The next period in the life of Northwestern University Medical School extended from its complete absorption into the University, in 1906, to the final days on the Dearborn-Street college site, 1926. It was a time of continuing adjustments to rapidly changing standards. Any previous hesitancy in plunging boldly into the progressive action that the changing times required was soon abandoned, and the School did all that it could to maintain a position in the first rank of medical colleges. Its successful adjustment in the preclinical years was praiseworthy, whereas the reorganization of the clinical years encountered unexpected difficulties even after the means for providing free beds was in hand (p. 294 ff).

Just previous to this period the University had lost, by resignation, Edmund J. James, its dynamic but discouraged seventh President, and obtained in Thomas F. Holgate, Dean of the College of Liberal Arts, its sixth Acting President. Whether conservative by nature or not, an interim executive is not likely to conduct more than a holding operation because of the presumptive shortness of his tenure, and the implied lack of full confidence in him on the part of the Trustees. Within the current period of discussion the University was to have three Presidents and two terms of interregnum. From the beginning of University organization into the early Twenties, when President Scott began to serve, there had been chosen nine Presidents and seven Acting Presidents. The average length of these sixteen terms was slightly more than four years, and extended comment on the medley of unfinished policies enveloped in that statistic is needless. In contrast to this succession of Presidents, none of whom had a tenure long enough to finish his task, may be cited Yale University — three of whose Presidents had successive
terms aggregating 76 years; or Harvard University — two of whose Presidents had successive terms totaling 64 years.

President James, in a brief period of leadership, had used his mastery of public relations to bring the University forth “from the quiet shades of its oak grove . . . and set it beside the great and recognized institutions in the country.” Abram W. Harris was chosen to maintain and improve this position. Between 1907 and 1916 he succeeded in adding Schools of Commerce and Engineering, and installed the latter in Swift Hall, erected for its use; the Graduate School likewise emerged as a separate entity. He also built eleven units of open dormitories and fraternity houses, in quadrangles. Harris Hall, and the original Patten Gymnasium, which also was convertible into a spacious auditorium, were other conspicuous monuments to his leadership. Then, once more, Dean Holgate was to bridge competently a break in the presidential succession, and this time to bear the additional burden of the War years. After the ephemeral term (1919-20) of President Harold L. Hough, the University chose its first alumnus and non-Methodist as a leader. But the relatively long and highly spectacular regime of Walter Dill Scott belongs more to the next period than to this one. Establishment of Schools of Journalism (1921) and Education (1926) rounded out the University diversification. Momentous was the acquiring of a campus for unifying the city professional schools and the raising of sufficient funds to house them on it; these events merit treatment in a separate chapter (pp. 206-222).

CONSTRUCTIVE SELF-CRITICISM

The younger Dean Davis, and Dean Edwards who succeeded him, were not complacent over the standing or progress of the Medical School in the first decade of the new century. As early as 1903, Davis began urging the need of additional land and a modern clinical building designed better to accommodate the dispensary and its greatly increased clientele. Davis Hall, in which the Junior and Senior students received instruction, had become so overcrowded that it was difficult even to keep it in a sanitary condition. But, more important still, it was no longer well adapted to care for the various kinds of services that advancing medical science was mak-
ing necessary. The Dean estimated that a suitable building and its land would cost between $150,000 and $250,000. Far-sighted President James was convinced of the soundness of this appeal, and advised his Trustees that the rest of the Dearborn-State block should be purchased at the earliest opportunity. In addition to this provision for ultimate expansion, he supported the recommendation for the immediate erection of an adequate clinical building.

As it happened, land values on the State-Street half of the block suddenly soared beyond reach, so that a different plan had to be adopted. The remaining land in the half block along the east side of Dearborn Street was purchased, as was most of the facing land on the west side of the street (the Postgraduate School and Hospital owned the northernmost lots). These acquisitions provided insurance against future building demands, but the currently needed clinical building never came to pass. The probable reason is that with the complete absorption of the Medical School in 1906, and the assumption of full responsibility for it, the University soon found itself sufficiently involved in meeting deficits; these accompanied the development of the laboratory departments, and the decreased patronage following required college preparation for entrance. No longer could the University advance money for building projects, secure in its faith that the Medical School would repay, with interest, out of operational profits!

