

## History of Surgery

### United States Excerpted from the Illustrated History of Surgery

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Benjamin Dudley (1785–1870) was a distinguished physician from Virginia who successfully passed the entrance examination for the University of Pennsylvania, where he earned his Doctor of Medicine degree in 1806. Subsequently, he expanded his medical knowledge through studies at various esteemed institutions across Europe. In 1814, Dudley returned to Lexington, Kentucky, where he established himself as a prominent physician and surgeon within the community. In 1817, he founded the Department of Medicine at Transylvania University, assuming the role of Professor of Anatomy and Surgery, to which he dedicated his professional career. Dudley gained prominence for his extensive expertise in lithotomy, meticulously documenting his clinical cases and experiences in a significant treatise entitled *\*The Nature and Treatment of Calculous Diseases\** (1836). He also authored an important article on head injuries in 1828, further contributing to the advancement of medical knowledge.

Valentine Mott (1785–1865) was one of the most esteemed early surgeons in America. He commenced his surgical apprenticeship under Valentine Seaman (1770–1817), a highly regarded physician in New York City and a distant relative of Mott. Seaman authored a notable yet lesser-known work entitled *\*Pharmacoeopia Chirurgica in Usu Nosocomii Novi Eboracensis\** (1811), which detailed the practices of clinical medicine within the surgical department of New York Hospital. After obtaining his Doctor of Medicine degree from Columbia College in 1806, Mott chose to extend his apprenticeship with Seaman for an additional year. This experience profoundly influenced his determination to pursue a career in surgery, prompting him to study in London and Edinburgh for further professional development. During his time in England, Mott studied under the esteemed surgeon Astley Cooper, who held him in such high regard that he entrusted Mott with the dressing and care of all his patients' wounds.

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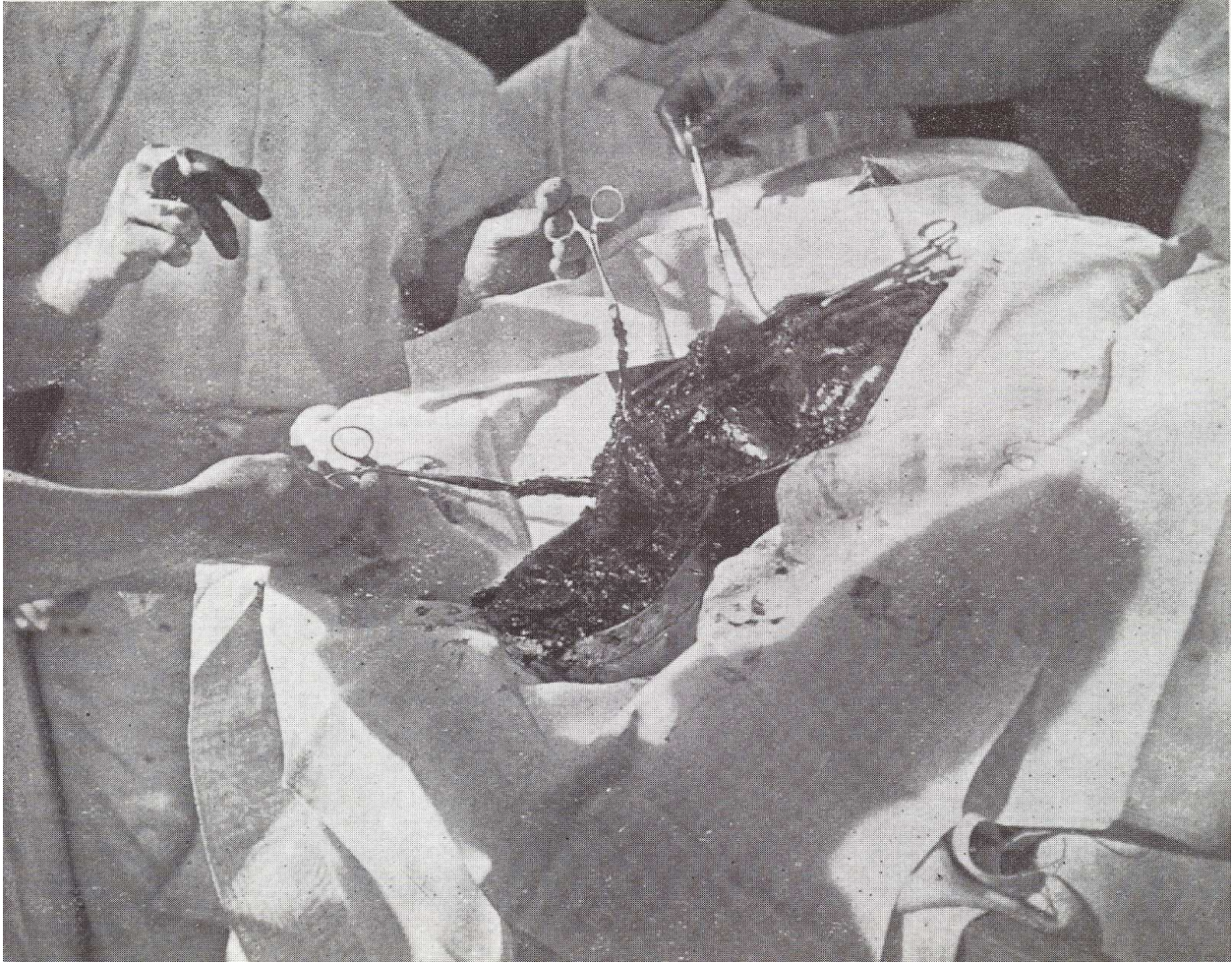
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***Figure 1 - Valentine Mott, one of Estey Covey's students, was one of the most prominent and creative surgeons in pre-Civil War America (Philadelphia College of Physicians Historical Collection).***



