G. V. Black is credited with establishing dentistry as a scientific profession, raising it from a mechanical art to a professional status. Born in central Illinois in 1836, Black was much more interested in mechanics and natural phenomena – trees, animals, and insects – than in formal schooling. At seventeen Black began his study of medicine in the office of his brother, Thomas G. Black, who was practicing in Clayton, Illinois. By 1857 Black had developed an interest in dentistry and began studying under Dr. J. C. Spears, who was practicing in the nearby town of Mt. Sterling. After a year working under Dr. Spears, and reading his preceptor's one book on dentistry three times, Black opened his own dental practice in Winchester, Illinois.

In 1862 Black enlisted in the 129th Illinois Volunteers and served as an army scout. A serious war injury led to his discharge in 1863. He then opened a dental practice in Jacksonville, Illinois, where he began researching, experimenting, and teaching the practice of dentistry. Dr. Black's contributions to dentistry include systemizing the operative treatment of dental caries and formulating the principle of extension for prevention, devising a system of dental nomenclature, writing the first text book of human dental anatomy, and his studies of the physical properties of amalgam, dental calculus, dental pathology and dental bacteriology.

Dr. Black joined the Illinois State Dental Society in 1868 and served as the Society's president from 1870 to 1871. He was also elected the first president of the Illinois State Board of Dental Examiners, serving from 1881 to 1887. In 1883 Black was appointed to the Chair in Dental Pathology at the Chicago College of Dental Surgery, a position he held for six years. From 1891 to 1897 Black was professor of Dental Pathology and Bacteriology at Northwestern University Dental School. In 1897 Dr. Black closed his private Jacksonville practice and accepted the deanship of the Northwestern University Dental School, where he served until his death in 1915.

NOTABLE FACT: In 1870 Dr. Black invented a cord-driven dental engine. He also invented and patented a foot motor. He was one of the first medical professionals to use nitrous oxide gas as an anesthetic in dentistry.