In a more comprehensive way, Dean Davis pointed out that the Medical School had enjoyed the reputation of inaugurating reforms in medical education, and keeping abreast of the highest requirements and the best methods of teaching. If this position among medical schools were to be maintained, the following changes and improvements must be made as soon as possible: first, the advancement of entrance requirements; second, the procuration of endowment sufficient to provide $40,000 annually; and third, the improvement of housing for the dispensary. President James was not slow to espouse a move toward higher standards. Perhaps unwittingly he hammered home the same point that Acting President Marcy had emphasized in 1876, but in different language: "An increasing attendance is not necessarily an indication of rising standards or improved quality of work, oftentimes quite the contrary — and therefore we may not flatter ourselves that simply because the attendance has been increasing, the University as a whole is rising in public esteem or in actual excellence." This was a timely warning to
a School that had not recently kept pace with stricter entrance requirements and other innovations, but had seen its enrollment more than double in fifteen years.

Dean Davis withdrew from leadership and was replaced by Arthur R. Edwards, an 1891 graduate, who was then Professor of Medicine. Dean Edwards assumed office in 1907 and, like a relay runner, took over the baton of pressing needs. He reviewed proudly how for many years the graduates of the School had stood in the first rank in the percentage of those passing the examinations of State Boards. For example, in the preceding four years only Cornell, Harvard and Johns Hopkins had done better. This record was indicative of the thorough training given in those disciplines that prepare practical physicians and surgeons. But, he declared, it was now necessary for the School to enter a higher and even broader field — that of medical research. Such activity, nevertheless, must await adequate financial support. The great and immediate need was for endowments. The laboratory departments should carry on investigations for the better understanding and cure of disease; there was an equally imperative need for money to care for charity patients used in teaching.

It is interesting that the Dean did not include, among desirable objectives, investigation to advance fundamental knowledge that might not yield an immediate application to clinical use. And it is still more interesting that he omitted the desirability of research in the clinical departments. But he was addressing the President and Trustees, and perhaps tempered his language to what he thought would impress them best; later he did speak of endowment to support clinical investigations. In 1910 Dean Edwards was again emphasizing that endowment was imperative and inevitable if the School were to continue in the first rank; some of the best investigators had been lost through offers of better salary and advantages elsewhere. The total annual budget, he wrote, must be at least $150,000 (in that year it was $81,000); in short, "the time has now come when less than these resources means less than first grade work."

Some of these immediate objectives of the two Deans were realized within a reasonable time. Others remained unfulfilled throughout the twenty-year period under discussion. On the one hand, admission requirements were raised; the laboratories became adequately staffed; research by the preclinical faculty was moderately
supported; the University learned to absorb operating deficits contracted by their newly owned school, and these seemed destined never to cease; land was tardily provided for future expansion. On the other hand, endowments remained wholly inadequate; clinicians neither became salaried, nor had adequate research space or support for such; dispensary inadequacies intensified; hospital facilities did not keep pace with the times, even though bedside instruction had been generously paid for (but withheld) in one hospital. The large benefactions bestowed in the middle Twenties came too late to affect the record of unspectacular performance in these regards during the current period.

EDUCATIONAL ADVANCES

In the 150 years between 1765 and the middle of the current period, 335 medical colleges had arisen in the United States, as well as 118 other institutions of dubious legitimacy. The period presently under consideration started with 161 medical colleges in the United States, and ended with 79; in that span, enrollments shrank from 24,300 to 18,800. Nationally, the middle part (1910-20) of this period was characterized by a more inclusive association of medical schools with universities, and the general establishment of medical education, with definite educational standards, as one of the university disciplines. About half of the schools in 1906 had a term 31 to 36 weeks long, whereas in 1926 almost all gave a 33- to 36-week session. Advances in the standards pertaining to requirements and the quality of teaching were responsible for these changes. For example, those institutions demanding some college work for entrance increased from three per cent of all medical schools in 1906 to 88 per cent in 1916; ten years later, all of the better schools required two or more years of college preparation.

