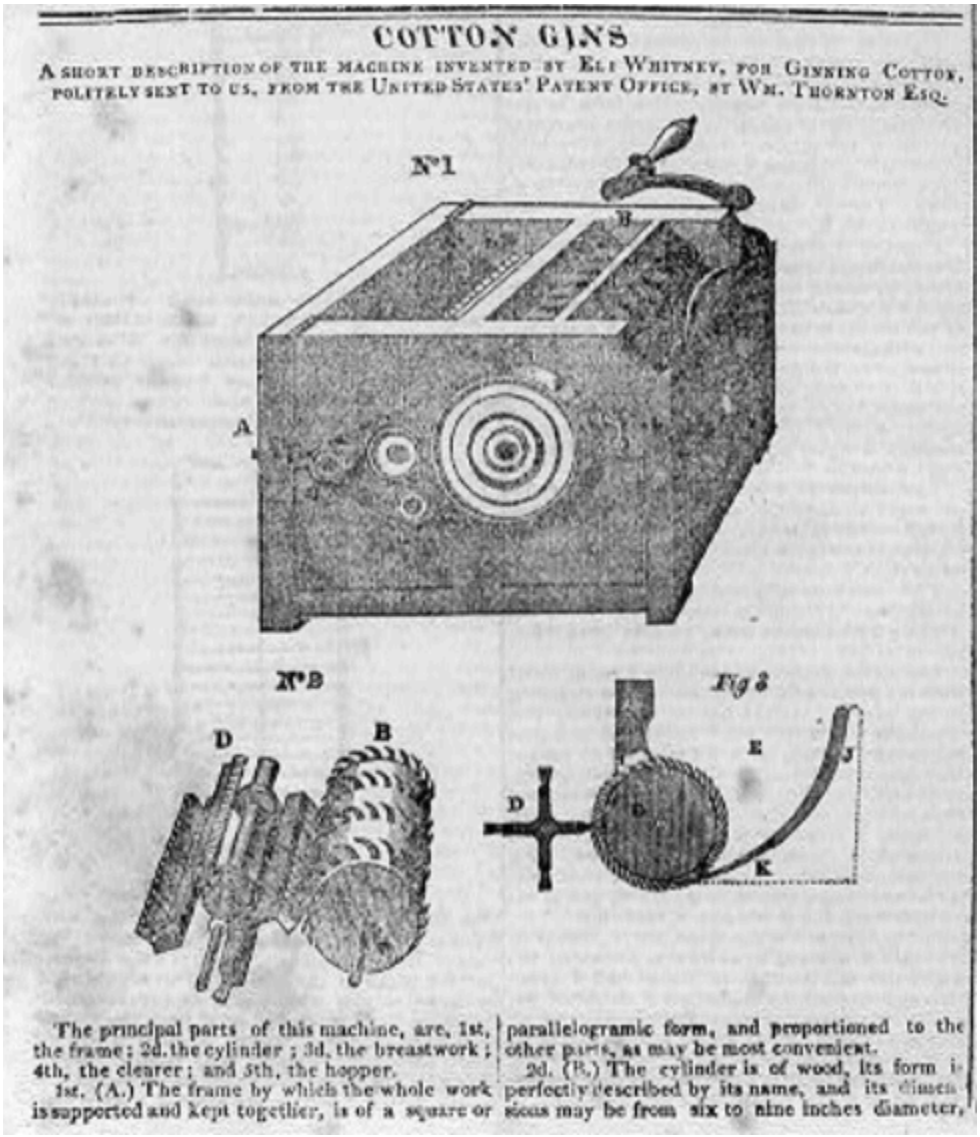

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When Eli Whitney first went to Georgia in 1793, a type of cotton called short-staple cotton was just starting to become a big crop there. Before that, farmers had grown a different kind of cotton called long-staple, or Sea Island, cotton near the coast since the end of the American Revolution (1775-83). But long-staple cotton couldn't grow inland. Short-staple cotton could grow inland, but it was hard for farmers to make money from it. The problem was that it took too long to remove the sticky green seeds from the cotton fibers. These fibers were short and covered the whole seed. People had to remove the seeds by hand, which was slow and didn't work well. Whitney once told a friend that he had never seen anyone clean more than one pound of cotton a day. At the time, Georgia's tobacco business was getting worse because the soil was worn out and there was too much tobacco. So, farmers really needed a way to make growing short-staple cotton profitable.

