# Other Monuments to Inhalation Anesthesia

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THE history of anesthesiology is one commemorated by several monuments. The most recognized memorial is the Ether Monument, erected in the Boston Public Garden in 1868. While many anesthesiologists are familiar with this sculpture, there are other less-known memorials related to the introduction of surgical inhalation anesthesia and to the claimants to its discovery. This article discusses some of these other monuments and presents them in the context of the events that led to their erection. Through understanding both the monuments' characteristics and their historical contexts, anesthesiologists can better appreciate both the early history of their profession and the impact that the proponents of the claimants had on the way this history is recorded.

Monuments related to the discovery of inhalation anesthesia were created in honor of the four most recognized claimants to this discovery: William T. G. Morton, M.D. (1819–1868), Horace Wells (1815–1848), Charles T. Jackson, M.D. (1805–1880; Professor, Harvard Medical School, Boston, Massachusetts), and Crawford Long, M.D. (1815–1878). Each monument avouches that the distinction for the discovery of surgical inhalation anesthesia belongs to the person it represents. Although supporters of these claims constructed these monuments after the individual's death, all four persons also made efforts to substantiate their assertions. These conflicting attempts for recognition (by both the claimants and their patrons) led to a vicious debate that became known as the Ether Controversy.

The root of this conflict dates back to October 16, 1846, when, at the Massachusetts General Hospital, William T. G. Morton publicly administered an anesthetic using a compound that he called "Letheon." In all, it took three trials with this anesthetic—in the last of which Morton had to reveal to the surgeons the active ingredient (sulfuric ether) in his preparation before they would agree to his administering of it—before the hospital affirmed it was safe to use in surgical procedures. Subsequently, Morton and Jackson jointly patented this process of administering "such vapors (particularly those of

Sulfuric Ether)"<sup>2</sup> to cause insensibility to pain during surgical procedures. Originally, it was understood that Jackson was the actual discoverer of the process and Morton was the dispenser of this knowledge—or as has been stated, "Jackson was the head, and W.T.G. Morton was the hand."3 The first real outcries that ignited the Ether Controversy began when Henry Jacob Bigelow, M.D. (1818-1890; Professor Emeritus, Department of Surgery, Harvard Medical School), published his account of the trials that occurred at Massachusetts General Hospital. The article proclaimed that Jackson and Morton had discovered a way to render patients insensible to pain. When Wells, a Hartford dentist, as well as Morton's former teacher and partner, read this article and saw that Morton and Jackson were taking credit for the discovery that insensibility to pain could be achieved through the inhalation of gases, he wrote a rebuttal. Wells explained that he had discovered this property 2 yr earlier. 4 Pinckney Webster Ellsworth, a prominent Hartford surgeon, also wrote an article in support of Wells' assertion that appeared in the Boston Medical Surgical Journal<sup>5</sup>—so started the Ether Controversy. What finally led to the debate between Jackson and Morton was Morton's cessation of stating that Jackson had been the discoverer of sulfuric ether's anesthetic properties and his subsequently expressing that the discovery of surgical inhalation anesthesia was his own.

Although not involved in the early portions of the Ether Controversy, in 1849 Crawford Long, M.D., a physician from Georgia, reported that he had first administered sulfuric ether during a surgical procedure on March 30, 1842, before Morton and Wells. Long may not have been as much involved in the Ether Controversy as the other claimants, but he must be considered a part of this historical conflict.

Despite the Ether Controversy, two decades after Morton's demonstration, The Ether Monument was erected in Boston's Public Garden, commemorating the first public ether anesthetic at the Massachusetts General Hospital. Unlike other monuments in the Public Garden, such as the statues of George Washington and Edward Everett Hale, which commemorate these citizens for their achievements, the Ether Monument does not give specific claim to an individual. Rather, it focuses on the event, leaving Morton's name conspicuously absent. The event that occurred on October 16, 1846, was one that brought fame and notoriety to both Boston and the Massachusetts General Hospital. Omitting Morton's name could be an attempt to place the focus on the Massachusetts General Hospital or the larger City of Boston. On the other hand, the reason for this omission

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could be the acrimonious dispute that emerged among the claimants of the discovery, which at this point had become national and international news.

