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BIOGRAPHICAL SKETCH

OF

DR. WILLIAM T. G. MORTON.

[Reprint from PHYSICIANS AND SURGEONS OF AMERICA.]



WILLIAM THOMAS GREEN MORTON.

MORTON, William Thomas Green, discoverer of anæsthesia, was born in Charlton, Mass., August 9, 1819; died in New York city, July 15, 1868. He was the son of James and Rebecca (Needham) Morton; grandson of Thomas Morton, a Revolutionary soldier, born in 1759; great-grandson of Robert Morton, who immigrated from Scotland and settled in Mendon, near Charlton, Mass.; he acquired by purchase for three shiploads of goods, seven thousand acres of land in the eastern part of New Jersey, where he had been induced to move, and in a portion of that property is now situated the city of Elizabethtown. The original grant has never been sold or in any way cancelled, and with the original title deed remains in the possession of the Morton family.

William Thomas Green Morton passed his youth in alternate school and farm work, until, at the age of thirteen, he entered the academy at Oxford, becoming a member of the family of Dr. Pierce. He also attended the academies at Northfield and Leicester, Mass. Owing to his father's financial embarrassment, he was obliged to leave school at the age of seventeen, and secured a position in a large publishing house in Boston. In August, 1840, he entered the Baltimore College of Dental Surgery, then just established under the auspices of the American Society of Dental Surgeons, in connection with the Washington University of Medicine of Baltimore, Md. In 1842, and after graduating in dentistry, he entered upon the practice of his profession in Boston, Mass. March 20, 1844, he entered his name as a student of medicine with Dr. Charles T. Jackson of Boston; in November, 1844, he matriculated in the Medical School of Harvard University, attending all the lectures in regular course; and in 1852, received the honorary degree of M. D., from the Washington University of Medicine, afterward merged in the College of Physicians and Surgeons, Baltimore, Md.

Meanwhile Dr. Morton was endeavoring to discover some means of deadening pain in connection

with his dental operations, and on September 30, 1846, at his office in Boston, administered sulphuric ether to one Eben Frost and extracted a tooth without pain to the patient. Securing permission from Dr. John C. Warren, senior surgeon of the Massachusetts General Hospital, on October 16, 1846, he administered ether to a patient at that hospital, and Dr. Warren performed a severe surgical operation, the patient remaining unconscious during the time. Dr. Morton at that time was but twenty-seven years of age and still a student in the Medical School of Harvard University. The discovery being announced, he was compelled to discontinue his studies in order to devote his entire time to his work. After the public demonstration of a painless capital operation at the Massachusetts General Hospital, October 16, 1846, it was necessary that the process should receive a suitable name. A meeting was held at the house of Dr. A. A. Gould, at which were present Dr. Henry J. Bigelow, Dr. O. W. Holmes, and Dr. Morton, and Dr. Gould read aloud a list of names which he had prepared. On hearing the word "Letheon," Dr. Morton exclaimed, "That is the name the discovery shall be christened." Dr. Gould and the others also favored this name, derived from the mythological river Lethe. But after a subsequent consultation with Dr. Holmes and a consideration of the terms suggested by him in the following letter, Dr. Morton adopted the terms anæsthesia, anæsthetics, and etherization, the terms now in common use. Following are two letters from Dr. Holmes bearing upon this subject:

BOSTON, NOVEMBER 21, 1846.

My Dear Sir:—Everybody wants to have a hand in a great discovery. All I will do is to give you a hint or two, as to names, or the name, to be applied to the state produced and the agent.

The state should, I think, be called "anæsthesia." This signifies insensibility, more particularly (as used by Linnæus and Cullen) to objects of touch (See "Good-Nosology," p. 259.) The adjective will be "anæsthetic."

Thus we might say the state of anæsthesia, or the anæsthetic state. The means employed would be properly called the anti-æsthetic agent. Perhaps it might be allowable to say anæsthetic agent, but this admits of question.

The words antineuric, aneuric, neuro leptic, neurolepsia, neuro etasis, etc., seem too anatomical; whereas the change is a physiological one. I throw them out for consideration.

