An Introduction to
William Stewart Halsted

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Fifty years after his active surgical career, William Stewart Halsted stands as the most important single figure American Surgery has produced. This manuscript is a modification of a lecture delivered by the author to the history of medicine society at the University of Oklahoma School of Medicine in early 1971.

THE HALSTED family has produced many men of note. The family has been traced to 16th Century England and an estate identified as High Halsted. The first Halsteds came to America in 1660 and the family centered in the New York-New Jersey area. Doctor Halsted’s grandfather, William Mills Halsted, founded a very successful dry goods importing firm and became a financial and philanthropic leader in New York, among other things being a founder of the Union Theological Seminary. There were three physicians in Doctor Halsted’s direct an-

cestral line but apparently none with whom he had much contact. Doctor Halsted’s father continued in the importing business and is described as a rigid disciplinarian.

Doctor Halsted, the first of four siblings, was born in 1852, raised in an atmosphere of controlled plenty, attended Andover and entered Yale in 1870. His principal achievements at Yale were athletic, and he was captain of the football team in his senior year. He appears to have participated in a number of college activities but clearly was not an outstanding scholar at this point in his career. MacCallum makes the interesting statement that “he was religious, but he reacted against his father’s type of Presbyterianism and took no particular stand.” Interest in medical school was first evidenced by his purchase of medical textbooks while a senior at Yale. Young Halsted entered the College of Physicians and Surgeons (later affiliated with Columbia University) in 1874. Medical school consisted largely of a series of lectures, and Halsted was sufficiently successful to be appointed an intern at Bellevue in 1877. Doctor Halsted graduated high in his class from medical school, and upon completion of his internship, successfully competed for appointment as house physician

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at the newly opened New York Hospital. During this year as house physician, Doctor Halsted made his first known contribution to medicine, a new design for hospital graphic charts used almost without alteration until the present time in most hospitals. Doctor Halsted went to Europe in the fall of 1878 to continue his medical education in the most highly recommended clinics of Europe. During this trip, he became particularly interested in German surgery and formed friendships with the leaders of German surgery which continued throughout his professional career.

Doctor Halsted returned to New York in September of 1880 and plunged into a variety of professional activities, including staff appointments with major responsibilities at several New York hospitals, a successful teaching "quiz," and a productive research program. During this period Halsted established a reputation as a brilliant, energetic young surgeon, a rapid operator, and an innovative investigator. The observation has been made that the interests which occupied Doctor Halsted’s long professional career all appeared to stem from the period between 1880 and 1886.

The end of the New York period of Halsted’s career was brought about by his involvement with cocaine. The story has often been told but only recently in complete form. At this point, it is sufficient to say that following Koller’s description of the anesthetic properties of cocaine when applied to the cornea and conjunctiva, Halsted and a group of associates began to experiment with cocaine and developed methods of regional block anesthesia. This remained one of Doctor Halsted’s most significant contributions to medicine. In the course of these experiments, Halsted and several others became addicted to cocaine and Halsted’s health and effectiveness so deteriorated that he made an unsuccessful trip to the Windward Islands in early 1886 in an attempt to discontinue use of the drug. On his return, he entered the Butler Sanitarium in Providence, Rhode Island, for treatment of drug addiction. In December of 1886, Doctor Halsted accepted an invitation by his long time New York friend, William H. Welch, to enter Doctor Welch’s laboratory at the newly opened Johns Hopkins Medical Institution.

Mr. Johns Hopkins, a wealthy Baltimore merchant, left a sum of approximately $8,000,000 to establish a hospital and a university with a medical school. The planning of these institutions began before Mr. Hopkins’ death and involved the highest caliber of leadership which could be obtained. The excellence of the institutions was by design, and the early faculty appointments, both to the university and its medical school, were fortuitous to say the least. The university opened in 1876, but the faculty for the school of medicine was acquired more slowly. The hospital was opened in 1889 but, because of a financial crisis, the medical school was not in operation until 1893. The period between the acquisition of the medical school faculty and the opening of the medical school was one of intense activity, and the caliber of bright young men who gathered around the initial medical school appointments, most notably William H. Welch, was indeed impressive. Among this group were Councilman, Nuttall, Herter, Brewer, Sternberg, Reed, and Mall. This was the group Halsted came to Baltimore to join, and it is generally considered that the stimulation and friendship of these men, particularly Franklin P. Mall, were important factors in Doctor Halsted’s return to a productive professional existence.

The Johns Hopkins Hospital opened in 1889. Prior to that date, William Osler, Professor of Medicine, and Howard Kelly, Professor of Obstetrics and Gynecology, were on the scene in addition to Doctor Welch and Doctor Halsted, completing the “Big Four”...

