

Chapter One: How Eli Whitney Made Cotton King

Eli Whitney began to make things when he was a small boy. He was called a genius because he was so ingenious. But he was not satisfied with doing things with his hands. He had a strong desire to make the most of his mind. So he went to Yale College and studied philosophy. One day the professor said he could not show a certain method to the class because the machine he kept for the purpose was broken. He could not teach that lesson until a new apparatus could be brought from England or France. But the ingenious student looked at the machine, and said "Let me fix it." The professor thought it could do no harm to let him try. Eli made the fine machine work just as well as it did when it was new.



One of the bravest officers in the Revolutionary War, which ended a few years before this time, was General Nathanael Greene. After the war, General Greene lived on a beautiful estate near Savannah, Georgia, and died there. When young Whitney finished his college course, he was engaged to teach at a school in Savannah; but when he went down there, he found that the school was not what he expected. So he acted as a tutor to the family of General Greene's widow.

While he was a tutor Whitney made playthings for the children, and fixed many handy things for Mrs. Greene to use about the house. She told him he ought to make a machine that would take the seeds out of the bolls, or fluffy heads, of the cotton plant. Great machines had been contrived for spinning and weaving cotton, but it took a man or a woman all day to pick the seeds out of a pound of cotton wool.

Eli Whitney went to work to make something that would do what in those days seemed impossible. He not only had to invent a cotton-gin, as the new machine was called, but he was also obliged to make tools for making the machine itself, and even tools for making the other tools!

But within a short time, he had invented and built a machine which worked quite well. Still, he was not satisfied. He locked himself up in a room and worked day and night until he had built a perfect cotton-gin which would work very fast and could clear out all the fine cotton seeds. This was in 1793, while George Washington was president, and Philadelphia was still the capital of the United States.

Whitney would not let anyone but Mrs. Greene and a friend named Miller see the model, or pattern, of his cotton-gin until he could take out a patent for it. But before he could get money enough to have his gin patented, someone broke into his little shop and carried off his precious model!

Then the poor inventor had to begin again and make another machine, to prove to the officials in the Patent Office that the cotton-gin was truly his invention, before they could make out for him the patent right, which stated



Eli Whitney's first cotton-gin

that he was the only person allowed to make and sell that machine in the United States. Before he could get this patent, he found that others were making, selling, and trying to get a patent for machines made like his stolen pattern.

Young Whitney's friend Miller furnished him money, not only to secure his patent rights and make the machines, but to go into the courts and fight those who were trying to steal his rights as they had stolen his model. These people made him so much trouble and expense that it took thirteen years to beat them by lawsuits. A patent protected an inventor by keeping others from making and selling that same machine,

but only for fourteen years. When his rivals were finally beaten, Whitney had just one year left in which he and his friends could sell the machine to pay for all the time, labor, and expense incurred.

In that year, he just barely made his cotton-gin pay for itself. But he had the great satisfaction of making the land in the southern states known as the cotton belt (because cotton could be grown in those states) worth hundreds of millions of dollars more than before. The raising of cotton grew to be such a great industry that slave labor was desired and used more than ever. Thus, without working toward that end, Eli Whitney, by increasing the production of cotton, facilitated the increase of slavery in the south, and helped to cause the struggle for and against slavery, many years later. But as the inventor did not know that his cotton-gin would make slavery a curse to the United States, he was not to blame.

After his patent had run out and he could make no more money by selling his cotton-gins, Whitney got a government contract for making guns. He invented new machinery to make the parts of his guns and was the first to have each part made by a different man according to an exact pattern. When the parts were put together to make a complete gun, no special fitting was necessary, because each piece was exactly like every other piece for that same part. If a part of the gun was broken, it could be replaced with a new one without any difficulty. Before that when one man made an entire gun, all the parts were specially fitted, and if one got broken, a new one had to be made and fitted by hand, which took a long time and made repairs very expensive. Whitney's factories and the homes of his

workmen formed a suburb of New Haven called Whitneyville.

Eli Whitney furnished hundreds of thousands of men with the weapons they used in putting down the slavery which his cotton-gin had innocently and unknowingly participated in causing.