

for his human experimentation, but there is no question in the medical community as to the importance of Bartholow's findings and innovation in neuroscience. However, his methods continue to spark debate. Almost a century and a half later, scholarly articles about Bartholow's experiment on Mary Rafferty are still being published. The 2015 American Medical Association *Journal of Ethics* succinctly summarized the controversy that is relevant today: "Technological Innovation and Ethical Response in Neurosurgery."

Bartholow's weapons in war and civilian life were a sense of superiority, logic, inquisitiveness, and ruthlessness. At the time of his death, his *Materia Medica* was in its eleventh printing. He dedicated his world-acclaimed book "To the Memory of Father, Mother and Brothers by The Survivor."

Bartholow died at his home in Philadelphia at age 72. He returned to his native New Windsor in a pine box. Some might say he is "at rest" within the ornate iron gates of the church graveyard. Others claim his restless spirit haunts the village of New Windsor. When a "psychic sensitive" employed to investigate activity in the graveyard laid hands on Bartholow's headstone, she was startled by the negative "vibes" that she received and shouted out the words that came to her, "They didn't understand!"

#### Selected Sources:

Bartholow, Roberts. "Experiments on the Functions of the Human Brain." *The British Medical Journal*. May 30, 1874, 727.

Bartholow, Roberts. *Medical Electricity: A Practical Treatise on the Applications of Electricity to Medicine and Surgery*. 3rd ed. Philadelphia: Lea Brothers & Co., 1887.

- Bartholow, Roberts. *A Practical Treatise on Materia Medica and Therapeutics*. 5th ed. New York: D. Appleton and Company, 1884.
- Bartholow, Robertsus. "Calori Animali." *University of Maryland Theses 1852*. Baltimore: The Medical Heritage Library.
- Bartholow, Roberts. "The Physiological Aspects of Mormonism, and the Climatology, and Diseases of Utah and New Mexico." *The Cincinnati Lancet and Observer*. 10:4 (April 1867): 193-205.
- Cambiaghi, Marco, and Stefano Sandrone. "Pioneers in Neurology: Robert Bartholow (1831-1904)." *Journal of Neurology*. 261 (2014): 1649-50.
- Devilbiss, Frank J. "History of New Windsor, Maryland." *The Carroll Record*. May-July 1895.
- History of Neurosurgery in Cincinnati*. Cincinnati: The Mayfield Clinic, 2009.
- Juettner, Otto. *Daniel Drake and His Followers: Historical and Biographical Sketches*. Cincinnati: Harvey Publishing Co., 1909, 260-67.
- Menon, Jayant, and Daniel J. Riskin. "Technological Innovation and Ethical Response in Neurosurgery." *AMA Journal of Ethics* 17:1 (January 2015): 62-8.
- Warner, Nancy M., Ralph B. Levering, and Margaret Taylor Woltz. *Carroll County, Maryland: A History, 1837-1976*. Westminster, Md.: Carroll County Bicentennial Committee, 1976.

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# Carroll History Journal

The Historical Society of Carroll County, Maryland, Inc.

