

African-American Inventors I

Short article on prominent 18th century African American inventors.

(No Model.)

2 Sheets—Sheet 1.

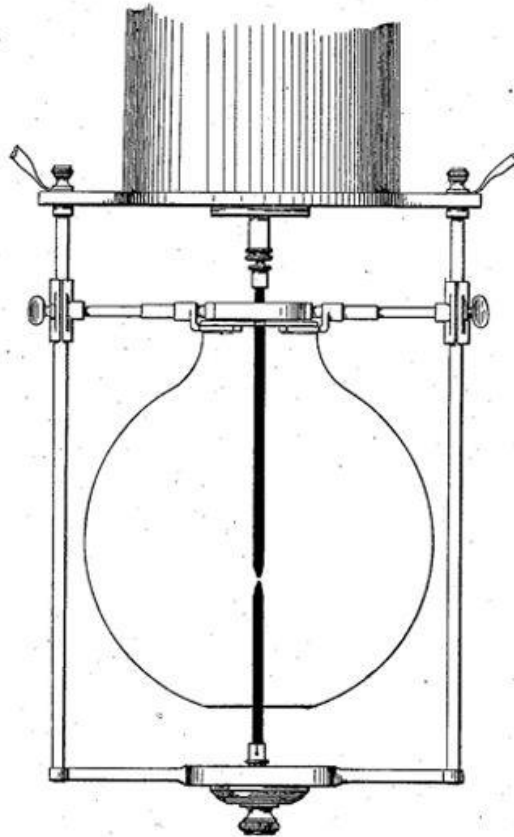
J. TREGONING & L. H. LATIMER.

GLOBE SUPPORTER FOR ELECTRIC LAMPS.

No. 255,212.

Patented Mar. 21, 1882.

Fig: I.



Witnesses.

Henry G. Barker
Frank Sulay et.

Inventors.

John Tregoning
Lewis H. Latimer
per Parker W. Pass atty.

A patent is a government grant to an inventor for an invention. George Washington signed the first patent law on April 10, 1790. The law gave patent holders the sole right to make and sell their invention for 14 years. It prevents other people from copying their invention and making money off it during that time. The Patent Act encourages progress in science by allowing patent holders the right to make a living from their own creativity.

To receive a patent, an invention must be new and contribute something useful. A patent can't be granted to something that has already been invented, but a patent can be granted to improve an already existing invention. Patents can be granted to machines, products, devices, and processes. Chemical compounds, food, drugs, and the processes to make these things can also be patented.

Before the Civil War (1861–1865), slavery was legal in the United States. Enslaved people were considered property and couldn't apply for patents. This didn't stop them from creating new inventions. Onesimus, a Massachusetts man enslaved by Puritan leader Cotton Mather, is credited with making a remedy for smallpox that was introduced in 1721. Papan's treatment of skin and sexually transmitted diseases (STDs) was so effective the Virginia state legislature freed him from slavery so that he could practice medicine.

The following three men are notable African American inventors of the 18th century. All three men were born free; they were not enslaved persons. There were many more African Americans, men and women, enslaved and free, who designed, manufactured, and sold inventions. Most of their stories have been lost to history.

Benjamin Banneker

Benjamin Banneker (1731–1806) was a self-taught mathematician and surveyor. When he was 21, Banneker was shown a pocket watch. He was so fascinated by the watch that its owner lent it to Banneker. He spent time studying pocket watches before deciding to build his own timepiece. A year later, Banneker invented a clock out of wood that struck a gong on the hour and kept time to the second. Banneker's wooden clock kept time for more than 40 years.

In 1792, Banneker completed the first Banneker's Almanac. Almanacs were important books in the 18th century because they told exactly when the sun came up in the morning and set at night. Almanacs also listed tide tables, dates of lunar and solar eclipses, holidays, and phases of the moon. Banneker's Almanac was commonly used by farmers and other residents of Pennsylvania, Delaware, Maryland, and Virginia during the 18th and 19th centuries.

Banneker gave a first edition of his almanac to Thomas Jefferson. He called on Jefferson to give black men and women equal rights, and to fight against prejudice that was "so prevalent in the world against those of my complexion . . . a race of beings, who have long labored under the abuse and censure of the world." Jefferson replied to Banneker, writing, "nature has given to our black brethren talents equal to those of other colors of man." Slavery was abolished 59 years after Banneker's death.

James Forten

James Forten (1766–1842) was born in Philadelphia, Pennsylvania, and lived there most of his life. He served in the U.S. Navy during the Revolutionary War. Captured and imprisoned by the British, Forten was offered his freedom if he agreed to live in England. Forten replied, "I am here a prisoner for the liberties of my country. I never, never shall prove a traitor to her interests!"

After the war, Forten was apprenticed to a sailmaker. He quickly learned the trade and developed a patent for a device to handle ship sails, which made him a wealthy man. Forten used his money to advocate for women's rights and the abolition of slavery.

George Peake

George Peake (1722–1827) also fought in the Revolutionary War. He was the first African American to be part of the settlement that eventually became Cleveland, Ohio. At this time, Ohio was a largely unsettled frontier in the western part of the United States.

