

Historical Vignette

Anesthesiology
52:62-70, 1980

Robert Hinckley's "The First Operation with Ether"

Leroy D. Vandam, M.D.*

OVER THE CENTURIES the imagery of physicians while healing the sick, averting pestilence and assuaging human suffering has been richly depicted in wall drawings, statuary and illustrated manuscripts. In the modern era painting became the main medium for this kind of expression. Of the memorable works extant, Rembrandt's "Anatomy Lesson of Dr. Tulp" (1632) comes to mind, also Thomas Eakins' rendition of the surgical clinics of the Drs. Gross (1875) and Agnew (1889) in Philadelphia around the turn of the century.¹ Perhaps the most striking example of the genre, however, is Robert Hinckley's visualization of the ether demonstration that took place in Boston, October 1846, striking indeed because of the significance of the event (fig. 1). Following the centennial celebration in 1946, Henry R. Viets, then curator of the Boston Medical Library (BML), researched its archives for an exhibit based on the origins of the painting.² As some new bits of information have since come to light, another view of the artist, his painting, and Viets' analysis would seem worthwhile at this time.

Robert Hinckley, descendent of several founders of the Plymouth Colony, was born in Northampton, Massachusetts, in 1853. Probably as a result of familial affluence, Hinckley voyaged to Paris, where he spent 17 years as student at the École des Beaux Arts, and fellow pupil of the renowned John Singer Sargent, both studying with Carolus Duran, reigning portraitist of the time. The painting we speak of was begun in France in 1882, reworked over a period of 11 years, and finally completed in Washington, D. C., in 1893. This work is intriguing for two reasons. First, why did Hinckley attempt it in the first place? A letter is said to exist somewhere among the uncatalogued papers of the BML³ to the effect that the exercise was in fulfillment of apprenticeship to Duran, a practical examination as it were. Viets reasoned that the opus might

have been commissioned by authorities at the Massachusetts General Hospital (MGH), or that it was merely conceived on speculation for monetary gain. At any rate, the canvas hung in Hinckley's studios, first in Paris then in Washington, where he had returned to a post as instructor in portraiture at the Corcoran School of Art. By the time of his death in 1941, he had completed several hundred portraits of the citizenry in and around Washington, to be seen in the public buildings there, in Annapolis, and as far away as West Point and Boston.

To the painting! Hinckley had proffered it to the National Medical Museum, but it was refused for lack of space. Later the canvas was exhibited at the jubilee of the ether demonstration in 1896, an event attended by many a notable, among them the widow, Mrs. William Thomas Green (W. T. G.) Morton, her daughter Mrs. J. C. Otis, and grandson, Sidney Otis. Finally, as a result of persuasion by his friend James Reed Chadwick, librarian of the BML, Hinckley ceded the painting to the library, where it livened the walls of Ware Hall, then stayed at the MGH until mounted in its present location at the Countway Library of Medicine, Boston.

A second enigma concerns the cast of characters assembled by Hinckley some 36 years after the primary event. Only a few of the participants depicted were alive at the time, so it is a fair guess that Hinckley, and probably Viets later on, relied to some extent upon the official biography of Morton, *Trials of a Public Benefactor* (TPB).⁴ Morton, in 1859, then deeply in debt and without professional income because of his repeated crusades, believed that an official account of his life might reap some of the pecuniary award still not granted by the federal government. Accordingly, he approved as biographer one Nathan Payson Rice, M.D., a not very busy New York physician but capable writer, suggested by a committee of doctors in that city.⁵ After an agreement between subject and author had been reached, Rice, on June 8, 1858, began work in West Needham at Morton's country house, an edifice of country gothic style known to the natives as "The House of the Seven Gables" but otherwise as Etherton.

* Professor of Anaesthesia, Harvard Medical School; Anesthesiologist, Peter Bent Brigham Hospital, Boston, Massachusetts 02115.

Accepted for publication May 22, 1979.

Address reprint requests to Dr. Vandam.