Today, it is not generally disputed that Morton's 1846 demonstration changed the course of medical history by credibly revealing an "inevitable, complete and safe" surgical anesthesia.<sup>6</sup> However, the claim as to who deserves the most credit for discovering that people could be rendered insensible to pain through the inhalation of gases remains debatable: Even today, publications continue to justify the preponderance of one or another of these men. Although the "true rights" to the discovery of surgical anesthesia may never be known, various monuments and tributes make the case for Morton, Wells, Jackson, and Long. While several recent articles, a book, and a major restoration have brought notoriety to the Ether Monument's artistic and historical significance, these other monuments to inhalation anesthesia have received less attention.<sup>7-9</sup>

The monuments related to inhalation anesthesia serve as evidence to the stories that surround this extraordinary innovation in medicine. Because they were constructed through the solicitations of each individual's supporters, these monuments also function as a substantiation of select groups' views of the claimants. In this same respect, they illustrate the effect adherents to a claim can have on the memory of the claimant.

### William T. G. Morton

William T. G. Morton was a Boston dentist. He studied dentistry under Horace Wells and in 1843, for a very short time (3-4 weeks), was in a dental partnership with him.<sup>1,4</sup> In November 1844, Morton began his studies at Harvard Medical School, naming C. T. Jackson as his preceptor. During this time, Morton and his wife were boarders in Jackson's home.<sup>1</sup> As can be seen, Morton is very much entangled in the lives of both Jackson and Wells. This close relationship set the stage for the dispute that would unfold.

Although the Ether Monument in Boston's Public Garden does not mention Morton by name, several other monuments explicitly credit him for his achievement. One such monument sits atop his grave in Cambridge, Massachusetts (fig. 1). According to the cemetery's records, Morton was brought to Mount Auburn Cemetery on September 7, 1868, nearly 2 months after his passing. The lag between his death and burial has sparked some question. Leroy D. Vandam, M.D. (1914–2004; Professor Emeritus, Department of Anesthesia, Harvard Medical School), in an article titled "The Last Days of William Thomas Green Morton," speculated that Morton's corpse could have been embalmed, or preserved on ice, during this time, but the facts remain unknown.<sup>10</sup>

The monument atop Morton's grave consists of a foursided base and a white granite pillar crowned with a

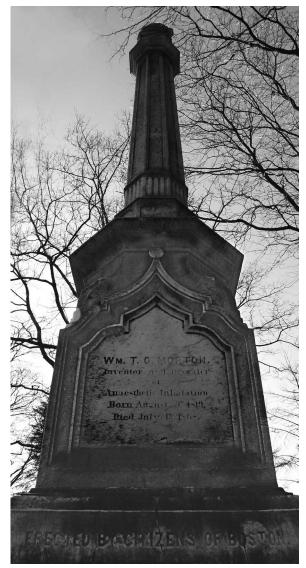


Fig. 1. Morton's tomb.

draped cinerary urn, a common 19th century cemetery ornament.<sup>11</sup> Each side has the following inscriptions written by Henry Jacob Bigelow, who was present during Morton's first public administration of ether anesthesia and was probably Morton's greatest advocate as well as one of the major reasons he holds such a lofty place in the history of medicine.<sup>12</sup> The monument reads:

W.T.G. Morton, Inventor and Revealer of Anesthetic Inhalation, Born August 9, 1819, Died July 15, 1868 [east side] Before Whom in all time Surgery was Agony [north side] By Whom Pain in Surgery was Averted and Annulled [west side] Since Whom Science had control of Pain [south side].

From the inscriptions on this monument, it is clear that Bigelow is in Morton's camp. He implies that pain is not being "Averted and Annulled" by the effects of ether, but rather by Morton himself. The final line, "Since Whom Science had control of Pain" and the term "Inventor" also assign sole credit to Morton. As mentioned, this

claim of sole credit was the spark that caused the wildfire between Jackson and Morton.

As Richard J. Wolfe stated in his book Tarnished Idol, "Bigelow was, along with Morton, a major player in introducing anesthesia to the world." The support that Bigelow gave to Morton was a risky move and one that brought some question regarding Bigelow's intentions as a physician. Morton later admitted that his goal in patenting this discovery was so that he might profit from its use. However, it did not take this admission for people to speculate that Morton's motives might be of a monetary nature. There was great uprise over the patenting of a process by which people might be alleviated from pain, and anyone associated with this patent, or both holders (Morton and Jackson), was also questioned. Evidence of this can be seen in Bigelow's announcement of surgical anesthesia in the Boston Medical and Surgical Journal, 12 as he attempted to justify the reasons letters of patent were necessary. However, despite all this, Bigelow and others, a great many of which were associated with the Massachusetts General Hospital, supported Morton throughout his life, with both pecuniary and literary efforts.