***Figure 2 - The earliest known photograph of Halstead's radical mastectomy, taken just before the removal of the breast, pectoral muscles, and axillary drainage. This photograph was also the first to appear in a medical journal to depict the use of surgical gloves. Although the idea of wearing gloves during surgery may not have occurred to Halstead, he was the first surgeon to actively promote the procedure and to promote its widespread acceptance (Johns Hopkins Hospital Bulletin, vol. 4, pp. 350-279-1894-1895).***

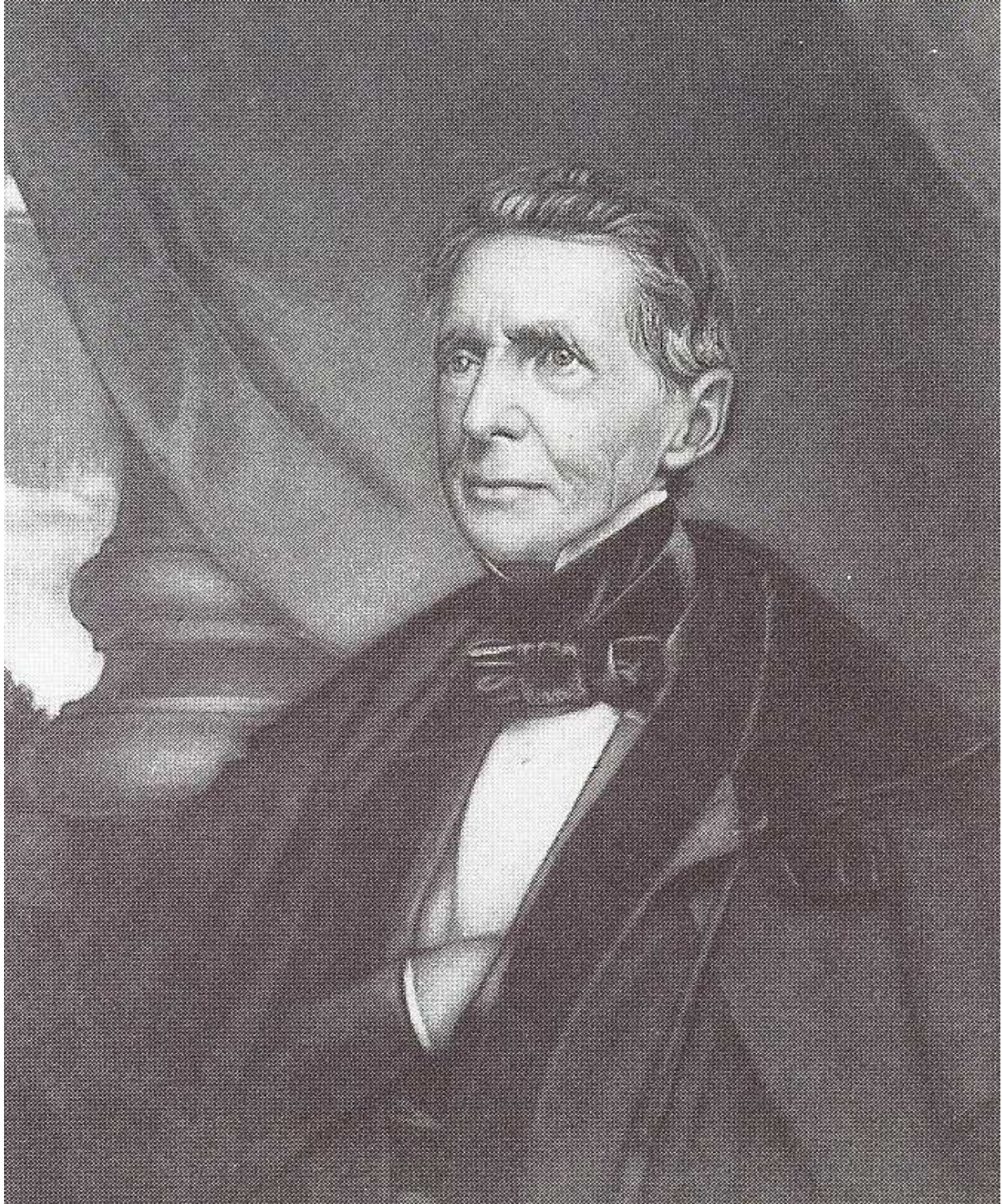
In 1808, Mott worked alongside Thomson and Bell in Edinburgh, where he gained substantial clinical experience. He returned to New York City in 1809 and soon began teaching surgery privately, rapidly attracting a considerable number of students. In 1811, he was appointed to the Chair of Surgery at his alma mater, Columbia College. The following year, the medical department of Columbia College merged with the College of Physicians and Surgeons of New York University. The newly formed College of Physicians and Surgeons emerged as the leading medical center in New York City, where Mott was appointed to the inaugural Chair of Surgery. In 1826, Mott resigned from this prestigious position for political reasons and played a pivotal role in establishing Rutgers Medical College in New York City, where he held the Chair of Practical Surgery until 1834, when illness compelled him to retire. Throughout his illustrious career, Mott made significant contributions to surgery and medical education, solidifying his legacy as a pioneering figure in American medicine.



**Figure 3 - Philip Singh Physicist, hand-colored lithograph by Inman, Philadelphia, (1821) A distinguished surgical physicist, innovator, and innovator, he did not consider himself a capable writer, and so all his achievements in the world of surgery were recorded by his nephew, John Singh Dorsey (Historical Collection of the College of Physicians of Philadelphia).**

In early 1835, Valentine Mott embarked on an extensive residence in Europe that spanned seven years. During this time, he received a warm welcome from several of the continent's most esteemed surgeons, meticulously documenting his observations and experiences in a publication entitled *\*Travels to Europe and the East\** (1842). Prior to his return to the United States in 1841, he learned of his appointment to the