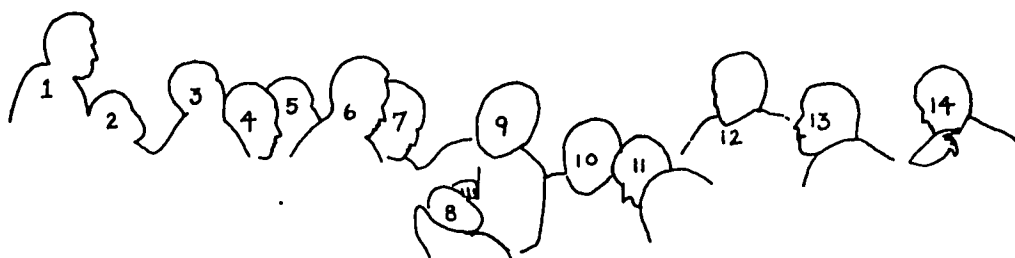


FIG. 1. Hinckley's "First Operation with Ether." Identification of those presumed to be present, as interpreted by Viets,² is shown by numbers in the key beneath the reproduction of the painting. 1. Unidentified newspaper photographer. 2. John Call Dalton. 3. William Williamson Wellington. 4. Abel Lawrence Peirson. 5. Charles Hosea Hildreth. 6. William Thomas Greene Morton. 7. Jonathan Mason Warren. 8. Gilbert Abbott. 9. John Collins Warren. 10. Eben H. Frost. 11. Charles Frederick Heywood. 12. Henry Jacob Bigelow. 13. Augustus Addison Gould. 14. Solomon Davis Townsend. (Color transparency by David Gunner. Reproduction courtesy of the Boston Medical Library in the Francis D. Countway Library of Medicine.)

He had for material a large mass of documents previously culled by Benjamin Perley Poore and issued in documentary format in 1856 as *Historical Material for a Biography of W. T. G. Morton, M.D.*⁶

Medical writers of today, particularly the procrastinators, might be stimulated to know that by September

1, Rice's manuscript, ultimately a volume of 460 pages, was ready for final approval. But as usual, controversy and rancor were engendered, mainly on the part of Rice because he did not approve of the title given by Morton, nor of the latter's affixing Rice's name as author. In addition, Morton had both added and



FIG. 2. Steel engraving by H. H. Hale of the ether demonstration, M. G. H., October 16, 1846. Physicians around Gilbert Abbott are, from left to right: H. J. Bigelow (not a bad likeness, see fig. 9), A. A. Gould (see fig. 10), J. Mason Warren, J. Collins Warren (easily identified, fig. 8), W. T. G. Morton (fairly accurate portrayal, see figs. 5, 6), Samuel Parkman, George Hayward, S. D. Townsend. From *Trials of a Public Benefactor*.⁴

modified sections and supplied engravings for illustration. Feeling ran so high that Rice in 1859 published an article endorsing the claim of Horace Wells as originator of anaesthesia.⁷ Thus, *Trials of a Public Benefactor* cannot be accepted as a purely factual account of the events associated with the ether demonstration.

Before going on to attempt recognition of the *dramatis personae*, let us examine the painting on artistic merits alone. It is a framed canvas, 98 by 115 inches, with drab moulding, and an estimated worth of \$5,000 (1963 figure). The appraiser called it a minor painting (small artistic value) of an historic event (considerable association value). But for the subject matter, it is overall a journeyman creation in a somewhat classical style. Nevertheless, Hickley's competence is amply revealed in the composition, with Gilbert Abbott, patient, as the central focus, the remainder of those present, assembled in two triangular masses on either side, to enhance the central theme. The railing of the seating area slopes downward to focus on the operative field. Everybody's countenances, as well as the twists of their bodies, are brought to bear on the focal point, while there are two dominant figures, those of the anaesthetizer; W. T. G. Morton, and a visiting surgeon,

Henry Jacob Bigelow, standing in center background against the railing. In the original, the pigment can hardly be called rich; however, the color is effectively employed to accentuate the characteristics and importance of the figures. Finally, the portraits bear little resemblance to the physiognomies of those alleged to be present; neither do any of the preliminary charcoal sketches, including one of an unknown Dr. Stowe. Some of these drawings were later sent to Boston with the plaintive note:

Robert Hinckley
P.O. Box 332
Rehobeth Beach, Delaware
May 15, 1934

Harvard Medical Library
Boston, Mass.