Even early in the present period, the medical course throughout the country was generally graded and four years in length; scholastic progress had been quickest and best in the realm of laboratory teaching. On the other hand, a certain amount of ungraded teaching persisted in the southern and western states, where the length of the college term might still not be more than six months. Although conditions in many medical colleges deserved the
humiliating exposures that investigations were about to reveal (p. 286), the nation was beginning to exemplify a third stage in the evolution of world-wide medical teaching. The first stage had been the era of dogma, headed by Hippocrates and Galen. The second was the era of empiricism, in which the principles of explanation were preconceived or preternatural, and the student’s concurrence was won by insistence rather than proof. The third stage, now entered upon, was the scientific era in which medicine became recognized as a part of biological and physical science, and was tested by the critical handling of evidence. Scientific experience was already setting boundaries between certainties and risks in medicine. In obtaining this newer and more rational training, the student not only looked, listened and memorized; he also did things himself and learned from personal experience.

In 1908 the Medical School advanced its admission requirements to one year of college preparation, which should include work in biology, chemistry and physics. This placed Northwestern in the company of about two dozen medical colleges that demanded from one to four years of liberal preparation. The adoption of this standard followed the recommendation of a committee of the Council on Medical Education (of the American Medical Association), of which John H. Long, Professor of Chemistry at the Medical School, was chairman. Three years later, in 1911, a further advance was made when two years of college preparation were required by Northwestern, and organic chemistry became an additional prerequisite; at this time 28 schools were enforcing this standard of preliminary training and seven required three years.

Although not a leader in these moves, Northwestern was still well in advance of the pace-setting Illinois State Board and the American Medical Association. This latter organization, proceeding cautiously, set one year as minimal standard for entrance in 1914, and did not extend the requirement to two years until 1918. The immediate effect of preliminary college residence on enrollment at Northwestern was drastic; it declined from 599 in 1908 to a low of 187 in 1913-14, before the upswing began. This natural shrinkage had been predicted and feared by a reactionary faculty group that for some years worked to block the adoption of college work for entry. They, nevertheless, failed to appreciate that there would be a real recovery, and must have been chagrined at its speed.
The chief change in the graduation requirements during this twenty-year period was the addition of a compulsory year of hospital internship. Midway of the period, when Northwestern adopted this fifth year, only seventy per cent of the nation’s graduates were taking internships voluntarily. The move toward this requirement had been initiated by the University of Minnesota to affect its 1915 graduates. Northwestern was the fifth school to adopt the same measure; it became mandatory on those finishing the regular course in 1919. The innovation never became popular nationally, and only fifteen schools ever conformed. An integral part of the five-year plan was the deferment of the doctoral degree until the satisfactory completion of the internship, but dissenters argued that there was little justification for a degree-requirement carried out in an institution not under university control. A prompt consequence of the measure was that students found themselves unqualified to take licensure examinations in some states that required interns to hold a medical degree. To circumvent this handicap the School began, in 1929, to grant the degree of Bachelor of Medicine at the end of the regular, four-year course. Curiously, Northwestern, although one of the first to adopt the intern year as a requisite to the degree of Doctor of Medicine, was one of the last schools to abandon it (1951).

In the earlier years the withheld degree did force into internships a few who would not have obtained this training voluntarily, and still others into better (approved) internships. It also exerted some threat-value in encouraging good deportment and hospital performance, and this continued control, though remote, was an argument advanced for its retention. Among the interns the withheld degree was never popular, although it actually made little difference to them, since they were all called “doctor” anyway. An alternative to the hospital year was a year of research, spent in one of the preclinical laboratories of the Medical School. This choice was elected by only a few individuals who were headed toward teaching or research. More logical than the requirement of an internship by medical colleges was the same demand exacted from those applying to states for a license to practice. Yet this standard, begun by Pennsylvania in 1914, was adopted slowly by other states and is still not required by three.

In the twenty years between 1906 and 1926 the curriculum underwent considerable change. By 1910 some 250 hours had been elimi-
nated from the Sophomore studies, and the schedule for each class then adhered closely to the 1000-hour program advocated by the American Medical Association as a standard curriculum. The span of years saw important changes in the presentation of the basic sciences. Gross anatomy was consolidated into the first year. Several phases of chemistry disappeared from the first year, namely: general (inorganic) chemistry, organic chemistry and qualitative analysis — all being made prerequisites. Also the Department no longer taught elementary electricity, since a knowledge of general physics had become an entrance requirement. Physiological chemistry moved from the second year into the first; blood analysis and colorimetry were introduced into the second year, and Seniors received instruction in the applications of physiological chemistry. Physiology, previously divided between the first two years, became solely a Sophomore subject. Pharmacology assumed additional stature by taking over the physiological action of drugs, previously a part of the course in physiology. Bacteriology split away from Pathology to become a separate department in 1912; it dropped the teaching of hygiene and added instruction in immunology. Pathology, formerly spread through the second and third years, became consolidated in the second year (except for its clinical techniques). In addition, certain intermediary courses were introduced into the second year to provide practice in the application of the methods of the basic sciences to clinical problems; such exercises dealt with renal, metabolic, digestive and cardio-vascular diseases.

