It is axiomatic that an educational institution is only as strong as its faculty. Even those unfriendly to the Chicago Medical College, both before and after University affiliation, were always willing to concede that it did produce good practitioners. And good clinicians on a production basis result only from good teaching. In the present chapter a few members of the Medical Faculty will be presented as a series of "profiles." The Founders, a remarkable group of men by any standard, have already been considered, as has also a strong line of Deans. The ordinary faculty members — those unrelated to administrative activities — also deserve token recognition, and now attention will be directed to them. Through the years the Medical Faculty has contained many worthy individuals who gained local renown as teachers or practitioners. There have been others whose reputations extended nationwide, and some whose stature commanded international recognition.

The selection of proper representatives from the large number of individuals who have served on the Medical Faculty during more than a century of operation presents a problem on which opinions will differ. How many should be chosen, and which ones, is a matter somewhat subject to personal judgments and loyalties. To simplify the problem in many regards, the selection was restricted to former members of the Medical Faculty, no longer living. Only those will be considered whose period of service to the School was of significant length, and whose accomplishments brought them international acclaim and enduring fame. It is certain that all of those chosen qualify as outstanding personalities, worthy of recognition on any list as stars of the first magnitude. That the selections have to be limited to so few, and that more medical categories cannot be represented, is regretted.
Christian Fenger was born on the west coast of Jutland, Denmark, on November 3, 1840. His father was a prosperous farmer who owned an excellent estate, formerly a monastery. Christian graduated from a boarding school, but without distinction since he was hampered by poor eyesight and a troublesome knee. The years following, spent in the University of Copenhagen, were furthered by teaching in a high school and by tutoring. They were also interrupted by service as an assistant surgeon during the Danish war with Prussia. He received his diploma in 1867, and two years later began an internship at the royal Frederick’s Hospital at Copenhagen. Experiments on gunshot wounds, and the invention of instruments for locating and extracting bullets, gained Fenger an appointment in the Red Cross International Ambulance, which extended throughout the Franco-German War. Next a period was spent in Berlin and Vienna, where he became acquainted with Bill-
roth and Rokitansky, and their pioneer work in surgery and pathology.

Back in Denmark in 1871, Fenger was appointed resident pathologist at the Copenhagen City Hospital. Careful studies on morbid anatomy found publication. Among these was his doctoral thesis in 1874, which demonstrated the anatomical basis (by involvement of twigs of the vagus nerve) for the occurrence of pain in carcinoma of the stomach. So it was that the degree of Doctor of Medicine was not obtained until thirteen years after he started as a medical student. Disappointed when the vacant professorship of pathology was straightway filled by appointment rather than by open competition, he took a position with the Egyptian government for a time, but resigned and emigrated to the United States in 1877.

Many months passed in Chicago before Dr. Fenger was able to earn a living by his profession. When at last he was invited to conduct a few autopsies at Cook County Hospital, his scientific demonstrations made a profound impression. Dr. Isaac N. Danforth, who then held the appointment as chief pathologist, resigned in order to open the position to Fenger. So corrupt were the County Commissioners that Fenger had to borrow $1,000 and buy the appointment. Thereafter, for fifteen years (1878-93), “... the autopsy room at the County Hospital was the Mecca of medical students, interns and members of the medical profession of Chicago, who for the first time in the medical history of the Middle West had an opportunity to witness scientifically conducted autopsies and to learn the fundamentals of morbid anatomy and pathology.” Even the skillful surgeons of the staff crowded about his autopsy table to learn the meaning of things they had seen (or overlooked), but whose significance they had not known. His great service to Chicago was imparting a new concept of pathology, showing its co-ordination with the clinical picture of disease, and demonstrating the interest and importance of this science.

Dr. Fenger was made curator of the museum at Rush Medical College in 1880, lectured for a year at Rush, and from 1882 to 1885 held the chair of General Pathology and Pathologic Anatomy at Northwestern. Beginning to do surgery at the County Hospital as a replacement for vacationing staff members, he secured a regular surgical appointment in 1880, and served on the staff for twelve years. In 1893 he became Professor of Surgery at Northwestern and
Attending Surgeon at Mercy Hospital. In 1899 he transferred to Rush and Presbyterian Hospital, but died less than three years later. He was chief surgeon at the Passavant, German and Tabitha Hospitals from their beginnings until his death. The majority of his operative work was done at the old Passavant Hospital.

Dr. Fenger was a prolific contributor to the literature of surgery, special pathology and diagnosis, and his writings were translated into many languages. The articles relating directly to pathology number at least ninety, and these range through a wide field of subjects. Two volumes of his collected works were published as a posthumous tribute by the Fenger Memorial Association. Appreciation of the importance of his contributions has increased with the years. He became Vice-President of the American Surgical Association in 1895 and, at the time of his death, was President of both the Chicago Medical Society and the Chicago Surgical Society. Fenger's influence on medicine was recognized by a testimonial banquet tendered by 500 physicians, representing 147 medical organizations. These admirers gathered from all parts of the country on the occasion of his sixtieth birthday. The Fenger Memorial Association was organized to perpetuate his memory through scientific research, supported by an endowment fund. The Chicago Pathological Society established a lectureship bearing his name. The distinction of Knight of the Dannebrog was conferred on him in 1901 by the King of Denmark.

The amazing extent and depth of Dr. Fenger's knowledge of pathology, both gross and microscopic, welled from years of unremitting work. So careful were his observations and so impersonally judicial were his conclusions, that few risked disputing them. It was this unique background that made him one of the great surgeons of his time. Though never matching the operative speed and brilliance of some others and inclined to proceed with caution, studying and interpreting pathology as he advanced, no one equaled him in diagnostic skill or in an understanding of what was uncovered by his knife. Among his credits is the institution of aseptic surgery in Chicago, and the teaching of its technique to others. Fenger introduced methods for the safe and systematic exploration of the brain, and for many abdominal and pelvic conditions. He was one of the first to remove a stone from the common duct, and was the first in Chicago to perform vaginal hysterectomy for uterine
There Were Giants

cancer. Operations were developed and perfected for the treatment of tuberculosis of the joints and cancer of the stomach. He was invited to present the results of his investigations on renal surgery before the International Medical Congress, at Paris, in 1900.

Dr. Fenger's prodigious capacity for work did not abate upon the acquisition of success and acclaim; so great was his endurance that he was accustomed to work steadily through the day and even until three in the morning. He spoke many languages (according to an assistant, eleven), but all of them slowly and haltingly. In sharp contrast, his written style was clear, orderly and concise — a surprise to many who had heard him speak or read. Feeling a moral obligation to keep informed on the progress of medicine throughout the world, he subscribed to journals in many tongues, and over a wide range of subjects.

Despite his strong accent and lack of fluent speech, which was difficult for strangers to follow, Dr. Fenger was able to impart information with great clarity. As a matter of fact, he found his greatest pleasure in instructing and working with young men who showed a thirst for knowledge and a penchant for hard work. For years the idolizing interns of County Hospital gathered at his house every Thursday evening, whereupon Fenger played host and teacher until midnight. It was through his influence that many young physicians visited the European clinics in the last decades of the nineteenth century and returned to become leaders in American medicine. His teachings and influence developed leading pathologists such as Hektoen, LeCount and Wells, renowned surgeons such as Senn, Murphy, W. J. Mayo and McArthur, and scientific physicians such as Billings, Herrick and Favill. Fenger was pre-eminently a teacher of teachers and a developer of teachers; also, he laid the foundation for the modern internist as well as surgeon. His influence was unequaled by any other individual of the period in Chicago. Perhaps no one was ever more effective in breaking down antiquated ideas and traditions in medicine, and replacing them with new methods and approaches.

Dr. Fenger was honest intellectually, and not afraid to say that he did not know. Unswerving sincerity and truthfulness were his earmarks. One intimate said that "he was the embodiment of truth and the incarnation of the scientific spirit in medicine." His relations to others in the profession were meticulously correct. Simple by nature
and sincere in manner, he was free of envy, jealousy or cupidity. Although fundamentally kind, his blunt words sometimes created an incorrect impression of unfriendliness. In fact, it is said that he was so brusquely outspoken at times as to chill friendships that could have been important. Actually his brusqueness was that of a busy, preoccupied man. He was genuinely impatient with persons who were frivolous or indolent, but eager to express appreciation and praise of honest and efficient work.

Physically Dr. Fenger was of medium height and stocky build. He was ruddily blond, with a commanding forehead and furrowed face, and azure blue eyes that could show warmth or a chilling frost. A closely cropped mustache and beard could not conceal a kindly face and pleasant smile. Soon after his arrival in Chicago, he met and married, in 1878, Caroline Sophie Abildgaard, who had left Denmark in childhood. By all accounts she was an extraordinarily cultured and gracious lady. They both were devoted to art, music and literature. It has been said that the mutual regard that existed between the two was unparalleled; the home life was ideal, despite the fact that only his evenings until nine o'clock belonged to the family. There were two children, a boy and a girl. Death came in his sixty-second year, on March 7, 1902, when he succumbed to a virulent type of pneumonia after an encounter with a severe storm. During this illness he was attended almost constantly by three distinguished, onetime pupils: Billings, Favill and Herrick. Ironically a memorial tablet to his greatness was erected in Cook County Hospital, where he initially had to buy his entrance.

