

# Granville T. Woods And The Third Rail Of Race

BY JOHN STICKNEY

Alexander Graham Bell, Thomas Edison, George Westinghouse, the Wright Brothers: These are iconic American inventors of the early 20th century. Granville T. Woods, their African-American contemporary, sometimes called “the Black Edison” for his inventions in electricity, deserves recognition too.

The prolific Woods contributed to the development of the third rail that powers our subways; the electrification of the Figure 8, a Coney Island roller coaster; and a railway telegraph system that helped prevent train accidents. In his 1968 book, *Where Do We Go From Here: Chaos or Community?* the Rev. Martin Luther King Jr. cited Woods as “an expert in electric motors, whose many patents speeded the growth and improvement at the beginning of this century.”

But Woods’ race sentenced him to a life of struggle and, ultimately, to a pauper’s grave at St. Michael’s Cemetery in East Elmhurst on Astoria Boulevard, not far from where Scott Joplin, the Black composer of *The Entertainer*, is buried.

This year, for Black History Month, the cemetery had planned a Woods commemoration on February 5, but it has now been postponed to perhaps a safer time to gather, April 23 (his birthday). There Woods’ spirit will come alive in the presence of David L. Head, a former New York City bus driver and author of *Granville T. Woods: African-American Communications and Transportation Pioneer*. (Available at dlhfoundation51@gmail.com).

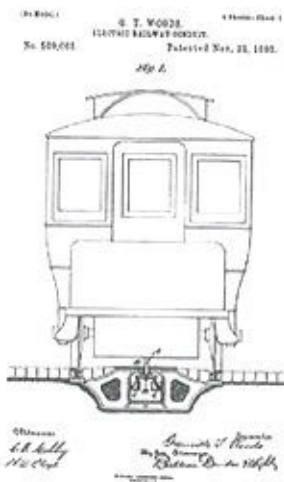
In period costume as Woods, Head will show and tell a story of rags-to-not-quite-riches achievement and thwarted promise.

Woods was born in 1856 in Columbus, Ohio, to a free family — his mother a washerwoman, his father a sawyer. He left school at age 10. Enthralled by trains, he got a job in a railroad shop and learned about metalworking and mechanical engineering. Later he worked as a fireman for a railroad, shoveling coal into steam engine boilers before being promoted to engineer.

The self-taught Woods always tinkered, imagining how things might work better. Then he turned to inventing. His first U.S. patent, in 1883, was for a steam boiler furnace (with which he was

*Photo credit: Charles Denson*  
**Granville T. Woods, an inventor, was featured in the April 1895 issue of The Cosmopolitan Magazine, which lauded his “innovative genius.”**

**In 1893, Woods patented an “Electric Railway Conduit,” a prototype of the third rail that would power the subway.**



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## Granville T. Woods



This self-educated African-American inventor made subway travel possible in New York City when he patented the third-rail system for conducting electric power to railway cars.

Shomburg Center for Research in Black Culture, The New York Public Library

**In 2004, for the centennial celebration of the New York City subway system, the MTA issued four million MetroCards commemorating Woods.**

dreams,” writes Rayvon Fouché, a Black professor of American Studies at Purdue University, in his 2003 book, *Black Inventors in the Age of Segregation: Granville T. Woods, Lewis H. Latimer and Shelby J. Davidson*. “Woods’ life — at times closer to a nightmare than the American Dream — clearly illustrates the harsh realities of being a Black inventor at the end of the 19th century.”

Woods married in 1890 but his wife filed for divorce a year later. He died of a cerebral hemorrhage in 1910, impoverished. During the past century’s rediscovery of Black history, Woods has gained respect. P.S. 335 in Bedford-Stuyvesant was named the Granville T. Woods Elementary School. Western Electric commissioned a headstone for his heretofore unmarked grave at St. Michael’s Cemetery.

Nobody has done more to promote Woods’ legacy than David L. Head, who learned about the inventor while writing for the Transit Workers Union Black history committee.

Head first came to Woods’ grave in 1998. “I knelt there and wept,” Head recalls, “and I prayed to the Universal Spirit that I might learn more

about this man.”

Just before Woods died, he sent a letter from an address on West 99th Street in Manhattan — the same block as St. Jude’s Chapel, a mission to the African-American community from St. Michael’s Church, which still maintains the cemetery bearing its name. Most likely, that’s how Woods ended up at St. Michael’s Cemetery.

Head lobbied for Woods to be honored at the centennial of the New York City subway in 2004 — and the MTA issued four million MetroCards commemorating Woods. Woods was inducted into the Coney Island Hall of Fame, and an adjacent street was renamed Granville T. Woods Way.

Head, now retired and living in Southfield, Mich., returns to St. Michael’s Cemetery on April 23 to “channel” Woods’ spirit.

