

This month in CAL . . .

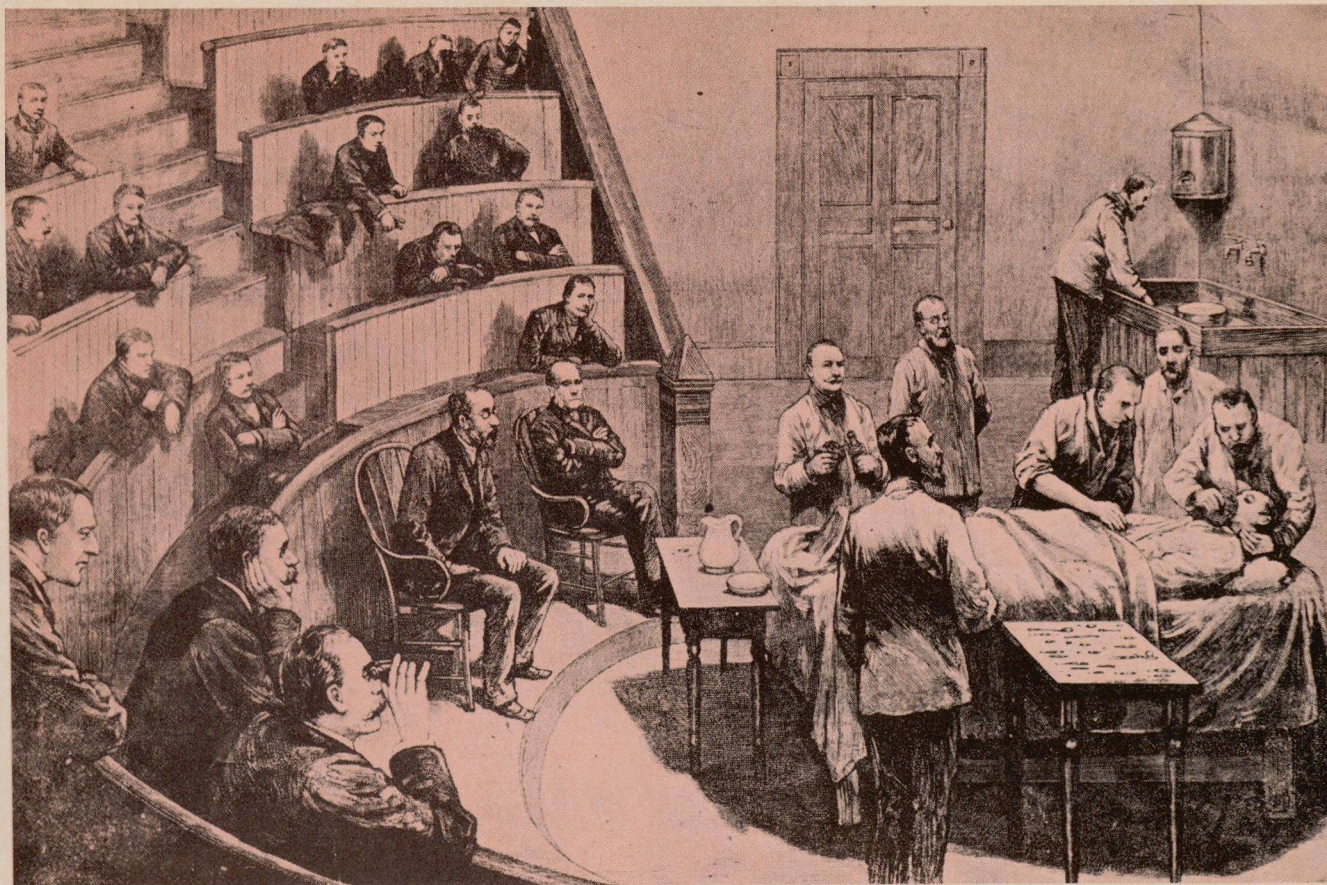
We tell again the well known story of Dr. William Thomas Green Morton, the Boston dentist who introduced ether to the medical world as a chemical anesthesia. The cover illustrates a demonstration of Dr. Morton's ether . . . on October 16, 1846. Dr. J. C. Warren excises a tumor from the neck of patient Gilbert Abbott, while Dr. Morton stands at the left, holding his apparatus. For an insight to the rocky road traveled by Dr. Morton, turn to page 9.



