

## Garrett Augustus Morgan (1877-1963)

Garrett Augustus Morgan was an American inventor whose curiosity and innovation led him to develop several commercial products, many of which are still in use today. Morgan is probably best known for inventing the gas mask and the traffic light.

The son of former slaves, Morgan was born in Paris, Kentucky on March 4, 1877. His early childhood was spent attending school and working with his brothers and sisters on the family farm. Morgan's formal education ended after elementary school. While still a teenager, he left Kentucky moving north to Cincinnati, Ohio in search of employment.

When he was 37, Morgan invented the gas mask, which was patented in 1914, and was used by the United States Army during World War I. In 1920, he started the *Cleveland Call* newspaper. Morgan became a successful and widely respected businessman. This prosperity enabled him to purchase a home and an automobile. Morgan's experiences driving through the streets of Cleveland are what led him to invent the nation's first patented three-position traffic signal.

Morgan was the first to apply for and acquire a U. S. patent for his three-position traffic signal despite other inventors who were experimenting with and marketing their own devices. The patent was granted on November 20, 1923. Morgan later had the technology patented in Great Britain and Canada. This technology was the basis for the modern-day traffic signal and was a significant contribution to the development of what we now know as Intelligent Transportation Systems.

Morgan's traffic management technology was used throughout North America until it was replaced by the red, yellow and green light traffic signals currently used around the world. Morgan eventually sold the rights for his traffic signal to the General Electric Corporation for \$40,000. Morgan was considered one of America's most prominent inventors.

Shortly before his death, in 1963, Morgan was awarded a citation for the traffic signal by the United States Government. In 2005, Morgan was inducted into the National Inventors Hall of Fame in Akron, Ohio.

Morgan's original wooden prototype traffic signal is on public display at Cleveland's African American Museum along with one of the three original Safety Hoods still in existence. Morgan died August 27, 1963. He was 86 years old.