## DR. ROBERTS BARTHOLOW: "STRANGE CHILD OF GENIUS"

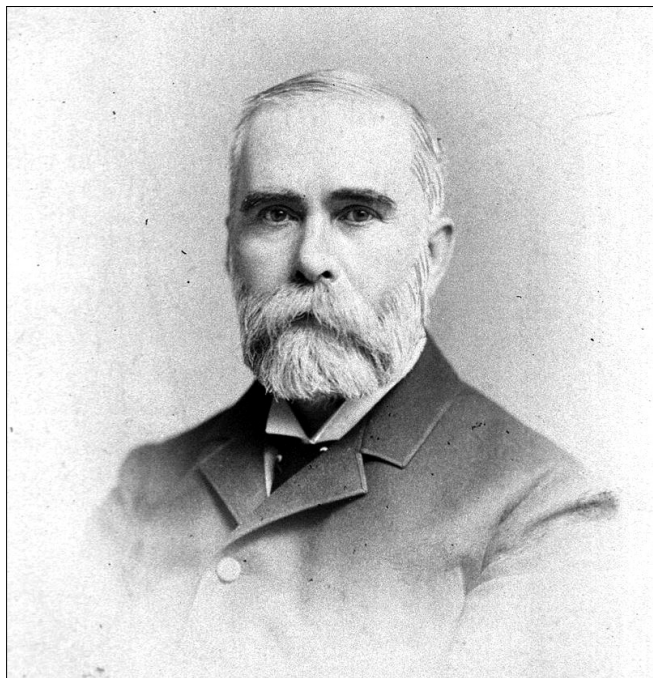
By Sharon Burleson Schuster

An unassuming headstone in the New Windsor Associate Reformed Presbyterian Church cemetery reads simply, "Roberts Bartholow, M.D., LL.D., 1831-1904." The dash between his birth and death represents 73 years of notable accomplishments, a remarkable medical career, important discoveries, and a dark side to one of medical history's most brilliant stars. The life of Dr. Roberts Bartholow was a strange journey that began in New Windsor. The stellar student, acclaimed physician, political activist, and assistant Civil War surgeon tangled with Indians and Mormons in the West, police in the East, and in the end, with his own demons.

1892 was a year of firsts and noteworthy events in America. The first voting machine was unveiled as were the electric clothes dryer, escalator, bottle cap, and toothpaste tube. The Reds beat the Cards 5 to 1 in the first Sunday National League baseball game. Arthur Conan Doyle published *The Adventures of Sherlock Holmes*. The Pledge of Allegiance was first recited in public schools on Columbus Day. Ellis Island became a reception center for new immigrants. Grover Cleveland was elected President.

There were also strange occurrences in 1892. It was a Leap Year, consisting of 367 days with two fourth-of-July dates on the calendar, owing to the alteration of the International Dateline by Samoa. The *New York Times* reported "the most wonderful exhibition of the aurora, or northern lights, possibly ever seen from American soil." While the heavens were illuminated with a rose-red aurora, one of medical history's most brilliant lights went dim.

Roberts Bartholow was at the zenith of his career a dozen or so years before his world collapsed in 1892. The fourth edition of his 738-page *Materia Medica and Therapeutics* was published world-wide in 1881. His credentials spread across the title page: "Roberts Bartholow, M.A., M.D., LL.D., Professor of Materia Medica and General Therapeutics in the Jefferson Medical College of Philadelphia, ETC." The hefty reference book was even translated into Japanese. Newspaper accounts of 1892 acclaimed his



Dr. Roberts Bartholow, Professor and Dean of Faculty, Jefferson Medical College, c.1890. (Photograph by Frederick Gutekunst, U.S. National Library of Medicine)

teaching style. He was said to be "a bomb-shell in the Academy of Medicine where the old fogies used simply to relate their case and expressed their opinions."

However, despite his eminence, the *Cincinnati Enquirer* carried this headline about him on February 18, 1892: "HE LOST HIS MIND."

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The Early Years

Roberts Bartholow's grandfather, Thomas Bartholome, was born in Holland c.1730 and emigrated to the United States at age 16. According to a granddaughter, he pronounced his name “Barthol- may,” but descendants spell and pronounce it “Bartholow.” Roberts Bartholow, son of Jeremiah and Pleasant (Peddicord) Bartholow, was born in New Windsor on November 18, 1831, and raised near Hampstead. Jeremiah was among the first trustees of the Methodist church in New Windsor, built in 1843.

Historian Otto Juettner presents Roberts Bartholow as a person of “peculiar make-up.” His “frigid dignity, chilly reserve, and uninviting manner” accounted for his stance in life, a man who “never had an intimate friend or even a close associate . . . cynicism and sarcasm stood during his whole life between the man and the world at large.” He was also characterized as “a peerless wielder of the pen.” The *Cincinnati Enquirer* described Bartholow as one of “average height, stout build, reserved in manner and even restless . . . cool and calculating. He talked as he wrote, like a book.” A 1912 issue of *The Eclectic Medical Gleaner* reported that he was a man of “distinguished appearance, dignified manner, and careful attire, he cared nothing for the whirl of social life.”

Juettner offers details about Bartholow’s education. His father insisted that this “strange child of genius” pursue a professional career, so he gave his son “all the advantages of academic preparation at Calvert College,” New Windsor, where Roberts earned his baccalaureate degree in the arts in 1848. He mastered the Greek and Latin classics, “became adept in the use of French and German,” and devoted himself “with much zeal to the study of chemistry.” The



Calvert College, New Windsor, c.1850. (Courtesy New Windsor Heritage)

young scholar also served as assistant instructor of chemistry.

