

BLACK HISTORY MONTH

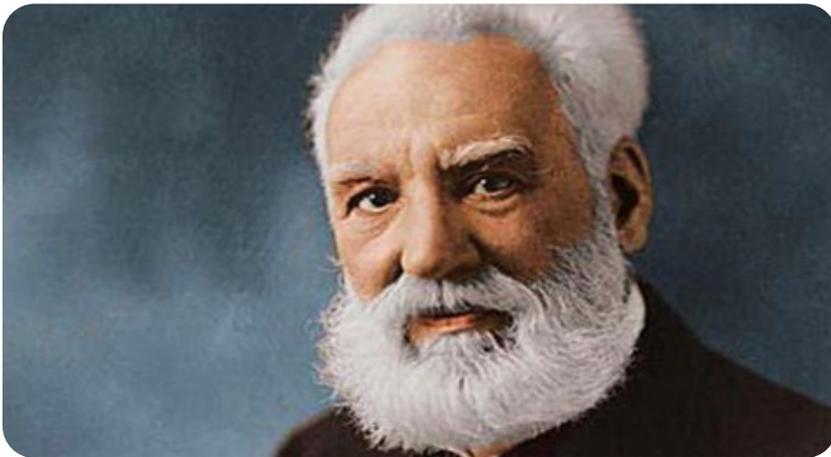
Proud to be

18TH OCTOBER



8 Black Inventors Who Made Daily Life Easier

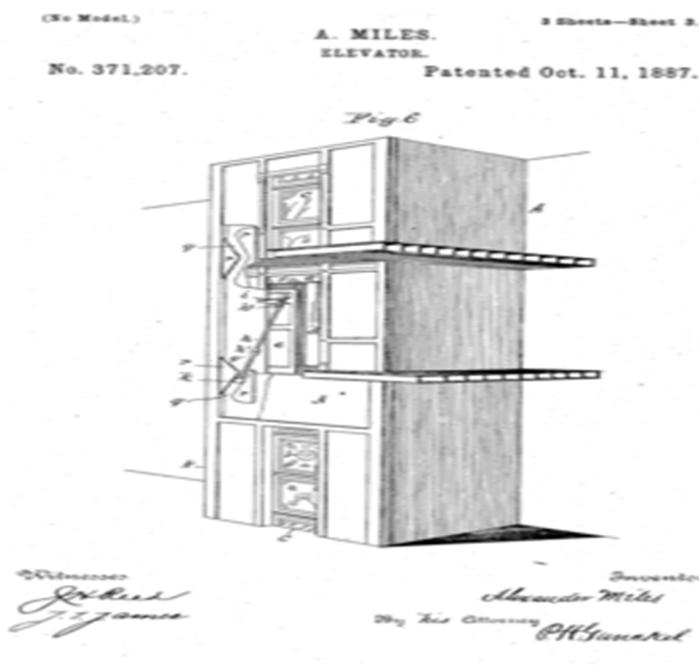
1. Automatic Elevator Doors, Invented by Alexander Miles in 1887



The use of elevators in everyday life keeps people from committing to long and gruelling climbs up several flights of stairs. However, before the creation of elevator doors that close automatically, riding a lift was both complicated and risky.

Before automatic doors, people had to manually shut both the shaft and elevator doors before riding. Forgetting to do so led to multiple accidents as people fell down elevator shafts.

As the story goes, when the daughter of African American inventor Alexander Miles almost fatally fell down the shaft, he took it upon himself to develop a solution. In 1887 he took out a patent for a mechanism that automatically opens and closes elevator shaft doors and his designs are largely reflected in elevators used today.