Peake invented a hand mill for grinding corn. His hand mill was made of two round stones approximately 48 centimeters (19 inches) wide. Peake's invention was easier to use than the traditional mortar and pestle, and ground the corn more smoothly. Although Peake didn't patent his invention, he received credit for it in the November 8, 1858, issue of the newspaper *Cleveland Leader*.



Lewis Latimer, an inventor of the 19th century, patented this attachment for a lamp. Draft of patent courtesy the United States Patent and Trademark Office

Thomas Jennings

Although Henry Blair is the first inventor to be identified as black by the U.S. Patent Office, he is not the first African American to be awarded a U.S. patent. Most historians agree that Thomas L. Jennings is the first African American patent holder in the United States. Jennings invented a way to dry-clean clothes in 1821. Judy W. Reed, of Washington, D.C., was the first African American woman to receive a patent. Reed's invention, patent number 305,474, granted September 23, 1884, is for a dough kneader and roller.

Articles & Profiles

- [National Geographic Kids: Black Inventors and Pioneers of Science](#)

Websites

- [University of California at Irvine: Index of African American Inventors](#)
- [National Organization for the Professional Advancement of Black Chemists and Chemical Engineers](#)

Andrew J. Beard

Andrew Jackson Beard (1849–1921) was born into slavery in Alabama and gained his freedom when he was fifteen. He invented his own flour mill, a rotary steam engine, and two kinds of plows before he went to work for the railroad in the 1890s.

Railroads connected the busy east coast of the United States with the frontier states in the west. They transformed communication and travel. Working for various rail companies, Beard created his most famous invention, the Jenny coupler. The Jenny coupler automatically locked train cars together when they bumped into each other. This made connecting long trains for travel and trade much easier. Before the invention of the Jenny coupler, workers had to insert a metal pin to link the cars as they came together. It was very dangerous work, and Beard saw and heard about many gruesome accidents. The Jenny coupler was an invention that saved the lives of countless railroad workers.

Henry Blair

Henry Blair (1804–1860) is the first black man to be identified on a U.S. patent application. The identification of Blair as black was an accident, as the U.S. Patent Office usually didn't identify patent holders by race.

Very little is known about Henry Blair, other than he must have been a free black man. Enslaved peoples weren't allowed to hold patents. Blair was awarded the patent in 1834 for a corn planter. The corn planter combined plowing, placing the seeds, and covering the seeds with soil. Blair was awarded a second patent for a cotton seed planter in 1836.

Solomon Brown

Solomon Brown (1829–1906) worked with Samuel Morse on the telegraph machine, which revolutionized communication in the 19th century. Brown installed the wires and made sure the telegraph worked properly.

Brown was also the first African American to be hired by the Smithsonian Institute in Washington, D.C. Using his own drawings, Brown gave talks on entomology, geology, philosophy, and religion to packed houses for several decades.

Hugh M. Browne

Hugh Mason Browne (1851–1923) was an educator who worked with such prominent African Americans as Booker T. Washington, W. E. B. DuBois, and Charles Chesnutt. Browne was especially concerned with education, and traveled to Liberia to compare the education system there to the one in the United States.

Browne was also a practical man, interested in improving the lives of everyday people. He invented a machine that trapped sewer water and stopped it from flowing back into a house. This helped residents live healthier lives. Browne was granted the patent on April 29, 1890.

George Washington Carver

George Washington Carver (1864?–1943) was an agricultural chemist famous for improving the lives of poor farmers through new farming methods.

During much of the 19th century, Southern farmers planted cotton year after year, which depleted the soil of vital nutrients. Carver's experiments found the peanut plant restored nitrogen to the topsoil and made it healthy again. Planting peanuts one year and cotton the next increased the life of the soil. This planting process is called crop rotation.

Carver's cotton-peanut crop rotation created peanut surpluses—more peanuts than people had need for them. Carver found new uses for peanuts and peanut products, including soap, face powder, mayonnaise, shampoo, metal polish, and glue.

Later, Carver discovered that sweet potatoes and peas had the same nitrogen-fixing abilities as peanuts. This profitable crop rotation allowed farmers to maintain soil fertility. Carver was awarded two peanut-related patents: one for pomade or cream (Patent no. 1,522,176 January 6, 1925) and one for a paint or stain (Patent no. 1,541,478 June 9, 1925).

Shelby Davidson

Shelby Davidson (1868–1931) worked for the United States Postal Service. He did not deliver mail, however. He worked in the auditing department, keeping track of numbers and schedules. Davidson invented a rewind device for adding machines in 1908. The rewind device reduced the amount of paper and time clerical workers spent on paperwork. Davidson also invented an automatic fee device in 1911 that allowed postal workers to work more efficiently.

Lewis Latimer

Lewis Latimer (1848–1928) was a member of Thomas Edison's research team and became the head draftsman for General Electric.

A draftsman is a person who draws pictures of buildings, machinery, or inventions. These drawings can determine the success or failure of the patent application. Latimer did the draft work for Alexander Graham Bell's telephone; Bell received his patent in 1876.