I would have a name pretty soon, and consult some accomplished scholar, such as President Everett or Dr. Bigelow, Senior, before fixing upon the terms, which *will be repeated by the tongues of every civilized race of mankind.*

You could mention these words which I suggest for their consideration; but there may be others more appropriate and agreeable.

Yours respectfully,

O. W. HOLMES.

DR. MORTON.

BOSTON, APRIL 2, 1893.

My Dear Sir:—Few persons have or had better reason than myself to assert the claim of Dr. Morton to the introduction of artificial anæsthesia into surgical practice. The discovery was formally introduced to the scientific world in a paper read before the American Academy of Arts and Sciences by Dr. Henry J. Bigelow, one of the first, if not the first, of American surgeons.

On the evening before the reading of the paper containing the announcement of the discovery, Dr. Bigelow called at my office to recite this paper to me. He prefaced it with a few words which could never be forgotten.

He told me that a great discovery had been made, and its genuineness demonstrated at the Massachusetts General Hospital, of which he was one of the surgeons. This was the production of insensibility to pain during surgical operations, by the inhalation of a certain vapor (the same afterward shown to be that of sulphuric ether). In a very short time, he said, this discovery will be all over Europe. He had taken a great interest in the alleged discovery, had been present at the first capital operation performed under its influence, and was from the first the advisor and supporter of Dr. W. T. G. Morton, who had induced the surgeons of the hospital to make trial of the means by which he proposed to work this new miracle. The discovery went all over the world like a conflagration.

The only question was whether Morton got advice

from Dr. Charles T. Jackson, the chemist, which entitled that gentleman to a share, greater or less, in the merit of the discovery.

Later it was questioned whether he did not owe his first hint to Dr. Horace Wells, of Hartford, which need not be disputed. Both these gentlemen deserve "honorable mention" in connection with the discovery, but I have never a moment hesitated in awarding the essential credit of the great achievement to Dr. Morton.

This priceless gift to humanity went forth from the operating theatre of the Massachusetts General Hospital and the man to whom the world owes it is Dr. William Thomas Green Morton.

Experiments have been made with other substances besides sulphuric ether, for the production of anæsthesia. Among them, by far the most important, is chloroform, the use of which was introduced by Sir James Y. Simpson. For this and for the employment of anæsthetics in midwifery he should have all due credit, but his attempt to appropriate the glory of making the great and immortal discovery, as revealed in his contribution to the *Eighth* edition of the Encyclopædia Britannica, is unworthy of a man of his highly respectable position. In the *Ninth* edition of the same work his article, "Chloroform," is omitted and a fair enough account of the discovery is given under the title "Anæsthesia."

Yours very truly,

O. W. HOLMES.

In November, 1846, Dr. Morton took out a patent for his discovery, in the name of "Lætheon." He offered free rights to all charitable institutions throughout the country, but the government appropriated the discovery without remuneration. In taking out this patent Dr. Morton was badly advised and regretted it. His misfortunes have amply atoned to a generous profession for this step. He applied to congress for relief in 1846 and again in 1849, endorsed by the action of the trustees of the Massachusetts General Hospital, who acknowledged him in 1848 to be the discoverer of the power and safety of ether in producing anæsthesia. In 1852, a bill, appropriating \$100,000 as a national testimonial for his discovery, was introduced in congress, with the condition that he surrender his patent to the United States govern-

ment, but it failed, and he was again unsuccessful in securing aid in 1853 and in 1854. Testimonials in his behalf were signed by prominent members of the profession in Boston in 1856, in New York in 1858, and in Philadelphia in 1860.

Dr. Morton received from the French Academy of Sciences a divided Montyon prize, 2,500 francs; the "Cross of the Order of Wasa, Sweden and Norway;" "The Cross of the Order of St. Vladimir, Russia;" and a silver box containing one thousand dollars from the trustees of the Massachusetts General Hospital "in honor of the ether discovery of September 30, 1846."