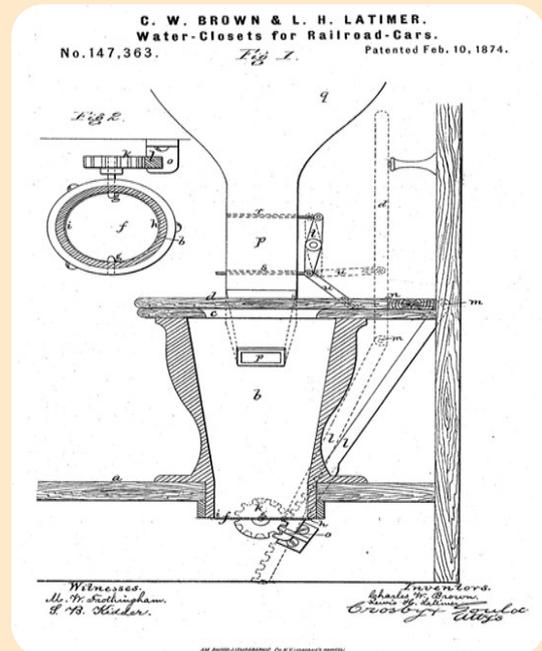


Alexander Miles

2. Carbon Light Bulb Filament, Invented by Lewis Latimer in 1881

The light bulb itself was invented by Thomas Edison, but the innovation used to create longer-lasting light bulbs with a carbon filament came from African American inventor Lewis Latimer. Latimer, the son of formerly enslaved people, began work in a patent law firm after serving in the military for the Union during the Civil War. He was recognized for his talent drafting patents and was promoted to head draftsman, where he co-invented an improved bathroom for railroad trains.

His successes would garner him further attention from the U.S. Electric Lighting Company, putting him at a company in direct competition with Edison, in 1880. While there, Latimer patented a new filament for the light bulb, using carbon instead of more incendiary materials, like bamboo, that were commonly used for filaments. The addition of the carbon filament increased the life span and practicality of light bulbs, which had previously died after just a few days. In 1884, he went on to work with Edison at the Edison Electric Light Company.