Dr. Fenger's greatness was based not only on his direct influence on the practice of medicine, but also on the influence and inspiration exerted upon a large group of disciples. He founded a school of thinking and attitudes, and his followers showed a sort of fanatical devotion to their leader. His onetime assistant, Dr. C. G. Buford, wrote:

No man in medicine was more respected while he lived. Few were more widely quoted in the operating room while living; and few more quoted in medical meetings after death. I have sat in a Pullman with a small group of his pupils who are all now great teachers; as they talked of Fenger every eye was moist and every voice quivered.
And Dr. Frank Billings, an internist, said:

Though twenty years have passed, he lives today in the hearts and minds of hundreds of physicians and surgeons who were proud to call him master; and he will continue to live through other generations by the work of his students, and his pupils' students.

ISAAC ARTHUR ABT, M.D., SC.D.
Pediatrician: 1867-1955

Isaac A. Abt was the smaller of a pair of male twins born at Wilmington, Illinois, on December 18, 1867. His parents had emigrated from Germany in the Bismarckian period that sent Carl Schurz, Abraham Jacobi and other freedom-loving people to this land. His father conducted a general store and the village post-office, but moved the family to Chicago when Isaac was eight years old. Before reaching the age of thirteen, the youngster was working for an apothecary. Among his duties were the grinding of herbs and roots, and the making of infusions, tinctures, pills and powders. At nineteen he started classes in the preparatory medical course at Johns Hopkins University, which then was only in its tenth year of operation. Some medical courses were being offered, although a complete medical school was still several years away. Yet, happily, he was able to study under such notables as Brooks in zoology, Remsen in chemistry, Howell in physiology and Welch in pathology. In his third, and final, year at Hopkins, Isaac had the further opportunity and privilege of making rounds with Dr. William Osler in the recently opened Hospital.

During summers the medical aspirant acted as an assistant to Dr. Edmund Andrews at Mercy Hospital. There he helped with operations and did minor surgical dressings in the wards. Also he attended the clinics of Drs. Fenger and Senn, and tried to fit college studies into what he was hearing and seeing. Leaving Johns Hopkins in 1889, without a degree, Isaac sought advice from Dr. Welch and was told that no college of that time was especially good, so it made little difference which one was selected, since everything depended on the individual. He entered Northwestern as a second-year student, and graduated in 1891 along with such later notables
as DeLee, Preble, Edwards, Walls, Eisendrath and Schroeder. His autobiography, *Baby Doctor*, supplies some interesting sidelights on the School and students of his day. Later characteristics of energy and initiative were foretold when he and two others improvised a laboratory, in a closet under the college amphitheater, and learned bacteriological techniques by themselves, since only didactic instruction on this subject was then offered. During the

![Isaac A. Abt](image)

academic year he assisted the physicians in the college dispensary, and served as the drug clerk there. Vacations were spent reading medicine in the offices of two physicians.

An internship followed at Michael Reese Hospital, where the young doctor found time to prepare and publish a paper on a series of well-correlated clinical cases. As the year progressed, the ambitious intern found his interest turning toward the diseases of children, which field he recognized as constituting a gap in medical knowledge. Encouragement was not forthcoming from the older physicians, who held that pediatrics belonged to the general practitioner and that there was no future in it as a specialty. Yet there were some competent children's specialists in the United States,
even though the outstanding ones could be counted easily on the fingers of one hand. Hence Abt concluded that there was need and opportunity for more. Europe represented the fountain-head of pediatric thought and instruction; so, in the autumn of 1892, he set out for a period of study under pediatric leaders at Vienna, Berlin and London. After eighteen months of exhilarating experiences, he returned to America in the winter of 1894, full of enthusiasm and new knowledge, and determined to overcome prejudices, dispel ignorance and blaze new paths.

Now 24 years of age, Dr. Abt equipped an office, over a drugstore at Thirty-Fifth Street and Indiana Avenue, and prepared for an uphill struggle. Actually, the office and reception room were part of a five-room flat in which he also lived. Private practice in his specialty made slow progress against the prevailing ignorance of the limitations of the family doctor in this field. But there was much to be done among the dispensaries, and he took on jobs as District County Physician and Health Inspector. In 1895 the young practitioner administered successfully, to a desperately sick baby, the first diphtheria antitoxin to be given in Chicago. Slowly more and more private homes opened to him until, in the early years of the new century, his reputation was such that serious or obscure illnesses were not thought to have received expert opinion or care except from him. Pioneer work in pyuria, demonstrating the presence of colon bacillus, brought additional renown. Consultations became an increasing factor in his practice, and demands came from all parts of the Middle West.

Early in his career Dr. Abt sought to prevent disease by attacking its sources. A crusade for pure milk was instrumental in bringing the dairy industry under legal control, and in establishing the Infant Welfare Society. A key speech in this campaign, delivered against a hostile audience, brought out an important quality. Although gentle and soft-spoken by nature, when aroused on matters of conviction his calm but earnestly forceful delivery exerted great influence on listeners. The effect was heightened by his obvious knowledge of facts, presented in precise and logical sequence, and his convincing sincerity.

Soon after returning from abroad, Dr. Abt was appointed as Assistant in Pediatrics at Northwestern, and also Instructor in Physiology and Histology. In the latter post he was delegated to
create the first physiological laboratory, with required work by students. When he had advanced to Instructor in Pediatrics in 1896, and had then held that post for six years, the professorship became vacant. It was natural for Abt to expect that his special training and conscientious service in the clinics would be rewarded, but the chair was given to a classmate who had been teaching other things and had never concerned himself in this field. The decision was an administrative blunder, incredible in its bias and stupidity, and entailing an incalculable loss to the School which only a fortunate circumstance retrieved.

Naturally crushed in spirit, Dr. Abt resigned and accepted a position at Rush Medical College as Associate Professor, which appointment continued from 1902 to 1908. By this time Dr. Edwards had replaced the younger Davis as Dean, and the next year Abt was invited to return to occupy the professorial chair in Pediatrics. It so happened that a children’s hospital in conjunction with Michael Reese was in the planning stage at this time. The two opportunities, plus vindication of the earlier snub, were irresistible. Accepting the offer, Abt continued in the post from 1909 until 1939 when, in his seventy-second year, he assumed emeritus status. At the turn of the century (1897-1901) he was Professor of the Diseases of Children at the Woman’s Medical College, resigning just before the school was jettisoned by Northwestern University (p. 120-1).

Although Dr. Abt held various hospital appointments as attending physician, his main work for many years was done at Michael Reese Hospital. In 1910 Mr. Edward Morris consulted him about a children’s hospital that the Nelson Morris family wished to build as a memorial to their mother. Dr. Abt advised that it be made a unit of Michael Reese, and he visited Europe to perfect ideas on construction and facilities. When finished, it was the best children’s hospital of that time in America. As the head of the Sarah Morris Children’s Hospital he gathered an able staff about him, and for the next thirteen years it became an important center for postgraduate instruction. But as a unit of the general hospital, it was subject to policies and administration that he came to feel were not consistent with the welfare of sick babies. Cumulative incidents that outraged his ideals led to a regretful resignation in 1925, and intensified his conviction that a children’s hospital should be entirely independent of any general hospital.
Joining St. Luke's Hospital, Dr. Abt remained there until 1932, when he was made attending physician at Passavant Memorial Hospital and consultant at Children's Memorial Hospital. At the latter institution he found a physical plant, a clinical and nursing staff, and an administration that seemed nearly perfect. Here he was able to negotiate a teaching affiliation between the Hospital and the Medical School. A dream of an Isaac Arthur Abt Hospital on the Chicago Campus went as far as the blueprint stage, but these plans blew away in the financial hurricane of 1929. Money given by his uncles as a nucleus for a building fund, together with other gifts from friends on his seventieth birthday, totaled more than $100,000. It was turned into a fund to be used in pediatric research at the Medical School. Active practice was not abandoned until 1946, when Abt retired from the Passavant staff.

Although by nature a mild, kindly and gracious man, Dr. Abt could be firm and, on matters of principle, courageously insistent. His ability for quiet but forceful leadership brought him many high offices. For sixteen years he was a member of the House of Delegates of the American Medical Association, and chairman of the Section on the Diseases of Children in 1911. He became President of the following organizations: American Pediatric Society (1926); Chicago Medical Society (1927); American Academy of Pediatrics (1930); Institute of Medicine of Chicago (1932); American Association of Teachers of the Diseases of Children; Children's Hospital Society; Chicago Pediatric Society; and Central States Pediatric Society. He was made an honorary member of the German Pediatric Society and of the Minnesota Chapter of Alpha Omega Alpha. He became a Chevalier of the Legion of Honor of France in 1927, and received the Distinguished Service Award of the American Medical Association in 1948. The honorary degree of Doctor of Science was conferred by Northwestern University in 1931.

In 1897 Dr. Abt married Lena Rosenberg, who was then a nurse at Michael Reese Hospital. She became a staunch ally in his campaigns for preventive medicine and organized the Women's Board at the Hospital. Prominent physicians of Europe and this country were often guests in their home, and Chicago physicians would be invited to meet them. For some years a Study Club of representative scientists and clinicians met semimonthly to monthly in the
hospitable Abt home, and those in attendance were charmed with Mrs. Abt's delightful personality and her versatility as a prandial hostess. There were two children, both boys, of this marriage; the elder, Arthur F., became a well-known pediatrician in his own right.

