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CRAWFORD WILLIAMSON LONG, 1815–1878 •

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As your chairman of the section on Anesthesiology of the American Medical Association, and as this is the one hundredth anniversary of the discovery of ether as an anesthetic agent for the relief of pain during surgical operations by Crawford W. Long of Georgia, I feel honored, and now wish to give a brief history of Long and his discovery.

Crawford Williamson Long was born in Danielsville, Madison County, Georgia, November 1, 1815. His grandfather was Captain Samuel Long, an Irishman by birth, who immigrated to Pennsylvania in 1762, and settled in Carlisle. He married Miss Ann Williamson, of Ulster, Ireland; served in the army of Washington, and at the surrender was a Captain in the command of the Marquis de Lafayette. After the war in 1792, Samuel Long moved to Madison County, Georgia, taking with him his 11 year old son, James, who had been born in Carlisle. This James Long, father of Crawford W. Long, married Miss Elizabeth Ware, a Virginia girl whose parents were born and reared in Albemarle County, Virginia, and had come to Georgia and settled in Madison County in 1788. She was an energetic, warm-hearted, ambitious woman of refined taste and much literary ability. Crawford Long's father was a planter and for years was clerk of the Superior Court. He sat in the State Senate for two terms.

Crawford W. Long attended the academy in his native town and at the age of 14 entered Franklin College, now the University of Georgia, where he took the degree of Master of Arts in 1835, at the age of 19, being considered "studious and wise" beyond his years, and called "The Baby" at the college on account of his youth. He stood second in the graduating class. Long taught school one year in Danielsville Academy, and after that began the study of medicine at Jefferson, Georgia, under Dr. Grant. He then took a medical course of one year at Transylvania University in Lexington, Kentucky.

In 1837 he entered the medical department of the University of Pennsylvania, which was then, as it is today, one of the leading medical schools of the world. Receiving his degree of M.D. in 1839, he next went to New York where he spent eighteen months "walking the hospitals" and working with leading medical teachers. He specialized in surgery and saw much suffering result therefrom.

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In 1841, when 26 years of age, Dr. Long settled in the little town of Jefferson, Jackson County, buying out the practice of his old preceptor, Dr. Grant. He soon acquired a lucrative practice which grew and extended into the neighboring counties and towns of Georgia. His home in the village became the favorite social gathering place for the young men of the vicinity and it was here that the great discovery was made, March 30, 1842.

Dr. Long was one of the charter members of the Medical Association of Georgia which was organized in Macon in 1849. In this year he published in the Southern Medical and Surgical Journal an account of his discovery with affidavits of witnesses.

On August 11, 1842, Dr. Long married Miss Mary Caroline Swain, the 16 year old daughter of a planter, George Swain, and a niece of Governor Swain of North Carolina, a lovely and intellectual woman fit in every way to be the life partner of such a man. Twelve children were born to this marriage; six grew to maturity. Mrs. Long died September 22, 1888, at Comfort, Texas, from injuries received in a railroad wreck. She was buried by the side of her husband in Oconee Cemetery at Athens, Georgia.

It is interesting to note that for one year (1850–1851) Dr. Long lived in Atlanta, but he found it such a crude village and with so little promise that he moved back to the classic city of Athens, where there were better advantages for educating his children. He continued to reside in Athens until the day of his death, June 16, 1878, after practicing medicine for nearly forty years.

During the War between the States he was never in active service but was appointed in charge of the military hospitals on the University campus at Athens by the Confederate Government. The Southern Cross of honor was conferred upon him by the Daughters of the Confederacy.

It was not until the early chemical discovery of hydrogen, nitrogen, oxygen and nitrous oxide in the latter part of the eighteenth century that the way was found for scientific anesthesia. Sir Humphry Davy said in 1800, "Since nitrous oxide is capable of destroying pain it may be used in surgical operations." Twenty-five years later Henry Hill Hickman anesthetised a puppy and other animals with nitrous oxide and carried out many operations upon them successfully without a struggle. These demonstrations went unheeded; the surgical theaters continued to be torture chambers. It was left to Horace Wells, of Hartford, to put the use of nitrous oxide gas into practice by having his own wisdom tooth drawn while under its influence in 1844.

