

Title: Crawford Williamson Long and the First Anesthetics Administered to Children

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Introduction: Crawford Williamson Long (1815-1878), a rural doctor of Scots-Irish ancestry working in Jefferson, Georgia, U.S.A., is believed to have priority in producing anesthesia for surgery (1). He performed at least five operations using ether prior to Morton's first public demonstration in 1846.

The First Anesthetics: In early 1842, Long suggested to a friend, James Venable, that the latter inhale ether while undergoing excision of a neck tumour. The operation, which took place in Long's office on 30th March 1842 stands as the first documented case of the use of an inhaled agent for surgical anesthesia. Venable gave no evidence of suffering during the procedure and when informed that it was over seemed incredulous until the tumour was shown to him (2). Long excised a second tumour, again using ether, from Venables' neck on 6th June of the same year.

First Pediatric Anesthetic: Long's third anesthetic, the first ever in a child, was administered to a young Negro slave. He wrote: *"My third experiment in etherization was made on 3rd July, 1842, and was on a Negro boy, the property of Mrs. S. Hemphill, who resides nine miles from Jefferson. The boy had a disease of the toe, which rendered its amputation necessary, and the operation was performed without the boy evincing the least sign of pain"*(2). Some years later Mrs Hemphill certified: *".....some six or seven years ago, I sent my negro boy, Jack, to Dr C.W. Long to have his toe examined and cut off if necessary..... After the boy returned home he informed me that Dr. Long cut off his toe and that he did not suffer any pain from the operation"* (3).

An Early Anesthesia Trial?: Long did not publish his work until 1849. He acknowledged that there would be those who would question the delay and wrote "The question will no doubt occur why did I not publish the results of my experiments in etherization soon after they were made? I was anxious, before making my publication, to try etherization in a sufficient number of cases to fully satisfy my mind that anesthesia was produced by the ether, and was not the effect of the imagination, or owing to any peculiar insusceptibility to pain in the persons experimented on" (2). Support for this claim comes in the account of John Groves, a medical student of Long's in 1845, and a witness to the second occasion on which he anesthetized a child, again a young Negro victim of slavery (Isom, property of Mr Ralph Bailey). Many years later, Groves wrote concerning Long's etherization of Isom: *"The first case that came under his care where its use was applicable after my going into his office was not until January 8, 1845, which was the case of a Negro boy having two fingers to amputate, caused by a neglected burn. I, as the only student still with the doctor, he had me to accompany him to see the operation and assist in the administration of the ether. The first finger was removed without pain, the second without ether, the child suffered extremely. This was done to prove that insensibility to pain was due to the agent used"* (4).

In Later Years: While Horace Wells, Charles Jackson and William Morton were all later to seek both fame and fortune as rewards for their roles in the "discovery" of anesthesia, Long quietly continued to practice medicine, modestly avoiding the limelight that could have been his due. His work was later recognised by the adoption of March 30th (the anniversary of his first operation on Venable) as "Doctor's Day" in the U.S.A., the creation of Long County by the state of Georgia, the unveiling of a statue in his likeness in Statuary Hall, Capitol Building, Washington D.C., the issuing of a postage stamp in his honour by the U.S. Postal Service and the opening of the Crawford W. Long museum in Jefferson.

Refs:

1. Lyman H.M. Artificial Anaesthesia and Anaesthetics. New York: William Wood & Co., 1881.
2. Long C.W. Southern Med Surg J., 1849.
3. Boland F.K. The first anesthetic: The story of Crawford Long. Athens: University of Georgia Press, 1950.
4. Taylor F.L. Crawford W. Long and the discovery of ether anesthesia. New York: Paul B. Hoeber Inc., 1928.