Dr. Abt was a profound student, working with tireless energy in his immense library, which afforded him access to information on a wide range of sources — from current literature to specialized monographs. Among his written contributions were: a translation of Hecker's *Atlas of the Diseases of Children* (1907); *The Baby's Food* (1917); *Yearbook on Pediatrics* (1902-43); *A System of Pediatrics* (1925); *Baby Doctor* (1944). One of his greatest achievements was the eight-volume *Pediatrics* which was started in 1914, changed by the first World War from an international collaboration to one in which 147 American contributors participated, and reached final publication in 1925. Among his devised contrivances were incubators for premature babies, and a motor driven breast pump. Perhaps no other American pediatrician was as well known and highly esteemed throughout the world.

Since he was a student at heart, Dr. Abt took teaching seriously. In his early days at the dispensaries and clinics he gave many students and interns their first concepts of what informed care and treatment of children could accomplish. His stimulating lectures and clinics were well presented and always showed evidence of scholarly preparation. His manner was dignified and somewhat formal, whether before classes or in personal relations with students, interns and nurses. An implied demand of respectful attention followed the pattern of a European professor, but was not an affectation. He trained scores of pediatricians, among whom may be mentioned Joseph Brennerman, Julius Hess, Clifford Grulee, Robert Black and Stanley Gibson.

Physically Dr. Abt was short in stature, with a round, balding head. His twinkling eyes and soft speech betokened friendliness, which effect a cropped mustache over full lips did not lessen. A neat bow tie was so habitual that he could scarcely be envisioned otherwise. He was somewhat shy with strangers and his manner was humble. Yet, with a gentle and restrained deportment went innate dignity.

Dr. Abt's long life-span coincided with the growth of American pediatrics almost from its beginnings. During sixty years of this
period of amazing scientific progress, he had ever been a leader. To many he had come to be a living link with a past whose conditions seemed unreal and scarcely believable. Yet his energy and sense of responsibility were such that fifty years after he took the first examination ever to be given for candidates to the attending staff of County Hospital, he was grading the papers of current aspirants far into the night. Within a month of attaining his eighty-eighth year, Dr. Abt died on November 22, 1955, of a coronary thrombosis, preceded by a malignancy of the tongue. Dr. A. H. Parmelee wrote:

Dr. Abt was a remarkable example of great accomplishment and distinguished leadership in American pediatrics. He was outstanding as a clinician, teacher, scholar and humanitarian . . . The characteristics we remember are his tireless energy, his broad knowledge of pediatrics, his ability as a teacher, his scholarly attainments, his humanitarianism, and, above all, his gentle, modest and lovable personality.

JOSEPH BOLIVAR DELEE, A.M., M.D.
Obstetrician: 1869-1942

Joseph B. DeLee's parents were Polish immigrants, whose original family name is unknown. His father was a dry goods merchant. Joseph, the ninth of ten children, was born in Cold Spring, New York, on October 28, 1869. His father hoped that this son would become a rabbi, and for a time it seemed that he might. The disappointed father was not reconciled to his son's choice of profession until, at the age of 28, he announced that he was about to become a professor. The selection of a medical career was made after finishing high school and spending a summer as an electrician's helper. This trade, though renounced, was a logical sequence to his schoolboy, odd-time enterprise of repairing and installing door bells and wiring gas fixtures. The latter avocation was to be continued even into his medical schooling as a necessary means of helping finance an education. Another side-employment of medical-student days, whose full implications he did not then comprehend, was acting as the chief medical attendant at what proved to be an illegal baby farm.

In 1888 Joseph began the study of medicine at Northwestern and
found himself in the company of a group of ambitious young men, such as Isaac Abt, Arthur Edwards, Robert Preble and others, who were also destined to become famous, and who would soon be faculty colleagues. As a student he was serious and dignified, never becoming especially intimate with any classmate. The teacher who exerted a profound and lasting influence on young DeLee was the brilliant Professor Jaggard, one of the first scientific obstetricians of the country, whose disciple he became and whose teaching tech-

Joseph B. DeLee

niques he copied. At graduation DeLee was better prepared for this specialty than most students of his day because he had watched two deliveries, even though he did so through opera glasses from a high seat in the amphitheater.

The new doctor graduated with honors, having won the Davis Prize for the best thesis in the last year when such a graduation requirement would still be in effect. He also placed second (to future Dean Arthur Edwards' first) in the competitive examination for an internship at Cook County Hospital. Here he had the opportunity to deliver 28 women and attend some twenty others. It was at this time that he determined to combat the indifference of the medical
profession to obstetrics as a worthy specialty, and he soon set as his ideal: "... raising the standards of teaching and practice in obstetrics." After a season of teaching dental anatomy and acting as surgeon in the Michael Reese Dispensary, DeLee spent the year of 1893-94 chiefly in Vienna, with a lesser time in Berlin and Paris. Back in America, and not yet 24 years old, he hung out his shingle at Michigan Avenue and Twenty-Second Street (now Cermak Road).

Dr. DeLee was eager to start a home obstetrical service, but his first attempt at this, in connection with the South Side Dispensary, was a complete failure (p.197). Undaunted, he managed to organize the Chicago Lying-in Dispensary in four rooms in the Ghetto, at Maxwell Street and Newberry Avenue (p. 393 ff.). Opening for patronage in February, 1895, it cared for 204 deliveries in the first year; also 52 Northwestern students and twelve physicians had received instruction there in the same period. The next step was to found the Chicago Lying-in Hospital where deliveries other than in the home could be made. This was accomplished in 1899 by converting a large house on Ashland Avenue to the purpose. Yet its capacity was limited to nine mothers, and a more permanent home was sought. In 1906 a site for a new hospital at Fifty-First Street and Vincennes Avenue was bought, but the complete hospital, with more than 100 beds, was not erected until 1917.

Neither the project of the Hospital nor of the Dispensary ended as Dr. DeLee wished. What he thought was to be a simple affiliation with the University of Chicago got out of control and the Hospital became a mere appendage of the University, with little but its name retained. This was the bitterest disappointment of his life. The Directors of the Lying-in Hospital also acted to close the Dispensary and transfer its activities to the newly absorbed Hospital. In a counter-move, DeLee tried to get Northwestern to take it over, but the time was during the depth of the Depression. Finally a new plan evolved through which a complete reorganization created the Chicago Maternity Center, independent of all other institutions except through contractual arrangements to teach students and nurses. Ultimately, however, this Center did become affiliated with Northwestern as a part of its Women's Hospital complex (p. 395). Also DeLee suffered disappointment in the failure of his Great Plan to materialize in his lifetime. This was to extend the work of the
Lying-in Hospital on the South Side by creating similar institutions on the North- and West Sides, in conjunction with Northwestern and Illinois, respectively.

DeLee's academic rise was meteoric. After a year each as Demonstrator and Lecturer in Obstetrics, came the premature and tragic death of his mentor, Professor Jaggard. This resulted in his taking charge of the Department in 1896 and becoming elevated three grades to the full professorship the following year. Thirty-two years later, when his plans for the future of the Lying-in Hospital finally went awry, he regretfully resigned from Northwestern in 1929 and followed the new Hospital to the University of Chicago. There he experienced progressive subordination and unhappiness, and entered into enforced academic retirement at the age of 65 years. Northwestern University conferred the honorary degree of Master of Arts upon him in 1906. He was made an honorary Fellow of the Edinburgh Obstetrical Society. He was President of the Chicago Gynecological Society in 1908, and was elected Vice-President of the American Gynecological Society.

In 1904 DeLee prepared Notes on Obstetrics for his classes, and a year later was gratified to learn that the top six contestants in the obstetrical examination at the County Hospital had been users of these instructions. A first book, Obstetrics for Nurses (1904), proved immediately popular and passed through twelve editions before his death. The "big book," Principles and Practice of Obstetrics (1913), was aimed at the medical student and practitioner. The illustrations had been started in 1900, and the text in 1907. Original in concept and written with meticulous care, it was drawn from the stores of extensive personal experience. This treatise was considered by many in this country and abroad as the final authority on the subject. In the author's lifetime it advanced through seven editions, and still continues as a standard text under other supervision. Among teaching aids, the DeLee series of motion pictures on obstetrical subjects take high rank; they served to spread his teachings throughout the world. By 1928 five films on basic subjects had been finished, and others were in preparation. His four-reel film on low cervical Caesarian delivery was the first obstetrical subject to be done in sound. Written contributions to the medical literature number 75.

How many babies DeLee delivered in his extensive experience is
not known. He stopped counting when the number reached 8,000. At middle age, when fame was established, he charged fees ranging up to $5,000 for a delivery. His justification was that the remuneration of a top obstetrician should not be less than that of a high-grade surgeon. He was correspondingly generous in the support of favorite projects. To his hospitals alone he gave more than $200,000. To Northwestern came $100,000, the income of which would be used in the Clinics for prenatal and postnatal care. A $10,000 fund was also established, the income to be used for medical education by the Department of Medicine.

In personal appearance Dr. DeLee was arresting. A tall, slender and erect figure was set off by a notable head. A sallow complexion was accented by dark, bright eyes and put into contrast by a full head of whitening hair, a mustache and pointed beard. To these was added his habitual trade-mark, a white pique four-in-hand tie. Here, one would unhesitatingly conclude, is a professional man with old-school dignity. There was a quickness of gesture and an incisive speech that ran company with an alert mind. A British colleague said: "He conveyed an indefinable sense of elation, and there were few who did not come under his spell. He lived for obstetrics, and obstetrics gave him his driving force."