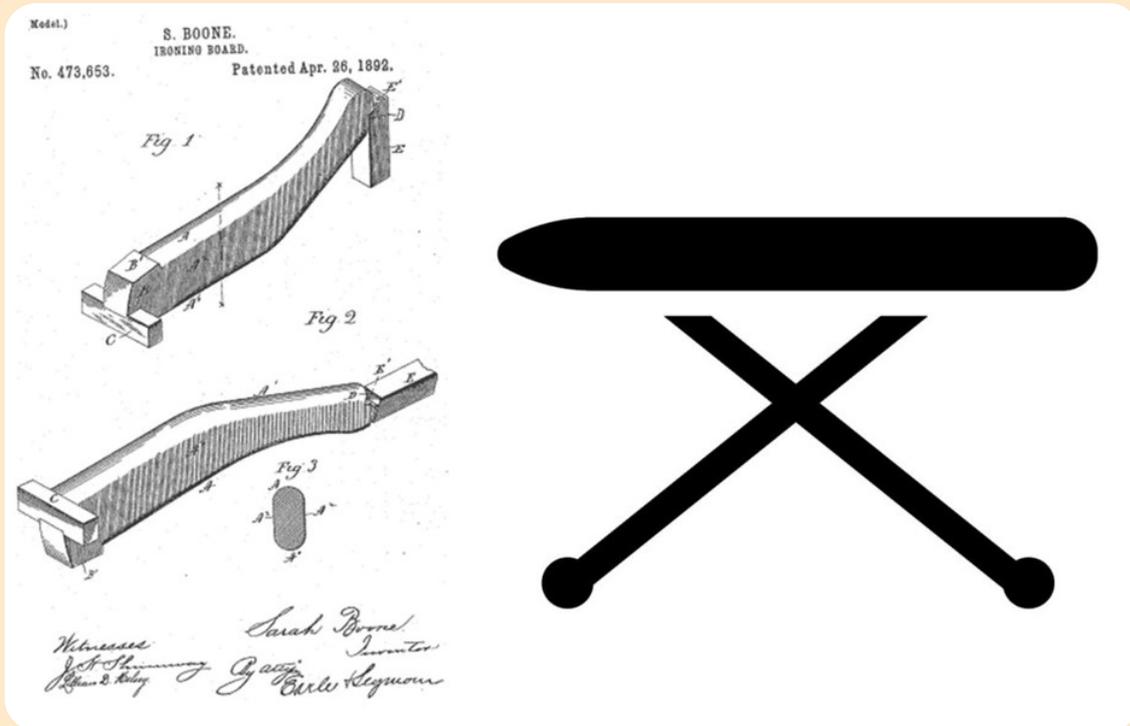


Lewis Latimer

3. Improved Ironing Board, Invented by Sarah Boone in 1892



The ironing board is a product that's used possibly just as much as it's overlooked. In the late 19th century, it was improved upon by Sarah Boone, an African American woman who was born enslaved. One of the first Black women in U.S. history to receive a patent, she expanded upon the original ironing board, which was essentially a horizontal wooden block originally patented in 1858. With Boone's 1892 additions, the board featured a narrower and curved design, making it easier to iron garments, particularly women's clothing. Boone's design would morph into the modern ironing board that we use today.



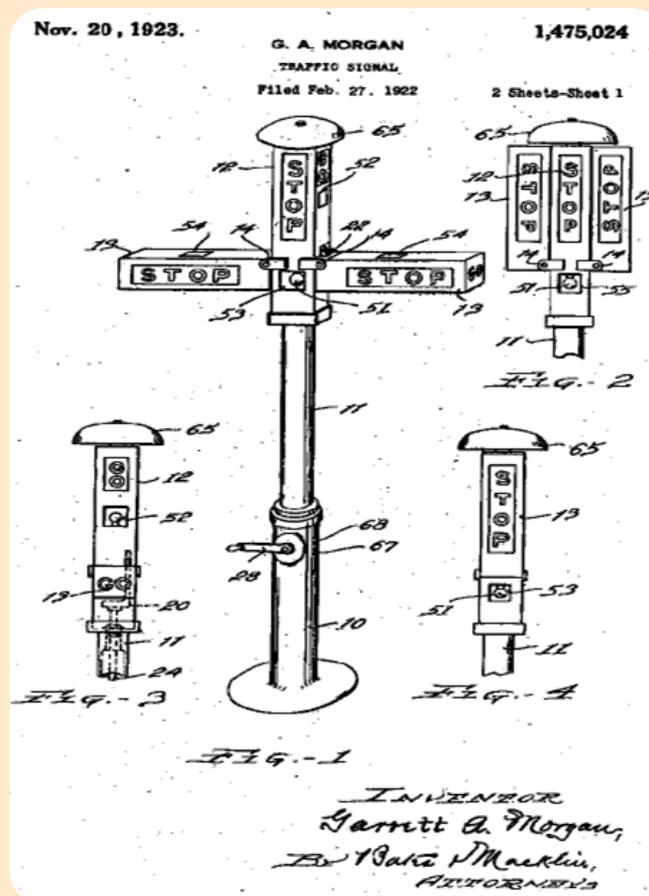
Sarah Boone

4. The Three-Light Traffic Light, Invented by Garrett Morgan in 1923

With only an elementary school education, Black inventor (and son of an enslaved parent), Garrett Morgan came up with several significant inventions, including an improved sewing machine and the gas mask. However, one of Morgan's most influential inventions was the improved traffic light. Morgan's was one of the first three-light systems that were invented in the 1920s, resulting in widespread adoption of the traffic lights we take for granted today.



Thanks to the successes of his other inventions, Morgan bought a car and, as a motorist, he witnessed a severe car accident at an intersection in his city of Cleveland, Ohio. In response, he decided to expand on the current traffic light by adding a "yield" component, warning oncoming drivers of an impending stop. He took out the patent for the creation in 1923, and it was granted to him the following year.



