History of Surgery

Excerpt from the Illustrated History of Surgery: United States

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John Watson (1807–1863), an Irish immigrant, arrived in the United States during his childhood. He earned his medical degree from the College of Physicians and Surgeons of New York City in 1832. In 1833, Watson joined the staff of the New York City Infirmary and later served as Professor of Surgery from 1839 to 1862. He joined the New York Hospital staff in 1838, where he regularly conducted clinical surgical courses. Watson's most significant contribution was his report on the first documented case of esophagotomy, published in the *American Annals* in 1844. Although he did not produce a comprehensive scholarly work, he authored a less widely known historical treatise, "The Medical Profession in Ancient Times," published in 1856.

Washington Atlee (1808–1878), the nephew of John Atlee, graduated from Jefferson Medical College in 1829. He commenced his medical practice in Lancaster, Pennsylvania, before relocating to Philadelphia by 1844. In Philadelphia, he joined the faculty of medicinal chemistry at the Philadelphia Medical College. Alongside his brother, Washington Atlee played a key role in reintroducing ovariotomy to the United States. He was also a founding member of the American Gynecological Society. In 1873, he consolidated his extensive research into the book *General and Differential Diagnosis of Ovarian Tumors, with Specific References to the Operation of Ovariotomy and Occasional Pathological and Therapeutical Considerations*. Atlee was a prolific author, contributing numerous articles to the surgical literature.

Joseph Pancoast (1805 – 1882) was a native of New Jersey and graduated from the University of Pennsylvania in 1828. He commenced his academic career by teaching practical anatomy and surgery in Philadelphia in 1831 and, seven years later, became a professor of surgery at Jefferson Medical College. In 1841, he returned to the chair of general, descriptive, and surgical anatomy, maintaining this position until his retirement in 1874. Pancoast authored the influential text "A Treatise on Operative Surgery" (1844), which gained prominence as one of the most widely used surgical atlases in mid-nineteenth century America. His pioneering surgical procedures included the correction of bladder exstrophy in 1859 and the resection of the second and third branches of the fifth cranial nerves at their exits from the base of the brain in 1872. Pancoast is also credited with the development of a specific type of suture employed in reconstructive (plastic) surgery, distinguished by its tongue-and-groove technique (Figure 1).

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Figure 1- This illustration depicts a mastectomy, etched on a stone tablet by S. Sychowski for Pancoast's A Treatise on Practical Surgery (1844). Pancoast's work, featuring 80 full-page lithographs, is recognized as the first comprehensive and extensively illustrated American surgical textbook. While most editions presented monochrome images, those with hand-colored illustrations, such as the one shown here, are exceptionally rare. (Image courtesy of the Historical Collection of the College of Physicians of Philadelphia).