DeLee was a confident man, self-assertive and egocentric, but possibly unaware of these traits. Rabbi Mann saw him as modest, but not self-effacing — a combination of perfectionist, hermit and student — and with amazing faith. He was an individualist who strove to develop to the utmost those skills and abilities that would perfect his professional attainments, and disseminate the teachings that he was convinced were correct. He was by nature hostile to mediocrity, and so set perfection as his goal. His reputation for sound judgment, outstanding craftsmanship and originality of thought and action was well earned. He had high ideals and was intensely true to those set up as personal standards. To realize those ideals, he gave of himself and his purse selflessly and without stint.

Defects that led to unhappiness, and some defeats in DeLee's dealings with individuals, were his limited sense of humor, and both an inability to compromise and a complete impatience with the concept of compromise. Conciliation with those he opposed was foreign to his nature. Stubborn, when he believed himself to be in the right, he could be hard and unkind to those attempting to obstruct his
path. As an obstetrician he was a master craftsman with a vast store of sound clinical experience, rather than a working scientist; a great artist, though temperamental. A visiting European authority said: "To watch him conduct a delivery was an unforgettable experience."

This perfectionist and controversialist, who never smoked, drank or married, died on April 2, 1942, in his seventy-third year. Modern obstetrics, the obstetrics of DeLee built on the basis furnished by Professors Jaggard and Bumm, outdistanced the practices of a previous generation as did Lister's surgery and Pasteur's bacteriology. He was the great humanitarian who set new standards in the teaching and practice of obstetrics, and who fought with consecrated devotion for the safety of mother and child at childbirth. The Chief of Staff, who was placed over him at the new Hospital, wrote:

A feeling of loss pervades his surroundings, but with it there lives a memory of his great service to his profession and mankind. . . . This man dies, but his influence marches on through decades by his personal contacts, writings and visual education. He was a star of the first magnitude in the obstetric heavens and only death has dimmed the brilliancy which will continue to illumine the atmosphere of his profession.

Rabbi Mann, at the funeral service, spoke words with which all the world could agree: "Know ye that a prince and a great man has fallen this day in Israel."

STEPHEN WALTER RANSON, M.S.,
PH.D., M.D.
Anatomist: 1880-1942

S. Walter Ranson was born August 28, 1880, at Dodge Center, Minnesota, the youngest of six children. His father was a physician, and three of the children followed in his steps. Walter entered the State University with the intent of becoming a psychologist, as had an older sister. With characteristic acumen he saw the need of a thorough grounding in the structure of the nervous system, and so came under the inspiring influence of Professor J. B. Johnston. The
young student soon found his enthusiasm shifting to neurology, and a laboratory was improvised in the family barn, where experiments were carried out during summer vacations. This work brought the tyro into contact with Professor H. H. Donaldson's book on the nervous system, and he transferred to the University of Chicago in order to study under this authority. A course of neurological training led to the degrees of M.S. in 1903, and Ph.D. in 1905.

At this juncture Ranson decided to continue with the regular medical curriculum, and hence completed the clinical years at Rush Medical College, the affiliated school of the University, in 1907. Following an internship at Cook County Hospital, an office was opened for practice on the South Side of Chicago. At the same time a subsistence arrangement was made by which Ranson became a part-time Associate in Anatomy with Professor Arthur W. Meyer, who had just come to Northwestern as Professor of Anatomy. Any lingering thoughts of a clinical career were abandoned one year later, when Dr. Meyer resigned and recommended his young helper as his eventual successor. The University followed this advice and first advanced Ranson to an assistant professorship in 1909. It was
then decided that, to prepare him further for his duties, a year of foreign study would be beneficial. Accordingly, he was promoted to an associate professorship, and the year 1910-11 was spent in Professor Wiedersheim's laboratory at Freiburg.

Returning from the foreign year, Dr. Ranson became, in 1911, Professor of Anatomy and Chairman of the Department of Anatomy. This was a bold move on the part of the University, since it necessitated promoting a young man over an older and well-qualified teacher in the Department. This post was held for thirteen years until, in 1924, he resigned to accept an offer from Washington University. At the time this new position seemed attractive, despite the fact that the Ward gift for a new building and its endowment had already been made. Less than four years later, at the instigation of the present writer, Northwestern made a proposal which involved the setting up of a research institute according to ideas that had been formulating in Ranson's ever-progressive mind. It was a challenge that he could not resist, and the financial outlay on the Institute of Neurology in the next fourteen years of Ranson's life probably brought greater international renown to the University than any other proportionate expenditure in its history.

The academic labors of Dr. Ranson's lifetime were divided between teaching, administration and research. From 1908 to 1915 he taught gross anatomy solely. Not until 1915 did he begin to instruct in neurology, but thereafter this subject became the principal object of his teaching attention, until his formal pedagogical career came to an end in 1927. As a teacher, Ranson was conscientious, informative and sound. His lectures were carefully prepared, skilfully organized and well chosen as to subject matter. His speaking style was matter-of-fact, and somewhat lacking in spontaneity and ease. Although striving earnestly to improve in this regard, he never attained a dynamic platform delivery. More effective was his individual instruction in the laboratory, where his courteous and sympathetic manner, eagerness to be of help, and eminent fairness made a perfect foil to an insistence on high standards of accurate observation and straight thinking.

Although the force of Dr. Ranson's quiet personality and scientific eminence left an indelible imprint on a generation of medical students who sat under him, far broader in pedagogical influence was his textbook, *The Anatomy of the Nervous System*. Before its
advent there was no suitable student text in this subject, and recourse had to be made to the chapters included in works on gross anatomy. Its preparation was begun in 1917, after only two years of experience in teaching the subject, yet it was outlined and written with sureness and speed. It is a fine tribute to the author’s judgment that this pioneer text continued into its tenth edition without fundamental alteration in plan or presentation and still remained a leader in its field.

As an administrator and director of laboratories, Dr. Ranson had gifts of a high order. His natural flair for quiet leadership, deep sense of responsibility, infectious enthusiasm, integrity of character, unswerving reliability, purity of ideals, transparent honesty, innate fairness and sympathetic friendliness inspired a multitude of colleagues, graduate students and subordinates to regard him with loyalty, esteem and devotion. He had the ability to make the utmost of what was available in facilities and funds. It would be difficult to match his effective management on the basis of income and output. One objective was ever foremost, and that was efficient production; he drove himself without stint and demanded the same unsparing application from others. Ranson was a keen judge of human nature, and was unusually successful in selecting the proper person for any post in a closely-knit organization that also required compatibility and team-work. Through his success in these several areas, the reputation of the Institute rapidly gained world-wide recognition and attracted students from many lands. The number of teachers, investigators and clinicians whom Ranson trained during his total career constituted, in itself, an impressive memorial. Of the actual scientific grist of the Institute, the fourteen annual volumes of publications speak most eloquently. High in quality, as in quantity, they represent the yield of what a competent judge has characterized as “one of the most productive schools of neurology that has ever existed.”

The dominating interest in Dr. Ranson’s intellectual life was research. It began while he was yet an immature college student, and grew in intensity with the years. It was his spoken conviction that research brings the highest degree of intellectual exhilaration and satisfaction that the human mind is capable of achieving. It was, therefore, with unconcealed enthusiasm that he welcomed the opportunity to abandon routine teaching and limit his labors to the
field of neurological investigation. So great was his zeal, that he had hoped to continue actively in research long after official retirement would be forced upon him.

Dr. Ranson's scientific achievements did not follow the curve that is usually correlated with age. Throughout his life he continually increased in scientific stature, and his later years deservedly brought him his greatest fame. He was always eager to make use of new techniques, and equally ready to enlist the co-operation of those who had special qualifications beyond his own. A great part of his later successes was due to this ability of devising a careful program of action and then delegating portions of its execution to trusted lieutenants. Ranson was a passionate searcher for truth, was highly critical in evaluating evidence and extremely cautious in drawing conclusions. In such an atmosphere of thoroughness, freedom in questioning and criticizing was encouraged. But the subordinate who took on his Chief in argument had to be prepared for a battle royal or be doomed to ignominious defeat, for he was a fair but relentless antagonist.

A bibliography of Dr. Ranson's publications contains 214 titles, 150 of which date from 1928 when he organized his Institute at Northwestern. Early morphological interests soon shifted into studies that dealt with functional interpretations of structural backgrounds and had significant clinical implications. Yet even to the end he was ready to engage in long investigations of pure morphology if these were necessary to illuminate dusky functional mechanisms. That he was the outstanding exponent of a definite school of combined neuroanatomy and neurophysiology is scarcely subject to question. This propensity is illustrated in two samples from his many fields of endeavor: one was the original demonstration of unmyelinated nerve fibers in sensory nerves, and their relation to the sensation of pain; the second was a succession of publications on the hypothalamus, and its various relations, activities and clinical implications.

Many honors came to Dr. Ranson. Among the societies of which he was a member, he was President of the American Association of Anatomists in the 1938-40 years, and served on the editorial board of the Archives of Neurology and Psychiatry. In 1929 the annual Stephen Walter Ranson Lectureship was established in his honor by the Northwestern chapter of his medical fraternity. Among the
invitational lectures delivered by him before learned bodies were: the Weir Mitchell Oration (1934); the Harvey Lecture (1936); the Dunham Lectures (1940); and the Hughlings Jackson Lecture (1941). To him was dedicated the imposing volume on *The Hypothalamus and Central Levels of Autonomic Function*, assembled from a symposium held at the 1939 meeting of the Association for Research in Nervous and Mental Disease. In 1940 he received the highest scientific accolade in America — membership in the National Academy of Sciences.