The 1850 Federal Census of Hampstead, Carroll County, lists “Robert” Bartholow as a “student” of Dr. Thomas Wells, living with him, his wife Juliann, and their four children, along with Hanson M. Drach, “teacher,” Leah Hildebrand, and Harriett Bishop, “mulatto.” After graduation from Calvert College, Bartholow completed some post-graduate work in clinics and hospitals in Baltimore. He earned his medical degree at the University of Maryland in 1852. His thesis was the only one of 23 in the graduating class that was handwritten in Latin: *Dissertatio Inauguratis De Calore Animalis, Robertsus Bartholow, Marylandiae.*

The newly-accredited doctor returned to New Windsor where his step-brother Wesley had practiced medicine until 1847. According to New Windsor journalist, Frank J. Devilbiss, Roberts practiced medicine there from 1852 to 1856.

nervous strain that his entire system was shattered and that he was rapidly going to pieces. It was even intimated that he had sought the use of powerful drugs and tonics to brace himself up. Then strange and erratic actions were committed by this doctor.

The *Cincinnati Enquirer* reported his diagnosis as “monomaniac on obtaining eminence as a physician. . . . The oldest and most celebrated medical writer of the age,” Bartholow was considered “the hardest worker ever known in the medical profession. The form of his insanity is known in the profession as paranoia, a form of dementia or delirium.” A colleague, Dr. Whittaker, proclaimed that Bartholow “was the only man he ever saw who really was over-worked.” *The Philadelphia Inquirer* carried the report of “specialists in insanity cases” who stated, “He is 59 years of age, but in appearance is now 70. A most pathetic feature of the lamentable case is that the hallucinations took the form of a violent prejudice against his wife, an exemplary woman of rare delicacy and feeling, refinement and culture.” Bartholow countered with, “Any statement that I am not in fit condition now is all nonsense.”

The *Cincinnati Enquirer* of February 28, 1892, carried this startling story:

One night recently the quiet neighborhood at Sixteenth and Locust [Philadelphia] was disturbed by a strange scene. A carriage was seen standing at the curb, while Dr. Bartholow, in the clutches of three stalwart policemen, was fighting furiously and crying out at the top of his voice. He was finally deposited in the carriage, which was driven away.

On February 18, *The Philadelphia Enquirer* reported, “The eminent physician was quickly removed from his residence, 1525 Locust street, to the institution several days ago at the instance of his family and his medical adviser and former collaborer at Jefferson College.” The front page, above-the-fold article noted that “well-known specialists in insanity cases, signed the commitment.” He was “confined under restraint in the Pennsylvania Hospital for the Insane, commonly known as Kirkbride’s.” Bartholow’s demented condition, kept secret by his colleagues, friends, and family, had been uncovered.

While Bartholow was in restraints at Kirkbride’s hospital for the insane, his patients “have been

informed that the doctor was traveling for his health.” His wife and unmarried daughters went on with their lives. *The Philadelphia Inquirer* ran a notice in “General Society Notes” advising that “Miss Bartholow and the Misses Bartholow, No. 1525 Locust Street, receive Thursdays from 4 to 6.”

His Legacy

On Sunday, January 29, 1893, *The Chicago Tribune* ran an item in the “Personals” column on page 28: “Dr. Roberts Bartholow, the eminent professor of Jefferson College, Philadelphia, who became insane some two years ago from hard study and overwork, has recovered his mental balance.” Yet records of the last decade of his life are void of medical discoveries, public accolades, and active engagement at Jefferson Medical College where he retained his status as Professor Emeritus.

Dr. Roberts Bartholow left a controversial legacy of unethical experimentation and discovery that nevertheless led to modern-day techniques in neurological surgery. The American Medical Association lists him with the likes of Adolph Hitler



Bartholow burial site, New Windsor. (Courtesy New Windsor Heritage)

THE

TRUE



AMERICAN.

R. BARTHOLOW,  
H. C. GEATTY,

EDITORS AND PROPRIETORS.

TERMS:  
ONE DOLLAR PER ANNUM IN ADVANCE.

VOL. 1,3

NEW WINDSOR, CARROLL COUNTY, MD., JUNE 29, 1855.

{NO. 31,

Bartholow created and edited this “Know-Nothing” newspaper. HSCC collection.