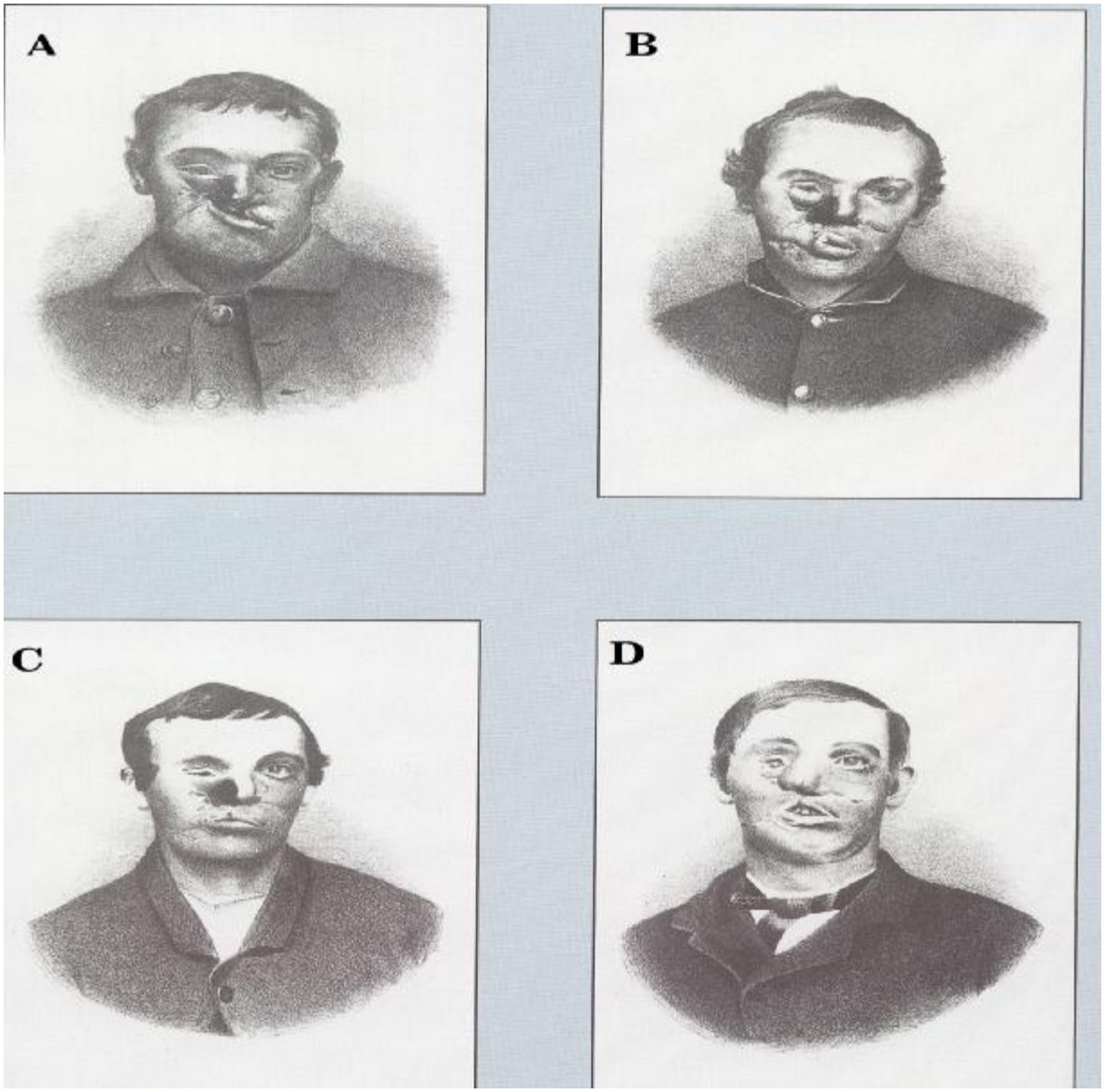

Figure 2- This series of four images documents the reconstructive surgery performed by Groddon Book on Carlton Burgan's facial deformity. This intricate procedure, spanning six months and involving five distinct surgeries, is regarded as one of the most significant surgical achievements of 19th-century America. The images illustrate the following stages: A) Burgan's appearance prior to any surgical intervention; B) Burgan's condition following the initial surgery, which included reconstruction of his oral cavity; C) an observable improvement in the symmetry of the mouth's angles after the second operation; and D) a frontal view showcasing the final aesthetic outcome after the completion of all surgical procedures. The patient's condition was caused by a rapidly progressing ulcer on the right side of the face, likely aggravated by treatment with mercurial compounds for a suspected venereal disease during his service in the American Civil War. (Source: Proceedings of the Medical Society of the State of New York, pp. 173–186, 1864).

In 1851, he provided a comprehensive account of all known methods of ovariotomy from 1701 to 1851. In 1853, he reported on the surgical removal of uterine fibroids, and in 1860, on the operative treatment of vesicovaginal fistula.

William Bodenhamer (1808–1905) graduated from Worthington Medical College, Ohio University, in 1839. Widely regarded as the first American specialist in diseases of the rectum, Bodenhamer can be seen as the American counterpart to the itinerant European surgeons of the nineteenth century who traveled from city to city performing rectal operations. He publicly announced that he would divide his time between Louisville and New Orleans to make his services available to as many patients as possible. A prolific writer, he authored six books and treatises, including Practical Observations on Certain Diseases of the Rectum, Anus, and Adjacent Tissues (1847); A Practical Treatise on the Etiology, Pathology, and Treatment of Congenital Anomalies of the Rectum and Anus (1860); Practical Observations on the Etiology, Pathology, Diagnosis, and Treatment of Anal Fissures (1868); Physical Examination of the Rectum (1870); A Discourse on Rectal Remedies (1878); and A Theoretical and Practical Treatise on the Disease of Hemorrhoids (1884).

Practical Observation on some of the Diseases of the Rectum, Anus, and Contiguous Textures (1847).

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Practical Observations on the Etiology, Pathology, Diagnosis, and Tratment of Anal Fissure (1868).

The Physical Exploration of the Rectum (1870).