Dr. Ranson was by nature dignified, yet unassuming, and of serious demeanor. He was not interested in social activities of a formal nature, and still less so in promoting himself by such means. Although somewhat reserved before strangers, he enjoyed thoroughly the companionship of well-tried friends and fellow workers. None who knew him intimately could doubt the genuineness of his interest in their welfare or the quiet, yet sincere, cordiality of his greeting and intercourse. As a modest man he disliked bombast and sham, and his keen perception was quick to see through those who were pretentious beyond merit. Although his interests ran deep in certain subjects outside his professional field, and especially so in current affairs, they were not notably wide-ranging. Most of his energy was conserved toward the use of the working day, and his evenings were dedicated largely to the quiet enjoyment of his family.

In physical characteristics Dr. Ranson was well proportioned and above average stature. His features were nicely molded to produce a handsome appearance. Dark hair, parted well to one side, a high, broad forehead, brown eyes, a well-shaped nose and a full, sensitive mouth set off a somewhat pentagonal face. In August, 1909, Dr. Ranson married Tessie Grier Rowland; there were three children of this marriage, one a graduate of this Medical School. A gastric ulcer of some twenty years’ standing gave much trouble in the last ten years of his life. In September, 1941, Dr. Ranson suffered a coronary attack from which he slowly made a partial recovery, but a recurrence on August 30, 1942, brought a fatal termination almost instantly. He had just passed his sixty-second birthday. The same malady had caused the death of his father and grandfather. At the funeral service Dean J. R. Miller said, in tribute:
And, lastly, I speak for all mankind and for those who are to follow through the ages in expressing our gratefulness for what this Great Man has given us. For Walter Ranson was a great man. Few of us here have had an opportunity to know one of his stature. Few whose name will live a thousand years — aye more; for so long as civilization exists, as long as Man reads the printed word, so long as science continues to light the way to a better world, the works of Ranson shall serve as basal blocks on which to build.

An obituary, prepared for the Anatomical Society of which he had served as President, ended with the simple words: “A great and a good man has passed from among us.”

FRANK BILLINGS, M.S., M.D., SC.D., LL.D.

Internist: 1854-1932

Frank Billings was born near Highland, Wisconsin, on April 2, 1854, the fifth of seven children. He was an eighth-generation American. His father, a surveyor and farmer, died when Frank was eight years old. Until reaching manhood, the youth worked on his mother’s farm and as a hired hand for neighbors, or hauled lead ore from the mines of the region. Country school was attended during the winters, and for a time classes were pursued at the Platteville Normal School. From 1873 to 1876 he taught, first in a district school and then in a high school. Working in a drug store evenings and vacation time, while teaching, kindled an interest in medicine that was furthered by a physician who acted as preceptor and encouraged his reading of medical books. With enough money at hand to make a start, Frank entered the Chicago Medical College at the age of 24, and later earned his way by tutoring. He graduated in 1881 and easily gained an internship at Cook County Hospital by making first place in the competitive oral examination.

The practice of medicine was then started by Billings in an office over a drug store at Jackson and State Streets, where he also slept and ate. During these early years, 1882-85, he acted as Demonstrator of Anatomy at Northwestern. It seems certain that his driving energy must have provided adequate subjects for dissection;
tales have been told of some of his picturesque exploits. It is also said that he was active in rallying physicians to get the Anatomy Act of 1885 enacted (yet Hosmer Johnson was far more influential in aiding this cause; p. 311).

Dr. Fenger encouraged Billings to tap the greater medical resources of Europe, so he spent some fifteen months of 1885-86 chiefly in the clinics of Vienna; yet Paris and London were also visited. This valuable experience was destined not only to enlighten

the young physician, but also to influence secondarily the conduct of diagnosis and the practice of clinical medicine throughout Chicago and beyond (p. 126). Having engaged in bacteriological experimentation while abroad, he brought back equipment for this purpose, cultured pathogenic bacteria and demonstrated tubercle bacteria in sputum at society meetings. When the American Medical Association soon met in Chicago in 1887, he was invited to exhibit cultures of all known pathogenic bacteria for the instruction of the members.

On resuming his Chicago practice, Dr. Billings was made Lecturer of Physical Diagnosis at the Medical School in 1886,
Professor of Physical Diagnosis and Clinical Medicine in 1887, and Professor of the Principles and Practice of Medicine and of Clinical Medicine in 1892. From 1886 to 1896 he served as Secretary of the Faculty, which entailed also the duties of Registrar and Admissions Officer; all correspondence was conducted laboriously in longhand.

In 1888 Billings became a member of the attending staff at Mercy Hospital. Practice grew and came to include an amazing clientele among the first families of the city. The physician who ministered to the Armours, Pullmans, Fields and other leading citizens soon had to restrict his practice to office, hospital and consultation work. He rapidly became the leading medical consultant throughout the West. It was the Billings influence on patients that led to the establishment of the McCormick Institute for Infectious Diseases, the Durand Hospital, the Otho S. A. Sprague Institute, and the University of Chicago School of Medicine. Associated with the latter came the Bobs Roberts Memorial Hospital for Children, the Max Epstein Dispensary, the Albert Merritt Billings Hospital, the Frank Billings Clinic, the Billings Library, and the Lasker and Douglas Smith Foundations for Research. And this is not a full list!

Toward the end of the old century, Dr. Billings acted as spokesman for a group of younger men on the Faculty in appealing to the then President of Northwestern University for financial aid to the Medical School. The appeal supported a request from the Medical Faculty that the balance ($26,000), still owed the University for funds advanced in constructing the Laboratory Building on Dearborn Street, be canceled in order that the Medical School might use its operating profits to improve the basic-science departments in keeping with the modern trend. As previously, the School was continuing to live on tuition fees alone, although the Faculty had been compelled to contribute generously from time to time for building projects. The President and Trustees gave no encouragement to this request, beyond suggesting that payments on the debt could be postponed for the present. In despair at the barren outlook, Billings resigned (1898).

The magnitude of this short-sighted, administrational blunder cannot be overestimated. Soon these policy-makers of the University had to learn that professional schools were not simple ornaments for which they assumed no responsibility, but that they must be subsidized if they were to continue to bring prestige to the Uni-
versity. But, in the meantime, Billings was gone beyond recall. Had he remained, one can only speculate on the different course that the history of the Medical School might have taken. The endowments, the hospitals and the institutes that the Billings influence brought to Rush and to the University of Chicago, and the more than a million dollars that he and the Billings family gave — might these have been directed toward his Alma Mater by a contented son? What might his strong leadership as Dean have accomplished in the young years of the twentieth century, in the light of the wonders that he wrought at another school?

In 1898 Rush Medical College became affiliated with the University of Chicago. Dr. Billings was invited to become Professor of Medicine, and accepted; two years later he was made Dean. For twenty years, until the time of World War I, he labored hard and long for the advancement of teaching and research at Rush and at Presbyterian Hospital. During this period these institutions prospered spectacularly. At the same time Billings held appointments at the University of Chicago, first as Professorial Lecturer (1901) and then as Professor of Medicine (1905). Although at the time of World War I he virtually laid aside for good his duties at the College and Hospital, he had already completed what turned out to be the most significant and productive years of his life. In 1920 he formally gave up work at Presbyterian Hospital and the deanship at Rush Medical College, while in 1924 he became Professor Emeritus at both Rush and the University of Chicago.

Meanwhile a campaign to build a hospital at the University of Chicago, and thereby to extend the preclinical years taken over from Rush in 1898, was spearheaded by Dr. Billings. The sum of $5,300,000 was raised, including $1,000,000 given by the Billings family. With the fruition of a full medical program at Chicago, it was advocated by him and others that Rush should transform into a center where graduate physicians would be trained for the specialties. But the Rush Faculty was unwilling to concur with this proposal; after litigation the affiliation was dissolved, and the College ceased to exist as such. This outcome was a matter of deep regret to Billings, and offset to a degree his pride and satisfaction in the success of the University of Chicago venture. It is only natural that he acquired a fabulous reputation as a successful beggar for his favorite enterprises. Rush Medical College, the University of
Chicago, and the Presbyterian, Billings and Provident Hospitals all benefited enormously from his magic ability to entice money from the rich.

During World War I, Dr. Billings was sent to Russia by President Wilson as chairman of a Red Cross Commission to survey needs, and to arrange for sending supplies of medicines and food. Thereafter he rose to the rank of Brigadier General in the Army, and was awarded the Distinguished Service Medal and the Order of Leopold of Belgium; somewhat later he was made an officer in the Legion of Honor of France.

In civic affairs Dr. Billings rendered notable service as chairman of the State Board of Charities from 1906 to 1912. He battled graft in all of the State hospitals and effected sweeping reorganizations, with the institution of a civil service system and the improvement of patient care. He overcame the opposition of entrenched politicians at Cook County Hospital and succeeded in placing appointments to the staff on a civil service basis. His success in providing a new hospital for Negroes and creating better conditions for the education of negro physicians and nurses was outstanding.

Dr. Billings was active in building various medical organizations, and assumed important roles in these and others, both local and national. He was President of the Chicago Medical Society (1890), American Medical Association (1902-04), Association of American Physicians (1906), Institute of Medicine (1922), Congress of Physicians and Surgeons (1924) and others. It has been said, and not challenged, that only one other person did more in developing the American Medical Association to the position it occupies today in medical affairs. His advocacy of higher standards in medical education, and his condemnation of false claims and misleading advertising of drugs and patent medicines were instrumental in fixing the aims of the Association and making it one of the most powerful organizations of its kind in the world. More directly these stands led to the creation of the important Councils on Medical Education and on Pharmacy and Chemistry.

