

TURNING IDEAS INTO REALITY

by RAYVON FOUCHÉ



The most **prolific** African American inventor of the late 1800s and early 1900s, Granville T. Woods was one of only a few black men during this period who supported themselves primarily by inventing. By the early 1900s, his hard work was about to bring him deserved attention and merit. The reason—at this time, powerful members of the American electrical community began to take notice of him and his work.

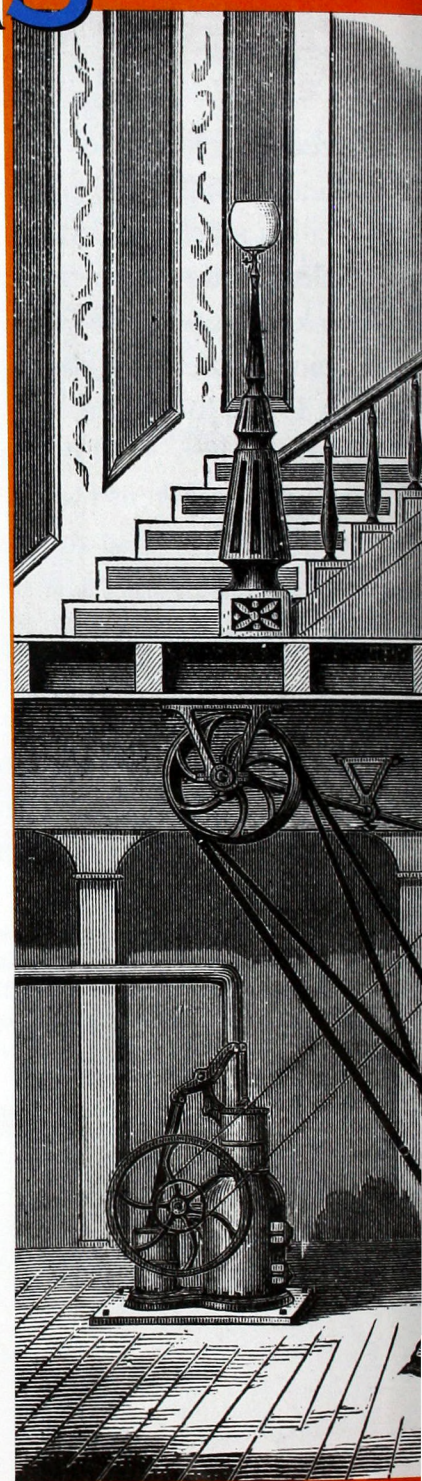
Much of Woods' early working years was spent on and around the various railways in Ohio. His frequent trips to the city of Washington Court House planted the seed for one of his first inventions—the induction telegraphy system. On one of his regularly scheduled trips from Dayton to Washington Court House, he visited the Beckel House, a local hotel. The building's elevator especially piqued his interest.

At the time, elevators needed operators to ride in



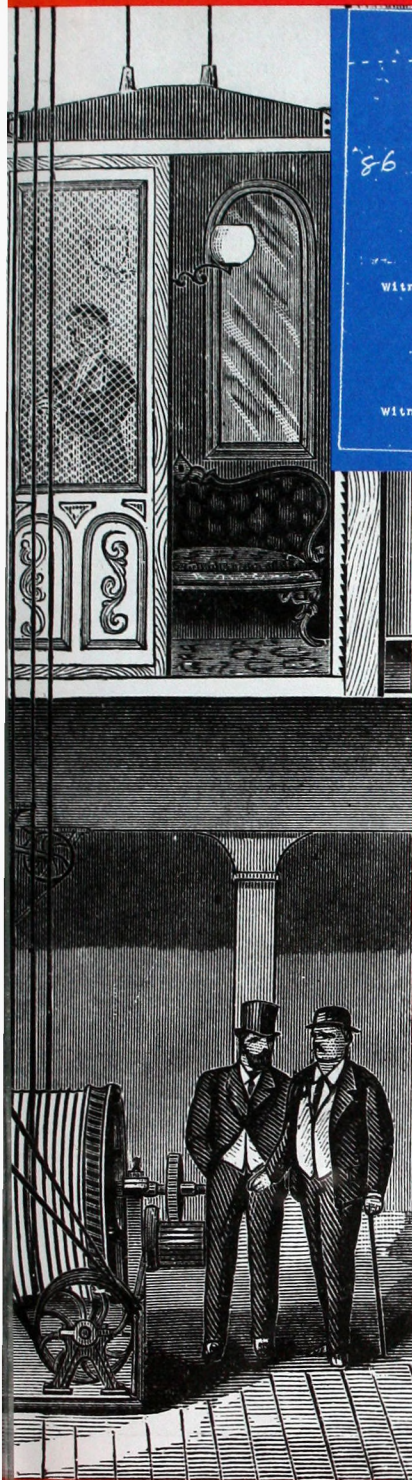
them and stop the elevator at specific floors.