Morton's monument rests on a foundation. That the inscription on the east side of this foundation does not read "Erected by the Citizens of Boston," but rather "Erected by Citizens of Boston," is interesting to note. Considering Bigelow's eloquent penmanship, the omission of the article "the," we speculate, must be an intentional exclusion, indicating that not all citizens of Boston agreed with Morton's claim to having discovered ether anesthesia. In fact, Boston and the greater New England area were constituted by various factions defending Morton, Wells, or Jackson. Furthermore, a pamphlet was prepared "by the Committee of Citizens of Boston Chosen to Raise a Morton Testimonial Fund" a year after the raising of the monument. The pamphlet is titled Historical Memoranda Relative to the discovery to Etherization, and to the connection with It of Late Dr. T.G. Morton. It includes a copy of the text found on the Morton Monument. Later, it is explained that a group of individuals (all living in Boston) were "appointed by citizens of Boston as a committee to obtain a proper testimonial for his [Morton's] family." Among the prominent individuals included in this group is John Collins Warren, M.D. (1778-1856; Professor of Anatomy and Surgery, Harvard Medical School), the surgeon who preformed the operation during Morton's first public demonstration of ether anesthesia in 1846. It is likely that the "Citizens of Boston" Bigelow speaks of on the monument are of the same group that prepared this pamphlet.

A letter written by Jacob Bigelow and preserved in the Massachusetts Historical Society states that the monument was presented to Mrs. Morton and family by the subscribers to the Morton Testimonial to serve the mem-

ory of her husband. A list of individuals in this letter—the same as those in the pamphlet—names the members of the Executive Committee of the Subscribers to the Morton Testimonial.

Also listed in the pamphlet are the names of prominent individuals outside Boston who supported the testimonial for Morton, including S. F. B. Morse (1791–1872). Indeed, Morton had many notable individuals supporting his cause.

Another Massachusetts memorial to Morton sits in the Bernard Appel Hall of Medicine at Boston University School of Medicine. This work consists of 12 rectangular stone sculptures, each 8 ft high with a wood and brass nameplate below. Doris Appel (1904–1995), a renowned medical artist and historian, created the bold relief sculptures, which depict 12 important figures in the history of medicine. These date from Imhotep (circa 2650 BCE) to Marie Curie (1867–1934).

Appel's sculptures, which were lauded in a 1963 *New England Journal of Medicine* editorial, formerly resided in the Medical Museum of the Armed Forces Institute of Pathology and were given as a gift to the Boston University School of Medicine by Blossom A. and George M. Sanger and Nancy and G. Robert Baler in the 1970s. <sup>13</sup> A second cast of these figures is preserved at the John P. McGovern Hall of Medical History at The University of Texas Medical Branch at Galveston.

Appel understood well the role of each of the claimants to the discovery of surgical anesthesia and was not particularly fond of Morton's persona. However, after careful consultation with leading medical historians of the time, such as Arturo Castiglione, she decided to include him among the 12 figures (verbal communication, B. A. Sanger, M.D., Boston, Massachusetts, December 2007). He stands in a coat, holding a top hat in his right hand and a flask of ether in his left, flanked by William Harvey (1578–1657) and Louis Pasteur (1822–1895) (fig. 2).

Boston University School of Medicine also houses two sculptured panels by Doris Appel that are situated outside the Bernard Appel Hall of Medicine. These panels were formerly held at the Boston Museum of Science. In 26 life-size figures made of artificial epoxy stone, the panels trace the evolution of medicine in the United States from the arrival of the Pilgrims in 1620 to the introduction of ether, to advances in surgery and the founding of medical schools.<sup>14</sup> A focal point in these panels is the representation of the first public demonstration of ether anesthesia (fig. 3). Morton is pictured anesthetizing Edward Gilbert Abbot (1825-1855) while surgeon John Collins Warren (1778-1856) performs the operation and Henry Jacob Bigelow observes the procedure. The scene is reminiscent of Robert Hinckley's (1853-1941) painting, First Operation under Ether—



Fig. 2. William T. G. Morton.

although in Hinckley's painting Bigelow stands further away from Morton and the operating chair.

Through the years, descriptions of Morton's character and motivations have ranged from benefactor, revealer, and innovator to liar, impostor, and quack. Nonetheless, the various monuments and tributes representing William T. G. Morton are a testament to the support he has received from individuals and groups who believe he played a determinant role in the introduction of surgical inhalation anesthesia.



Fig. 3. From *right* to *left*: William T. G. Morton, Henry Jacob Bigelow, John Collins Warren. Gilbert Abbot lies recumbent.