Dr. Billings was an extremely busy practitioner of medicine, and the many other things that he did were, in a sense, secondary to his vocation. The secret of his varied and remarkable achievements was intensive and systematic hard work. Nevertheless, research did not become a part of his life for many years. Yet he consistently en-
encouraged young investigators, obtained large funds to support research and, in the end, even created a school whose aim was to produce investigators. Personal, active participation in research began after fifty, when he engaged in a prolonged study of focal infections and established a new point of view concerning the source of obscure ailments. As an author he published the Billings-Forscheimer System of Therapeutics. He received an honorary M.S. degree from Northwestern in 1890; an Sc.D. from Harvard (1915), the University of Wisconsin (1924), Northwestern (1926) and Chicago (1927); and an LL.D. from the University of Cincinnati (1924).

Physically Dr. Billings was a large-framed, muscular man. His head was notably large and topped with a heavy thatch of dark hair. A broad forehead surmounted widely spaced eyes and arching, heavy eyebrows. Prominent cheek bones, a broad mouth, mobile lips and a strong chin completed a commanding physiognomy.

Dr. Billings attacked all problems in a big way, cutting past trivialities to reach significant fundamentals. At times his conclusions appeared to be intuitive, but they were reached by a mind that saw things in correct perspective and proportions. He was a very human person, who was also a good companion—simple, genuine, affable, and with an infectious sense of humor. He radiated honesty, and his large body, strong face and self-confident manner invited, and gained, trust. Generous of his time and advice, he attracted and captured people. Yet he exhibited contradictions of character, was subject to strong likes and dislikes, and was at times liable to err; but he was always willing to admit his errors.

In May, 1887, within the year after returning from European study, Dr. Billings married Dane Ford Brawley, who died nine years later from nephritis contracted during pregnancy. This grievous loss was mitigated to a degree by the daughter, who became a source of happy companionship in the years that followed. On September 20, 1932, he died of an acute gastric hemorrhage. He was then past 78 years of age.

A disciple and associate, Dr. James B. Herrick, wrote:

He possessed a rare personality. . . . He was unaffected in dress, manner, and speech; was frank and outspoken. He had confidence in himself and in his cause. He was forceful, often aggressive. . . . He did
not cringe or fawn before wealth, title, or social position, nor did he shrink from poverty or ignorance. All patients were treated as human beings who were ill, and not alone as "cases." He was dynamic and grew. Because of this growth he sometimes, unconsciously, might today take a position opposed to that of a few years ago. He was kindly and sympathetic; helpfully generous of advice and of his means; optimistic; inspiring to all who came in contact with him. Many men owe their success to his example and encouragement. By contact with young men he kept youthful in spirit.

He had a genius for leadership. He was a shrewd reader of character and he knew how to handle men. His ability not alone to plan but to push plans through to materialization made him succeed where others failed. Had he chosen some other vocation than medicine he would have forged ahead, would have been president of a bank, a captain of industry, a leader at the bar, a statesman of national rank. He was always a leader; to follow was not in his make-up.

JOHN BENJAMIN MURPHY, A.M., M.S., M.D., LL.D.
Surgeon: 1857-1916

John Murphy, the son of Irish immigrants, was born in a log cabin on the outskirts of Appleton, Wisconsin, on December 21, 1857. He was the fifth in a succession of six children, only three of whom lived beyond their thirties. Elementary studies in the district school were followed by attendance in the high school at Appleton, four miles away, where he boarded during the school week. During the last year or two of schooling, John worked part time in the local drug store. Sometime during the high-school period he adopted the middle name of Benjamin, which seemed to add elegance to the plain "John Murphy" with which he had been christened. Before long, however, the given names were destined to be condensed to the initials "J. B.," and his signature would thereafter retain this abbreviated form.

With the high-school course finished in 1876, the youth took the state examination, qualified as a teacher and was assigned to the district school where he had sat as a pupil only four years previously. Here he taught two terms of the school year, and then decided that medicine was more inviting as a life work. So he began to
study with the doctor, beneath whose office he had worked previously as a druggist's assistant in Appleton. A year later the lanky, carrot-topped aspirant, still only nineteen years old, entered Rush Medical College. There he listened to the single set of medical lectures, heard them repeated the next year, and graduated with the class of 1879. Northwestern, which he had decided against, was requiring three graded years and longer annual sessions; the smaller cost is said to have been the decisive factor that led to the choosing of Rush.

John B. Murphy

The winning of first place in the competitive examination for Cook County Hospital opened the door to a year of clinical experience. Then a start was made in general practice on a partnership basis with Dr. Edward W. Lee who, as attending surgeon at the County Hospital, had sensed the intern's potentialities. Their office was at the corner of Halsted and Harrison Streets. After a year, this medical alliance was interrupted when Murphy, following Dr. Fenger's advice, spent eighteen months at postgraduate study in the
clinics of Vienna, Berlin and Heidelberg. Returning to his partnership in 1884, general practice was resumed, and it was not until the late Eighties that he felt his patronage to be such as to permit the establishing of an office by himself in the Loop, with a limitation of practice to surgery.

Academic rank began as a Lecturer in Surgery at Rush Medical College in 1884. An opportunity for advancement to a clinical professorship came from the College of Physicians and Surgeons in 1892, and was accepted. Christian Fenger resigned from the Northwestern Faculty in 1899 and Edmund Andrews retired in 1901. It has been said that Murphy hoped to become head of surgery at Northwestern when he first came there as Professor of Clinical Surgery in 1900. But the honor went to Weller Van Hook, and after five years Murphy accepted an invitation to return to Rush. His terms included the condition that he would become co-chairman of the department. This tenure, lasting only a few years, proved to be an unhappy experience, since he was not accepted fully by his colleagues, and his every move met with opposition. Soon dignified escape was afforded by the resignation of Dr. Van Hook, who had developed an absorbing interest in Theosophy. So Murphy returned gladly to Northwestern in 1908, this time as Professor of the Principles and Practice of Surgery and of Clinical Surgery, and also as Chairman of the Department of Surgery. In this post he remained until death, gaining his greatest national and international acclaim as a surgeon, as well as acquiring his fabulous reputation as a teacher.

For many years, beginning in 1895, Dr. Murphy was also Professor of Clinical Surgery at the Postgraduate Medical School. His first appointment at a private hospital (St. Joseph) came in 1892. Staff positions at this and other hospitals were abandoned or subordinated increasingly as his work concentrated at Mercy Hospital. Here he was chief of staff from 1895 until his death, and here he made his reputation as a world figure. For many years of his later life the names “Murphy” and “Mercy” were linked in the minds of surgeons.

On Dr. Fenger’s advice, Murphy made himself into a general surgeon with the total body as his field. Endowed by nature for the work, he rapidly became a versatile and accomplished operator, combining scientific acumen, sound judgment and humane sanity
with technical skill of the highest order. He attempted new operative techniques on human patients only when they had been tested thoroughly in the laboratory and animal operating room, and had been rehearsed fully in the deadhouse. On occasion he could be daring, as when he successfully removed an embolus from the common iliac artery and restored the circulation.

Along with this practice of his art went experimentation and contributions to the advance of the specialty. Almost from the start of his career there was always a laboratory at hand. The first two were adapted in the barns of his residences on the West and South Sides. The third was in a room adjoining the dissecting laboratory at Northwestern. The fourth and last was essentially an office-suite, completed only two years before his death. It was originally a two-story building that the Medical School had erected adjacent to Mercy Hospital for a dispensary (p. 410). Purchasing this for $20,000, he converted it into elaborate accommodations for the clinical activities of himself and associates.

Dr. Murphy possessed several qualities essential to a clinical investigator of the first rank: he was fertile in originating or adapting basic ideas, imaginative in their development, and tireless in working out procedures and then perfecting details. His 85 contributions to various fields of surgery were all significant, and several were so outstanding in their boldness, primacy and worth as to be reckoned among the classics of surgery. First of these was his performance of the initial operation in early acute appendicitis, his insistence on this as the proper procedure, and his making both the profession and the public so conscious of the danger in delay that the operation almost became minor surgery. Next was the metallic “Murphy button,” devised for anastomosing hollow viscera without sutures, which opened wide the field of intestinal surgery. A method of suturing blood vessels resulted in the first end-to-end union of a severed artery; the method was a brilliant piece of pioneer work. Then he advocated the use of nitrogen to collapse and splint the abscessed tuberculous lung, an epochal presentation far in advance of its tardy adoption by the profession. He introduced the drip method of rectal, saline infusion as a part of his important concept of the treatment of peritonitis; this technique perhaps added the greatest luster to his fame at home and abroad. There followed studies on the surgery of the spinal cord and peripheral nerves that
helped lay the foundations for later neurosurgical practice. His last achievements were in the field of bone, joint and tendon surgery, and these advances were the greatest yet known; spectacular was his success in replacing bone with cartilage grafts and creating new articulations.

Among other notable contributions must be mentioned the thirty bimonthly volumes of the *Surgical Clinics of John B. Murphy*, which were eagerly awaited and read by thousands of physicians throughout the world. For a time he edited the *International Clinics*. Later, his broad vision and active participation were instrumental in founding the American College of Surgeons. Throughout his remaining life he acted as chief of the editorial staff of its journal, *Surgery, Gynecology and Obstetrics*. After death his memory was honored by the College through the erection of a magnificent building, with an auditorium, the John B. Murphy Memorial.