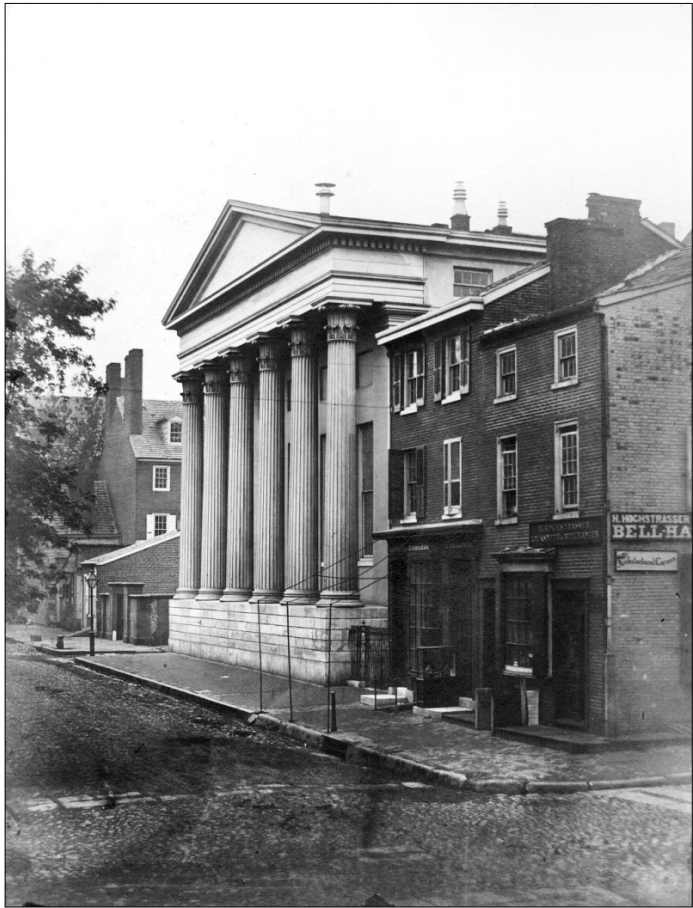
empty, save for the dissection room. There, they quickly passed by a box of assorted limbs, a mix of severed hands, feet, heads, arms, and the body of a six-month-old baby. Mr. Marshall, the college’s janitor, piqued the officers’ suspicions when he turned away from the door to a secret cadaver chute. There, the party discovered a body, head covered with a white cloth, hanging by the neck from a rope. It was the stolen body of John Scott Harrison. As Dean of the college, Bartholow issued this statement:

A very great misconception seems to exist as regards the part taken by the Faculty and their assistants in procuring the material for dissection. The men engaged in the business of procuring subjects are, of course, unknown to the Faculty; they bring the material to the college, receive the stipulated price, and disappear as mysteriously as they came. In the case of the body of the Hon. J. Scott Harrison, it seems to have been brought by the resurrectionist on his own responsibility, and the poor janitor, whom it is sought to punish, had no part in, or knowledge of the transaction.

Though questions remained as to why the body had been hidden in the chute, the police took the word of Dr. Bartholow and no one at the college was implicated.

His Zenith

The 1880 Federal Census lists Roberts Bartholow, 49, and his family residing in Philadelphia. He had brought his unique teaching style to Jefferson Medical College where he was professor and dean of the faculty. His work was recognized by many. Mount St. Mary’s College in Emmitsburg conferred a Doctor of Laws upon him; he was awarded fellowships by The College of Physicians of Philadelphia, the American Philosophical Society, the Royal Medical Society of Edinburgh, and the Society of Practical Medicine in Paris; he was paid \$12,000 by a Cincinnati millionaire who claimed that Bartholow had extended his life with his medical treatment; his name appeared in advertisements in newspapers across the country, touting the medical benefits of Buffalo Lithia Water bottled from a spring in Virginia and said to be “what Adam drank in Paradise.” All was well with the doctor until the autumn of 1891.



Jefferson Medical College, Philadelphia, 1855.  
(The Library Company of Philadelphia)

He Lost His Mind

In November, Bartholow was removed from the lecture halls and surgical theater at Jefferson Medical College, as reported in an item in the *Harrisburg Telegraph*. The Board of Trustees of the college encouraged Bartholow to take time off with salary and thereafter “resign his place in the college faculty because of his eccentric methods of teaching,” but the doctor refused the offer. Two years earlier, the Jefferson College board had attempted to force him to retire, but “a great number of students [were] firm in protesting against the retirement.”

