

# Reginald Heber Fitz

## (1843–1913)

ROBERT H. YOUNG

**B**EFORE THE FORMAL ESTABLISHMENT of the department of Pathology in 1896, notable practitioners of pathology at the hospital included J. B. S. Jackson, J. Collins Warren, and Calvin W. Ellis. Although Jackson and Ellis each served as Shattuck Professor of Pathology at Harvard Medical School (HMS), it was the third Shattuck Professor, Reginald Heber Fitz (figure 2.1), who elevated pathology to a new status, not only by his contributions but also by his appointment as the first designated Pathologist at MGH. Accordingly, he can be considered MGH's first Chief of Pathology despite the lack of both that title and a formally organized department. Indeed, in an obituary of Dr. William W. Gannett (1), a colleague of Dr. Fitz's, it was noted that "Dr. R. H. Fitz with whom he had studied and whom he had assisted at the medical school, was in charge of the Department of Pathology there and the Massachusetts Hospital." As MGH was the only HMS teaching hospital at the time, pathology at the MGH and its study at HMS were closely linked, which probably explains the obituary's phrasing. Dr. Fitz's contributions at both institutions and to the literature secure his place in history (2–19) and merit a consideration here equal to that of individuals who officially held the title of Chief of Pathology.

Reginald Heber Fitz was born on May 5, 1843, in Chelsea, Massachusetts, one of six children of a diplomat, Albert Fitz (who died of yellow

fever at the age of 44), and his wife, Elisa Roberts Nye. The Fitz family had deep roots in Massachusetts, having been farmers for generations. After preparatory school (the Chauncey Hall School) in Boston, Fitz entered Harvard College in 1860. He did not initially take to college life, abandoning it in the middle of his junior year to work in the copper fields of the upper Michigan peninsula. Fitz returned after a year to continue his college education, graduating with honors in 1864. That an older brother offered to pay for college and medical school also played a role in his returning to college. Upon graduation he became an apprentice to a prominent Cambridge physician on the Harvard faculty, Jeffries Wyman. He entered HMS in the fall of 1865 and graduated in June 1868. During his time at Harvard he served as an intern at Boston City Hospital (8). Among those who taught him at HMS were Oliver Wendell Holmes and J. B. S. Jackson. Holmes, who is credited with introducing the teaching of microscopic pathology to the students of HMS circa 1855, probably stimulated Fitz's interest in this area.

After graduation, Fitz went to Europe, first to Vienna (figure 2.2), where he worked for almost a year under Carl von Rokitansky and Joseph Skoda, following which he moved to Berlin to study with Rudolf Virchow and Johannes Orth. Fitz appears to have found his time in the latter city more stimulating than that in Vienna,

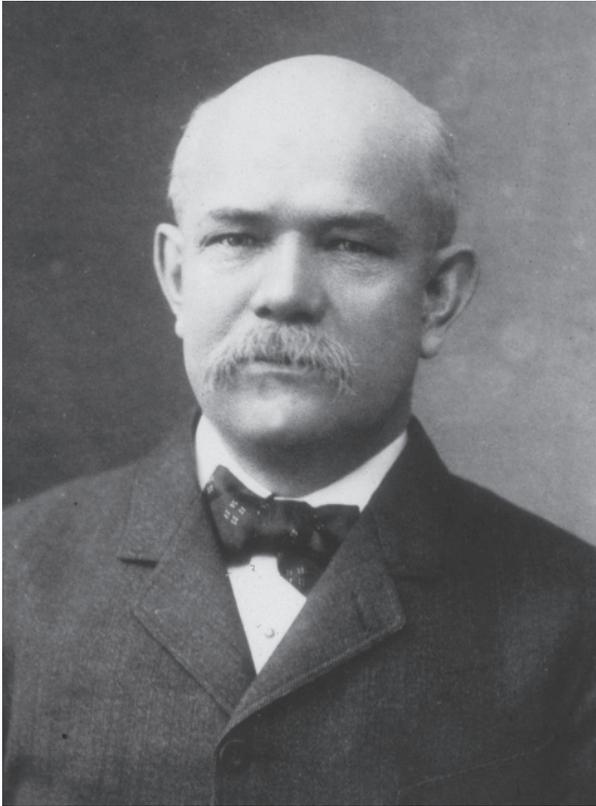


Figure 2.1 Reginald Heber Fitz

although it is likely that the influence of Rokitsansky, whose experience with autopsy pathology was monumental, resulted in Fitz's interest in autopsy pathology throughout much of his career. Added to this, however, was an interest in microscopy attributable in part to his experience with Virchow, who was introducing his concept of cellular pathology at that time. His time with Virchow resulted in his first published article, which dealt with bronchiectasis-related changes in cartilage (20); it was published in the journal founded by Virchow (now known as *Virchow's Archiv*) in 1870. Fitz returned to Boston in 1870 and began the private practice of medicine, maintaining an active medical practice while also working as a pathologist. In 1871 he was named Instructor in Pathologic Anatomy at HMS and Microscopist and Curator of the Pathology Cabinet at MGH; from that year until 1882 he was also one of the physicians for the Boston Dispensary.