Dear Sir,

You have a picture painted by me, "The first operation with ether."

I am mailing under separate cover sketches which were made at the time of the above painting.

Being over eighty years of age and do not expect to do any more painting.

Yours most truly,
Robert Hinckley

While the body of the letter is penned in a handsome hand, probably that of an amanuensis, the signature is unmistakably that of an octogenarian.

Among the pages of TPB a steel engraving by H. H. Hall identifies the patient and seven others (fig. 2): Gilbert Abbott; J. C. Warren, operating surgeon; W. T. G. Morton, anaesthetizer; H. J. Bigelow, visiting surgeon; A. A. Gould, physician; S. D. Davis, surgeon; George Hayward, house surgeon (there is confusion here, as Warren's house surgeon was Charles Frederick Heywood); and Samuel Parkman. Neither Hayward nor Parkman appears in the Hinckley portrait as interpreted by Viets. Upon later recollection it seems unlikely that Morton could have observed or remembered all those present when he had hurried into the amphitheatre, late for the procedure, delayed by his methodical instrument maker, Nathan B. Chamberlain. The earliest known photograph of an operation performed with ether anesthesia at the MGH is shown in figure 3. Easily identified is John Collins Warren (see fig. 8), but none of the others. G. C. Sanchez believes it fairly certain that the photo-

graph was taken after March 1847, since it shows the use of a sponge rather than the original inhaler.⁸

Let us proceed now to Viets' interpretation of "Who was Who on Ether Day." An unidentified newspaper photographer (in fig. 1) stands on a chair far left, over-towering the others, easily construed as a man of the fourth estate and employed by the artist to bring the focus inward. However, the daguerrotypist, Josiah J. Haines, is said to have had a change of heart and failed to appear at the proceedings. The figure numbered 2 is a medical student, John Call Dalton, age 21, a Harvard Medical graduate of the class of 1847 and a second-year house pupil at the MGH. After serving as house surgeon at the MGH, Dalton (fig. 4) embarked upon a career unique for an American physician, that of experimental physiologist, studying with Claude Bernard in Paris.¹⁰ He was successively professor of physiology at Buffalo, Vermont, and the Long Island School in 1859, that year completing his textbook of physiology, which saw seven editions through 1882. In his experimental work, Dalton confirmed Bernard's experiments on the sugar-making function of the



FIG. 3. Probably the earliest known actual photograph of an operation performed with the aid of ether anesthesia at the Massachusetts General Hospital.⁸



FIG. 4. Reproduction of an oil painting of John Call Dalton, early in his career as a physiologist.

liver. An aggressive opponent of antivivisectionists, he served as professor of physiology and microscopical anatomy at the College of Physicians and Surgeons in New York until 1884, then as president of the faculty until his death in 1889. Although Dalton was alive at the time the painting was done, no reference exists in writings about him to the effect he was present at the demonstration.

Standing in front of Dalton is William Williamson Wellington (fig. 1, 3), of Cambridgeport, graduate of Harvard in 1838, but not a member of the staff of MGH. According to TPB, Wellington's presence may be explained as follows. Morton as a youth was sent from his father's academy in Charlton, Massachusetts, first to an Oxford school (from which he was expelled), then to Northfield, and finally to Leicester. There he formed a collection of minerals, which attracted the attention and warm praises of his preceptor, Dr. Wellington. "Years passed after Morton left the academy before the preceptor and pupil again met; and this strange to say took place at the Massachusetts General Hospital, on the memorable six-

teenth of October, 1846." In the painting the presence of Abel Lawrence Peirson of Salem (fig. 1, 4) is the more credible, for he had graduated from Harvard in 1816, and held the honorary post of Consulting Surgeon to the MGH in 1837. Peirson, later on, gave the first account of an ether anesthetic administered beyond the confines of the MGH. Alas, however, according to his own testimony, Peirson was not present at the first operation, but attended the third. To complete the group on the left, we epoxy another medical student (no. 5), this one being Charles Hosea Heldreth, of whom Hinckley later sent a preliminary drawing. Heldreth, aged 21 at the time, was house pupil at the MGH in 1850, and graduated from Harvard in 1851. One doubts that he was actually there.