An Essay on Rectal Medication (1878).

A Theoretical and Practical Treatise on the Hemorrhoidal Disease (1884).

William Detmold (1808–1900) was born in Germany and received most of his medical training there. He immigrated to the United States in 1837 and soon became one of New York City's earliest orthopedic surgeons. In 1838, he published his first American paper on the treatment of clubfoot through division of the Achilles tendon. In 1850, he reported the first known case of treating a brain abscess by opening the lateral ventricles of the brain.

George Norris (1808–1875) completed his medical education at the University of Pennsylvania in 1830. After spending two years at Pennsylvania Hospital, he traveled to Paris, where he studied under Dupuytren, Rowe, and Volpeau. Upon returning to the United States, Norris joined the surgical staff at Pennsylvania Hospital. In 1848, he succeeded John Rhea Barton as Professor of Clinical Surgery at his alma mater. Norris's only major clinical publication was *Contributions to Practical Surgery* (1873). His other work, *The Early History of Medicine in Philadelphia* (1886), was published posthumously. He is chiefly remembered for compiling statistical data on surgical procedures performed in the United States during the 1830s and 1840s.

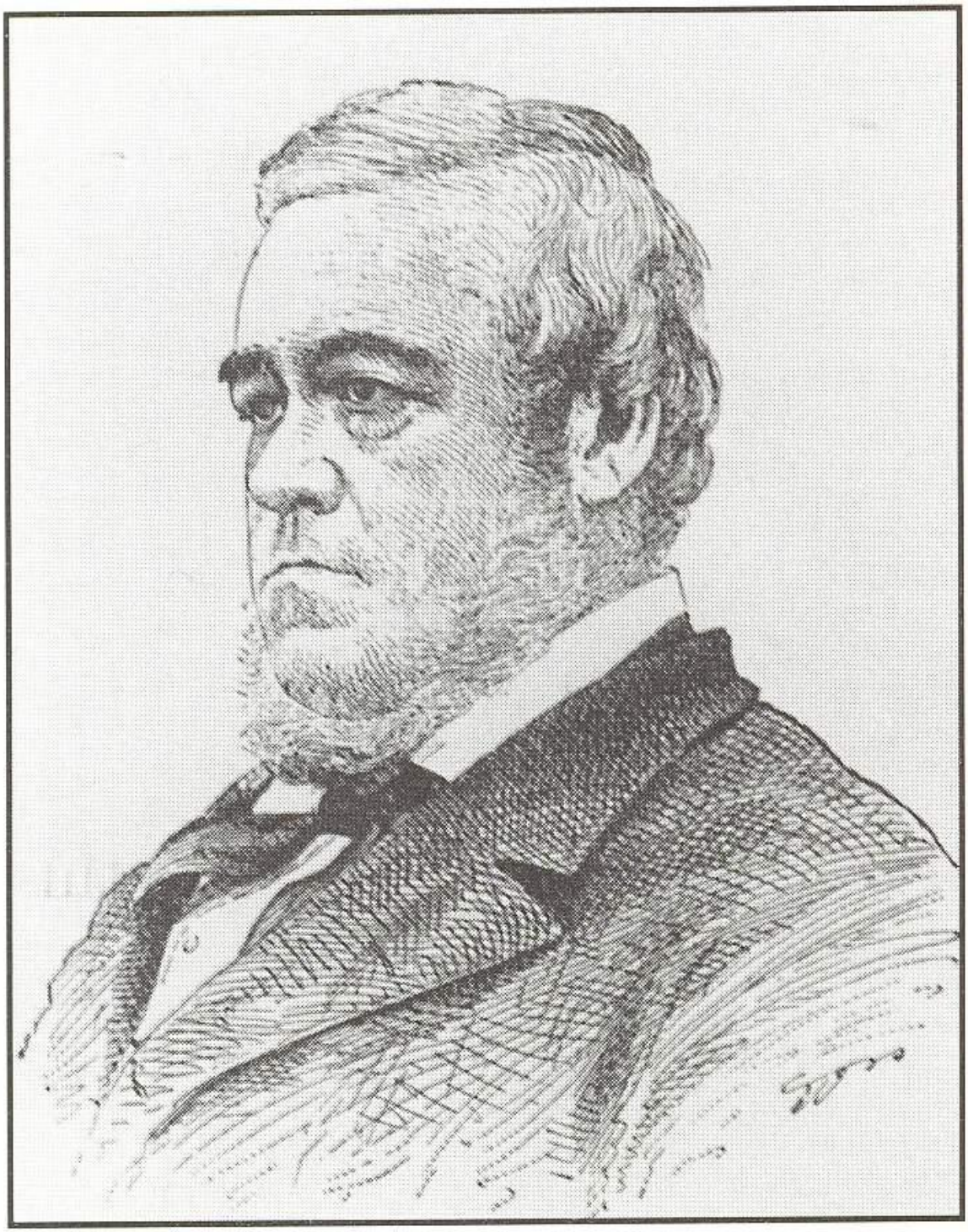

Figure 3- Warren Stone (from the author's personal collection)

