Granville T. Woods Essay, Research Paper

African-American inventors have gotten little recognition for their accomplishments. Indeed, it was hard to find information to even write a small report on a single one of them. However, although their names might not be as household as Thomas Edison, that does no mean that African-American inventors have not played just as important of a role in technology in America. Although we might not be able to name any African-American inventors off the top of our heads, we use their inventions everyday and not even realize it. The last time you took a train, were you worried about it derailing, or not stopping? You could thank Granville T. Woods for that. He invented the air brake for trains, the standard emergency break used today.

Granville T. Woods was born on April 23, 1856 in Columbus Ohio. His parents were freed slaves and Woods himself only attended school until the age of 10. Although he stopped formal education at such a young age, Mr. Woods began to work on the railroad and study electronics. Much of his knowledge came directly from on-the-job training. He attended night school and took privet lessons in his teens to make up for the many years of lost education. In 1872 at the age of 16, Woods became a fireman on the Danville and Southern Railroad in Missouri. There, he developed a passion for trains and dreamed of becoming a railroad engineer himself. Indeed, his love of trains is what fueled many of his inventions. He moved around a lot in the next few years. In 1876 he worked part time in a machine shop in Springfield, Illinois. It was here that he began to take engineering courses in an eastern college. He took a job an engineer in 1878 aboard the Ironsides, a British Steamer, within two years he became the chief Engineer of the steamer. However, despite all of his experience and of his skin color, he never got far in these jobs. He decided to settle back in Ohio.

It was back in Cincinnati that Mr. Woods began inventing. In 1880, shortly after settling in Cincinnati, Mr. Woods established his own shop. Woods first patent was for an invention that had to do with one of his great loves, trains. It was on improved steam boiler furnace. It was in this shop that Mr. Woods became one of the most prolific inventors of the 19th century. He had registered over 60 patents in his lifetime and was sometimes referred to as The Black Edison .

Regarded as one of Woods greatest invention was the Synchronous Multiplex Railway Telegraph (1887). This was the most primitive form of the radio system used in trains today. Before this invention, there was no way for a dispatcher to be able to determine the location of a train and so accidents were frequent. This invention allowed for communication between the train and the dispatcher so that train accidents became less frequent. This invention used the principle of electromagnetic induction. The magnetic field produced from electric current running through the wire produced a signal that was traceable from the dispatcher s office. When the trains moved the magnetic field moved with it, this allowed for the tracking of all trains.

Some of his more notable inventions include the development of the third-rail system used in subways today and the development of the trolley system for trolley cars. Most of Mr. Woods 60 patents had to do with railroad telegraphs, electrical breaks, and electrical railways systems. Some of his patents include the Steam Boiler Furnace, Electric Railway, Automatic Air Brake, Telephone Transmitter, Induction Telegraph System, Overhead Conducting for Electrified Railway, Tunnel Construction for Electric railway, and the Galvanic Battery.

Unlike so many African-American inventors of the 19th century, Mr. Woods was actually praised for his work within his own lifetime. The January 14, 1866 edition of The Catholic Tribune said Granville T. Woods, the greatest colored inventor in the history of the race, and equal, if not superior, to any inventor in this country, is destined to revolutionize the mode of the street car transit. Mr. Woods broke through racial and educational barriers to become one of the most notable inventors of the 1800 s. He was notable not only after his death, but during his own lifetime. An accomplishment for any inventor made even greater through his struggle.

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