Well known to the world for all time is the erect, intent figure of William Thomas Greene Morton (no. 6); (figs. 5 and 6), about whom some comments may be pertinent. One is led to believe that a good deal of machination was involved before Morton was permitted to reveal his "invention" publicly. But Morton was a bona fide student at Harvard Medical School,

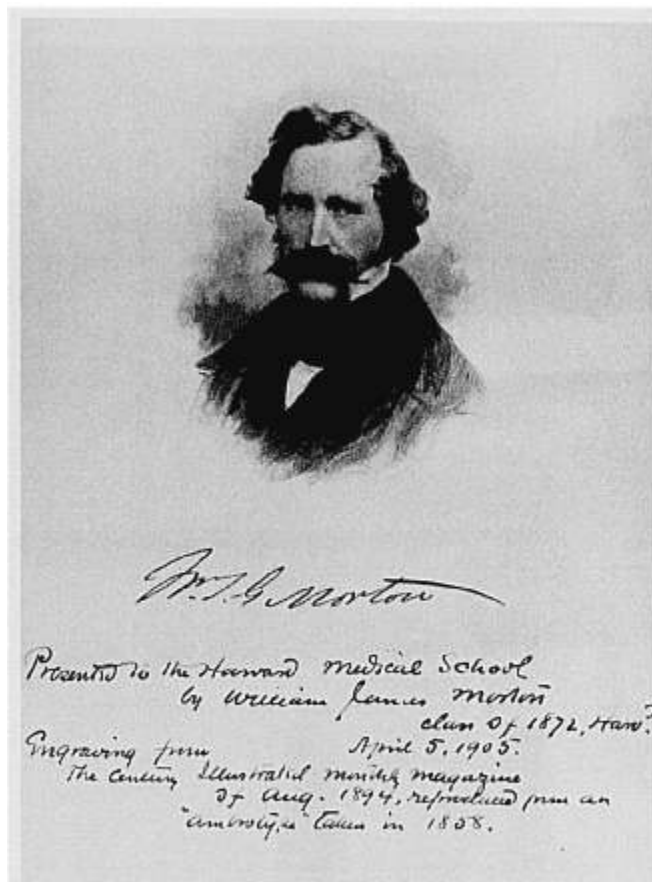


FIG. 5. Portrait of W. T. G. Morton, probably done around the time of the demonstration. Presented to the Harvard Medical School by William James Morton, Class of 1872, Harvard, April 5, 1905. Original engraving from the *Century, Illustrated*.

having matriculated in the fall of 1844, attending many a lecture course through 1845 (fig. 7). Surely he must have been a familiar figure to the staff of MGH, as well as fellow students. Likewise, he was undoubtedly present at Wells' abortive demonstration of nitrous oxide in January 1845. And it is unlikely that the surgical staff would have risked their reputations as well as that of the venerable MGH, had they not had a modicum of confidence in this proponent of anesthesia.

Jonathan Mason Warren (no. 7) was the son of operating surgeon John Collins Warren. Reputedly, Morton sought out Jonathan to secure an audience with the father. Jonathan Mason had in 1846 just been appointed house surgeon, and he is justly acclaimed as the pioneer American plastic surgeon for original contributions on rhinoplasty and correction of cleft palate. Morton may have provided some of the inspiration for work done on congenital defects about the face and mouth, for he had written articles on the use of a gold plate to correct palatal defects and, with his unique knowledge of dental materials, had also contrived an artificial nose fashioned of enameled platinum.