The February 20, 1892, issue of The *Cincinnati Enquirer* published a review of his “Sad Case”:

About five years ago Dr. Bartholow, to the surprise of his old friends in Cincinnati and new ones in Philadelphia, began to show strange symptoms. At first there were whisperings of family troubles; then it was hinted that he had been under such a high

Active in the politics of the time, Bartholow organized a Know-Nothing Lodge in Uniontown around 1855. The Know-Nothing Party, officially known as the American Party, was exclusively for white Protestant men opposed to immigrants coming to America. He also created and edited a local newspaper, *The True American*, “a spicy sheet,” according to Devilbiss.

Bartholow married Susanna Lamott, whose father, Colonel John Henry Lamott (1795-1884), was a veteran of the War of 1812 and among the early settlers in Hampstead. Roberts and Susanna had three children—Frank Carroll (b.1852), Maria (b.1854), and Susan (b.1861). Susanna died in July 1862, and less than two months later, Roberts married Maria Walker in Lowell, Massachusetts. Their children were Mary (b.1863) and Paul (b.1868).

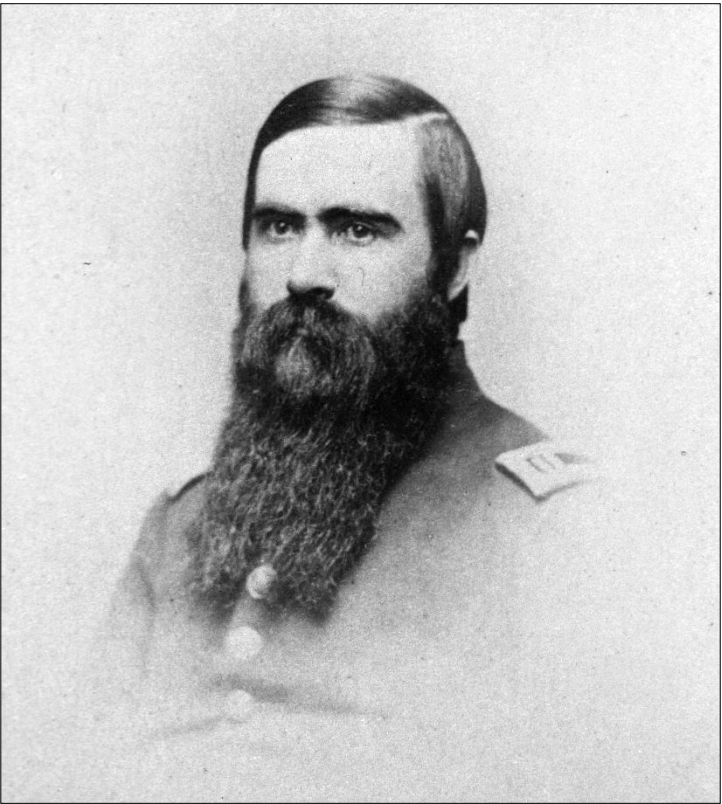
One War, Many Battles

While married to Susanna, Bartholow enlisted in the U.S. Army on June 4, 1857, as an assistant brigade surgeon. He was dispatched to the territory of Utah to deal with the Mormon rebellion and Indian uprisings. Roberts wrote in the U.S. Army *Sanitary Report - Tenth Infantry En Route for Utah*:

On the 8th of July, by order of commanding, I reported for duty with the Tenth Infantry. Eight companies of this regiment were then lying at Camp Walbach, near Fort Leavenworth, Kansas Territory, being destined to form a part of the ‘army for Utah’. The column moved out on the 18th of July and took up the line of march for Salt Lake City.

While on the 1,200 mile march, Bartholow wrote *Enlisting and Discharging Soldiers*, a manual adopted by the War Department. In the chapter “The Qualifications of Recruits,” Bartholow determined that the Irish “are most capable physically” and the “Scotch are the most efficient soldiers.” Owing to the “permanent flattening of the thorax,” mechanics, tailors and shoemakers are “unfit for soldiers.”

In his letters to commanders and in *Senate Documents* published in 1860, Bartholow wrote about the hardships suffered by the troops. The average daily march of 15 miles in 95 degree heat and cloudless days left the men exhausted. The soldiers suffered from fatigue, drunkenness, poison



Dr. Roberts Bartholow, Assistant Brigade Surgeon, U. S. Army, c.1860. (WikiMedia Commons, Public Domain)

oak, fever, diarrhea, syphilis, and urgent thirst. Bartholow’s treatments for physical ailments consisted mainly of rest, brandy, sulphuric ether, and laudanum. He ordered fruit for scurvy, and their diets were occasionally enhanced by buffalo steaks. One “distraction” was a woman, a camp follower, who was in labor for 60 hours.