The quality of teaching by Dr. Murphy was so outstanding that the brothers Mayo and others pronounced him the greatest teacher of surgery of his time, and Sir Berkeley Moynihan declared him the best clinical teacher of surgery since Paré. His listeners and readers ranged from nurses to professors of surgery; as Dr. G. W. Crile said: “He taught the world.”

The Murphy surgical clinics were staged as dramatic, and often feared, performances; yet the students learned and remembered. His tall, spare, gowned figure was commanding, but his shrill voice was a surprise and disappointment until it became forgotten in the unfolding presentation. A common method was to invite a student at random to come down into the pit and attempt the diagnosis, badgering him the while with questions, argument and a continuous “Why?” Impatient and intolerant of ignorance and stupidity, he would force the reasoning forward, eliminating the nonessentials and narrowing the evidence, until the suspense became very real throughout the amphitheater. At length the final key question would elude the climactic answer from the victim or a classmate, reduce the whole to an orderly story, and then the show was over—except for a quick summary, placing the whole in proper perspective, and the operation itself. The huge amphitheater at Mercy Hospital was a Mecca also for visiting physicians from the several States and from foreign countries. These especially were guests on
the days when students were not present. The daily average attendance numbered 150, and sometimes there was only standing room behind the 511 seats.

Despite his greatness in many particulars, Dr. Murphy had a singular ability to arouse envy, distrust and dislike. He was unpopular as a medical student, his monopolizing of class time by question and argument being interpreted as pure "show-off." Later, even colleagues in the same hospitals were not above spiteful whisperings. His scientific reports were alleged to suppress unfavorable cases. He was charged with being a social climber, a publicity seeker and a sensationalist. Certain it is that he had a talent for creating unfortunate publicity and headlines, and a positive genius for being misunderstood. Typical was his alleged "steal" of the wounded President Theodore Roosevelt presumably headed toward a hospital other than Mercy. On three occasions episodes such as this led to charges of unethical conduct being preferred against him before important medical societies.

To a degree some of the criticisms were valid, but in many instances the stories were distortions or fabrications. In truth, Murphy was a successful go-getter and a superior surgeon, who became the target of many small men and some great ones. That he was not liked by the doctors of his own city was made clear by their pettily denying him membership in the Chicago Medical Society until he was well along in his fifth decade of life and had already gained an international standing. Also, the exclusive American Surgical Association at first refused to elect him to membership after inviting him to come and address them, because some could not believe that his brilliant results, as reported to them, could be true! For his part, it was Murphy's studied policy not to fight back against gossip, denunciation or calumny. It is said that he spoke ill of no man, not even of his enemies. He was content, in terms of his favorite amphitheater phrase, to "let the record show."

Many honors were bestowed on Dr. Murphy. He was President of the Chicago Medical Society (1904), Chicago Surgical Society (1904), American Medical Association (1911) and the Clinical Congress of North America, held in London in 1914. He was made a life member of the Deutsche Gesellschaft für Chirurgie (1894), an honorary foreign member of the Société de Chirurgie de Paris (1894) and an honorary Fellow of the Royal College of Surgeons.
(1913). The University of Notre Dame awarded him the Laetare Medal (1902). The honorary degree of Master of Arts was conferred by St. Ignatius College (1901), the degree of Master of Science by the University of Sheffield (1908), the degree of Doctor of Laws by the University of Illinois (1905) and the Catholic University of America (1915). In 1916 he was created a Knight Commander of the Order of St. Gregory the Great. Other distinctions came to him both at home and abroad.

There were wide differences of opinion in evaluating Dr. Murphy in regard to his personal and professional honesty, his motives, and his methods of conducting a practice and exhibiting surgery before the public. But none could assail successfully his skills, attainments and influence. Murphy was the foremost surgeon and teacher of his time. With driving ambition matching ceaseless industry, he went from triumph to triumph, ever the optimist and enthusiast who made his dreams come true. From out his laboratory and clinic came more new ideas and practical methods than from any other, and his total contributions to basic surgical thought and practice are astonishing. It was Murphy, above all others, who placed American surgery on a high plane abroad.

An obvious shortcoming was that he used his surgical assistants as mere technical helpers, bordering on drudges. By this he failed to develop them into great surgeons in their own right, and to create a succession of leaders in schools and hospitals. When he died, no distinctive school of surgery survived him, as was true of Fenger and, to a lesser degree, of Kanavel. In balancing the personal qualities of Murphy, his biographer, Dr. Loyal Davis, wrote:

There was good and bad in this man—and in abundance on both sides—but there were other things, too. There was great brilliance and downright stupidity; there was charm and the power to irritate; ambition, with all of ambition's ugliness as well as its beauty. He was merciless and tender at the same time, strong and weak, blind and all-seeing.

Dr. Murphy was tall and slender, blue-eyed and red-haired. A short, blond-red beard was parted at the chin and brushed to each side. Surmounting this was a sweeping moustache to match. A high, shrill voice was out of keeping with his dignified and compelling
presence. He was a man of unusual charm — a towering personality who had great poise and assurance. He was capable of keen humor, although essentially a sensitive and reserved egoist. As a young, dashing physician he, by good chance as a substitute, attended the typhoid illness of Jeannette C. Plamondon, the daughter of a wealthy and socially prominent family. She was ten years his junior and as popular as she was beautiful, yet in November, 1885, they married. A considerable factor in the Murphy success-story must be attributed to the stimulation, sympathy and capable aid that he received from this ambitious, devoted and charming woman. There were five children; three daughters lived past childhood and survived him.

Because of family history, Dr. Murphy had feared tuberculosis since the time of a suspected, but unproved, right-kidney ailment in his Vienna days; a later pulmonary scare prolonged this specter. Anginal attacks, dating from 1905, and originally interpreted as neuritis in the left shoulder and arm, were followed by long remissions, but in the winter of 1916 they became severe and incapacitating. Suddenly, on August 11, 1916, came a final, fatal attack. On autopsy the right kidney was found to be tiny, necrotic and showing evidence of a chronic, persistent infection. It was concluded that had the infected kidney been removed within a decade or two of his Vienna episode, the arteritis would have been prevented.

In his presidential address to the American Medical Association, Dr. Murphy described the path of the successful man, and it was the road that he, himself, chose: "Competency is attained and maintained only by zeal, indefatigable labor, and continued efforts in self-education. The responsibilities of his profession rest on the individual man . . . If he carries the weight with an erect figure, abiding dignity and a strong heart, it rides like a bubble."

Obituaries and encomiums were written in many medical journals, here and abroad. The editor of the *Annals of Surgery* doubly honored Northwestern by concluding that ". . . his name must be written in the glorious history of American surgery with that of the immortal Nicholas Senn." A famous French clinician wrote: "Well may he be to us the ideal American surgeon, whom we may all emulate, but never hope to equal." Dr. W. J. Mayo said, in part:

Possessing a brilliant surgical imagination, he early deviated from
the beaten paths and invaded new territory, and yet with such acumen that nothing which he originated has failed to live. Like those of the great musicians, his productions are still masterpieces; they mark epochs in surgical progress.

The American surgical profession has lost its leading spirit. In Dr. Murphy's death at the age of fifty-eight, well may we regret the twelve unfilled years which go to make up the allotted span of man. And yet, when we review what he had done, we freely acknowledge that even in the time the light lasted, he accomplished more than any other surgeon of this time.

JAMES STEWART JEWELL, A.M., M.D.
Neurologist, 1837-1884

Two Scotch-Irish families, forebears of James Stewart Jewell, are first identified as living in Northwest Pennsylvania, from which they migrated first to Tennessee and then to Southern Illinois in the region still known as "Little Egypt." Here John Jewell and Margaret Stewart were married, and within a week began a long wagon-journey that ended not far from Galena, Illinois. There a log house and some shelters for animals were built. John was amiable, but somewhat of an alcoholic and not a good manager as the head of a household. Hence the enlarging family was doomed to live in poverty, although not in actual want. Margaret was a strong character — deeply religious, of indomitable spirit and fond of learning. There were a few books among the meager household possessions, including Fox's "Book of Martyrs", a "History of the Jews" and the Bible.

On September 8, 1837, James was born, the first of eight children. He grew into a frail child, who his mother soon came to realize was endowed with an exceptional mind. At two years James knew his letters and at four years he could read. When old enough to help in the field, his mother would read to him during rest periods. Formal schooling was slight and sporadic. At six years an ungraded school was started nearby, and there he found that he could hold his own in reading and spelling among pupils ranging from five to twenty years of age. Unfortunately the school expired after a few months of classes, and there was no further opportunity
for schooling during the next ten years. But prodigious reading was done as the meager home-library became augmented by works on world history, natural history, geology, anthropology and translations of classical poetry.

James S. Jewel

In 1851, increasing difficulty in supporting a family of ten forced the parents to return to southern Illinois and settle about twelve miles from the town of Marion in Williamson County. Two years later a school was established some miles away. Here James, now sixteen years old, attended classes for a while, working at a nearby farm to pay for the keep of himself and a sister who also was a pupil. Nevertheless, after one short session and another lasting five months he had to return home because his help was needed there. His secondary schooling, totaling less than eighteen months, was ended. He later maintained that this contact with formal education had little influence on his mental development and methods of study. Obviously this was true, since he was essentially self-taught.