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Doctor Morton's Misfortunes

*A tool of modern surgery was introduced
by a dentist . . . but not without trouble*

Lily-B Rozar

LAST EVENING, as we were informed by a gentleman who witnessed the operation, an ulcerated tooth was extracted from the mouth of an individual without giving him the slightest pain. He was put into a kind of sleep, by inhaling a preparation, the effects of which lasted for about three-quarters of a minute, just long enough to extract the tooth" — so stated the notice which appeared in the *BOSTON DAILY JOURNAL* of October 1, 1846.

The above mentioned operation was performed by Dr. William Thomas Green Morton. The

patient had come to Dr. Morton in agony with a toothache. Dr. Morton let the patient breathe the fumes of some ether he had borrowed from a Dr. Jackson. Within five minutes the tooth was painlessly extracted.

Dr. Morton was born at Charlton, Massachusetts, August 9, 1819. He was the son of Robert and Rebecca Morton who emigrated from Scotland and settled in Salem, Massachusetts in the seventeenth century.

At the age of seventeen, William Thomas Morton went to Boston to acquire an education. While working on various jobs,

he studied dentistry at the College of Dental Surgery. After two years of training, Morton began his practice in Farmington, Connecticut.

He became acquainted with Horce Wells of Hartford, Connecticut. These two dentists, as partners, practiced at 19 Tremont Street, in Boston. This partnership proved unsuccessful. They dissolved partnership and Wells returned to Hartford.

Morton remained in Boston. Feeling inadequate in medical training, he decided to attend Harvard Medical School. However, he had recently married

Misfortunes

and he found keeping a wife and attending Harvard was a bit too expensive. Due to circumstances, he quit school and began practicing dentistry.

Dr. Morton met Professor Charles T. Jackson. Acting upon the recommendation of Professor Jackson, Dr. Morton used ether in drops as a local anesthetic during the filling of a tooth. It was during this time that Dr. Morton had become very interested in the manufacture of artificial teeth.

However, he discovered that to be effective in this type of dentistry, he would have to remove the roots of the remaining teeth. Since very few patients were willing to undergo such a painful operation, his idea of artificial teeth proved a dud. He tried several methods, including opium, to deaden pain. But none proved effective.

It was at this time that Professor Jackson suggested Dr. Morton let the patient breathe the fumes from ether. Jackson had demonstrated before his chemical classes that inhalation of sulphuric ether causes loss of consciousness. Before using this method on any of his patients, Dr. Morton made some experiments.

First he tried ether on himself. Then he tried it on a dog, a hen and some gold fish. They recovered without any ill effects. So Dr. Morton then tried it on a Mr. Frost, the patient mentioned in the "astounding" notice mentioned above.

Dr. Henry Jacob Bigelow, a young surgeon of Boston, read the announcement and became interested. He wanted to get the details. So he called upon Dr. Morton. Through Bigelow's influence, Dr. Morton was requested to try out his new discovery at the Massachusetts General Hospital.

The patient was a young man named Gilbert Abbott. The surgeon was John Collins Warren. He removed a vascular tumor

from the neck of Abbott. The surgery took five minutes. The patient showed no evidence of pain.

The next day, Dr. Morton supervised another operation by a Dr. George Hayward. This operation was equally successful. But that was when Dr. Morton's misfortunes began. Since he was not a medical man, he was not permitted to assist with any other operations.



Dr. William Morton, pioneer

Dr. Morton refused to reveal the composition of the anesthetic agent. Soon afterward, the difficulties were resolved and the discovery was first announced on November 18, 1846, in the *Boston Medical and Surgical Journal*.

Since Dr. Morton's former partner, Dr. Horace Wells, in 1844, had employed nitrous oxide for the extraction of teeth, Dr. Morton did not reveal that his anesthetic agent was sulphuric ether. He mystified those interested by calling it "letheon."

Upon legal advice, he named Professor Jackson as a partner in his application for a patent on October 27, 1846. The patent was issued November 26, 1846—for a period of fourteen years.

Two days later, Dr. Morton announced he was prepared to grant licenses for use of his dis-

covery and the apparatus by which it was to be administered. However, he agreed to repay the fee should the United States Government adopt his invention. He also specified that certain charitable hospitals might use "letheon" free of charge.

