

## **The Father of Modern Dentistry - Dr. Greene Vardiman Black (1836-1915)**

Greene Vardiman Black was born in a farm in Winchester, Illinois on August 3<sup>rd</sup> 1836. He had a meager educational advantage by going few months each year in winter to a new-room school near his father's farm. He showed very little interest in school, however preferring to wander through the woods studying nature and wild-life which developed his keen sense of observation and an analytical mind which in turn turned out to be the foundation of his life achievement.

At the age of seventeen he decided to study medicine at his brother Thomas G. Black's office who was a practicing physician at Clayton, Illinois. After his 4 years of study (1853-56) gaining knowledge in anatomy and medicine he studied dentistry under J.C. Speer who was practicing dentist at Mt. Sterling, Illinois. He read and twice re-read the only book on dentistry that Dr. Speer owned. He assisted Dr. Speer in his work for a few months and with this little formal education and his knowledge of basic sciences he set up his dental practice at Jacksonville, Illinois in 1856 where he became a very well known and respected practitioner of dentistry. There was a brief interruption in his career as Dr. Black was someone who cared for more than just dentistry, he was a true patriot at heart and served as a union scout in 1862 during the civil war but was soon back on track. There are a few men who lift the age they inhabit to unknown heights, till all men walk on higher grounds and Black was truly one of them. He never believed in practicing the mechanical art of dentistry that was taught and prevailed in his time but he instead made dentistry a dignified, scientific and highly skilled profession.

G.V. Black's work on gold foil was so well done that it could not be bettered and stands today as he left it well completed and unchallenged. He invented the cord driven dental engine with a foot motor in 1870. The formula for amalgam that Black worked out is almost unchanged to this day. He even gave away his classification of dental caries and standardized dental terminologies. To Dr. G.V. Black is due the credit for presenting to the profession the current scheme of nomenclature and classification of dental operating instruments, he was the one who classified instruments as monangle, binangle, tripleangle and quadrangle depending on the number of angles in the shank. G.V. Black established principles governing the design of cavities and he published his

concept 'EXTENSION FOR PREVENTION' in 1891 in an article in Dental Cosmos titled "MANAGEMENT OF ENAMEL MARGINS". The wisdom of his work remained unchallenged for almost a century. Black's idea was to prevent the recurrence of dental caries by placing the margins of the restoration along lines that would be cleansed by the normal excursion of food. To obtain this self-cleansing benefit the margins of the restoration should be placed as close as possible to the mesio-buccal, disto-buccal, mesio-lingual. distolingual line angles of the teeth.

Some of the outstanding books published by G.V.Black are 'Formation of poisons by microorganisms', 'The Periosteum and the Peridental Membrane', Operative Dentistry (2 volumes) and Special Dental Pathology. He has held innumerable respectable positions in the field of dentistry like the President of the Illinois State Dental society, Illinois State Dental Board of Dental Examiners, National School of Dental Techniques and the National Dental Association, he was the Chairman of the Section of etiology, pathology & bacteriology at the World Colombian Dental Congress, the Professor of Dental Pathology(Chicago College of Dental Surgery & North Western University Dental School).a voted life membership in the Illinois State Dental Society and also the Dean of the North Western University Dental School to just name a few.

He had won the 'Miller Prize' for his contribution to the advancement of dentistry, awarded the 'Doctor of Science' by the Missouri Dental College and later by the Illinois College & University,'Doctor of Medicine'by Chicago Medical College and 'Doctor of Law' by the North Western University Dental School. The Dental Society of the state of New York also awarded him the 'Fellowship medal'. These high positions and responsibility had him working throughout the day and late into the night, he still found time for his passion for music. He was a musician of ability who played the piano, violin, cello, piccolo, flute and the cornet. To gratify his love for nature and travel, it was his custom to spend a month each summer in the woods or in travel. He even designed his own sloop-rigged boat and named it 'Microbe'.

The principle of 'Extension for prevention' that Black put forward has been taken over by 'Prevention of extension' but it was something that Black knew because it was his own statement that *"The professional man has no right other than to be a continuous student"*, he knew that what he found and formulated

would be reformed and that dentistry can never be a 'Cook-book method'. Had Dr. Black been alive today he would have been the first to applaud these developments and it would have been his disappointment that it did not happen until recently. 19 years (in the year 1896) before he died, Black made a prophetic statement *"The day is surely coming and perhaps within the lifetime of you young men before me when we will be engaged in practicing preventive rather than reparative dentistry"*. Black died on 31<sup>st</sup> August 1915 at the grand old age of 79 years leaving behind his wife and a rich heritage of 4 children of the same sterling qualities and was buried at the Diamond Grove Cemetery, Jacksonville.

Greene Vardiman Black single-handedly raised dentistry from *a trade to a profession* and made it what it is today. Black's life showed that he was a naturalist, musician, artist, scientist, physician, surgeon and a dentist too. He was truly a legend in his own time