In 1879 Fitz married Elizabeth Loring Clarke, the daughter of Dr. Edward Hammond Clarke, who was an HMS professor. Dr. Fitz and his wife had four children, one of whom, also named Reginald, became a distinguished physician in his own right at the MGH and Peter Bent Brigham Hospital and attained the rank of Associate Professor of Medicine at HMS.

In his role as pathologist, Dr. Fitz was responsible for the autopsies on hospital patients (chapter 1) and, based on his experience with Virchow, was probably the first individual at the MGH to utilize the still young technique of light microscopy in the study of human tissues (whether Holmes did microscopy at the hospital as opposed to the medical school is not clear). The number of cases submitted to microscopic evaluation at that time is not known, but it was probably limited. Before his arrival, pathology had for practical purposes been gross pathology, which was essentially the sole interest of J. B. S. Jackson, then the Professor of Pathological Anatomy at HMS, who disdained the new technique of microscopic evaluation. Fitz's autopsy experience laid the groundwork for his landmark papers on appendicitis and pancreatitis (see below). In the years between 1871 and 1892, he conducted many autopsies at the MGH, and it is likely that he was the main prosector during these two decades. Only the most important or interesting of his almost 40 publications are cited here (20–30); his two landmark papers are considered below. Others of particular note include an extensive study of diabetes mellitus (with a pioneer in the study of that disease, Dr. Elliott P. Joslin) (27) and a paper on osteitis deformans (Paget's disease) (28). The latter paper includes eleven X-rays taken by the pioneering radiologist Walter Dodd and three striking gross autopsy specimens. As Dr. William Councilman noted in his tribute to Dr. Fitz's contributions to pathology (13), Dr. Fitz's articles contained thorough reviews of the medical literature and in Councilman's opinion served "as models for clear and concise statement and for conservative



*Figure 2.2* Reginald Fitz (front row, third from right) with other students and physicians in Vienna, ca. 1870. Professor Carl von Rokitansky is seated at the center of the table.

judgment on the clinical and general medical bearings of the facts presented.” Councilman contrasted Fitz’s experiences in Vienna and in Berlin, in favor of the latter, and noted that, as alluded to above, in Berlin he became “adept in the use of the microscope and in the technique of making microscopic preparations.” Dr. Fitz used much of the material obtained from postmortem cases to expand the material in the collection of the Warren Anatomical Museum. He is also credited by Councilman with inspiring Dr. Henry Sears to make the generous gift that led to the founding of the Sears Pathological Laboratory at HMS, the first in the United States to be used exclusively for the study and teaching of pathology.

Dr. Fitz succeeded Jackson as Professor and head of the Department of Pathology at HMS

in 1878 and in the following year was named the Shattuck Professor of Pathological Anatomy. He played a significant role in improving medical school education, thereby contributing to the reform movement that was taking place in those years under the leadership of Harvard President Charles William Eliot. He was a member and then the long-standing chairman of the committee responsible for the courses recommended for medical students. His concerns regarding medical education extended to postgraduate years, leading him to become active in trying to improve standards of medical practice. In 1887 Dr. Fitz was appointed Visiting Physician at the MGH but maintained his position of Professor of Pathological Anatomy at the medical school until 1892, when he became the sixth Hersey Professor

of the Theory and Practice of Physic, succeeding Dr. Francis Minot. His appointment as Visiting Physician at MGH was initially opposed by those already holding the title, and Fitz even submitted his resignation in March 1886 in response to the hostility he encountered concerning his desire to be Visiting Physician. The dispute reached the level of the hospital's Trustees, who ultimately sided with Dr. Fitz, and he withdrew his resignation one month after tendering it.

