



NATHAN RYNO SMITH
1797-1877

MASTER SURGEONS OF AMERICA

NATHAN RYNO SMITH

AMONG the outstanding figures in the American medical world during the middle period of the last century, Nathan Ryno Smith will always occupy a conspicuous position. He was born in Cornish, New Hampshire, on May 21, 1797; being the second son of an illustrious father, Dr. Nathan Smith, professor of medicine and surgery in the Medical School of Yale College.

Dr. Nathan R. Smith received his classical education at Yale, from which institution he graduated in 1817, with the degree of bachelor of arts. He also pursued his medical studies at Yale College and received the degree of doctor of medicine there in 1823. Following his graduation he settled at Burlington, Vermont, in 1824, and began to practice his profession. In 1825, in conjunction with his father, he organized the Medical School of the University of Vermont and was appointed its first professor of anatomy and surgery. Feeling the need of further instruction in order to fit himself for the position of a teacher, he spent the winter of 1825-1826 in Philadelphia, in attendance on the lectures at the University of Pennsylvania. While in that city he became associated with Dr. George McClellan and others, in organizing the Jefferson Medical College and was elected to the professorship of anatomy, which chair he filled during two sessions. Among his pupils at Jefferson Medical College were Samuel Gross, subsequently professor of surgery in the same institution and for many years considered the Nestor of American surgery, and Washington L. Atlee, a renowned ovariologist.

In 1827 he was called to Baltimore as professor of anatomy in the University of Maryland, but after a short while he was transferred to the chair of surgery—a position that he held, except for a brief intermission, for over 40 years. He found Baltimore a ripe field for surgical practice, and so thoroughly did he dominate surgical thought and work in that city and the state of Maryland that he became known widely as the “Emperor,” and to this day those of his pupils who are still living cling to this title in affectionate remembrance of their distinguished master. At the time of his removal to Baltimore he was about 30 years of age and he continued to reside there until his death in 1877. Owing to dissensions between the trustees and the faculty of the University of Maryland, in 1838 Dr. Smith accepted the chair of practice of medicine in Transylvania

University at Lexington, Kentucky, and for three sessions he traveled to and fro to fulfill the duties of his position. He delivered some lectures during this time at the University of Maryland also, and upon the readjustment of the affairs at this institution he resumed the professorship of surgery in 1840 and continued his courses of instruction until 1870, when advancing years and physical infirmities impelled him to relinquish active participation in the work of the medical school and to retire with the rank of emeritus professor of surgery. As late as 1873-1874 he held occasional clinics at the University Hospital, and the writer remembers attending one in which he said: "Anybody can do good work with good tools, but it takes a surgeon to do good work with poor tools," and as an illustration he mentioned that on one occasion, while he was on a railroad train, a man was injured to such an extent that an amputation became necessary. The man was placed in the baggage car and an operating table improvised. Dr. Smith did not have any amputating instruments with him, but with a butcher's knife and a carpenter's saw the leg was amputated and the stump was dressed before he reached the city. This was before the era of anti-septic and aseptic surgery, and I do not remember that he stated the result of the operation. On another occasion he said he had been called to see a highly nervous boy suffering with a large abscess of the thigh. To allay the patient's apprehension he was introduced as Cousin John and he suggested that he be allowed to look at the inflamed spot. When he had seen it he said he thought it would soothe it if he washed and shaved it and asked if he could have a razor. The razor was brought and he proceeded to shave the area, but after making a few passes he turned the edge of the razor down and made the required incision. The boy with a scream said: "You are not Cousin John. You are the old devil. Your name is Smith." Cordell, the medical historian, says: "Professor Smith was a man of commanding presence, fully 6 feet in height, with clean-shaven face, a well-shaped Grecian nose, long thin compressed lips, piercing eyes surrounded by shaggy eyebrows, a well poised head and a long neck, concealed by an old fashioned black stock and standing collar. He was near-sighted, and wore glasses. He lectured without notes, in slow, deliberate fashion, in a voice of medium pitch, distinct, though not strong."

He was an indefatigable worker and was accustomed to make his rounds at the Baltimore Infirmary, now the University Hospital, about 6.30 o'clock in the morning; on which he was accompanied by his residents and students. Whilst his surgical work was varied and extensive, his reputation rests chiefly on his lithotome, an instrument for the performance of vesical lithotomy, and the anterior splint. It is said that he operated for stone in the bladder about 350 times, with a very low mortality; a large portion of his success, as well as that of his son, Dr. Alan P. Smith, in these operations being due to the use of this lithotome. Dr. Smith's lithotome was an ingenious but simple instrument for the

performance of perineal lithotomy, by means of which the extraction of calculi from the urinary bladder was rendered easy and safe. A distinguished professor of Surgery is said to have remarked, "With it anyone could operate." The anterior splint for the treatment of fractures of the lower extremities was a great improvement on the methods in vogue at that time, and was considered by Professor Smith to have been his chief contribution to surgery. This suspensory apparatus has now fallen into undeserved disuse and is as capable of rendering good service now as it was when perfected by him in 1860. The principle upon which this was based was that of the double inclined plane, with suspension. During the Civil War the anterior splint was used with the greatest benefit and comfort in the treatment of soldiers suffering from compound gunshot fractures of the lower extremities. The Hodgen splint, which is used satisfactorily in some parts of this country, is merely a modification of Smith's anterior splint, and the usefulness of both of these appliances is due to the fact that the limb can be swung and a certain amount of motion permitted without interfering with the healing process. The same principles were applied in the treatment of fractures in the late World War, but with greater provision for extension than was possible with the original anterior splint.

As early as 1835 Dr. Smith performed a complete thyroidectomy for a large ulcerating tumor of the thyroid body, without anæsthesia and with no artery forceps nor other appropriate methods of hæmostasis. The patient survived for 13 days and died with symptoms of pyæmia. The late Professor Halsted says: "Nathan R. Smith had quite surely never seen an operation performed on the thyroid gland, and it is not unlikely that he had never heard of such an operation. My admiration for Dr. Smith, Baltimore's 'Emperor,' has been greatly increased since reading his modest and lucid report of a case, the importance of which he could hardly have comprehended." Dr. Halsted considers this operation to have been *the chef d'oeuvre* of Nathan R. Smith. The late Professor Samuel D. Gross says: "Dr. Smith was one of the most distinguished surgeons that our country has produced. As a mechanical surgeon he has justly occupied a high rank."

Dr. Smith was a frequent contributor to surgical literature and was the author of several books, the most important of which are *Memoirs, Medical and Surgical, of Dr. Nathan Smith*, with additions by the author, 1831; *Surgical Anatomy of the Arteries*, 1830; *Fractures of the Lower Extremity and Use of Suspensory Apparatus*, 1867, and *Legends of the South*, 1869. He received the degree of doctor of laws from Princeton College in 1852. In 1867 when he was 70 years of age, he made his first and only visit to Europe and was received with great distinction by the leading surgeons of Great Britain and the Continent and on his return to this country he was the recipient of a great ovation from his friends and admirers. He continued to meet his classes for 2 years longer and then retired from his chair.

RANDOLPH WINSLOW.