## **Charles Jackson**

Out of the four main claimants to the discovery of surgical anesthesia, Jackson seems to be the least understood. Only one monument to this prolific scientist, geologist, and physician can be found, this being his gravestone. Charles T. Jackson graduated from Harvard Medical School in 1829; he then went on for postgraduate study in Paris, which was at that point the medical capital of the world. Once Jackson returned to the United States in 1832, he began practicing medicine. However, 4 yr later, he abandoned clinical medicine to pursue his interests in the fields of chemistry and geology.<sup>1</sup>

Although he was one of the major chemists of his time, Jackson's reputation did not fare well after the events of the Ether Controversy. This negative aura surrounding him could be due to the fact that there are few easily accessible accounts of his life other than those in favor of one of the rival claimants (usually Morton), who painted him in a bad light.<sup>15</sup> Although quick to point out his brilliance, most texts cite Jackson as erratic and eccentric as well as litigious and plagiaristic. Richard Wolfe explained the reasons for these accusations when he stated, "Jackson was a keen scientist, who often observed and discovered facts that had passed unnoticed by others, he lacked the time, the interest, and the imagination to put them into practice himself; and after he had brought them to the notice of others, who did apply his suggestions and demonstrated their validity, he was greatly offended when he was not credited with originating the idea." In the case of the discovery of surgical anesthesia, Jackson fought fiercely to defend his claim, asserting he gave the knowledge necessary to bring this innovation to the forefront.

After his death, Jackson's character was further diminished by spurious accounts of his supposed mental breakdown and questions of his mental sanity throughout his life. It has become the general consensus that toward the end of Jackson's life, because of the stresses of the Ether Controversy, his mental stability abated and

he was declared insane. Worse yet, other sources have stated that upon seeing Morton's monument in Mount Auburn and reading the inscription, he went into a frenzy and, having to be restrained, was confined to McLean Psychiatric Hospital. New sources are beginning to present a different perception of Jackson's life. In short, it has been suggested that Jackson had a cerebrovascular accident resulting in aphasia. <sup>16</sup>

Like Morton, Jackson too is buried at Mount Auburn cemetery. It could be because of the maligned press that Jackson received that the monuments to his life consist of only his modest and hardly noticeable grave. After stating his name, parents, and dates of birth and death, the stone remembrance of Jackson reads:

Eminent as a Chemist Mineralogist Geologist and Investigator in all Departments of Natural Science. Through his observations of the Peculiar Effects of Sulfuric Ether on the Nerves of Sensation and His Bold Deduction Therefrom the Benign Discovery of Painless Surgery was Made.

This inscription is a testament to Jackson's life. It states his various fields of expertise, putting an emphasis on the "observation," "deduction," and "discovery" of sulfuric ether's physiologic effects and how this could be implemented in surgery. Notice that it is from his deduction that painless surgery was discovered, not from his experiments. Jackson thought his ideas were validated through Morton, and the constructors of this monument keep true to this.

The base of Jackson's headstone includes a passage from Lord Byron's (1788-1824) poem "Prometheus" 17:

Thy Godlike crime was to be kind, To render with thy precepts less The sum of human wretchedness, And strengthen man with his own mind.

Since Prometheus created man and, in defiance of the gods, provided the gift of fire, he is considered by many to be the benefactor of humankind. He was in many ways the epitome of Byron's Romantic Age ideals: a hero with an individualistic nature (a concept later termed the Byronic Hero). 18 Byron's poem describes the details of Prometheus' subsequent punishment and the lessons one can learn from his tale. The first line, "Thy Godlike crime was to be kind," refers to giving "fire" or "light" to the world. Jackson, one might infer, freed the world from the "darkness" of pain through the gift of anesthesia. The next passage reads, "To render with thy precepts less The sum of human wretchedness, And strengthen man with his own mind." Here Byron is stating that humankind is in a state of suffering because of the gods' stringent rules. He states that Prometheus did away with these suppressing doctrines by giving fire to humans, allowing them to free themselves from their figurative darkness. Likewise, the giving of anesthesia freed humans from the sufferings of surgery. Jackson did not wish to receive any pecuniary award from the discovery or keep this knowledge to himself; rather, he

wanted to give this knowledge to the world. These lines fit with the arguments that Jackson proclaimed regarding the original patenting of "Letheon." As he states in a letter to the editor of *The Lancet* dated March 30, 1847, "I have always protested against the monopoly of scientific or medical discoveries by patents." In this same letter, he stated, "It was my desire to give it [surgical anesthesia] to the world." As is shown, the words of Byron's "Prometheus" fit very well into the viewpoints and story of Jackson.

