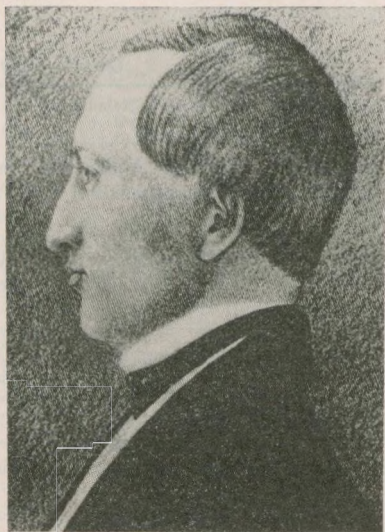


MEDICAL HISTORY

Crawford W. Long, M. D., and the First Surgical Operation under Ether Anesthesia



Crawford W. Long, M.D.

LOUIS H. RODDIS, M.D.

IN THE town of Jefferson in northeastern Georgia on March 30, 1842, Crawford Williamson Long, a 26-year-old country doctor, performed the first surgical operation under a general anesthetic.

As Dr. Long did not immediately publish a report of his work, much of the credit for the first use of ether anesthesia has been given to a chemist, Charles T. Jackson, a dentist, William T. Morton, and a surgeon, John Collins Warren. Dr. Warren removed a tumor from a jaw under ether anesthesia given by Dr. Morton on Oct. 16, 1846—4½ years after Long's use of general anesthesia. Also, Long had performed a number of other opera-

tions under ether during the interval, thus there is no question about the priority in time of his work.

His failure to publish his experience, however, robbed him of much of the recognition he otherwise should have received. In the meantime, Jackson, who had suggested the use of ether to Morton, became engaged in a controversy as to the credit for its use by Dr. Warren, a controversy that has continued to this day.

The discovery of general anesthesia began on April 17, 1799, when Sir Humphry Davy found that pure nitrous oxide is respirable, and when inhaled produced

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first a pleasant stimulation and then a state of insensibility. Sir Humphry declared that, "It appeared capable of destroying physical pain and may probably be used with advantage during surgical operations in which no great effusion of blood takes place." The use of it as a stimulant became a fad, and parties and exhibitions became popular in which the "laughing gas" brought on a state of exhilaration in volunteer subjects. Following such a demonstration, a Boston dentist, Horace Wells, had a tooth extracted on December 11, 1844, by another dental surgeon, John M. Riggs.

It was such a public demonstration of "laughing gas" by an itinerant lecturer in Jefferson that led several young men to ask Dr. Long to try it on them. He replied that he had no nitrous oxide but had some sulphuric ether which had about the same effect. He used this on a number of occasions and also took it himself. He noticed that bruises were not felt at the time they were received, and, as he said, "was led to believe that its use would be applicable to surgical operations."

From this belief it was only a step to the operation performed on March 30, 1842. The patient was a Mr. John Venables who had 2 small tumors, probably sebaceous cysts on the back of the neck. Dr. Long suggested the use of ether; this was given by pouring it on a towel over

the patient's face. After anesthesia was obtained, Dr. Long removed an encysted tumor about 1" in diameter. The patient had felt nothing and at first would not believe that the tumor had been taken out. On June 6 of the same year, Long resected the other tumor which was a little larger and more adherent to the capsule. The charge for giving the anesthetic and the excision was \$2.00!

Long continued to use ether in various cases of minor surgery. When the work of Jackson and Morton and the operation by Warren became known, he did not even then publish his own experience in a formal article, but he did have 2 certificates submitted by patients printed in the *Southern Medical Journal* in Dec., 1849.

In 1854, his friends urged him to take up the matter of establishing priority through his Senator. Both Morton and Jackson were then attempting to obtain a grant of money from Congress as a reward for their part in the discovery of general anesthesia. Jackson visited Dr. Long and was so convinced of the priority of Long's claim that later he published in the *Boston Medical and Surgical Journal*, Apr. 11, 1861, a statement that Long was entitled to the honor of having performed the first surgical operation under ether anesthesia.

Long, who had graduated from the University of Pennsylvania Medical School in 1839 and then did postgraduate work in surgery in New York, began his practice in

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Jefferson the year before performing the famous operation. He remained there until 1850, when he moved first to Atlanta for a year and then to Athens, Ga., where he remained until his death. This occurred on June 16, 1878, when after delivering a woman—who was under ether anesthesia—and handing the baby to the nurse, he sank to the floor unconscious from a cerebral hemorrhage. He died a few hours later at the patient's home.

One of his daughters, Frances Long Taylor, published a biography of her father in 1928 under the title: *Crawford W. Long and the Discovery of Ether Anesthesia*. There is a statue of him in Danielsville, and in Jefferson the site of his office is now the Long Museum. His statue and that of Alexander Stevens, Vice-President of the Confederacy, are the 2 representatives of Georgia in the Hall of Fame in the National Capitol.

4420 Braeburn Road
San Diego 16, California

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