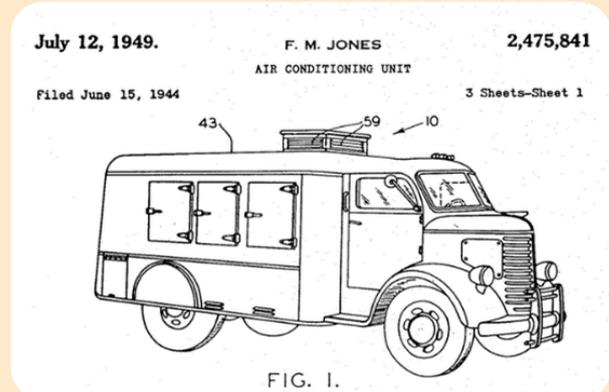
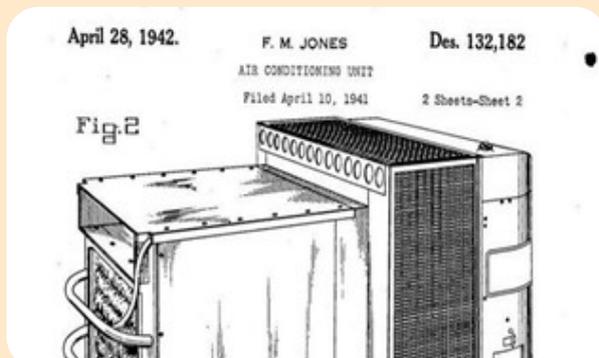
Garrett Morgan

5. Refrigerated Trucks, Invented by Frederick McKinley Jones in 1940



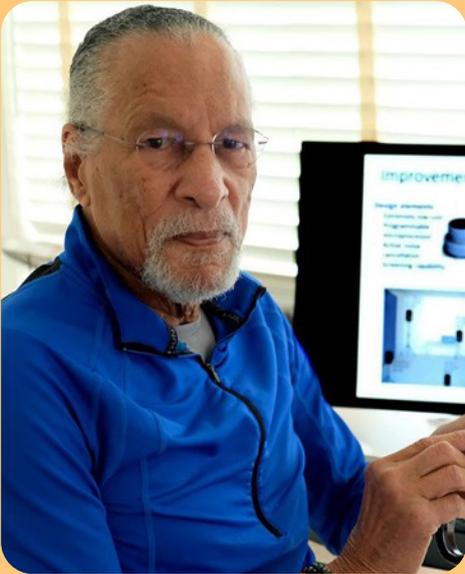
If your refrigerator has any produce from your local grocery store, then you can credit African American inventor Frederick McKinley Jones. Jones took out more than 60 patents throughout his life, including a patent for the roof-mounted cooling system that's used to refrigerate goods on trucks during extended transportation in the mid-1930s.

He received a patent for his invention in 1940, and co-founded the U.S. Thermo Control Company, later known as Thermo King. The company was critical during World War II, helping to preserve blood, food and supplies during the war.



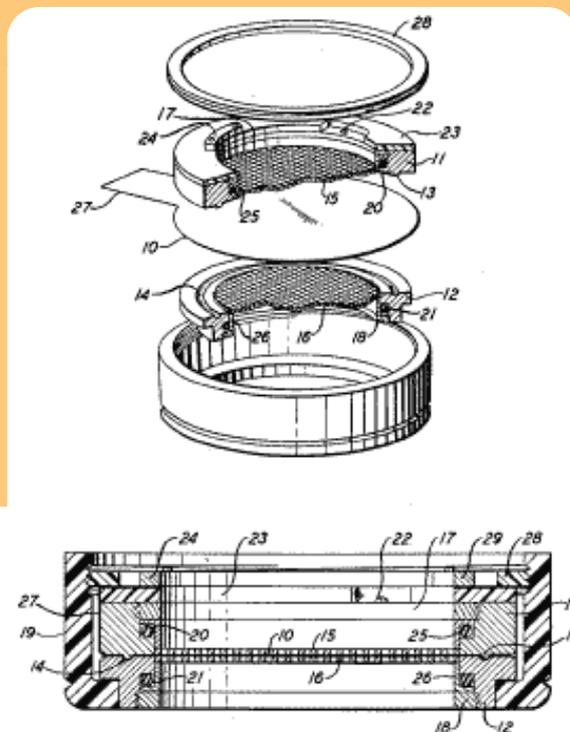
Frederick McKinley

6. Electret Microphone, Co-Invented by James E. West in 1964



Even for those who aren't quick to pick up the mic during karaoke, microphones are used every day to communicate over distances far and wide. And the vast majority of microphones used today, including the microphones used in phones and cameras, use a microphone co-invented by a Black man. Dr. James E. West was tasked with creating a more sensitive and compact microphone while working at Bell Labs in 1960.