#### **Horace Wells**

Horace Wells was a dentist who had at one time been both a colleague and a mentor of Morton. Despite having failed to convincingly show the effectiveness of nitrous oxide during a demonstration in 1845, Wells claimed he deserved the credit for the discovery of surgical inhalation anesthesia. He spent the rest of his life dealing with frustration and anger due to his inability to receive recognition. Eventually, self-experimentation with anesthetics and his inability to cope with the events surrounding the discovery of anesthesia lead to his suicide.

In 1834, Horace Wells, at age 19 yr, began his study of dentistry under the tutelage of the leading dentists of Boston. W. Harry Archer, D.D.S. (1905–1980; University Professor Emeritus, Department of Oral Surgery, University of Pittsburgh, Pittsburgh, Pennsylvania) stated that it is possible that Wells might have received instruction on dentistry from Dr. N. C. Keep (1800–1875), the soon to be first dean of Harvard Dental School. In 1836, Wells moved to Hartford and set up his dental practice.<sup>4</sup>

Because of his competence and ingenuity, he soon became very popular in Hartford. It was said of him that "No man ever enjoyed the confidence of a community more entirely than he did that of Hartford." This great esteem for Wells played an important role in his recognition through monuments.

Horace Wells is buried in Hartford's Cedar Hill Cemetery. According to the cemetery burial cards, in 1908, Charles Wells (1840–1909) had his parents exhumed from their grave site in Hartford's Old North Cemetery and reentered in Cedar Hill Cemetery. He commissioned Louis Potter (1873–1912) to create his father's gravestone. The gravestone is a rectangular monument rich in allegories illustrating Horace Wells' contribution to medicine.

The monument depicts a man lying on the ground, with a female angel descending upon him (fig. 4). The angel on Wells' gravestone is shown completely outstretched, her cupped hands holding a plate-like object with a vapor emanating from it. The angel's wings encompass the top portion of the gravestone shrouding the man. In the Bible, wings are sometimes used allegorically to represent support and protection: "How priceless is



Fig. 4. Relief on Wells' tomb reading "THERE SHALL BE NO PAIN."

your unfailing love! Both high and low among men find refuge in the shadow of your wings" (Psalm 36). The large wings on Wells' grave might therefore be interpreted as God's protection. It can be assumed that the angel is bestowing the gift of anesthesia to humankind.

The bronze relief on the northern side of Wells' gravestone shows a woman with her eyes closed and head tilted upward toward a star field (fig. 5). On the lower part of the bust, the woman's body appears veiled in open poppy flowers, while rising above her are closed poppy flowers. Because morphine is derived from them, poppy flowers are often used to symbolize sleep. Furthermore, the word *morphine* comes from the Greek word *Morpheus*, the name of the Greek god of dreams. Below the open poppy flowers, the phrase "I sleep to awaken" is inscribed—a reference, presumably, to awakening after surgical anesthesia.

The southern side of the gravestone reveals the same woman, only her eyes are open and tilted toward the sun (whose rays spread across the top boundaries of the sculpture) (fig. 6). On the lower part of the bust, morning glories occupy the space where poppies shrouded the northern sculpture. The choice of flowers here is also noteworthy. Morning glories bloom every morning and then close in the afternoon, only to begin the cycle again the next morning. Perhaps this is intended to show that patients under anesthesia are dormant; they, like the flowers, "awaken." This idea corresponds fittingly to the phase, "I awaken to glory," which is inscribed below these morning glories.

The back of the headstone simply states: "HORACE WELLS, 1815–1848, Discoverer Of Anesthesia."

Louis Potter's original side reliefs were stolen in the 1980s and were later replaced with flat bronze facsimiles. However, in 2004, through the efforts of the Horace Wells Club of Connecticut, the Hartford Medical and Dental Societies, and Atena Foundation, and with an Assessment Award by the Save Outdoor Sculptures project, replicas of the originals were restored to their rightful position. Three of these contributing groups are located in the area where Wells practiced. As was a trend in the Ether Controversy, local pride and recognition became the focus point for many of the supporters to the claimants.



Fig. 5. "I sleep to awaken."

Another statue of Horace Wells stands in Hartford's Bushnell Park, having come all the way from Paris in 1874. The face of Wells was molded, using a daguerre-otype as a guide, from a plaster cast taken after death. M. Gruet cast the statue in bronze under the supervision of T. H. Bartlett (1835–1922), who is attributed with the sculpture. Wells appears capped and holding a cane in his left hand. To his right is a book with "Anesthesia" written on it and a scroll with Wells' own remark about nitrous oxide: "I was desirous that it should be as free as the air we breathe." The statue rests on a granite base with the inscription, "Horace Wells, the discoverer of anesthesia."