In 1855, at the age of eighteen, James registered as a medical student under the preceptorship of Dr. S. M. Mitchell of Corinth, also in Williamson County. Three years later he came to Chicago to com-
complete his medical training. He had already gained a smattering of Latin, but still wrote and spelled indifferently. On the other hand, he had an excellent understanding of anthropology, botany, geology and zoology; he was a good biblical scholar and eventually became one of the best of his time. On his arrival at Chicago James straightway took ten dollars from his slender hoard and joined the Chicago Academy of Sciences which was strongly supported by such leading physicians on the Chicago Medical College faculty as Nathan Smith Davis, Edmund Andrews and Hosmer A. Johnson. Promptly, in October of that year, he read a well-remembered paper there on "The Caves of Southern Illinois." One year later Charles Darwin published the epochal "Origin of the Species," and this book led the highly religious young Jewell to become an ardent anti-evolutionist. In fact, he prepared a manuscript for a book to combat the theory; it was never published, but he ever regarded Darwin as an atheist.

Jewell attended Rush Medical College during the session of 1858-59, taking the complete course of ungraded lectures. His ungainly appearance gave no hint of his true worth. Yet quickly both faculty and students came to realize that "his unpromising exterior concealed a mind of rare brilliance and uncommon attainments." At that period he was better informed than any member of the faculty in certain realms of learning. This was also the time when the Medical Department of Lind University was getting organized by current and recent defectors from the Rush faculty. Doubtless admiration for members in the founding group, the appeal of a new type of school and possibly, the 'stealing' of the sole teaching hospital in the city by that school were all factors in causing Jewell to transfer his allegiance to the unique, pioneer undertaking. He entered as a senior student and graduated in the first class (1860) at the age of twenty-three. At that initial Annual Commencement he delivered the valedictory address as the representative of his classmates. Four years later he would become one of the incorporators of the renamed College.

For two years Dr. Jewell practiced his profession back in Williamson County, and in the early period of the Civil War he became a contract surgeon in General Sherman's command. Returning to Chicago, Dr. Jewell filled the Chair of Anatomy from 1863 to 1869 at the now renamed Chicago Medical College. He
taught anatomy from the comparative standpoint, and centered his expositions about the nervous system as an axis of reference. Next followed a protracted period of travel in Italy, Palestine and Egypt, aimed at extending his knowledge of ancient history; this included biblical history since, as an avocation, he had conducted the largest Bible class in Evanston. On his return he wrote three unpublished volumes of travel which, strangely enough, include only one reference to anything medical.

Coming again to Chicago, in the year of the Great Fire (1871), Dr. Jewell re-entered medical practice, restricting his efforts to neurology and psychiatry, and especially to the former. For a year he gave a course of lectures on general pathology, but in 1872 the Chicago Medical College created a new chair for him — that of Nervous and Mental Diseases. This was the first in America to be devoted solely to the study and teaching of these subjects. His appointment continued until 1884 when failing health compelled retirement. For years he had also served as a general utility teacher, filling in for any absence that occurred in any subject. Similar versatility was shared by Dr. N. S. Davis and is a pointed commentary on the simplicity of medical lore at that period. In his varied teaching efforts, Dr. Jewell was admired as one of the most brilliant and fascinating lecturers of his time. Many said he was the best teacher they ever had. Yet one visitor at a summer course found him too fond of detail, and later prolix throughout life.

In January, 1874, Dr. Jewell took the lead in founding and editing *The Journal of Nervous and Mental Disease*, the first of its kind in the New World. This move required courage since the disastrous financial panic of 1873 was still raging. Editorially he proclaimed that "everything of real interest, especially if new, that will throw light on the anatomy, physiology, pathology or therapeutics of the nervous system is to be included within the scope of our Journal." His editorship entailed an incredible amount of labor, and his editorial skills were both exemplary and successful. *The Journal* at once took rank with the foremost in any language, and Jewell’s name gained world recognition.

Contemporary clinicians did not regard Dr. Jewell highly as a general practitioner, believing that he lacked sound clinical sense; and there are some stories that seem to substantiate this judgment. Nevertheless, his examination of patients was meticulous and the
records of them outdid all others before his time; they were so volu-
minous that each made a small printed booklet. Many thousands of
these were intended to become the basis of a book on nervous and
mental diseases, but death came too soon. He once prepared a
manuscript for a large volume on the perceptions, but an associate
persuaded him not to publish it. Yet when only six years out of
medical school, he did publish a book entitled "Cerebrospinal
Meningitis."

Dr. Jewell had a breadth of vision, a depth of erudition and a
scope of activity that accorded him outstanding national stature.
He was involved in the foundation of the American Neurological
Association in 1875, and he served four years as its first President.
He was a Vice-President of the International Congress in that
specialty held in Washington, D.C. Probably Dr. Jewell’s knowl-
edge of the literature on the nervous system exceeded that of any
other in this country, at least. He was proud of his library, which
reached about 4,000 volumes and was the most extensive in the
West. It is now lodged in the John Crerar Library at Chicago. In
1869 Northwestern University awarded him the A.M. degree, said
to be the first granted by that institution. A colleague wrote: "As a
man of vast and varied learning, Dr. Jewell had few equals; his
reading was simply prodigious. The best thoughts of the best
thinkers were his daily food. He not only had marvelous powers of
acquirement, but he was a profound thinker as well."

Dr. Jewell was described as "tall and angular, with a large head
adorned with a shock of brindle hair; there were prominent gray
eyes, and spindling legs; a man of ungainly appearance but rare
brilliance." A kinder contemporary saw him as "tall and stately."
His habitual attire included a ‘claw-hammer’ long coat, patterned
after his teacher and later friend, Nathan Smith Davis. His hair was
worn long and cut square at the neck. He had strong religious con-
victions, yet was not austere; although full of fun he rarely laughed,
tending rather to chuckle. Opposite in this regard to the stern and
sedate Dr. Davis, he liked to tease him without mercy. Apparently
Jewell was the only one who dared to do this, and was the only one
whom Davis would tolerate doing it. Dr. Jewell was versed in Latin,
Greek and Hebrew. Additionally, he acquired a good reading abil-
ity in French, Italian and German.

The health of James S. Jewell declined perceptibly in 1880. In
1884 he resigned his professorship at the Medical College and retired to Florida where he studied the cerebral anatomy of birds. Struggling indominantly against ill health he returned to Chicago after two years and there founded the monthly *Neurological Review*, but this terminal attempt at editorship ceased after four issues had appeared. He died in his fiftieth year on April 18, 1887, of fibroid tuberculosis. With his passing went one of the most picturesque figures in the profession — a man who also left his mark on the rise and future history of American neurology. He was "a fascinating and complex personality, compounded of a Puritan hunger for righteousness, a passion for knowledge and a yearning for perfection and achievement."

Professor John H. Hollister, a founder of the Medical College, a teacher of Jewell as a medical student, and a later colleague and friend wrote:

His loyalty to the Christian faith was intense and outspoken. His views on the harmony of science and religion are the most able that have found expression anywhere. In all his personal relations in life he was the soul of honor — a trusted friend, intensely loyal to all that was good. In that broad sense, in which but few men are included, he was a perfect gentleman. He was clear in his convictions, bold and outspoken in their expression, and yet so noble and so true that we doubt that in his entire lifetime he had a single enemy.
OTHER NOTABLES

There are numerous deceased Faculty members, other than Founders, Deans and 'Giants', who also became notable in their fields of specialization and attained national and even international acclaim. A single representative for each category has been selected, following consultation with current Departmental Chairmen. The years of service, appended to each name, correspond to his span of appointment to professorial rank. Obviously there can be disagreement over the selections made for such a limited list, but amplification into a larger listing would only lead to further differences of opinion:

Anatomy (B. J. Anson, 1930-62)
Bacteriology (F. R. Zeit, 1901-13)
Biochemistry (J. H. Long, 1882-1918)
Dermatology (J. Zeisler, 1890-1917)
Gynecology (A. H. Curtis, 1917-47)
Materia Medica and Therapeutics (W. E. Quine, 1871-83)
Medical Jurisprudence (A. Church, 1893-1913)
Medicine (N. C. Gilbert, 1925-48)
Neurology (L. J. Pollock, 1922-51)
Nutrition and Metabolism (T. D. Spies, 1947-60)
Obstetrics (W. W. Jaggard, 1884-96)
Ophthalmology (H. S. Gradle, 1894-1907)
Orthopedic Surgery (E. W. Ryerson, 1927-35)
Otolaryngology (J. G. Wilson, 1908-45)
Pathology (J. P. Simonds, 1913-46)
Pediatrics (J. Brennermann, 1918-21)
Pharmacology (H. M. McGuigan, 1910-17)
Physical Diagnosis (C. L. Mix, 1904-17)
Physical Medicine (J. S. Coulter, 1932-49)
Physiology (W. S. Hall, 1895-1919)
Psychiatry (H. T. Patrick, 1898-1919)
Public Hygiene (W. A. Evans, 1908-28)
Radiology (J. T. Case, 1915-47)
Surgery (A. B. Kanavel, 1917-38)
Urology (V. J. O'Conor, 1942-61)

Lightly lie the turf, ye gods, and void of weight on our grandsires' shades, and round their urn may the fragrant crocus bloom and eternal spring, who maintained that a teacher should have the place and honor of a revered parent.

JUVENAL