Often there was no way for an operator to know on which floor a passenger was waiting for a ride. To use the elevator, a passenger would ring a bell, and the operator moved the elevator up or down to search for that person. Woods considered this signaling method of communication inefficient and began thinking about ways to improve it. It occurred to him that a better system involved the use of induction—that is, the transmission of electrical, information-carrying impulses through the air. The basic concept of induction communication would direct his

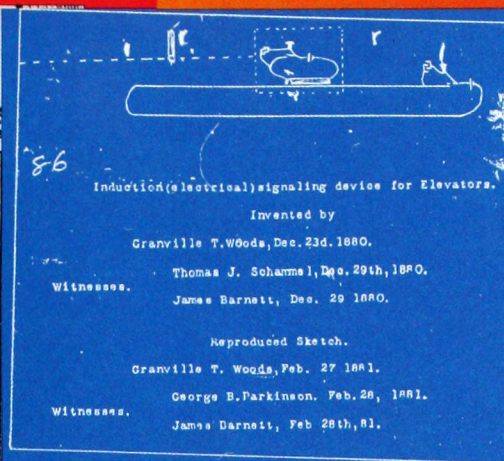


A couple of businessmen checked out an early Otis elevator.

Prolific means turning out many products of the mind.



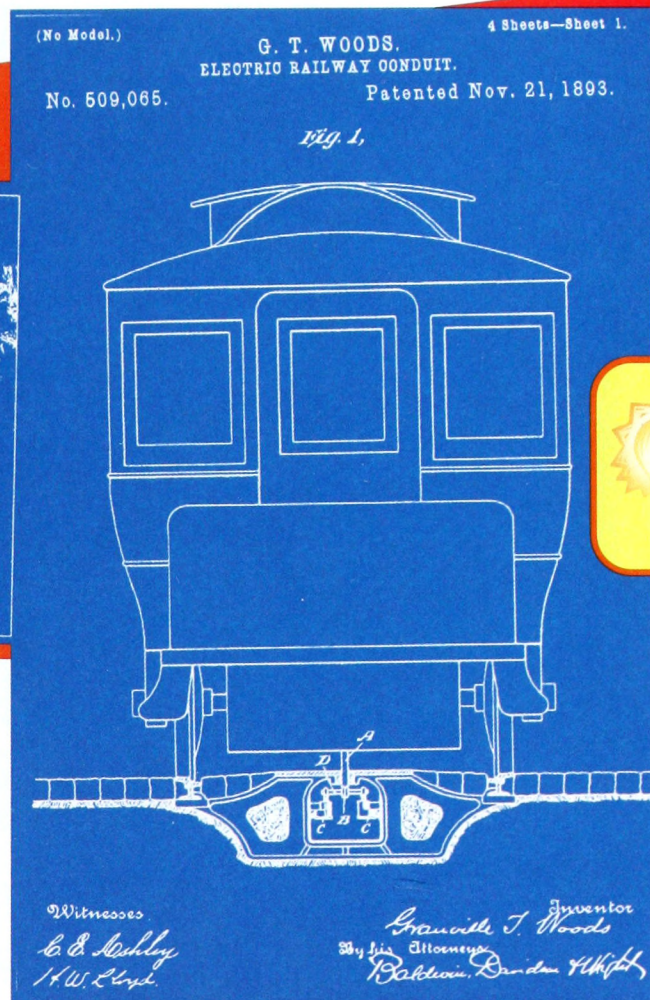
it the machinery for this



research for the rest of his life.

By 1881, Woods had begun to develop and expand his ideas about the possible uses for inductive communication. He now was looking to devise a way to apply the process to railways, his area of expertise. If he could invent a system for trains and railway stations to communicate more efficiently, he believed it could prove useful and beneficial to the industry. Using the same principle as his elevator invention, Woods designed two systems: One worked on the roofs of railway cars and the other, beneath the railway car.

Woods devoted most



Above: Woods' conception of how to safely transfer electric power to a railcar through an underground conduit system. Top left: Woods' elevator signaling device was intended to alert an elevator operator that someone was waiting to ride the elevator, although it did not indicate on which the floor the rider was.

of his career to a type of communication technology that is still in use today. Transmitting information through the air is realized in television and cell phones, as well as in the many wireless technologies that continue to grow in popularity. 📶