chair of a newly established medical college affiliated with New York University. Mott's presence on the faculty ensured the college's immediate success, and over the ensuing decade, he managed one of the most active surgical centers in America. However, in 1850, health complications once again necessitated Mott's resignation, compelling him to return to Europe for recuperation. Following a year abroad, feeling rejuvenated, he resumed his previous position at the university's medical college. Although he enjoyed robust health in 1853, Mott opted to retire, attaining the distinguished status of Professor Emeritus. In his later years, he devoted himself to humanitarian efforts. In 1862, responding to a request from the United States Sanitary Commission—a civilian organization dedicated to assisting soldiers during the Civil War—he authored and presented two influential papers discussing the application of anesthesia and the management of hemorrhages resulting from gunshot wounds. Mott played a pivotal role in the advancement of clinical surgery. Although he never authored a comprehensive textbook on surgery, he edited the American edition of the three-volume work by Volpou, entitled *\*New Elements of Operative Surgery\** (1847). Throughout his illustrious career, Mott contributed numerous articles to medical and surgical journals, pioneering various techniques and procedures. Notably, he reported the first documented use of a ligament for the repair of an unidentified artery in 1818, performed the initial ligation of the common carotid artery and resection of the mandible in 1822, conducted the first successful ligation of the common iliac artery in the United States in 1827, and executed the first hip joint amputation performed in America in the same year. Additionally, he achieved the first resection of the clavicle necessitated by osteosarcoma in the United States in 1828, discussed the application of the Brasdor technique for treating aneurysmal disease in 1829, and accomplished the first ligation of the external iliac artery in 1831. Mott was also the first to ligate the subclavian artery beneath the scalene muscle in the United States in 1833 and successfully ligated the internal iliac artery in 1837. Furthermore, in 1843, he published a practical report detailing the excision of a fibrous mass from the nostril, utilizing the separation of the nasal bone from the maxilla.