Dr. Morton spent the last years of his life in agricultural pursuits in Wellesley, Mass., where he also raised and imported fine cattle. He died financially poor. Over his grave in Mount Auburn cemetery, Boston, is a monument "erected by citizens of Boston," with the following inscription, written by the late Dr. Jacob Bigelow, of Boston: "William T. G. Morton, inventor and revealer of Anæsthetic Inhalation. By whom pain in surgery was averted and annulled. Before whom, in all time, surgery was agony. Since whom science has control of pain." A monument in the Public Garden in Boston is erected "To commemorate the *discovery* that the inhalation of ether causes insensibility to pain. First proved to the world at the Massachusetts General Hospital, in Boston, October, 1846," the date of Dr. Morton's successful demonstration at the hospital. Dr. Morton's name is enrolled upon the base of the dome in the new chamber of the house of representatives in the state house in Boston, among the selected fifty-three of Massachusetts' most famous citizens, the names having been selected either to mark an epoch or designate a man who has turned the course of events. Dr. Morton's name is also enrolled upon the medallions of the new public library of Boston, among the five hundred and fifty names chosen from the records of historical time in honor of their achievements.

In our Civil War Dr. Morton was with General Grant in the Battles of the Wilderness, and with General Burnside in the Battle of Fredericksburg, administering to the wounded. The following letter was written from the headquarters of the Army of the Potomac to a friend in Washington :

HEADQUARTERS, May 19, 1864.

My Dear —:—Soon after leaving Fredericksburg to come out here, we passed some four or five army wagons parked, each one with its four or six horses or mules, ready for service, yet near the supplies of forage. There were also large droves of cattle, brought from the western states for the use of the army, and killed as they are needed. The road, if road it may be called, was wretched indeed, the horses often sinking in mud-holes to the saddle-girths. Through this, ambulances and wagons were floundering along, carrying the wounded to Fredericksburg, while others, only slightly injured, plodded along on foot. Occasionally we passed an impromptu camp, where these slightly wounded men had stopped to rest, and several newly made graves showed where some poor fellows had made their last halt. The last five miles of our journey was over a new road cut through the woods, as the guerrillas had possession of the turnpike near Spottsylvania Court house. Indeed they have occasionally swooped in upon the road over which we went, carrying off horses and robbing the wounded.

On reaching the top of an eminence, I at last saw our line, in the shape of a horseshoe, somewhat straightened out, with troops all around, in readiness for instant attack, while beyond them, crouched in rifle-pits, were our pickets. Riding through regiments and batteries I reached a house which had been pointed out to me as Gen. Grant's headquarters, but found on my arrival that he had moved, that the building might be used as a hospital. Just then several wounded rebels were brought up on stretchers, and the surgeon in charge, who had known me after Burnside's attack upon Chancellorville, invited me to administer anæsthetics, which I did. All of them had limbs amputated, and seemed very grateful afterwards for the kind treatment which they received, but they were bitterly secesh when the war was alluded to.

When these wounded rebels had been attended to, the surgeon sent an orderly with me to the headquarters of the medical director of the Army of the Poto-

mac, to whom I reported for duty, and then, as there was no need for my services, I went on until I reached the headquarters of the army. These occupied a group of about twenty tents, pitched along the border of a piece of woodland. In front of one of these tents, the fly of which was converted into an awning, sat the lieutenant general, with several officers and Mr. Dana, the assistant secretary of war.

While Gen. Grant was in Washington I had been introduced to him, and he now remembered me and kindly welcomed me. He conversed very frankly upon military matters, declaring that he intended to give the rebels all the fighting they wanted. It would not be proper, I suppose, to write you the general's remarks on the campaign, but I must tell you that in answer to my question—"How long is this deadly conflict to last?" he replied, in his cool, unassuming way, "Perhaps until the Fourth of July, and we shall have all the time supplies and reinforcements, which they can't get."

The general assigned me a tent and an orderly, and invited me to share his camp-fare. On previous visits to camps, I had found that the generals lived far better than do the boarders at the Washington hotels, but our supper that night was simply coffee and bread and butter. The butter (the general said) was made on the field of battle.