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who made such an impact on American medicine and medical education. An additional appointment of importance was that of Miss Caroline Hampton as nurse in charge of the operating rooms. Miss Hampton was a member of the distinguished South Carolina family. Her father was Frank Hampton, brother of Wade Hampton, III, whose record during the Civil War is well known, but whose contributions to South Carolina in the postwar period are even more significant. Caroline Hampton's mother was Sally Baxter, daughter of a wealthy New York family and probably the inspiration for Beatrix in the novel, Henry Esmond, by William M. Thackeray, who became infatuated with Miss Baxter during a trip to the United States.6 Caroline Hampton spent the first several years of her life on the Hampton plantation. Her mother died in September of 1862 and Frank Hampton was killed at the Battle of Brandy Station in June of 1863. Caroline Hampton's later childhood was spent with sisters of her father in the vastly reduced circumstances of the postwar southern aristocracy. She was independent enough to go to New York for nursing training and, on graduation from nursing school at the New York Hospital, came to Baltimore to begin work in the new Johns Hopkins Hospital. Her sensitivity to the bichloride of mercury solutions then being used for scrubbing the hands and arms of the operating team, and the subsequent invention of rubber gloves by Doctor Halsted to prevent this is one of the well known Halsted legends. Doctor Halsted and Miss Hampton were married in 1890, and in 1892, Doctor Halsted was appointed Surgeon-in-Chief of the hospital, this appointment being delayed because of his history of drug addiction from which he had apparently recovered completely.

Halsted's professional activities can perhaps be considered as involving three closely interrelated spheres: the research laboratory, the clinical arena, and the surgical training program. Beginning in New York and continuing throughout his life in Baltimore, Doctor Halsted was close to the experimental laboratory, and a continuous series of animal experiments was carried out by him or under his close direction. Experimen-
staff above the resident level was never large and, with one exception, consisted of men who had completed the training program in surgery. The exception, however, is a notable one, being J. M. T. Finney, who came to Baltimore from the Massachusettts General Hospital. Doctor Finney's talents complemented Doctor Halsted's and his eminence as a surgeon and as a man did much to enhance the fame of the department at the new medical institution. Through his residents and staff Doctor Halsted became known as a great teacher, which, in effect, he was. In New York he was a brilliant classroom teacher, a rapid dexterous operator, whereas in Baltimore he was a very retiring, mild classroom teacher whose performance at an undergraduate level was frankly often considered dull. In addition, he was a slow, meticulous operator, taking much longer than his associates to do most procedures. He was, in the Baltimore years then, a teacher by example and precept. Not least among Doctor Halsted's important activities was his guidance of men into surgical specialty areas. He encouraged Doctor Sam Crowe to develop otolaryngology, Doctor Harvey Cushing to concentrate on neurosurgery, Doctor Howard Baetjer to explore radiology, and Doctor Hugh Young to become interested in urology. All became "founders" of surgical disciplines.

It is difficult to gain an image of Halsted as a person. He was reserved, during his Baltimore years at least, though capable of being a witty conversationalist and a charming host. He and Mrs. Halsted lived quietly in a magnificently furnished townhouse in Baltimore but, after the first few years of their marriage, rarely entertained. Doctor Halsted was quite knowledgeable about antique furniture and rugs, and collected valuable pieces with which the house was furnished.

Many of Doctor Halsted's eccentricities have been described. He was extremely meticulous in dress. His clothes were made by a particular tailor in London and his shoes were made in France from leather which he selected and marked. His linen was sent to France to be laundered, and he expressed surprise at learning that there was a decent laundry in Baltimore. He would burn only one kind of firewood which was carefully selected and transported to Baltimore. Among Doctor Halsted's many interests was his lasting affection for the country home in Cashiers, North Carolina, purchased by him from the Hampton family and named High Hampton. This beautiful site has been maintained and is currently a charming and well-run inn. Mrs. Halsted went to spend several months there each year, and Doctor Halsted joined her during the summer and took great delight in raising prize dahlias. Doctor Halsted was frequently absent from the hospital for long and unexplained periods of time. Doctor Alfred Blalock, a worthy successor to Halsted, uncovered some correspondence from the board of trustees of the hospital expressing concern about these absences, which (to Doctor Blalock's delight) Doctor Halsted managed effectively by simply failing to respond in any way.

The question of Doctor Halsted's recovery from cocaine addiction was raised from time to time. Other than an occasional opinion to the contrary, the evidence available suggested that he was free of the drug habit following his second trip to the Butler Institute in 1886 or 1887. In the extensive library left by Osler, there was a small, locked black book which Osler requested not be opened until the 100th anniversary of the Johns Hopkins Hospital (which would be 1989). Doctor William Francis, Osler's cousin and literary executor, read the book in 1958 and decided that it should be published but died before this was accomplished. The sections of this book having to do with Doctor Halsted were published by Penfield in 1969. In handwritten notes by Osler, it is made clear that Doctor Halsted continued to take morphine and it is probable that his addiction continued throughout his life, although Osler suggested the possibility that he might not have taken morphine after 1912. The part addiction played in Halsted's professional career will certainly be debated for decades, but the fact that a professional career of such high quality was possible certainly adds to one's estimate of the man's strength of character.

Doctor Halsted died of complications of biliary tract disease on September 7, 1922. His legacy of scientific, experimental approach to surgical problems, of objectivity in the management of surgical patients, and
of care in the selection and training of surgeons and surgical teachers has continued to grow in importance and establishes him in a position of prominence among the surgical figures of all time. Doctor Welch spoke for many when he wrote in a letter to Mrs. Halsted, dated October 13, 1922. "I hope you know how completely I reciprocated Doctor Halsted's feelings of affection. I admired him above all my colleagues. There is no one who can fill his place as he did. The memory of his wonderful character and life and devotion must be your most precious possession."

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