Along with his German colleague Gerhard Sessler, West invented the foil electret microphone, which was considerably less expensive to produce than the typically used condenser microphones. Two years after it was invented, the final model of the microphone was developed and in 1964 they patented the landmark invention. Only four years later, the new microphone was in wide production and was being used in hearing aids, tape recorders, most telephones and baby monitors.



the foil-electret microphone

James E. West

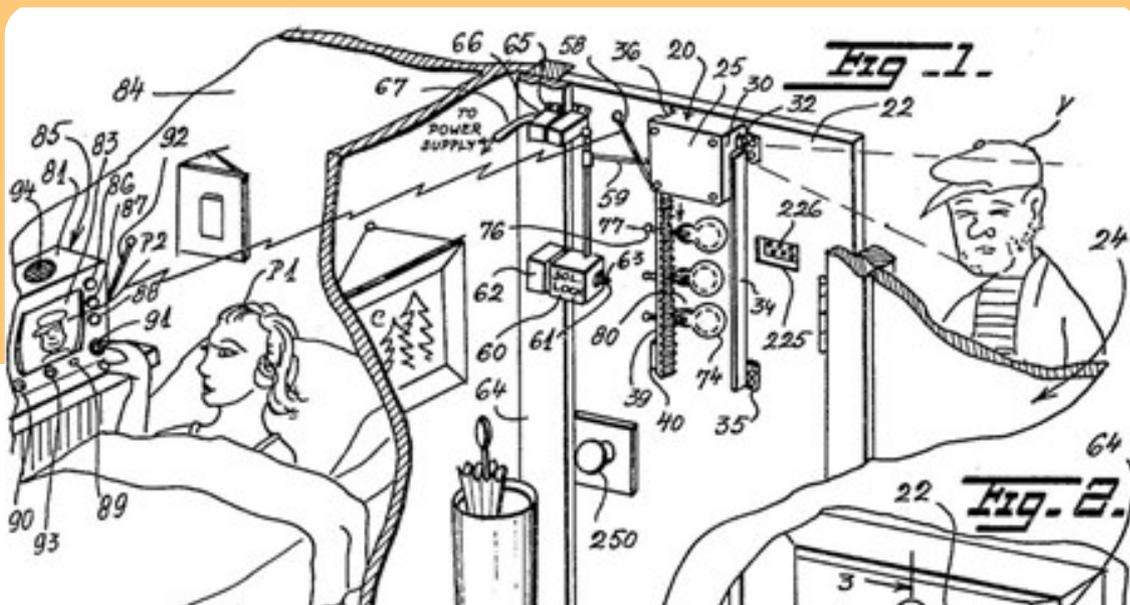
7. Home Security System, Co-Invented by Mary Van Brittan Brown in 1966



Before security systems became a fixture in homes, an African American nurse Mary Van Brittan Brown, devised an early security unit for her own home. She spent many nights at home alone in Queens, New York while her husband was away, and felt unsafe with high rates of crime in her neighbourhood. On top of that, police were unreliable and unresponsive. So, she created a device that would help put her mind at ease.

In 1966, Brown invented a system that used a camera that could slide into and look through four peepholes in her front door. The camera's view would then appear on a monitor in her home so she could survey any potentially unwanted guests.

She added other features to the system, including a microphone to speak to anyone at the door, a button to unlock the door, and a button to contact the police. She and her husband took out a patent for the system in the same year, and they were awarded the patent three years later in 1969. Home security systems commonly used today took various elements from her design.



Mary Van Brittan Brown

8. Color IBM PC Monitor and Gigahertz Chip, Co-Invented by Mark Dean c. 1980 and 1999

Before flat screens and hi-definition LCD monitors were the norm, PC displays were limited to screens with no colour that were tethered to computers with limited processing power. That all changed thanks to Black inventor and engineer Mark Dean. Dean began working for IBM as a chief engineer in the early 1980s, making up a team of 12 people who would develop the first IBM PC.

In addition to helping create IBM's original machine in his early years with the company, he also worked to develop the colour monitor and led the team that developed the first gigahertz processor. The massive chip, built in 1999, would allow for higher processing rates at faster speeds within PCs.



Mark Dean