Bartholow was later stationed in the Director’s Office of the Army of the Potomac in Washington, D.C., in March 1862. He was appointed Medical Purveyor for the Army of the Potomac with goods that he procured to be transported by General George McClellan’s troops. On April 1, 1863, Captain Bartholow was serving as an assistant surgeon at Ft. Schuyler in New York City. In July, wounded Union soldiers from the battle in Gettysburg were transported there where Bartholow performed “difficult operations.” In October of the same year, he was serving as a surgeon for the Union Army at Lincoln Hospital in Washington, D.C. With the coming of the new year, Bartholow is listed on January 13 as working in a general field hospital in Chattanooga, Tennessee. From there, he went to Fort Union, New Mexico.



Besides the war on Confederates, “fanatic Mormons and belligerent Indians,” Bartholow engaged in another battle. He was surprised and appalled by the appointment of the first woman medical officer in the person of Dr. Mary Edwards Walker. She was also a so-called dress reformer, and wore a modified military uniform with bloomers. Later in life, as a suffragette, Walker often donned a top hat and tails.

Bartholow accused Walker of being “entirely unfit for the position of medical officer. She had no more medical knowledge than an ordinary housewife. She presented herself with feminine tremor and confusion.” Even though Dr. Walker was awarded the Congressional Medal of Honor for her service “above and beyond the call of duty” on the battlefield and was the second practicing female surgeon in North America, Bartholow’s public ranting about her continued with a declaration that Walker was a “medical monstrosity.”

Bartholow was mustered out on May 11, 1864, to take a position as chair of Medical Chemistry at the Ohio Medical College. In 1866 he also joined the staff of Good Samaritan Hospital. A prolific author while in Cincinnati, he published *On Spermatorrhoea*, *The Principles and Practice of Disinfection*, and *A Manual of Hypodermic Medication*. The latter was dedicated to “Andrew Hull Baker, A.M., President of Calvert College, Maryland, By His Obligated Friend And Former Pupil, The Author.” Bartholow was later named Professor of *Materia Medica and Therapeutics*. The *Cincinnati City Directory* shows the Bartholow family residing at 334 Race Street in 672 square feet.



Dr. Mary Walker, c.1870. (National Archives)

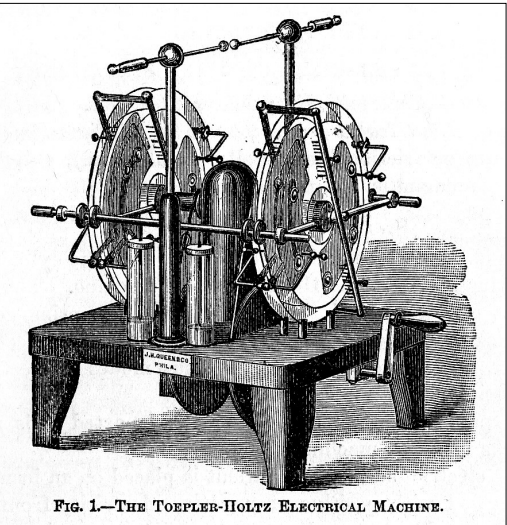
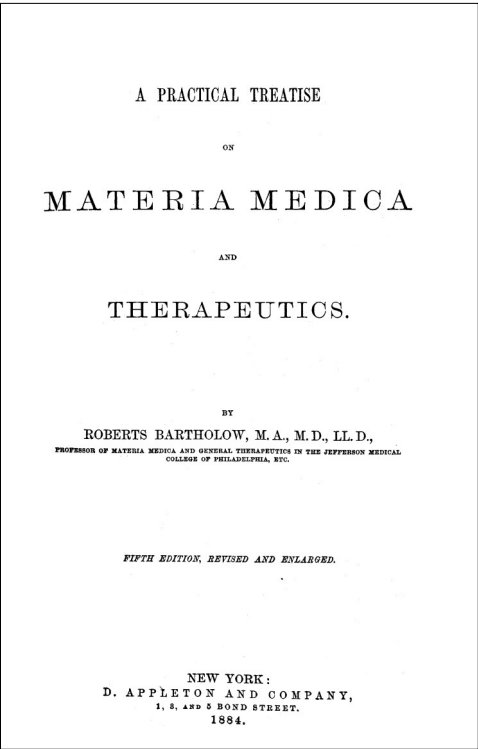
A Shocking Tale