In an essay by Shirley Stallings and Michael Montagne, the statue is described as the "image of a traveler on a pilgrimage." The authors explain this through the vari-



Fig. 6. "I awaken to glory."

ous characteristics of the statue: Wells looks to be pictured in mid-stance; he is wearing boots and holding a walking stick; he is also holding a box, book, and scroll. Likewise, the cloak that Wells is depicted to be wearing is wrapped around him and drawn close to his body. This was done to "suggest Wells' protection against the struggles of his life journey." The walking stick also has an allegorical element. This can be seen as an extension of the arm and the self—an element of protection and security. The walking stick or staff is also shown in the caduceus, a common symbol for the medicinal arts.

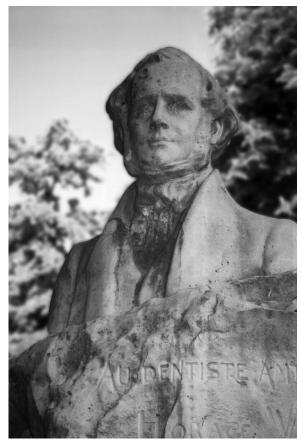


Fig. 7. Horace Wells' bust in Paris.

The statue was erected at the joint expense of the city and state, each having contributed the sum of \$5,000. Furthermore, when discussing the construction of this monument at a meeting of the Hartford Society of Dentists on April 11, 1870, it was resolved that "the natural gratitude due to the memory of public benefactors, imperatively demands that the City of Hartford and the State of Connecticut, with the Medical and Dental professions, cause a suitable monument to be erected in the public park of this city, in memory of Dr. Horace Wells, the Discoverer of Anesthesia." A Reiterated here is the theme of local pride stemming from Wells' memory and accomplishments. In addition, In July of 2003, through the efforts of the Horace Wells Club and Trust Fund, the James and Ellen Burr McManus Fund of the Hartford Dental Society, the Connecticut State Dental Association, and the Wells Pedestal Fund of the City of Hartford, Wells' monument in Bushnell Park was restored.‡ Once again, private and local groups are contributing to a figure that brought great renown to the city of Hartford and the State of Connecticut.

Monuments recognizing the contribution of Horace Wells are not confined to New England, or even to the United States. On March 27, 1910, near Paris's Arc de Triomphe in the Place des Etats Unis, a bust of Horace Wells was revealed (fig. 7). Sculpted by the famous artist Rene Bertrand Boutée (1877–1950), <sup>19</sup> it depicts Wells in

<sup>‡</sup> http://www.hartford.gov/News/archives/archivesNewsFromCityHall/cityhallnews/HoraceWellStatuteRepairs.htm. Accessed March 13, 2008.

a jacket and tie, his eyes straight ahead. The bust is supported by a white column of roughly carved marble that bears the inscription "Au dentiste Americain Horace Wells Novateur de L'Anesthesie Chirurgicale" or, in English, "To the American dentist Horace Wells. Innovator of Surgical Anesthesia." On the right side of this column is a medallion with the likeness of Paul Bert (1833–1886), a French physiologist who later devised a way to administer nitrous oxide with oxygen under hyperbaric conditions.<sup>20</sup>

The Place des Etats Unis is an area where Joint French and American efforts are presented in sculptured form. With this joint recognition in mind, one can begin to understand why a monument to Wells exists in Paris.

In December 1846, Wells left for Paris, his purpose being to procure paintings for resale (a business enterprise he was attempting to begin) and to present his claims as the discoverer of anesthesia.<sup>4</sup> On this trip, Wells met Christopher Starr Brewster (1799-1870), an American dentist in Paris. Brewster was well connected in Paris and greater Europe because he was the personal dentist to the French Royal Family, the Emperor of Russia, and other prominent persons throughout Europe and Russia. It was Brewster who would bring Wells' proof of "his" discovery of anesthesia before the Parisian Medical Society, and the positive acclamation Wells' received from them had a great deal to do with Brewster's prominent place in society.<sup>5</sup> On January 12, 1848, Brewster would pen a letter to Wells, telling him that the Parisian Medical Society had given Wells all honors for the discovery of surgical inhalation anesthesia.<sup>21</sup> Unfortunately, by the time this good news reached America, Wells had committed suicide. Even though Wells' unfortunate death came before the general use of nitrous oxide in surgical procedures, his efforts were not forgotten in Paris. For later in that century, building on Wells' previous endeavors, Paul Bert would add applicability to this discovery.