The knowledge and interest of these drugs reached even to the distant rural hamlets. In one of these, Jefferson, Jackson County, Georgia, many miles from a railroad, Crawford W. Long was plying his profession of medicine. Fresh from the University of Pennsylvania he knew the exhilarating properties of the drug and frequently fur-
nished ether to the young men who met at his office for an "ether frolic." In the winter of 1841–1842—but let him tell his story:

"They were so much pleased with its effect that they afterwards frequently used it and induced others to do the same, and the practice soon became quite fashionable in the country and some of the adjacent counties.

"On numerous occasions I inhaled ether for its exhilarating properties and would frequently, as sometime subsequent to its inhalation, discover bruises or painful spots on my person which I had no recollection of causing, and which I felt satisfied were received while under the influence of ether. I noticed my friends while etherised received falls and blows which I believed were sufficient to produce pain, not in such a state of anesthesia, and on questioning them they uniformly assured me that they did not feel the least pain from these accidents. Observing these facts, I was led to believe that anesthesia was produced by the inhalation of ether, and that its use would be applicable in surgical operations.

"The first patient to whom I administered ether in a surgical operation was Mr. James M. Venable, who then resided within two miles of Jefferson, and now resides in Cobb County, Georgia. Mr. Venable consulted me on several occasions in regard to the propriety of removing two small tumors situated on the back part of his neck, but would postpone from time to time having the operation performed, from dread of pain. At length I mentioned to him the fact of my receiving bruises while under the influence of ether vapor without suffering, and as I knew him to be fond of, and accustomed to, inhaling ether, I suggested to him the probability that the operation might be performed without pain, and proposed operating on him while under its influence. He consented to have one tumor removed, and the operation was performed the same evening. The ether was given to Mr. Venable on a towel and when he was fully under its influence I extirpated the tumor.

"It was encapsulated and about half an inch in diameter. The patient continued to inhale ether during the time of the operation and, when informed it was over, seemed incredulous until the tumor was shown him.

"He gave no evidence of suffering during the operation, and assured me, after it was over, that he did not experience the least degree of pain from its performance. The operation was performed on the thirty-first day of March, 1842."

Three similar cases were reported that same year and at least one surgical operation annually thereafter (abstracts from Long's original paper were read before the Georgia State Medical Association, in 1849).

I had the privilege of anesthetizing one of Dr. Long's daughters, Mrs. Eugenia Long Harper, who unfortunately received a fracture of
the neck of the right femur which was nailed November 14, 1934. She made an uneventful recovery and was able to be up and walking without the aid of even a stick. She was 73 years old when this happened, and died in 1940, some six years after the injury was received.

On April 10, 1910, the imposing granite monument was unveiled and presented by Dr. L. G. Hardman to the Jackson County Medical Society. It stands in the center of the public square facing the spot where the first painless operation in modern surgery was performed.

On March 30, 1912, on the seventieth anniversary of his first operation a great celebration was staged at his alma mater, the University of Pennsylvania, and placed in ever-enduring bronze, a memorial in its classic halls to the great discovery which the youthful Georgian made little more than three years after his graduation.

On the afternoon of June 14, 1921, on the occasion of the one hundred and twenty-first commencement exercise of the University of Georgia, a handsome medallion monument in memory of Dr. Long was unveiled on the campus.

On March 30, 1926, in Statuary Hall at our National Capitol an enduring effigy of Crawford W. Long was presented to the National Government by the State of Georgia. The statue was carved from marble which came from his native state, Georgia. The money for this purpose was raised by the Crawford Long Memorial Association, of which Dr. Frank K. Boland, of Atlanta, was president and presided at this presentation. The entire program of the unveiling and presentation by the State of Georgia can be found in the Congressional Record, Pages 7988–7995, April 23, 1926.

On April 15, 1926, a monument in honor of Dr. Long was unveiled on the Courthouse grounds at his birthplace, Danielsville, Georgia.

It is quite fitting to pay tribute to other pioneers in this field of work, who, within the space of only a few years, made discoveries also; Horace Wells, a dentist, of Hartford, Connecticut, in 1844, used nitrous oxide quite extensively in his practice, and William T. G. Morton, of Boston, also a dentist, gave a public demonstration of his discovery of the anesthetic properties of ether at the Massachusetts General Hospital on October 16, 1846, more than four years after Long used it in 1842. Sir J. Y. Simpson, of Edinburgh, England, who was not satisfied with the disagreeable odor and irritating effect of ether, was carrying on similar experiments when he discovered the anesthetic properties of chloroform on November 4, 1847.

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