Gilbert Abbott (no. 8) lies there, a house painter† and trusting patient, with a vascular tumor just below the mandible that was first scheduled for excision on Tuesday the 13th of October. But remembering his commitment to Morton, John Warren asked his patient if he would delay in order to benefit from a newly discovered anodyne. With Abbott's acquiescence, the operation commenced on Friday the 16th. The encounter between Morton and Abbott represents the first of many subsequent preanesthetic visits by anesthesiologists, as Morton asked for informed consent (was Abbott prepared to receive the nostrum?) and he comforted him ("Are you Afraid?" Answer, "No."). Abbott's acceptance and calm despite lack of premedication were followed by induction of anesthesia. Heywood, the house surgeon, noted that Abbott was in good health upon discharge, December 7, after a hospital stay of 52 days. Had there been postoperative infection, so common in those days?

John Collins Warren (1778–1856), the surgeon (no. 9) was the son of John Warren, founder with Aaron Dexter and Benjamin Waterhouse of the Medical School, in 1782. John Collins succeeded his father in 1815 as Professor of Anatomy and Surgery and, for a time, 1816–1819, was Dean of the school. Not only had he helped to found the *Boston Medical and Surgical Journal* (ancestor of the present *New England Journal of Medicine*) in 1812, with Jackson and Bigelow,

† Abbott's listing as a house painter in many an account is probably an error. G. C. Sanchez avers that he was a printer, responsible for the issuance of two newspapers, the *Cambridge Gazette* and the *Middlesex Mercury*, in the early fifties.⁹



FIG. 6. A Mrs. Baker received this copy of Dr. Morton's photograph in April 1946 from Miss Mary Newell Eaton, a retired high school teacher living in St. Petersburg, Florida. She had found the original in her mother's (Mrs. J. J. Newell) family album. Mrs. Newell was descended from a maternal ancestor (Rebecca Needham) of W. T. G. Morton. The photograph bears the inscription, "To my cousin, Mrs. J. J. Newell—Wm. Thomas Green Morton." Notice that neither portrait in figure 6 or figure 7 bears any resemblance to Hinckley's impression.

but he also established the MGH with James Jackson in 1821. Then in his 68th year (fig. 8) and chief of the surgical service, one might be sure that he had given the matter much thought and was fairly certain of the probability of success of the venture.

On the way to the amphitheatre that morning, Morton took with him Eben H. Frost (no. 10), a merchant of Boston who had had an ulcerous tooth extracted while under the influence of ether on September 30 in Morton's office, 19 Tremont Row. A newspaperman, Albert G. Tenney, had witnessed the event, reporting it the next day in the *Boston Daily Journal*, where the account attracted the eye of Henry J. Bigelow. Eben Frost was brought along to help reassure the patient, another thoughtful gesture on the part of



FIG. 7. The tuition tickets to the Harvard Medical School of W. T. G. Morton, medical student. His studies were interrupted at the end of his second year by his discovery of practical ether anesthesia, demonstrated before his classmates, professors, and the public at the Massachusetts General Hospital on October 16, 1846. Presented by his son William J. Morton. Class of 1872. This collection of tickets, hardly legible in this figure, is from the Locke Collection of the Smithsonian Institute in Washington.

Morton. Holding the patient's pulse in an attitude of concentration and anticipation is Charles Frederick Heywood (no. 11), aged 23. Recently graduated from the medical school and appointed Warren's house surgeon at a salary of 500 dollars per annum, he wrote the account of the operation (reportedly without mentioning the anesthetizer's name). Although undoubtedly the most famous house surgeon of all time, Heywood's later career as a surgeon in New York was not a particularly distinguished one. Heywood's name is often misspelled in subsequent accounts, probably because of confusion with that of George Hayward, appointed visiting surgeon to MGH in 1846. Surprising it is that George Hayward is not included in Hinckley's schema, for he excised a fatty tumor of the arm on the next day with Morton the anesthetizer.

A brief anesthetic hiatus followed because of the surgeons' displeasure with Morton's concealment of the true nature of "Letheon," but on November 7, Hayward is given credit for performing the first major operation with ether, amputation of a leg, accomplished in 1¾ minutes exclusive of the ligatures.