Wells' death in 1848 came at a time when the Ether Controversy was only in its infant stages. His absence left his claim open to debunking efforts by both Jackson and Morton. The success of Morton's trials with ether in 1846 placed Wells' failed efforts with nitrous oxide in a state of incredibility. In fact, after Wells' death in 1849, Morton would counter the claim of Wells by stating that nitrous oxide could not produce insensibility to pain and therefore he was the discoverer of anesthesia, not Wells.<sup>5</sup> However, although Wells' rights to discovery fell to the wayside during the continuing Ether Controversy, he was not without powerful and prominent proponents: individuals such as John Riggs (1810-1885), Wells' associate and the discoverer of Riggs disease; Pickney Webster Ellsworth, a prominent Hartford surgeon; and Truman Smith (1791-1884), US senator and judge. Because of these advocates and the support of the city of Hartford and the State of Connecticut, Wells' memory lives on through the monuments they constructed.

## **Crawford Long**

Crawford Long has been described as a physician from Georgia who was dignified, honorable, and hardworking. Unlike the other claimants, Long delayed reporting his experiences with surgical inhalation anesthesia. Although he first administered ether anesthesia on March 30, 1842, for the removal of a neck tumor, he did not publish the account of this procedure until 1849 in the Southern Medical and Surgical Journal. However, he apparently was not attempting to conceal this innovation, because he spoke about it with others in the medical community. Rather, he wanted to investigate this phenomenon in a "capital operation" before publishing his results.<sup>22</sup> Because of his lack of desire for monetary rewards or fame, Long starkly contrasted with the other individuals associated with the introduction of inhalation anesthesia. In fact, in his 1849 article, he states that he was publishing his reports because, "my friends think I would be doing myself injustice, not to notify my brethren of the medical profession of my priority of the use of ether by inhalation in surgical practice."23

Long's contention of his use of ether anesthesia did not go unnoticed. During the congressional trials that occurred in the 1850s regarding Morton's attempts to obtain a pecuniary award from Congress for his "Letheon" discovery, Jackson was asked by senator William Dawson (1798-1856) to travel to Georgia to verify Long's story. After meeting with Long, Jackson became convinced that he truly was the first person to administer sulfuric ether as an anesthetic; this is evident by Jackson's article (written after the trial) in the April 11, 1861, edition of the Boston Medical and Surgical Journal.<sup>24</sup> In this article, Jackson tells the story of how Long administered ether as an anesthetic and his reasons for the delay in publishing his accounts. Jackson also states that if Long had written him earlier, he would have presented his claims before the Academy of Sciences of France. When Jackson's accounts were presented to Senator Dawson, Dawson brought them before congress and Long was listed as a claimant to the discovery of anesthesia. However, this bill for appropriations to the discovery of anesthesia was not approved, and Long's claim became forgotten by most.1

Much like Wells, Long's support came mostly though the local community of Jefferson County (where Long's office was and where he administered ether for the first time) as well as the State of Georgia and the Southern United States. However, Long's supporters were not of the social distinction or powerful persuasion that was enjoyed by Morton, Wells, and Jackson. Because of this, Long's fame and monuments are restricted to the Southern United States.

One such monument (a granite obelisk on a large base that bears his name) was constructed in Jackson, Georgia, near the site of Long's first administration of ether for a surgical procedure. It reads<sup>25</sup>:

In the memory of Dr. Crawford W. Long. The first discoverer of Anesthesia, the Great Benefactor of the human race.

Born in Danielsville, Madison County, GA Nov 1, 1815.

Died in Athens, Georgia June 16, 1878.

Sulphuric Ether Anesthesia was discovered by Crawford W. Long March 30, 1842, at Jefferson, GA.

Administered to James M. Venable for removal of a tumor. Given by Dr. Lamartine Griffin Hardman, in the name of his father and mother.

Dr. W. J. Hardman and Mrs. E. S. Hardman lifelong friends of Crawford. W. Long.

Dr. W. B. J. Hardman being a physician of Jackson County. Erected by the Jackson County Medical Society, April 21, 1910. Committee

H. W. Bell

J. C. Bennett, M.D.

F. M. Bailey

Unveiled by the Georgia Medical Association

April 21, 1910.