Between 1906 and 1926 instruction in the upper two years of the medical course underwent changes in which the student did more things himself, and came into closer contact with patients. The arrangements, nevertheless, were but partial improvements when compared with the offerings of the most advanced schools. The Junior year, which had gained additional time through the abdication of special pathology, shifted from long hours in the dispensary to overly concentrated didactic instruction. Innovations in the Senior year were introduced through instruction in roentgenology (1913) and oral surgery (1917).

All hospital offerings were hampered by the limitations imposed through a lack of controlled beds. Dean Edwards emphasized that clinical instruction should follow the laboratory method, in which instance the patient represents the laboratory. But only in the De-
partment of Medicine had teaching to groups of five or six students been possible, as yet, for lack of funds. The Senior work, after some previous (and even pre-War) experimentation with clerkships, was divided at the very end of the current period into three phases: first, hospital clerkships; second, dispensary clerkships; and third, hospital clinics and ward walks. The last-named service included a final patronage of the old-time, dramatic amphitheater clinic; its actors, scenery and spotlights were about to take a last bow. The early College had been truly progressive in being the first to require bedside instruction, co-ordinated with the didactic lectures. By contrast, the later School was laggard in adopting a clerkship program that had been transplanted from England so successfully, long before, by Dr. Osler at the Johns Hopkins Hospital.

In the previous chapter it was explained how a combination of college and medical work could lead to baccalaureate and doctoral degrees in seven years, or even six (p. 167). Those who chose to take the first year of medical studies on the Evanston campus were not then registered as medical students, and they found themselves lacking in gross anatomy, which had to be made up later by work at the Dental School. In 1910-11 an instructor was sent by the Medical School to teach human anatomy on the Evanston Campus to those who had completed two years of college preparation. This arrangement permitted students to register in Evanston for the entire first year in medicine, and it was the hope of the University administration that the remaining year of the complete preclinical course would follow. The number of students thus accommodated was very small, and the arrangement was not profitable. For example, in 1915-16 the tuition-receipts from the three students in gross anatomy were $315, as against a salary of $1,100 paid the part-time instructor. After that year the program was abandoned.

The degree of Bachelor of Science in Medicine was adopted in 1911. It provided a baccalaureate degree for students from other institutions who entered the Medical School without having completed the requirements for such a degree. If the premedical preparation were the equivalent of that leading to the six-year combined course at Northwestern, a student could become a candidate for this new degree at the completion of his medical course. Adoption had been urged by the Medical School, partly for self-protection, since six nearby state universities had already taken this step. Also the University of Chicago was allegedly attracting students by
offering such a package deal. A similar plan, leading to the regular B.S. degree, had been vehemently opposed and blocked by the “Old Guard” of Liberal Arts professors when President James presented and approved this recommendation from the Medical School and Law School in 1904.

The proposal of 1911, merely modifying the name of the degree to Bachelor of Science in Medicine, received the approval of the University Council, but went to the Trustees along with a strong dissent from the College of Liberal Arts. The final passage of this measure had importance far beyond its immediate application. A recent revision of the University Statutes had invested the University Council (the forerunner of the present University Senate) with increasing functions in order to make it an adviser to the Trustees on educational matters affecting any School. Among new, specific charges was the supervision of programs leading to degrees. The issue, therefore, became a heated and trying test of the new powers of the Council. The outcome settled once and for all that the concerted will of the College of Liberal Arts, historically dominant, was not necessarily to remain supreme in the evolution of a broader University governance and spirit.

Graduate work in the Medical School made a significant, but modest, start during the 1906-26 period. In the first ten years an average of four persons were registered each year; in the last ten years, seven. In 1922 the first degree of Doctor of Philosophy was awarded, and to a woman, Margaret Wilson, in the Department of Anatomy. It was also the first in any professional school of the University.