Mary Rafferty was a 30-year-old Irish immigrant, living at home with her mother and four siblings. She was employed as a domestic, according to Bartholow’s notes. He included descriptions such as “medium height . . . not very well-nourished . . . cheerful. . . rather feeble-minded.” In infancy she had fallen into a fire, burning her scalp severely and creating a lesion where the hair never regrew. Mary explained that when a small ulcer appeared on her scalp, she thought it was “produced by the friction of a piece of whalebone in her wig.” Upon her admission to the Good Samaritan Hospital in

January 1874, Bartholow diagnosed her as “hopelessly diseased.” She had received “many months of care by the Sisters of Charity” for a two-inch erosion of the skull that exposed her brain.

It is not clear whether Mary Rafferty gave her consent for Dr. Bartholow to extend treatment to experimentation. Bartholow saw the exposed brain as an opportunity to test whether the results of electrical stimulation of animal brains performed by David Ferrier in 1873 could be generalized to human brains. Mary Rafferty was restrained in an “extension chair” in the Electrical Room established by Bartholow. Needles of various lengths were inserted into her exposed brain. He recorded his observations of Mary’s reactions to the probes and to electrical currents of various strengths:

Distinct simultaneous contractions of arm and leg on R side; head deflected to R . . . great distress; began to cry . . . frothing at mouth . . . convulsions for 5 min. . . coma for 20 min. . . afterwards, weakness and vertigo.



The Toepler-Holtz Electrical machine used on Mary Rafferty. (Image from Bartholow's *Materia Medica and Therapeutics*, 1884)

Mary Rafferty had a seizure and died four days after the experimentation. Bartholow denied that his probing into her brain had any causal effect leading to her death.

Bartholow’s “Experimental investigations into the functions of the human brain” was published in *The American Journal of Medical Sciences* in 1874.

Immediate medical concerns were raised when Bartholow also published *A Practical Treatise on the Applications of Electricity to Medicine and Surgery*. The American Medical Association called his experiments on Rafferty “so in conflict with the spirit of our profession, and opposed to our feelings of humanity that we cannot allow them to pass unnoticed.” In response, Bartholow publicly apologized in a letter to the *British Medical Journal*. Were his intentions misunderstood?

The condemnation did not tarnish his reputation. He was named president of the American Neurological Association in 1881 and published *Medical Electricity*. Bartholow claimed that “writer’s cramp and allied defects of certain muscles, are more successfully treated by galvanism than any other means,” and recommended the “application of electricity (topically and internally) to relieve pain, treat Lumbago, hysterical paralysis, dyspepsia, tubal pregnancy, aneurism, amputation of the tongue for

cancer, paralysis, tetanus . . . and possibly hydrophobia.” He declared that “if medical electricity has a real value as remedy for disease, it is clear no physician is justified on moral grounds in ignoring it.”

Today, medical institutions and university medical departments around the world agree with the University of Michigan’s claim that Dr. Bartholow’s experiment on Mary Rafferty was “the first demonstration by direct application of stimulating electrodes, of the motor excitability of the human cerebral cortex.” His research is routinely cited in academic papers regarding this topic in neurosurgery.

Left Him Hanging

Students of Roberts Bartholow at Ohio Medical College were enthusiastic and engaged by the hands-on method of instruction that he employed in the surgical theater. Rather than imparting knowledge solely through lectures, Bartholow demonstrated on cadavers. It was a time when “resurrectionists” were employed to provide bodies to medical colleges for study. The “body-snatchers” worked under the cover of darkness to dig up freshly-interred, unclaimed bodies. Delivered through a back door or cellar entrance, there was no incriminating interaction with faculty. The May 30, 1878, *Cincinnati Enquirer* reported a “sensation” on Vine Street at three o’clock in the morning. A buggy being driven in an alley by the Grand Opera House stopped at Race Street where “something white was taken out and disappeared.” It was supposed that “a stiff was being smuggled into the Ohio Medical Center.”

The corpse of John Scott Harrison, an Ohio congressman, son of William Henry Harrison, the ninth President of the United States and father of Benjamin Harrison, 23<sup>rd</sup> President, had been taken from a cement-reinforced brick vault. It was a national scandal. With search warrants in hand, the police were at the doors of the Ohio Medical College, demanding to search the entire school, room-by-room on all five floors. The rooms were