Warren Stone (1808–1872) graduated from the Berkshire Medical Institute in Massachusetts in 1831. He also completed an apprenticeship with Amos Twitchell (1781–1850), a respected Vermont family physician and surgeon. Twitchell was notable as the first surgeon in the United States to ligate the common carotid artery for a traumatic injury in 1807. Finding it challenging to establish his practice in New England, Stone relocated to New Orleans. There, he became affiliated with the medical department of the University of Louisiana, was elected professor of surgery in 1836, and later received a promotion. Although he published few works, Stone reported the first use of metallic sutures in arterial ligation in 1859.

John Bobbs (1809–1870) earned his M.D. from Jefferson Medical College in 1836. After settling in Indianapolis, he played a key role in founding the Indiana Central Medical College in 1849, serving as its president and professor of surgery. Two decades later, he established the Indiana Medical College. He wrote infrequently and, consistent with the common medical practice of the era, worked as a general practitioner, performing surgery only when necessary. In 1868, Bobbs reported the world's first cholecystectomy performed on a patient suffering from gallstones.

James Knight (1810–1887) earned his degree from Washington Medical College in Baltimore in 1832. Influenced by Valentine Mott, he dedicated himself to the study of orthopedic surgery. Knight is most recognized for establishing a hospital for paralyzed patients in New York. His written contributions were limited, with his principal work being *Orthopaedia, or a Practical Treatise on the Aberrations of the Human Form* (1874).

Thomas Mütter (1811–1859) graduated from the University of Pennsylvania in 1831 and pursued further medical studies in Paris. In 1841, he became Professor of Surgery at Jefferson Medical College, a position he held for 15 years until illness forced his resignation. His only significant treatise, which is considered to have limited research depth, was a lecture on clubfoot titled *A Lecture on Loxarthus or Clubfoot* (1834). Additionally, as a professor of surgery, he published a pamphlet titled *Syllabus of the Course of Lectures on the Principles and Practice of Surgery* (1843). Mütter is primarily remembered for his considerable expertise in various areas of reconstructive surgery.

Jonathan Mason Warren (1811–1867), son of John Collins Warren, graduated from Harvard University in 1832 after studying under his father. He furthered his education in London and Paris. Upon returning to the United States in 1835, he served as his father's assistant at Massachusetts General Hospital and was appointed consulting surgeon there a decade later. His principal written work was the book *Surgical Observations, with Cases and Operations* (1867). He is particularly noted for his extensive experience in reconstructive surgery of the nose (1837) and the repair of cleft palate (1843).