It was recommended to the University Trustees in 1905 that the training schools for nurses of Mercy Hospital and Wesley Hospital be affiliated with the University, and diplomas were first presented to graduates of these Schools at the Annual Commencement of 1906. The details of contracts were completed the following year when the Northwestern University School for Nurses (later the Program of Nursing Education) was established to sponsor training in all affiliated hospitals. Matters concerning admission, curriculum, methods of instruction, personnel and graduation were to be determined by a joint committee drawn from the Medical School and hospital. This was a novel step, looked upon with some disdain in the College of Liberal Arts, but Dean Holgate, then Acting President, approved it and his influence prevented open hostility. He
pointed out that: “The instruction is given in a thoroughly scientific manner by members of the faculty. The preliminary education required is the full equivalent of that [now] demanded for admission to the Medical School, and the examinations passed in course are as severe tests of scholarship.” His final statement could not have withstood impartial investigation. The establishment of such a School was without precedent in the country; it was, perhaps, the last “first” of major importance to be scored by the Medical School in its initial century of existence.

Laboratory class in physiology; about 1900.

ADMINISTRATION AND ORGANIZATION

The organization of the Medical School stood in need of concentration and systematization. Acting President Holgate called attention to the conditions prevailing in 1907; faculty relations were controlled by the Dean; student relations by a Junior Dean; finances by one of the professors; admission, scholarly requirements and records by the Secretary; certain matters by the Clerk; and still other matters by the Secretary to the President. He warned that it was too much to require or expect the maintenance of success from a Dean
so long as there existed such a large division of authority and function. Some of these obvious faults were perhaps inherent in a system where the chief executive was a practicing physician, who was also trying to run a school and teach classes. Yet a thorough delegation of authority was destined to come about later (p. 241) when administration became really complex.

The twenty-year span of 1906-26 saw four Deans and two Acting Deans in charge of the Medical School. After a term of six years, N. S. Davis, Jr., was replaced as Dean by Arthur N. Edwards under conditions that are not now fully interpretable but may have been a well-intended attempt to correct the diffusion of authority just reviewed. At a meeting of the Executive Committee of the University Trustees in July 1907, President Harris recommended that Dr. Davis "be made Director of the Medical School, or President of the Advisory Council, using the title which he may prefer, with duties in general the same as those now exercised by him as Dean, to be decided later by the President after conference with Dr. Davis and others . . . [and] that Dr. Arthur Edwards be appointed Dean and to be the General Executive." It would seem that the Advisory Council of the Medical School and the Trustees in general (of which group Dr. Davis was an ex officio member) were not consulted concerning this action which was "to go into effect very soon and without much discussion." A strong letter of protest against what was considered summary use of the powers which the Chicago Medical College had recently and hesitantly surrendered to the University, but had not thought would actually be exercised, was sent to the Secretary of the University Trustees and to certain other Trustees by the eminent Professor W. E. Casselberry. He had received information concerning the action when it was still unknown even to all Trustees. His indignant remonstrance was to no avail; the recommendation of the President was supported by his Trustees.

It is known that Dean Davis was a proponent of higher standards for the Medical School; that a strong wing of the Faculty was opposed to this; that Dr. Edwards was a more forceful person; and that the first college requirement for entrance went into effect the year after his assumption of office. One might suspect that the President wanted a more vigorous executive, and went about to get him by 'kicking upstairs' the then incumbent. On the contrary, after a conference with President Harris, Dr. Casselberry accepted the
view that:

... the avowed intention and desire of President Harris for Dr. Davis to remain in the faculty in a position of actual supremacy, under a newly created title, should be literally fulfilled and, in connection therewith, that Dr. Davis should be placed on the Executive Committee of the Board of Trustees of the University, the latter being regarded as essential to sustain his supremacy under the changed conditions and enable him, as formerly, to guide the policy and conduct the affairs-in-chief of the Medical School.

The new arrangement was not acceptable to Dr. Davis, and he at once withdrew from all active relations with the School, although he never resigned as Dean. His name was still carried as a Trustee of the University until 1914, and on the Faculty roster as Professor of Medicine until his death in 1920. There was no official reaction of the Advisory Council of the Medical School to this episode. The Minutes remain silent, as they do relative to a contest for control of the School during the ensuing Edwards regime. The latter years of his encumbrancy comprise the only internally stormy ones in the long history of the institution.