Since I have been here there has been a succession of skirmishes and picket firings. The pickets lie crouched in rifle-pits, in which when it rains, there is often a foot or eighteen inches of water, and between them is what is called *the disputed ground*. When there is any heavy firing heard the ambulance corps, with its attendants, stationed nearest to the scene of action, starts for the wounded. The ambulances are halted near by, and the attendants go in with stretchers to bring out the wounded. The rebels do not generally fire upon those wearing the ambulance badges.

Upon the arrival of a train of ambulances at a field-hospital the wounds are hastily examined, and those who can bear the journey are sent at once to Fredericksburg. The nature of the operations to be performed upon the others is then decided upon, and noted on a bit of paper pinned to the pillow or roll of blanket under each patient's head. When this had been done I prepared the patients for the knife, producing perfect anæsthesia in an average time of three minutes, and the operators followed, performing their operations with dexterous skill, while the dressers in their turn bound up the stumps. It is surprising to see with what

dexterity and rapidity surgical operations are performed by scores in about the same time really taken up with one case in peaceful regions.

The medical department deserves great credit for the abundant supplies sent to the wounded, while the members of the Christian and sanitary commissions furnish many additional comforts. The number of wounded has been greatly exaggerated, and will not to-day amount to twenty thousand. Of this number a large proportion are so slightly wounded that in thirty days they will be ready for duty again.

The dead are buried where they fall, or near the hospitals in which they die. Their names are carefully written on wooden head-boards, and entered into registers. It is, however, useless for friends to come here for their remains, as there is no way of transporting them to Washington except in government wagons, and the army needs all its transportation.

What houses remain standing are used as hospitals, the female occupants being permitted to retain one room. Often a stack of chimneys show where a dwelling has been burned. The colored people are leaving for the North, carrying their effects in small wagons or carts, often drawn by an ox working in shafts. It has rained nearly every day since I have been here, but the soldiers manage to keep themselves comfortable under shelter tents or bowers. Artillerymen sleep under their cannon, which are covered by tarpaulins.

Very truly yours,

W. T. G. MORTON.

Following is an extract from an Associated Press report from the Army of the Potomac :

Dr. Morton, of Boston, one of the first discoverers, if not indeed the first discoverer of the anæsthetic properties of ether, has been with the army the last week, working and observing in his capacity, with all his might. During this time he has, with his own hands, administered ether in over 2,000 cases. The medical director, when asked yesterday in what operations he required ether to be used, replied, "In every case." Day before yesterday some 300 rebel wounded fell into our hands. Of these twenty-one require capital operations. They were placed in a row, a slip of paper pinned to each man's coat collar telling the nature of the operation that had been decided upon. Dr. Morton passes along, and with a towel saturated with ether puts every man beyond consciousness and pain. The operating

surgeon follows and rapidly and skillfully amputates a leg or an arm, as the case may be, till the twenty-one have been subjected to the knife and saw without one twinge of pain. A second surgeon ties up the arteries; a third dresses the wounds. The men are taken to tents near by, and wake to find themselves cut in two without torture, while a winnow of lopped off members attest the work. The last man had been operated upon before the first awakened. Nothing could be more dramatic, and nothing could more perfectly demonstrate the value of anæsthetics. Besides, men fight better when they know that torture does not follow a wound, and numberless lives are saved that the shock of the knife would lose to their friends and the country.

A very complete account of Dr. Morton's life and achievements is given in a work entitled "Trials of a Public Benefactor," by Nathan P. Rice, M. D., Pudney & Russell, New York, 1859.

Dr. Morton married, in May, 1844, Miss Elizabeth, daughter of Edward Whitman, Esq., of Farmington, Conn. Children: William James, born in Boston, July 3, 1845; Marion Alethe, born in Wellesley, Mass., February 2, 1847; Edward Whitman, born in Boston, November 29, 1848; Elizabeth Whitman, born in Wellesley, July 11, 1850; Bowditch, born in Wellesley, October 27, 1857, prepared for college at the Institute of Technology, Boston, was graduated from Harvard Medical school in 1881.