In 1793 Eli Whitney invented the cotton gin. It is a simple machine that separates cotton fibers from the seeds. The gin (short for engine) consists of wire teeth mounted on a boxed rotating cylinder that, when cranked, pulls cotton fiber through small grates to separate the seeds, while a rotating brush removes lint from the spikes to avoid jams.

Whitney's cotton gin had a huge effect on the economy. After he invented it, the amount of raw cotton produced almost doubled every ten years after 1800. The cotton gin was invented around the same time that the Deep South was opening up to white settlers. It helped people move west into areas where they could grow cotton. By the middle of the 1800s, America was providing three-quarters of the world's cotton.

The cotton gin made it easier to remove seeds from cotton, but it didn't reduce the number of enslaved people needed to grow and pick the cotton. As new inventions like spinning jennies and steamboats made it possible to weave and transport more cotton, the demand for Georgia's cotton grew. From 1790 to 1860, the percentage of enslaved people compared to the total population stayed about the same. However, the actual number of enslaved African Americans in the South increased a lot.

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Thomas Jefferson to Eli Whitney, 16 November 1793

To Eli Whitney

Sir

Your favor of Octob. 15. inclosing a drawing of your cotton gin, was received on the 6th. inst. The only requisite of the law now uncomplied with is the forwarding a model, which being received your patent may be made out and delivered to your order immediately.

As the state of Virginia, of which I am, carries on houshold manufactures of cotton to a great extent, as I also do myself, and one of our great embarrasments is the clearing the cotton of the seed, I feel a considerable interest in the success of your invention, for family use. Permit me therefore to ask information from you on these points, has the machine been thoroughly tried in the ginning of cotton, or is it as yet but a machine of theory? what quantity of cotton has it cleaned on an average of several days, and worked by hand, and by how many hands? what will be the cost of one of them made to be worked by hand? Favorable answers to these questions[1] would induce me to engage one of them to be forwarded to Richmond for me. Wishing to hear from you on the subject, I am Sir Your most obedt. servt

Th: Jefferson

Eli Whitney to Thomas Jefferson, 24 November 1793

From Eli Whitney

New Haven Nov. 24th. 1793.

Respected Sir

I received your favor of the 16th. inst. yesterday and with pleasure take the earliest opportunity to answer your enquiries concerning my machine for cleaning cotton.

It is about a year since I first turned my attention to constructing this machine, at which time I was in the State of Georgia. Within about ten days after my first conception of the plan, I made a small, though imperfect model. Experiments with this encouraged me to make one on a larger scale. But the extreme difficulty of procuring workmen and proper materials in Georgia, prevented my completing the larger one, untill some time in April last. This though much larger than my first attempt, is not above one third so large as the Machines may be made, with convenience. The cylinder is only two feet two inches in length and six inches diameter. It is turned by hand and requires the strength of one man to keep it in constant

motion. It is the stated task of one negro to clean fifty Wt. (I mean fifty pounds after it is separated from the seed) of the green-seed cotton Per Day. This task he usually completes by one oClock in the afternoon. He is paid so much Per lb. for all he cleans over and above his task, and for ten or fifteen Days successively he has cleared from sixty to Eighty Wt. Per day and left work every day before sunset. The machine cleaned fifteen hundred weight in about four weeks, which cotton was examined in N. York, the quality declared good and sold in market at the highest price.

I have, sir, been thus particular in relating the experience I have had of the performance of this Machine, that you may be the better able to judge of its utility and success.
I have not had much experience in cleaning the Black-seed cotton. I only know that it will clean this Kind considerably faster than it will the green-seeded, but how much I cannot say.
After the workmen are acquainted with the business, I should judge, the *real* expence of one which will clean a hundred Wt. Per Day, would not exceed the price of ten of those in common use.

I shall have another person concerned with me in carrying on the business after the Patent is obtained. We have not yet determined at what price we shall sell the machines, it will however be so low as to induce the Purchaser to give them a preference to any other. We are now erecting one on a large scale, to be turned by horses, for our own use, and I do not think it will be in our power to make any for sale this winter.

This, sir, is not the machine advertised by Pearce at the Patterson Manufactory. I never saw a machine of any kind whatever for ginning cotton, untill several months after I invented this for which I have applied for a Patent. Some time last spring, I saw it mentioned in a Savannah News-Paper that Mr. Pearce of New Jersey had invented a machine for ginning cotton, but there was no mention made of the construction. I have since understood that his improvement was only a multiplication of the small rollers used in the common gins. This is every thing I know concerning the machine to which I suppose[1] you allude in your Postscript.
I think the machine is well calculated for family use. It may be made on a very small scale and yet perform in proportion to its size. I believe one might be made within the compass of two cubic feet, that would cleanse all the cotton which any one family manufactures for its own use. The machine itself does considerable towards carding the cotton, and I have no doubt but by leaving out the clearer and adding three or four cylinders, covered with card-teeth, it would deliver the cotton completely prepared for spinning. You will be able to form a more perfect idea of the machine from the model, which will be so complete as to perform the opperation of seperating the cotton from the seed.