John Methauer (1787–1875), who earned his Doctor of Medicine degree from the University of Pennsylvania in 1809, returned shortly thereafter to Virginia, where he devoted the majority of his professional life. From 1835 to 1836, he served a year as a professor of surgery at Washington Medical College in Baltimore. In 1837, he established a private medical institute, which later became affiliated with Randolph-Macon College. As a prominent surgeon, Methauer garnered significant recognition for being the first in the United States to successfully repair a damaged perineum and rectovaginal septum in 1833. He advocated for the use of metallic sutures in such procedures. His success in perineal repair attracted substantial attention, and during the 1840s and 1850s, he published numerous additional reports that further elaborated upon his initial findings.



***Figure 4 - John Collins Warren One of the most prominent surgeons from the Warren family of physicians and surgeons in Boston, John Collins Warren is best remembered today as the person who performed the first surgery during which anesthesia was used (1846) (The surgeon who performed the first surgery under anesthesia (Historical Collection of the College of Physicians of Philadelphia).***

William Gibson (1788–1868) was a prominent and influential figure in the field of American surgery. He pursued his studies at the University of Edinburgh, where he earned his Doctor of Medicine degree in 1809. Upon returning to the United States, Gibson accepted the role of Chair of Surgery at the University of Maryland. Following the retirement of the esteemed surgeon Philip Syng Physick, he succeeded him at the University of Pennsylvania, where he remained until his own retirement in 1855. In 1824, Gibson published the two-volume work *\*Institutes and Practice of Surgery\**, which became the second systematic textbook on surgery in the United States. He was a pioneer in his discipline, achieving the distinction of performing the first ligation of the common iliac artery in the United States in 1820. Moreover, he made substantial contributions to obstetrics, notably reporting the first successful Cesarean sections in 1835 and 1838. In addition to his surgical accomplishments, Gibson authored a widely-read travelogue entitled *\*Rambles in Europe\** in 1839, which included biographical sketches of notable European surgeons and was published in 1841.

Jonathan Knight (1789–1864) attended the University of Pennsylvania School of Medicine but did not obtain an official medical degree. Following the establishment of Yale Medical School, he was appointed professor of Anatomy and Physiology, a position he held from 1813 to 1838, after which he transitioned to the Chair of Surgery, serving in that capacity until his death in 1864. Among his notable achievements was his presidency of the American Medical Association in 1853. Although Knight published infrequently, his most significant work documented the first case of aneurysm treatment utilizing digital compression in 1848.

Alexander Stevens (1789–1869) studied at Yale Medical College and subsequently earned his Doctor of Medicine degree from the University of Pennsylvania in 1811. In 1814, he was appointed professor of surgery at the New York Medical Institute, and four years later, he became an attending surgeon at New York Hospital. In 1826, Stevens succeeded Mott as the Chair of Surgery at the College of Physicians and Surgeons in New York. He became the second individual to serve as president of the American Medical Association (AMA) in 1848. Although not a prolific writer, Stevens authored the first treatise on urological surgery in America, titled *\*Lectures on Lithotomy\** (1838), and he also composed the first comprehensive article on trauma in the United States in 1837.