Aside from Morton, Henry Jacob Bigelow (no. 12; fig. 9) was probably responsible more than any other for the planning and success of the event.¹¹ Born in 1818, he had studied abroad and audited some of Paget's lectures in England. Upon return, he sponsored Wells' nitrous oxide demonstration in January 1845, had repeatedly observed ether given in Morton's office during the fall, and subsequent to the great occasion, wrote the official account, a masterpiece of descriptive clinical pharmacology for those times.¹²

Thereafter he published many a paper on anesthesia, mainly concerning ether and chloroform, even to describe a refrigerant, Rhigolene,¹³ used for local anesthesia. Many were his other accomplishments, including the founding of Mt. Auburn, America's first garden cemetery, where many of the participants in the ether affair are interred.¹⁴ For nearly 40 years Bigelow and Gross of Philadelphia were the leading surgeons on the East coast. In surgical circles he is remembered as an orthopedist, mainly for operations done on the hip: the Y-ligament bears his name, the first hip resection, and a classic textbook on fractures and dislocations of the hip, containing his method for reduction of dislocations. Bigelow's permissive role in the ether affair is revealed in a letter from Morton's son William J.‡ to W. Sturgis Bigelow, son of Henry Jacob: "Verbally, my mother [Mrs. W. T. G.], thanks

‡ William J. Morton, 1872 graduate of Harvard, was a pioneer radiologist in America. Distressingly, he was imprisoned at one time, as a dupe in a stock fraud case.

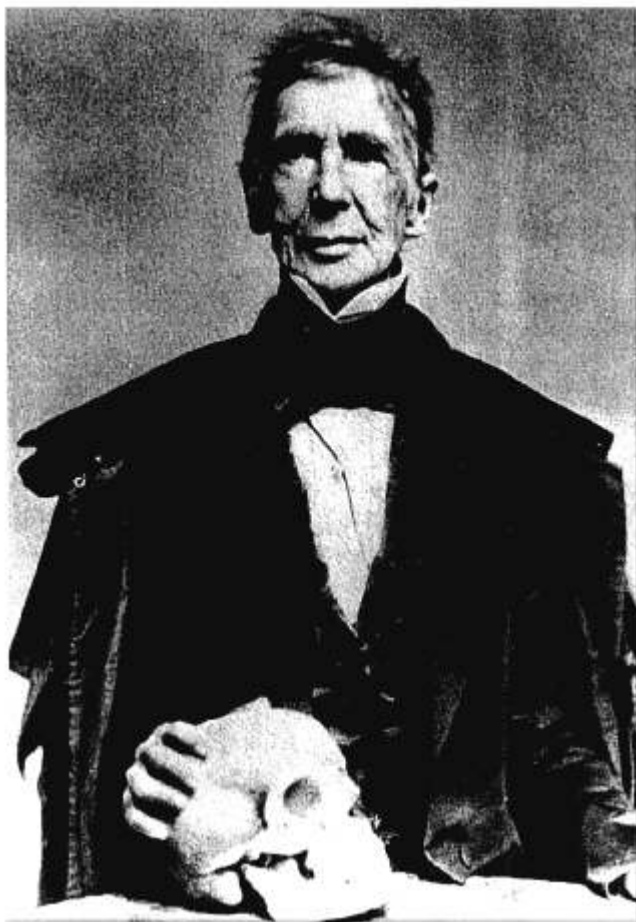


FIG. 8. One of many photographs extant of John Collins Warren, this taken toward the end of his career. His distinctive features are evident in figures 2 and 3, certainly not in Hinckley's conception.



FIG. 9. Henry Jacob Bigelow. From a daguerrotype by Leon Foucault, Paris, taken in 1841. Again, Hinckley's idealization of this individual bears little resemblance to the original.

your father [H. J. B.]—who advised my father [W. T. G.] to induce John Collins to permit the public experiment—hence Abbott."

