

Granville T. Woods

“Invented the Auto Circuit Breaker in 1839”

“Granville T. Woods (April 23, 1856–Jan. 30, 1910) was a black inventor so successful that he was sometimes referred to as “The Black Edison.” He dedicated his life's work to developing a variety of inventions, many relating to the [railroad industry](#). By the time of his early death at age 53, Woods had invented 15 appliances for electric railways and received nearly 60 patents, many related to the railroad industry.

Fast Facts: Granville T. Woods

Known For: Highly successful black inventor

Also Known As: The Black Edison

Born: April 23, 1856 in Columbus, Ohio or Australia

Parents: Tailer and Martha Woods or Martha J. Brown and Cyrus Woods

Died: Jan. 30, 1910 in New York, New York

Notable Invention: Synchronous Multiplex Railway Telegraph

Early Life

Granville T. Woods was born on April 23, 1856. Most reports indicate he was born in Columbus, Ohio, the son of Tailer and Martha Woods, and that he and his parents were free African-Americans by virtue of the [Northwest Ordinance](#) of 1787, which prohibited slavery from the territory that included what would become the state of Ohio.

However, Rayvon Fouché wrote in a Woods biography that, based on census records, Woods' death certificate, and journalistic accounts

published in the 1890s, Woods was born in Australia and apparently moved to Columbus at a young age. Some biographies list his parents as Martha J. Brown and Cyrus Woods.

Early Career

Most sources agree that Woods had little formal education, leaving school at age 10 to work as an apprentice, studying to be a machinist and a blacksmith, and literally learning his skills on the job. Woods held a variety of positions in his early teens, including working as an engineer in a railroad machine shop and on a British ship, in a steel mill, and as a railroad worker.

While working, Woods took courses in fields such as engineering and electronics, realizing that education was essential to developing the skills he would need to express his creativity with machinery. Some reports say he had up to two years of college course training in either electrical or mechanical engineering or both, possibly in an East Coast college from 1876 to 1878.

In 1872, Woods obtained a job as a fireman on the Danville and Southern railroad in Missouri, eventually becoming an engineer and studying electronics in his spare time. In 1874, he moved to Springfield, Illinois, and worked in a rolling mill. Four years later, he took a job aboard the British steamer Ironsides. Within two years, he became its chief engineer.

Settling Down

His travels and experiences finally led him to settle in Cincinnati, Ohio, where he dedicated himself to modernizing the railroad and its equipment. Woods invented more than a dozen devices to improve electric railway cars and other devices for controlling the flow of

electricity. His most noted invention at this point was a system for letting a train engineer know how close his train was to others, which helped reduce collisions.

He also developed a system for overhead electric conducting lines for railroads, which aided in the development of overhead railroad systems in cities such as Chicago, St. Louis, and New York.

Woods eventually set up his own business, the Woods Electrical Co., in Cincinnati to develop, manufacture, and sell electrical apparatus. In his early 30s, he became interested in thermal power and steam-driven engines. He filed his first patent for an improved steam boiler furnace in 1889. His later patents were mainly for electrical devices.

He also developed the Synchronous Multiplex Railway Telegraph, which allowed communications between train stations and moving trains. This made it possible for trains to communicate with stations and other trains so everyone knew exactly where the trains were at all times.

Among his other inventions were an automatic air brake used to slow or stop trains and an electric car that was powered by overhead wires. It used a third rail system to keep the cars running on the right tracks.

Other Inventors

Telephone inventor [Alexander Graham Bell's](#) company, American Bell Telephone Co., purchased the rights to Woods' patent on an apparatus that combined a telephone and a telegraph. The device, which Woods called "telegraphony," allowed a telegraph station to send voice and telegraph messages over a single wire. Proceeds from the sale gave Woods the luxury of being a full-time inventor.

Success led to lawsuits. One was filed by famed inventor [Thomas Edison](#), who sued Woods on a claim that he, Edison, was the inventor of the multiplex telegraph. Woods eventually won the court battle, but Edison didn't give up easily when he wanted something. Trying to win over Woods and his inventions, Edison offered Woods a prominent position in the engineering department of Edison Electric Light Co. in New York. Woods declined, preferring to maintain his independence.

Early in his career during the summer of 1881, Woods contracted smallpox, which was in its last years as a major health threat in the United States. The often fatal illness sidelined Woods for nearly a year and left him with chronic kidney and liver disease that might have played a role in his early death. He suffered a stroke on Jan. 28, 1910, and died at Harlem Hospital in New York two days later.

During his smallpox illness, Woods was quoted as saying he had to take extreme measures to support his family. Another reference, in 1891, mentioned that he was being sued for divorce. Generally, though, newspaper accounts referred to Woods as being a bachelor.

Legacy

Granville T. Woods' dozens of inventions and patents made life easier and safer for countless Americans, especially when it came to railroad travel. When he died, he had become an admired and well-respected inventor, having sold a number of his devices to such industrial giants as Westinghouse, General Electric, and American Engineering.

Decades later, many of his other patents have been assigned to major manufacturers of electrical equipment that play a substantial role in daily life.

To the world, he was known as the "Black Thomas Edison," and his numerous inventions and improvements to existing technology seem to support that characterization.”

Source: Thought Co

Information Link:

<https://www.thoughtco.com/granville-t-woods-1992675>

Patent Link:

<https://patents.google.com/patent/US662049A/en?q=Auto&inventor=Granville+T.+Woods&oq=Granville+T.+Woods+Auto>