Dean Edwards (1907-16) served in a period made difficult by reduced income because of raised standards. It was also made dangerous by a clique of ambitious clinicians trying to usurp power, and made frustrating by the intransigence of the Superintendent of Wesley Memorial Hospital, who blocked all efforts to use a fund given specifically for clinical teaching (p. 294 ff.). Dean Edwards gave the School a new impetus, although decisions that he was forced to make were not always popular, and estranged some friends and previous admirers. When it became known that Mr. James Deering advocated that only a full-time Dean should simultaneously to run the Medical School and induce the Wesley Trustees to put the Deering endowment (p. 202) to its intended use, Edwards resigned gracefully and probably with genuine relief, since administrative duties had exacted a high toll from his clinical and scientific life. After continuing one year at his original post as Professor of Medicine, Dr. Edwards resigned. Efforts to obtain a reconsideration failed, and he was lost from the life of the School.

Dr. Arthur I. Kendall, Professor of Bacteriology, was chosen as Acting Dean in the autumn of 1916, and at the end of that aca-
Academic year was appointed Dean. He was the first leader who was neither a founder of the School nor an alumnus. Of much more importance, he was the first administrator who could devote all of his attention to School affairs. During his regime the departmental structure was reorganized to secure more effective administration and teaching, the curriculum was revised, clerkships were introduced, a difficult war period was surmounted, qualified applications for entrance began to outrun facilities and, at long last, a hope of eventual compromise-settlement with Wesley Memorial Hospital was raised. With such accomplishments already gained, and a new campus and medical building just assured, Dr. Kendall chose to accept a post at Washington University that offered an enticing prospect of considerable freedom for research. This decision, influenced by the knowledge that there was a plot to unseat him, left the Medical School leaderless at a critical moment in its history.

The University then decided to go the whole way and bring in a Dean who should devote his entire time to administrative affairs alone. While these arrangements were being made, Dr. James P. Simonds, Professor of Pathology, was appointed Acting Dean and served for the year 1924-25. Meanwhile, Dr. Irving S. Cutter, Dean at the University of Nebraska for the previous ten years, was appointed to the new post and took over the office in the summer of 1925. His productive administration (1925-41) belongs to the next period in the history of the School, rather than to this one.

On the final absorption of the Medical School into the University in 1906, its administrative powers were largely assigned to a body first called the Advisory Council, but renamed in 1909 as the Medical Council. It replaced the former Executive Committee of the semi-independent Medical College. As the School increased in complexity, this representative body naturally grew in size. Starting with nine members, besides the Dean and Secretary of the Faculty, it came to include the President (and latterly the Dean of Faculties). At present it consists of about forty members. The original Council was elected by the Medical Faculty, but within a few years its membership became appointive.

The Medical Council is the main executive arm of the Medical School, with power to administer its internal affairs and to formulate policy. Its recommendations on appointments and other matters of importance are channeled through the President to the Board of Trustees for approval, modification, or rejection. Matters
involving other schools have to be routed through the University Senate, whose recommendations, in turn, pass to the President and the Board of Trustees. The general Faculty is left with but few prerogatives (stipulated below) and, except for sporadic attempts to activate it, the necessary meetings became routine and poorly attended. The current University Statutes define these matters explicitly in the following language:

In the School of Medicine the functions of the Faculty, except for the fixing of the requirements for admission and for degrees, and the recommendations of candidates for degrees [which are reserved to the full Faculty], shall be vested in an administrative board to be known as the Medical Council. This Medical Council shall consist of the President of the University, the Vice-President and Dean of Faculties, the Dean of the School of Medicine, the Secretary of the Medical Faculty, and such other members as may be appointed annually by the Board of Trustees or its Executive Committee on the nomination of the President of the University, with the knowledge of and after consultation with the Vice-President and Dean of Faculties, and upon the recommendation of the Dean of the School of Medicine.

The original organization of the Medical College was by “chairs,” personified by the professor who was the sole expositor of that branch of medical lore. For 36 years the student had no occasion to think of departments or subjects as such; he was intent on “taking and passing Professor X.” Not until the Annual Announcement of 1896-97 were the various disciplines listed as ‘Departments’ and was the nature of each component course described. The first official organization of the School into Departments was (apparently) proposed by Dean N. S. Davis, Jr., in 1907, and the recommendation of his Advisory Council was adopted by the Trustees. For the present there were to be nine Departments, as follows: Anatomy; Chemistry; Pathology; Physiology; Pharmacology and Therapeutics; Medicine; Surgery; Obstetrics and Gynecology. Included as a subdivision of Pathology was Bacteriology; Medicine had eight subdepartments, and Surgery two.