G. E. Gifford designates Augustus Addison Gould (no. 13; fig. 10) "The Forgotten Man of the Ether Controversy."¹⁵ Gould was a noted conchologist, in 1840 having described 13 new species of shells in and around Massachusetts and a total of 1,100 original specimens before his death. As a result of domestic dissatisfactions, Morton, his wife Elizabeth, and their infant son had left Charles T. Jackson's domicile to take up residence with Gould, in the fall of 1846. Gould had previously observed some of the dental anesthetics given, and on the night before the demonstration advised Morton to incorporate inspiratory and expiratory values in the ether apparatus. The name Letheon was coined by Gould, who subsequently wrote many of the announcements about ether and acted as medical consultant for Morton's ambulatory anesthesia patients. In the Hinckley picture, Gould, the only medical man in the group, is provided a chair, from which he sprang as the knife is about to fall. Last, there is Solomon Davis Townsend (no. 14), a Harvard graduate of 1815, senior surgeon and chief after Warren's retirement, one-time naval surgeon and friend of Farragut and Bainbridge.



FIG. 10. Augustus Addison Gould, whose face is not visible in Hinckley's rendition.

In conclusion, we can forgive Robert Hinckley the artistic license in selecting those individuals (as identified by Viets) for inclusion in the ether painting mainly for purposes of both dramatic representation and composition. But his historical research was surely faulty. All will agree that Abbott, Morton, and Warren were indeed present, Heywood as well, and a number of medical students, probably John Call Dalton but not necessarily Charles Hosea Hildreth. Other students unidentified were certainly in the gallery. The news-

paper photographer, Abel Lawrence Peirson, and Jonathan Mason Warren were not there, and possibly neither was William Williamson Wellington. It is logical that Eben H. Frost, Henry Jacob Bigelow, Augustus Addison Gould, and Solomon Davis Townsend, questionably, should share in the glory of that day. But two others, George Hayward and Samuel Parkman, might have been portrayed. Perhaps some of these fascinating questions can be answered by further research, but the process will not be easy because of the passage of time and the dissipation of essential evidence.

I am indebted to my friends for valued information used in preparation of this account: Mr. Charles C. Colby, 3rd, Ms. Frances Flynn, George E. Gifford, Jr., M.D., G. C. Sanchez, M.D., and Mr. Richard J. Wolfe.

References

1. Gifford GE Jr: The medical portraits of Sargent and Eakins. *Bull U Maryland School Med* 41:7-18, 1955
2. Viets HR: Hinckley's Who was Who on Ether Day. An Exhibit of the Boston Medical Library, May 22-24, 1962
3. Wolfe RJ: Personal communication
4. Rice NP: Trials of a Public Benefactor as Illustrated in the Discovery of Etherization. New York, Putney and Russell, 1859
5. Viets HR: Nathan P. Rice M.D., and his Trials of a Public Benefactor, New York, 1859. *Bull Hist Med* 232-243, 1946
6. Poore BP: Historical materials for the biography of W. T. G. Morton, M.D., discoverer of etherization with an account of anaesthesia. Washington, D. C., G. S. Gideon, 1856, printed pp 114
7. Rice NP: A grain of wheat from a bushel of chaff. *The Knickerbocker and New York Monthly Magazine* 53: 133-138, 1859
8. Sanchez GC: Personal communication
9. *Ibid.*
10. Mitchell SW: Biographical Memoir of John Call Dalton. National Academy of Sciences, Biographical Memoirs 3: 179-185, 1895
11. Holmes OW: Memoir of Henry Jacob Bigelow: Proceedings of the American Academy of Arts and Sciences 26:3-15, 1871
12. Bigelow HJ: Insensibility during surgical operation by inhalation. *Bost Med Surg J* 309-317, 1846
13. Bigelow HJ: Rhigolene, a petroleum naphtha for producing anaesthesia by freezing. *Bost Med Surg J* 74, 238-240, 1866
14. Alper MH: The ether controversy revisited. *ANESTHESIOLOGY* 25:560-563, 1964
15. Gifford GE Jr: The forgotten man of the ether controversy. *Harvard Medical Alumni Bulletin* 40:14-19, 1965