Dr. Fitz's most important contribution to pathology and medicine was his work on appendicitis (figure 2.3). He coined the term *appendicitis* and used it for about five years before his landmark study was published (22). Even though others had previously written about appendiceal inflammation, Dr. Howard Kelly, the pioneering gynecologist-surgeon, in his monumental text on the appendix (17), acknowledged Fitz's contributions to this subject, as did others (18, 19). Fitz carefully correlated the clinical and pathological findings of 257 cases he classified as perforating appendicitis and compared them with 209 cases he classified as typhlitis or perityphlitis. He recorded detailed clinical parameters such as age, sex, and the nature of pain and its time course. Pathological observations included the presence or absence of perforation, whether the peritonitis was localized or generalized, and the presence or absence of an abscess. His exhortations that the disease required an immediate operation undoubtedly led to the saving of countless lives worldwide. His initial report presented to the Association of American Physicians in Washington, D.C., on June 18, 1886, was published the same year and received significant publicity in the United States and abroad. Dr. Fitz traveled widely in North America promoting its implications, and, as a result, operations for the previously frequently fatal disorder began to be performed with appropriate alacrity. Many luminaries, including Drs. William Osler and William Henry Welch, were in the audience when Fitz made his presentation and also helped disseminate his concepts. In 1900

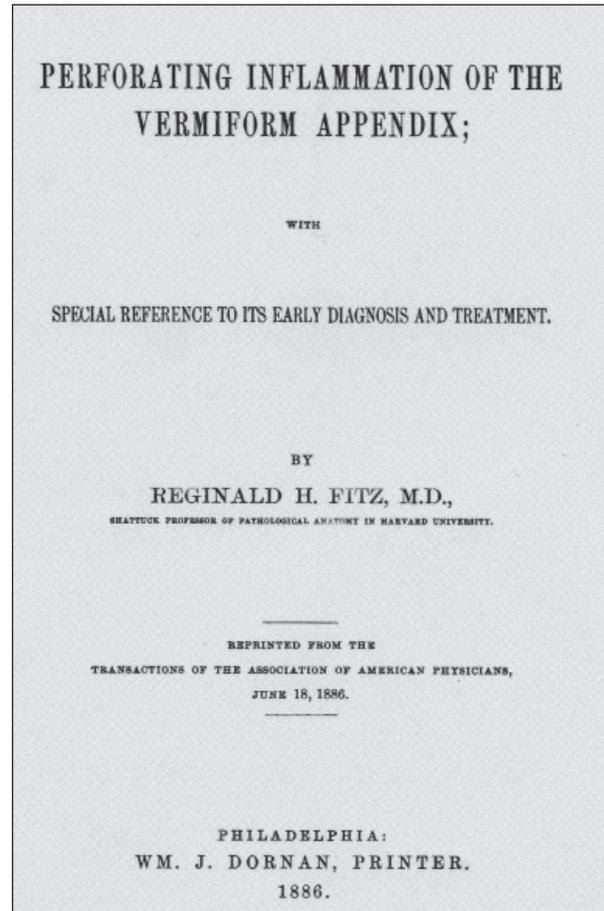


Figure 2.3 Title page of Dr. Fitz's paper on appendicitis

he reported on the results of 72 operations, the patient surviving 53 of them; these were cases in which Fitz played no operative role but rather acted as an adviser.

Dr. Fitz's second most important contribution to the pathology literature occurred three years after his initial report on appendicitis, when he delivered the Middleton-Goldsmith Lecture to the New York Pathological Society on February 16, 1889, on the subject of acute pancreatitis (figure 2.4). His findings were published shortly thereafter in the *Boston Medical and Surgical Journal* (now the *New England Journal of Medicine*) (24). Fitz began his lengthy discourse with a thorough review of the literature on the pancreas and many of its disorders. He then indicated

that his own interest in pancreatitis dated from 1876, when he performed an autopsy on a patient who had died of pancreatitis, following which he studied additional pancreatic specimens with the help of Dr. William Fiske Whitney, the curator of the Warren Anatomical Museum (who would join the MGH as a surgical pathologist in 1888; chapters 1 and 3). Dr. Fitz then discussed pancreatic hemorrhage, the association of hemorrhage with acute pancreatitis, pancreatitis occurring without hemorrhage, and the relation of acute pancreatitis to fat necrosis. Although the significance of this study on medical care may be less than that of his work on appendicitis, it is still a seminal contribution. Toward the end of his life

he wrote a scholarly essay on Zabdiel Boylston, who in 1721 had introduced smallpox vaccination into the United States (30). This essay resulted in Fitz's being elected a member of the Massachusetts Historical Society shortly before his death.