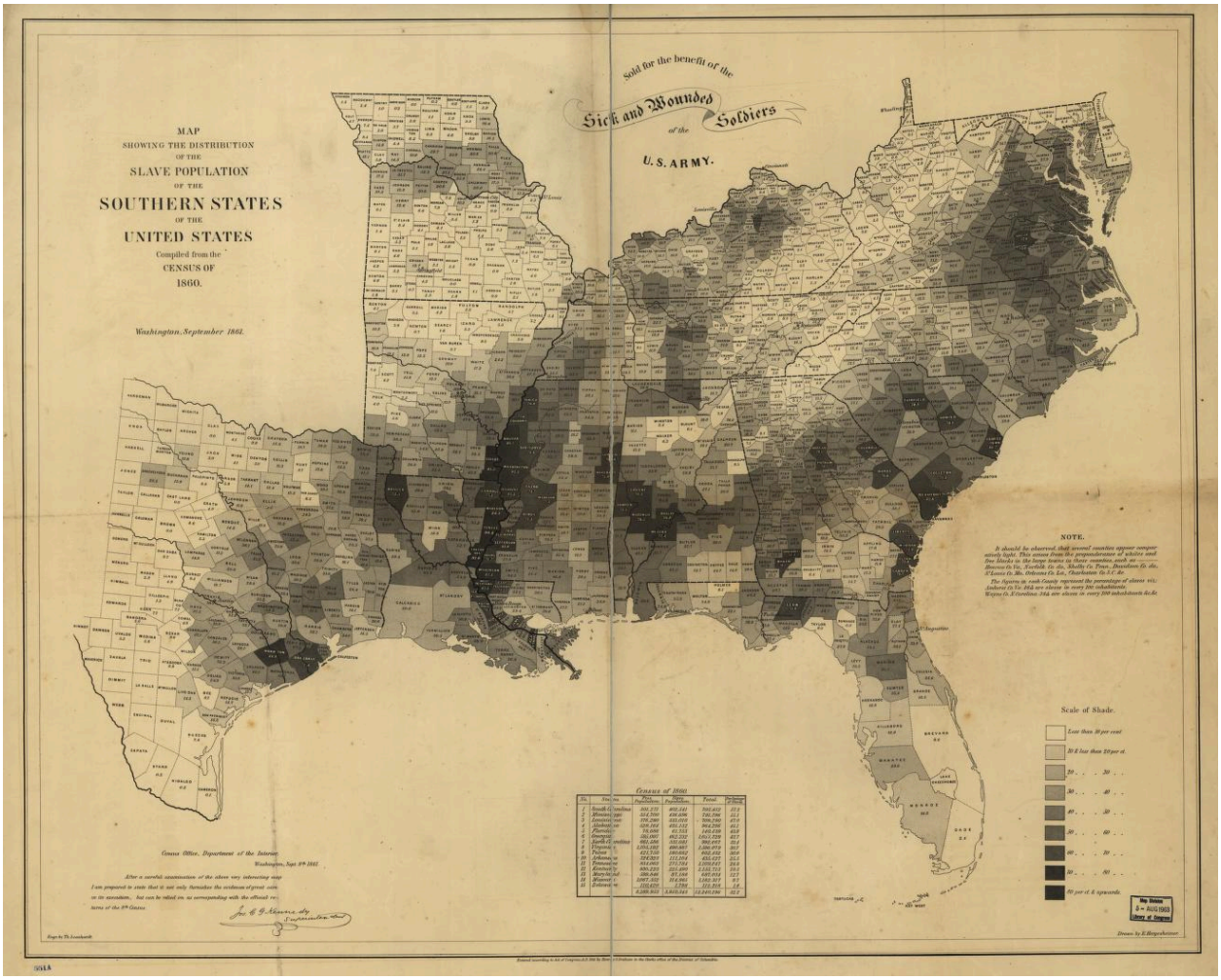
It is my intention to come to Philadelphia within a few weeks and bring the model myself; but per[haps] it will not be in my power, in which case I s[hall] send forward the model with an order for the patent. I am Respected Sir your very humbl. Servt.