In 1882, Latimer invented a carbon filament to use in light bulbs. It lasted longer and was cheaper than Edison's first design. Edison's company hired Latimer soon after.

Latimer also designed a bathroom for railroad cars, a disinfecting and cooling device, a hat and coat rack, locking umbrellas, and a device for supporting books.

Jan Ernst Matzeliger

Jan Ernst Matzeliger (1852–1889) invented a machine to connect the upper part of the shoe with its sole. This process is called lasting. Matzeliger's shoe lasting machine could make 150 to 700 pairs of shoes in one day, compared to 50 pairs a day lasted by hand.

George Washington Murray

George Washington Murray (1853–1926) held eight patents relating to farming. Born an enslaved person, Murray was elected to the U.S. House of Representatives from South Carolina in 1892.

George Washington Murray is an ancestor of Rep. Jim Clyburn, a current member of the U.S. House of Representatives from South Carolina.

John Parker

John Parker (1827–1900) owned three of the seventy-seven patents issued to African Americans by 1886. He was only one out of fifty-five African Americans to be granted more than one patent in the U.S. by 1900. He is best known for patenting a portable tobacco screw press. This was used for cutting tobacco.

Parker was also a “conductor” on the Underground Railroad. From his home in Ripley, Ohio, Parker helped more than one thousand enslaved people receive their freedom.

Norbert Rillieux

Norbert Rillieux (1806–1894) was a Creole inventor from New Orleans. He studied in Paris, France, before returning to the U.S.

Rillieux’s father was the owner of a large plantation, where sugar was often grown. Rillieux invented the multiple-effect vacuum evaporator for refining sugar. His invention produced a whiter, more refined sugar with less labor. Rillieux’s refining process was eventually extended to all evaporating processes—including condensed milk, gelatin, soap, glue, and whiskey.

Samuel Scottron

Samuel Scottron (1843–1905) invented an adjustable mirror so that barbershop clients could examine their haircuts from every angle.

From the barbershop, Scottron branched out into inventions for the home. He invented the adjustable window cornice, a pole tip, a curtain rod, and a supporting bracket. (A cornice is an attractive window overhang that's used to hide the curtain rod.) Scottron was the first African American to be a member of the Brooklyn, New York, Board of Education and was a co-founder of the Cuban Anti-Slavery Society.

Lewis Temple

Lewis Temple (1800–1854) redesigned a harpoon, a device for hunting whales, in 1845. Called "Temple's Iron," his invention hooked the whale onto the line much like a fish on a hook. His invention led to more whales being caught and killed. During the 19th century, New England was the center of the whaling industry. “Temple’s Iron” helped create a thriving economic community in places like New Bedford, Massachusetts.

Sarah Breedlove Walker

Sarah Breedlove Walker (1867–1919), also known as Madame C. J. Walker, is probably the most famous African American woman inventor.

Walker invented the hot comb and a pomade to make hair soft and shiny. Before the hot comb, African Americans straightened their hair on ironing boards. Many people had burns on the face and scalp, as well as damaged hair, because of this. Walker revolutionized the African American cosmetics industry.

To increase business for her beauty products, Madame C. J. Walker organized saleswomen into "Walker Clubs," a system copied later by Mary Kay Cosmetics. In 1908, she founded Lelia College in Pittsburgh, Pennsylvania, to train women to sell her products.

This marketing system worked very well. Walker became the first African American woman millionaire. She employed 3,000 people in her Indianapolis, Indiana, factory. Madame C. J. Walker gave generously to the National Association for the Advancement of Colored Persons (NAACP) and other nonprofit groups or charities. She also funded scholarships for women to go to college.

Granville T. Woods

Granville T. Woods (1856–1910) was nicknamed "The Black Edison" for the number of inventions he built and patented. Like Edison, Woods' inventions were not focused on one industry.

Woods earned his first patent in 1884 for a steam boiler. He also invented a system for railroad braking, electric railroad systems, and devices to improve the telephone and telegraph. The telephone and telegraph patents were bought by Alexander Graham Bell's company.

In 1887, Woods invented the Synchronous Multiplex Railway Telegraph. It allowed railroad workers to know where the trains were on the railway. Before this no one knew precisely when a train was coming down the tracks. Woods's invention prevented many collisions and deaths. He registered twenty patents between 1900 and 1907 for electronic train control devices.



Lewis Latimer co-patented this invention in 1882.

Draft of patent courtesy the United States Patent and Trademark Office

The Real McCoy

Elijah McCoy (1844 -1929) invented a lubricating cup for trains. Before McCoy, trains had to stop in order for workers to grease the gears by hand. If they didnt, the expensive machinery would break. McCoys inventions made it possible for locomotives to automatically lubricate instead of the old manual method, improving efficiency. He is the man behind the phrase The Real McCoy.

Inca to Carver
to Kellogg

Although George Washington Carver came up with many uses for peanuts, he was not the one to invent peanut butter. The ancient Incas of Peru were known to grind peanuts into a paste-like spread. Dr. Ambrose Straub patented a machine to make peanut butter in 1903. John Harvey Kellogg sold a nut butter spread in 1890. Mr. Kellogg is better known for another food invention Kellogg's Corn Flakes.

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