Tributes to Dr. Fitz by many individuals survive, many of which attest to the remarkably high regard in which he was held (2–16). Most of these were written by individuals who had the good fortune to know him personally, including his physician son (9). One such tribute preceded a Festschrift published in 1908 in the *Boston Medical and Surgical Journal*, an issue that included almost 150 original contributions and reviews by illustrious individuals of the era (11). In one appreciation Fitz was remembered as “a gentle kindly man, rugged of stature, bald of head and wearing the imposing mustache of the period.” The same writer remarked on his zest for correct diagnoses and his cross-questioning of physicians, pointing out their errors in a way that irritated elder colleagues but delighted the younger ones. Elsewhere, however, it was noted that some students “feared” Dr. Fitz, which may have been due in part to the sarcasm he could bring to bear. Another tribute referred to Dr. Fitz's “methodical German methods at autopsies which were a revelation to house officers” and remarked that his lectures were “descriptions of changes in regions and organs rather than the processes bringing about the changes.” Nonetheless, as that writer continued, “The causal factors in disease were but dimly understood until the latter days of his Professorship, but his clear-cut concise descriptions of pathological changes will ever remain with his pupils.” Concerning his appearance, one writer noted, “He had deep-set eyes and a searching glance, as if he viewed life through a microscope,” and this seems to aptly capture his countenance. Dr. Fitz was very friendly with the eminent surgeon Dr. Maurice Howe Richardson, who served for a time as Moseley Professor of Surgery at HMS and as Chief of Surgery at MGH. A remembrance of Dr. Richardson by

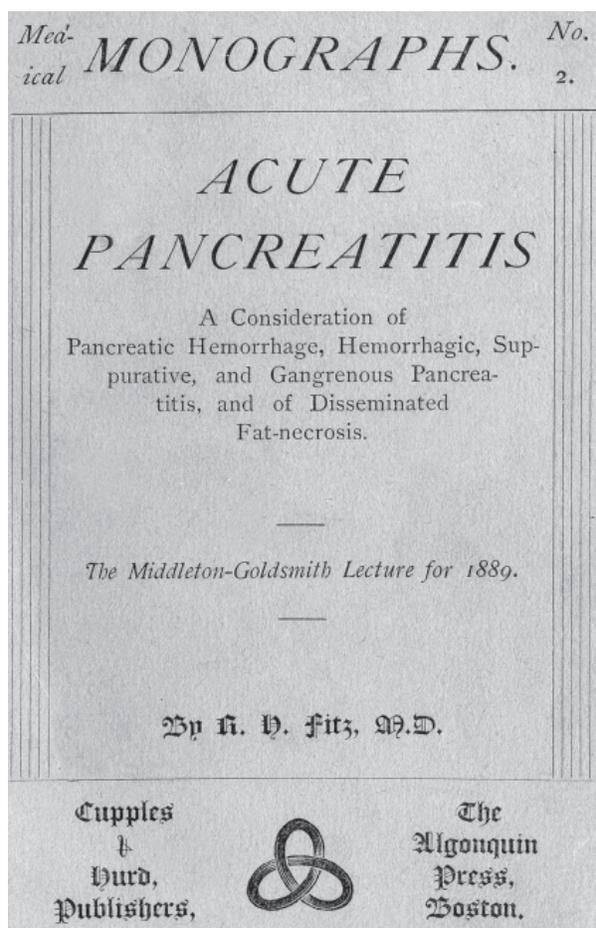


Figure 2.4 Cover of a reprint of a Middleton-Goldsmith Lecture on pancreatitis

his grandson Dr. George S. Richardson recorded that “regularly in Septembers he [M. Richardson] would walk the outer Adirondack trails with Fitz.” Many honors were bestowed on Dr. Fitz, including the presidency of the Association of American Physicians in 1894 and the presidency of the Congress of American Physicians and Surgeons in 1907.

In 1908, at the age of 65, Fitz retired from his academic posts (as was then compulsory) but remained active in clinical practice until his death on September 30, 1913, the result of complications following an operation for a bleeding gastric ulcer. A memorial meeting was held in his honor on November 17, 1913, and tributes were made by a number of distinguished speakers, including President Eliot, Dr. Henry P. Walcott (Chairman of the Board of Trustees of the MGH), Dr. William T. Councilman (Shattuck Professor of Pathological Anatomy at HMS), Dr. William Thayer (Professor of Medicine at Johns Hopkins University), and Dr. W. W. Keen (Professor of Surgery, Emeritus, Jefferson Medical College, Philadelphia). The tributes to Dr. Fitz by these speakers, all published in the *Boston Medical and Surgical Journal* (12–16), emphasized his service to surgery, to the hospital, to pathology, and to teaching; they were published privately as a memorial volume in 1914. In aggregate they pay great tribute to the diverse talents of a distinguished physician and pathologist with a powerful legacy in the annals of medicine, pathology, and surgery.

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