Also in 1907 the titles and ranks of the teachers were first regularized in the following descending categories: Professor; Clinical Professor or Associate Professor (equal in rank); Assistant Professor; Associate; Instructor; Demonstrator; Assistant. This listing
remains in use, except that the posts of Clinical Professor (p. 250), Demonstrator and Assistant have disappeared. From early years, as now, the title of Lecturer had come to designate one whose relation to the School is incidental or tenuous. A similar series of ranks was adopted by the Trustees, for the University as a whole, in 1909. The grade of Associate is seemingly peculiar to this School. It was introduced, and has continued in use, to designate individuals who deserve recognition beyond that of Instructor, but do not yet qualify for an assistant professorship.

With the passing years it became apparent that this departmental organization, with simultaneous clinical programs in several hospitals, failed to prevent overlapping of effort in different departments, repetitions within the same department, and the omission of significant areas, including borderline fields. Hence, at the meeting of the Medical Council when Professor Kendall was made Acting Dean (1916), President Holgate suggested that the School could be reorganized to advantage on a simple and lasting basis. Promptly Dean Kendall presented a plan that employed a new category, called a Division. For purposes of major administration there were six Laboratory Divisions and five Clinical Divisions. For instructional purposes some of the Divisions were departmentalized. It was believed that a divisional organization, with responsible chairmen, would remedy the existing defects in overall administration and curricular design, without relieving the subordinate departmental heads of responsibility in enforcing the effective teaching of a standardized curriculum, or of equal responsibility in minor administrative matters. This plan continued until 1942, when a return to the departmental type of organization was made. It was then decided that it was advantageous to spread responsibility directly among the specialties, and to recognize and reward professional merit in those diverse fields by conferring additional titles of chairmanship.

The first half of the current period found the School headed by a clinician who was not in residence and had neither office nor desk. Hence the general management of the School came to be assigned to the Registrar, Charles W. Patterson, who, as the practical executive officer, acquired a breadth of duty and delegated authority that seems incredible today. His ordinary line of duty encompassed the customary range relating to an admissions officer and registrar. But, in addition, he served as superintendent of buildings and
grounds, overseer of the School Bank and Clinics, administrator of the budget (including the authorization of all purchasing and paying), dean of students, contact man for faculty and alumni, and liaison officer between the School and the University Administration at Evanston. A veritable academic factotum!

Dissection group; 1890. In white apron, the future Professor Menge.

MISCELLANY

Several heterogeneous items of significance fall within the two decades under consideration. For example, the dispensary services underwent various expansions. In 1903 a diet kitchen was installed; it was the pioneer to be so directly connected with a medical school in Chicago. Beginning under the supervision of one graduate nurse, it served to supplement the theoretical aspects of the dietetics of infant feeding by practical applications. The excellent results obtained made a profound impression on the student participants. The institution of a Social Service in 1920, delayed of necessity during World War I, was a significant forward step in promoting efficiency among the services rendered by the Dispensary. It increased the
value of the work to the patient and student alike, and augmented the dispensary attendance in all its branches. X-ray equipment was first obtained in 1917, a prenatal clinic was authorized in 1921, and a course for laboratory technologists was begun in 1922.

Other events, at least indirectly related to the present period, are of interest. A first attempt by Dr. Joseph B. DeLee to launch a prenatal registry at the Dispensary, through which women were to book for home delivery, failed. The patients about the clinic apparently would not believe that worthwhile obstetrical care could be obtained without a fee. The Medical School deserves only indirect credit, through the renewed efforts of Dr. DeLee, for the establishment of the first care for expectant mothers among the poor of Chicago. Situated in the Maxwell-Street district, his Chicago Lying-In Dispensary conducted 204 deliveries even in the first year (1895) of the experiment. At first Northwestern students were summoned for all of the births, which Dr. DeLee conducted in person. Within a year they were required to participate actively on a two-week service; this arrangement continued for 75 years. It then became optional, and finally ended when the service was absorbed into the Prentice Memorial Hospital. Another first in Chicago was the Fresh-Air Sanitarium, established by the School and some of its graduates in 1909. Not directly a School product, but a project conceived and organized by a group of the Faculty and alumni, was the American College of Surgeons (1913).