Eli Whitney

Did the cotton gin make life better?	
Featured Source: Image of "The First Cotton Gin"	**Source D:** *The First cotton-gin / drawn by William L. Sheppard.* (n.d.). Library of Congress, Washington, D.C. 20540 USA. https://www.loc.gov/resource/cph.3a04710/

Public domain. Available at the Library of Congress: https://www.loc.gov/item/99447026/

Did the cotton gin make life better?	
Featured Source: Slave Population Map	**Source E:** *Map showing the distribution of the slave population of the southern states of the United States. Compiled from the census of 1860.* (n.d.). Library of Congress, Washington, D.C. 20540 USA. https://www.loc.gov/item/99447026/



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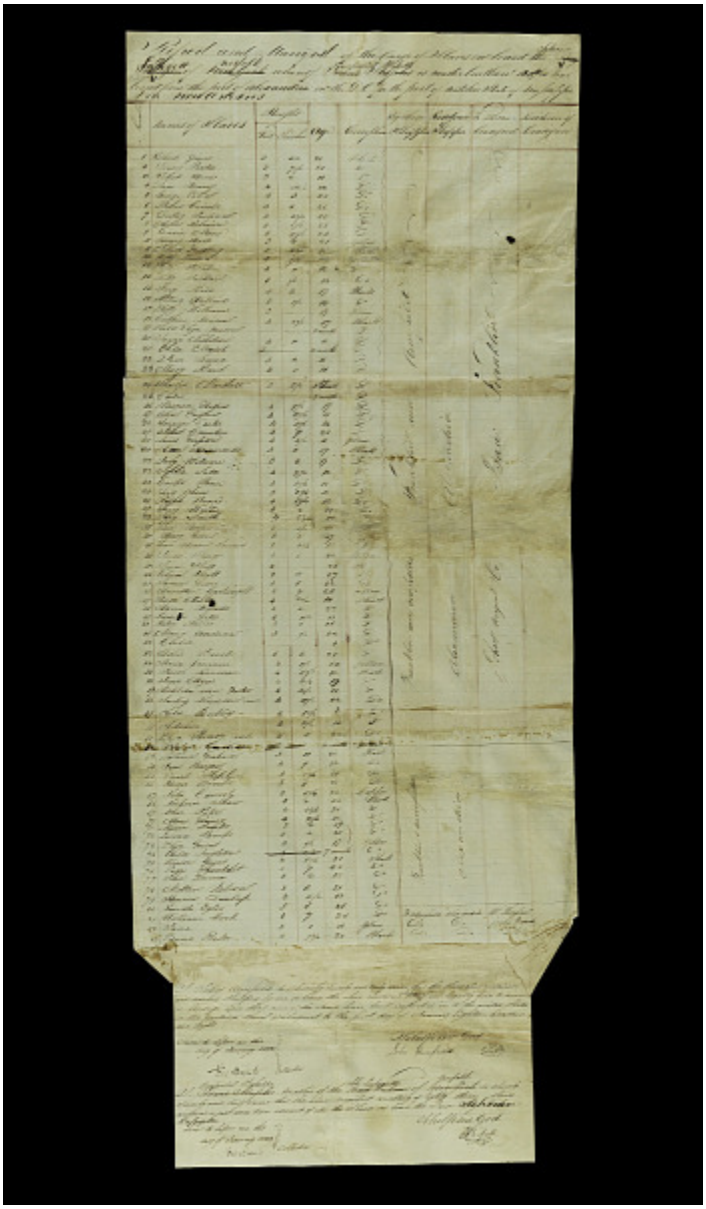
Featured Source: Ship Manifest	**Source F:** *Ship Manifest for Schooner, LaFayette*. (2025). National Museum of American History. https://americanhistory.si.edu/collections/object/nmah_1341099



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Item description: This reproduction of part of a ship's manifest names and describes 83 enslaved African Americans taken aboard the schooner *LaFayette* in Alexandria, Virginia, in 1833. Bound for Natchez, Mississippi, via New Orleans, the people had been sold "down river" into the domestic slave trade that brought some 1.5 million people south to work the fields of the Cotton Belt. The Franklin and Armfield firm, which was responsible for this transaction, was a well-known and wealthy slave trading business in Alexandria.

Formative Task: Weighted Cost/Benefit Analysis

Did the cotton gin make life better?

Scale: 1 = not at all important 5 = average importance 10 = very important

Costs (given up, disadvantages)	Scale 1-10	**Benefits** (gained, advantages)	Scale 1-10
Total		**Total**	

Explain your answer, did the cotton gin make life better?

Sources list:

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