What compels Head to crusade for Woods? “Ever since I was in elementary school I’ve been reading history,” Head says. “And I kept wondering, where are the Black people in the story, beyond slavery? I felt invisible and inferior. That has driven my passion to tell the untold stories.”



**David L. Head, a historian and advocate for Granville T. Woods and other Black pioneers of transportation, appears in period costume to present the inventor’s life and work. On April 23, Woods’s birthday, Head is scheduled to appear at a Woods commemoration at St. Michael’s Cemetery (72-02 Astoria Blvd., East Elmhurst, Queens, NY), where Woods is buried.**



# David L. Head

THE DAVID L. HEAD FOUNDATION

*"A View to the Past with a Focus on the Present & Future"*

January 2018

This document was created to describe the history between David L. Head Foundation and the Charles H. Wright Museum and its beneficial relationship.

On Friday, November 9, 2012, I was honored and pleased to share my inspiration that began the Granville T. Woods journey. Along for this journey was a distinguished panel of STEM professionals who played a significant role in the creation of the new high-tech permanent exhibition: Inspiring Minds: African Americans in Science and Technology housed at the

Charles H. Wright Museum (CHWM). This exhibition has been an educational triumph highlighting numerous interactive fact-based computer kiosks on significant contributions in Science, Technology, Engineering and Math. This exhibit has been an eye opening experience to public and charter schools, corporate companies and various civic organizations, senior citizens and worldwide visitors.

In June 2013, in the interest of promoting STEM, the David L. Head Foundation collaborated with the CHWM to launch a program originally named: Science Saturday, later renamed "Meet the Scientist". The program showcased African American pioneers and modern trailblazers in STEM related fields and science projects of students from the surrounding area.

As co-founder and coordinator with Dr. Terrance Dillard, it has been a pleasure and learning experience to be exposed to so many stimulating presenters with children and parents alike such as:

Andrew Humphrey - Fox News Meteorologist

Dr. Tonya Mathews - CEO - Michigan Science Center

Yvonne M. Friday - M.D. Chief of Pediatrics, Michigan Children's Hospital

Michael Taylor - Ph. D, Nuclear Physicist, U.S. Dept. of Energy

Shree Taylor - Mathematician, CEO, Delta Decisions D.C.

Terrance Willis - President & CEO, I.C. Datacom

Master Sargent, Maurice Graves Jr., USAF, Information Technologist

Lieutenant Colonel. Earl Robinson, USAF Retired, Fighter Pilot, Nano-Scientist

Chauncey Spencer II - Aerospace Pioneer Historian

David Tarver - Electrical Engineer, Senior Counselor for Innovation and

Entrepreneurship Wayne State University  
Elizabeth Mays - Founder/President MCS Multimedia  
Michael S. Hamilton - Robotics Innovator, Renaissance High School  
Dominique Whitten - Cass Tech Honor Student and future medical doctor

The program has also introduced a host of other outstanding presenters. We were proud to receive the Mary McLeod Bethune Award by CHWM during the 2014 calendar year. For assuring the participation of different mentors and exposing student's minds to chemistry, robotics, information systems and much more.

Links to Science followed Meet the Scientist, an exciting series of workshops and exploration into the timeline of African American Scientist and Inventors achievements from the 15th century through today. These programs have laid the foundation to move forward to more robust interactive programs.

As the global economy continues expanding rapidly it's important that we take on the responsibility to help raise STEM standards. I am reminded by a scripture in the Bible, that states the "...where there is no vision, the people perish." My vision for 2018 and beyond is to create a multi-layered STEM Laboratory in the CHWM that encompasses a rich cultural environment that provides students with a pathway for self-actualization and STEM proficiency.

- This project will be designed to include a STEM professional and topic to coordinate the five essential key areas:

The first area will be coordinated by Ms. LaToniya A. Jones a mathematician. The POWER Org Math provides opportunities for learners to see, say, and perform math confidently and proficiently. Learners fine tune basic math foundational skills while making meaningful math connections to higher level concepts in advanced algebra, geometry and pre-calculus. These program feature engaging hands-on, critical thinking experiences include math trivia, game shows, physically building math concepts, as well as re-engineering and creating equations. Math literacy levels will increase significantly with the immersion of math vocabulary, data analysis (numerical and graphical), independent and team assessments."

The second area will be coordinated by Mr. Keith Young a chemist, who is the founder and executive advisor of ECOTEK. The ECOTEK program involves performing research in four areas: physical science, geosciences, biological science and environmental science. Students are assigned to research projects based on interest, academic record, work ethic and maturity level. The curriculum is process centric and result oriented. In addition, the students are responsible for the project planning, resourcing, execution, risk management, and completion. Parents are heavily involved in the program process.

Thirdly, Dr. Terrance Dillard, the CEO and founder Digital Countermeasures. Countermeasures is a program where students are instructed in the disciplines of computer science, information security, and project management. IT is growing and