From this time on, Dr. Morton confronted the frowns of fortune. The French Academy of Medicine awarded the Monthyon prize of five thousand francs to Professor Jackson and Dr. Morton. Dr. Morton refused to accept his share—declaring that the discovery was entirely his.

Then in 1847, a "memorial was sent to Congress by the surgeons and physicians of Massachusetts General Hospital—praying that adequate compensation be given to the discoverer of the anesthetic uses of ether." After waiting two years for Congress to act on this matter, Dr. Morton took the matter in his own hands.

He, personally, solicited Congress for financial reward. This and other pressure was brought to bear and two bills for one hundred thousand dollars were appropriated for the discovery of practical anesthesia. Though these bills were introduced into Congress at three separate sessions of that body nothing ever came of them.

And more clouds were gathering for Dr. William Thomas Morton. Due to the activities of the supporters of Professor Jackson, and Dr. Wells, and Crawford W. Long, the one hundred thousand dollar appropriation was never carried out. All deliberations of all committees and sub-committees were drawn out for over two decades.

Civil War was declared. The cause was lost in a network of unfinished business. It is recorded that many efforts were made to give Dr. Morton financial aid. All these brought him honor, but no riches.

For twenty years Dr. Morton knew nothing but the agony of cutting controversy and litiga-

Photos: The Bettman Archives and Library of Congress

tion. Though his education was limited, Dr. Morton was a man of methodical habits. He was "tall, dark and handsome." He faced his adversities with dignity.

Crawford W. Long, Horace Wells and Professor Jackson shared in the discovery of surgical anesthesia. But Dr. Morton experimented independently. In experimenting with ether, he took entire responsibility for the results of his first public demonstration on human beings. He was the first to convince the surgical world the importance of the discovery. For this reason his contemporaries gave him credit as the discoverer.

Though the conflagration of controversy seem never to cool, Dr. Morton never attempted any retaliation upon his foes. However, his efforts to secure profit for his discovery made him an unpopular figure for several years. Yet it did not rob him of



the honor which was due him.

Dr. William Thomas Morton's published works relating to ether are uncommon. His most important work, *REMARKS on*

the PROPER MODE of ADMINISTERING SULPHURIC ETHER by INHALATION was published in 1846. This work was dedicated — "To the surgeons of the Massachusetts General Hospital . . . as an evidence that their early and continued interest in the administration of sulphuric ether is gratefully appreciated."

Dr. Morton and his wife, Elizabeth, had one son, William James Morton. He was a pioneer in the use of X-ray in the United States. He and his mother were a great comfort to Dr. Morton throughout his life of perpetual torment.

Spending the last twenty years of his life fighting for his life left the dentist in dire poverty. While driving through Central Park he died from apoplexy—thought to have been induced by reading an article which had been written in behalf of his controversial contemporaries.

NO INTERLOCKING CUSPS

NO TIPPING or ROCKING

NO CUSPAL INTERFERENCE

NO difficulty in establishing occlusion

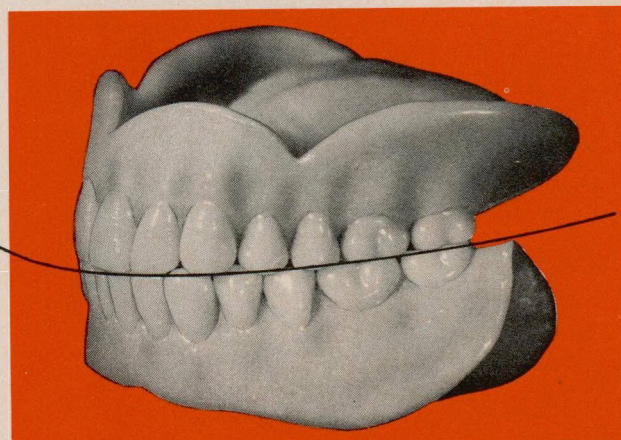
Specify **Coe** Self-Balancing Posteriors

YES ...Lasting Comfort

YES ...Masticating Efficiency

YES ...Prolonged Stability

Specify Coe Self-Balancing Posteriors for your own and your patient's satisfaction.



A Mechanical Tooth for a Mechanical Purpose