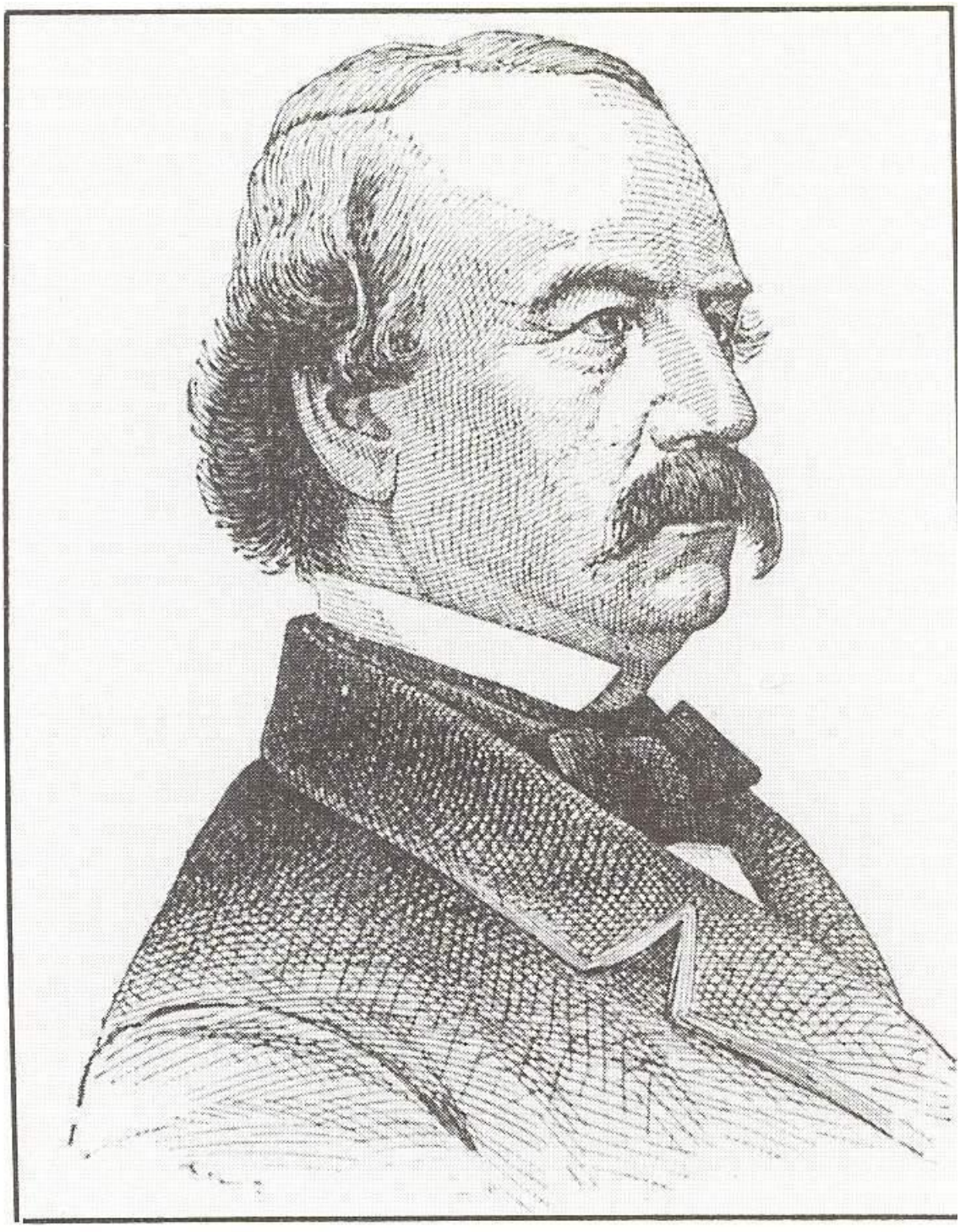

Figure 4- Daniel Bernyard (from the author's personal collection)

Daniel Brainard (1812–1866) received his medical degree from Jefferson Medical College in 1834. After practicing medicine in Chicago for several years, he moved to Paris to advance his medical

studies. He returned to Chicago in 1841 and founded Rush Medical College, where he became the first professor of surgery. Brainard was a distinguished surgeon known for his work on intravenous cancer treatment (1852), experimental studies on snakebites (1854), and a paper on treating nonunion fractures (1854).

John Homer Dix (1813–1884), a native of Boston, graduated from Jefferson Medical College in 1836. He immediately returned to Boston to commence his medical practice, specializing in ophthalmology. Dix was a pioneer in this field in the United States and a co-founder of the American Ophthalmological Society. His notable publications include *Treatise on Strabismus, or Squinting, and the New Mode of Treatment* (1841) and *Treatise Upon the Nature and Treatment of Morbid Sensibility of Retina, or Weakness of Sight* (1849).

Benjamin Lord Hill (1813–1871) served as a professor of surgery and later as a professor of anatomy at the Eclectic Medical Institute in Cincinnati. The Eclectic movement, which promoted herbal medicine, gained prominence in the 1840s, particularly in the central and Midwestern United States. Hill's seminal work, *Lectures on the American Eclectic System of Surgery* (1850), was the first surgical textbook published by this movement and the first non-allopathic surgical textbook in America. In the early 1850s, like many eclectic physicians, Hill shifted his focus to homeopathic medicine. He became a professor of obstetrics and gynecology, and subsequently a professor of surgery, at the Western Homeopathic College in Cleveland. There, he authored *The Homeopathic Practice of Surgery, together with Operative Surgery* (1855).

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1. The Illustrated History of Surgery: Haeger, Knut – Books.
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