As can be seen from the inscription, the monument was given to Jackson, Georgia, by Lamartine Griffin Hardman, M.D. (1856-1937)—soon to become governor of Georgia—in collaboration with the Jackson County Medical Society and Georgia Medical Association. This inscription describes the reasoning for Long's claim and gives a list of other individuals who believed he deserved recognition.

In 1864, legislation was introduced by Congressman Justin S. Morrill (1810–1898) allowing each state to recognize two individuals to be memorialized in Washington, D.C. Crawford Long was one of the two selected for Georgia—a clear indication of how well esteemed he was within his own state. The statue was sculpted out of Georgia marble by J. Massey Rhind (1860–1936) and unveiled in Statuary Hall on March 30, 1926. Below Long, who stands at a podium in coat and tie, are inscribed the words, "My profession is to me a ministry of God." This sculpture came courtesy of the Crawford W. Long Memorial Association, of which Frank K. Boland (1906–1967), author of *The First Anesthetic: The Story of Crawford Long*, was president. State to recognize two individuals to be memorially allowing each state to recognize and the state of the st

In 1936, a reproduction of the statue in Statuary Hall was made public at the Madison County Courthouse in Danielsville, Georgia (fig. 8).<sup>23</sup> Both the statue in Washington and the reproduction in Danielsville are attributed to J. Massey Rhind. Rhind, originally from Scotland, immigrated to the United States in 1889.<sup>27</sup> During the late 19th and early 20th centuries, he was a prolific sculptor of public monuments. In fact, the Smithsonian Art Inventory catalog has more than 90 works attributed to Rhind. These works include sculptures of Andrew Carnegie (1835–1914), George Washington (1732–1799), and Ulysses S. Grant (1822–1885). The fact that Craw-



Fig. 8. Crawford Long monument in Danielsville, Georgia.

ford Long was added to such a prestigious list again shows what strong respect the people of Georgia had for him.

The base of the statue reads:

Crawford W. Long, M.D.
Discoverer of the use of sulphuric ether
As an Anesthetic in surgery
On March 30, 1842 At Jefferson
Jackson County, Georgia, USA.

Below his dates of birth and death appears the same quote, "My profession is to me a ministry from God"—a sentiment that his "parishioners" must have thought described him best.

Long's story is a good example of the influence "well-placed" supporters had on the Ether Controversy. Although he had loyal advocates, they were not influential enough to gain Long much national notoriety. Even though Long's statue in Washington is of a prominent nature, his lack of desire for reward, tardiness in reporting his account, and his supporters' lack of distinction did not give adequate recognition to his position in the discovery of inhalation anesthesia.

## **Summary/Conclusion**

Numerous monuments in Massachusetts, Connecticut, and Georgia commemorate the original demonstrators of inhalation anesthesia for surgery using sulfuric ether, as well as the controversy surrounding these individuals.

The Ether Controversy is a historical event brought about by individual desire and fueled through collective support. It is interesting to ponder what might have occurred if the Ether Controversy had only been an argument between two people: Morton and Jackson. If Jacob Bigelow had not written his famous article describing the events of 1846, would Wells have argued for his position? If Long's friends had not coaxed him to finally publish his account, would he even have joined in the Ether Controversy? Would Morton have been able to attain his position without the support of such elite backers? Questions like these highlight the crucial role proponents of the claimants to the discovery of inhalation anesthesia played in the outcome of the Ether Controversy.

It is also interesting to consider what might have occurred if Boston had had only one petitioner to the right of the discovery of inhalation anesthesia. For example, because of their unshared claims, Long and Wells stand as personifications of their respective communities, and therefore these populations support and honor their memory through stone edifices. This personal connection perhaps provides the impetus for these impelled peoples to maintain these structures. In contrast, Morton's tomb at Mount Auburn Cemetery is in need of proper maintenance, and its marble inscriptions have eroded enough that they are hardly legible.<sup>28</sup> Jackson's only monument is his grave, which is overshadowed by both Long's and Wells' statues. However, if Boston had had a single claimant, the entire city would have likely advocated for that person; Boston was divided in its support and, as such, backing for the individual's monuments was fragmentary. By not mentioning any of the claimants, the Ether Monument in the Boston Public Garden remains neutral in regard to the Ether Controversy. This is perhaps the paramount reason why it is

generally considered the most important, visible, and recognizable memorial to the introduction of surgical inhalation anesthesia.

The tributes and monuments to the claimants of the discovery of inhalation anesthesia are embodiments of the patronage received by, Morton, Jackson, Wells, and Long. They should be viewed as part of history, as well as a testimony to the various interpretations of the Ether Controversy.

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