Early in the period under review the Medical School was subjected to two inspections, first by the American Medical Association and soon after by the Carnegie Foundation for the Advancement of Learning. The School fared well in the first set of findings and gathered only mild criticism in the second report. Details of these results and the import of such inspections nationally are recounted in Chapter XI.

The cramped Office of the School, about which Acting President Holgate had previously commented disparagingly, was moved in 1917 from Davis Hall into larger rooms in the Laboratory Buildings. At this time the closing down of the School of Pharmacy, and the combining of Physiology and Pharmacology into a single division, permitted a corresponding invasion of the medical-dispensary service into part of the first floor of the Laboratory Building. An additional dispensary had been built in 1908 on Calumet Avenue,
adjacent to Mercy Hospital (p. 410). This well-equipped unit served the School until 1914. It may have been a compromise to the insistence of Dean N. S. Davis, Jr., that either a large clinical building be erected near the Medical School, or that Davis Hall be torn down and a many-storied clinical building replace it.

The first manifestation of a sense of obligation toward providing vacations for employees of the Medical School came in 1907, when the Advisory Council voted:

... that the office force, fireman and engineer be given two weeks vacation with full pay each year, and that the Druggist and Head Nurse be given two weeks vacation each year with full pay, but with the provision that they must find and pay for their own substitutes.

Apparently janitors and other helpers were not deemed worthy of consideration. The handling of the druggist and head nurse followed the original University pattern for leaves of absence by professors in the College of Liberal Arts (p. 250), but in this instance was niggardly. By custom, the Medical Faculty took one month of vacation annually; this was in contrast to a full summer for teachers on the Evanston campus.

Medical graduates were unhappy over a decision reached in 1910 concerning diplomas. Hitherto it had been customary to have diplomas signed by the whole roster of professors. The new ruling of the University Council limited signatures to the officers of the University and Medical School. Even a year later, the second Senior Class to be affected by this ruling petitioned unavailingly "that the signatures of all members of the Faculty might appear upon their diplomas." Previously, in 1908, President Harris had advised that recipients of the medical degree should no longer have any degrees, previously earned, appended to their names on the diplomas.

The Chicago Medical College early designed its official seal, and imprints were affixed to diplomas. This device was ring-shaped, with a vacant center. It bore the name of the College, in English at the top, and showed five stars at the bottom where the date of founding customarily appears. After the first affiliation of the College with Northwestern University, in 1870, diplomas were issued under a joint sponsorship: "Chicago Medical College, the Medical Department of Northwestern University," and seals of
both institutions were affixed. Subsequent to the firmer union of the two institutions in 1891 diplomas were issued under the name of Northwestern University alone, and only the Northwestern seal was used. This action anticipated the complete absorption of the College in 1906, and the new diploma title became permanent. Strangely enough, the old College seal, although an anachronism, remained in use for many years; a correct seal for the Medical School was not acquired until 1924. It is used to authenticate transcripts and other official documents.

Seal of the Medical School, replacing that of the Chicago Medical College.

Both students and faculty of the Medical School became deeply involved for a period during World War I. These disruptions included the organization of Hospital Unit No. 12 and its service in France, and the virtual take-over of the School by the Medical Department of the U.S. Army in 1918. An account of these activities is given in Chapter XI.

During Dean Kendall's term of office a proposal of union came from the Hahnemann Medical College, located not far distant, which would also make available its Hospital. For many years these old institutions received strong support from influential Chicagoans, and they still had some stalwart backers, among whom was
Victor Lawson, editor and publisher of the *Chicago Daily News* and chairman of the Hahnemann Board. It was he who initiated the negotiations, but on terms that were unrealistic in view of the declining vogue of that medical cult, and the obvious desire and need of the institution to seek cover if it were to enjoy even token survival. The proposal was unacceptable to Northwestern, and a little later (1922) the College, only one year younger than Northwestern University Medical School, closed its doors.

Founders’ Day, which has become an important feature of the academic year, was started as an improvisation. Dean Kendall invited three of the older alumni to address the 1922 reunion of the Alumni Association briefly on biographical topics. Emeritus Professor George W. Webster appeared with a bulky manuscript whose reading would have consumed much of the time allotted to the entire program. Rising to the emergency, the Dean convinced the essayist that his contribution was too important for the occasion. He then announced to the assembly that a new feature was to be introduced to start each ensuing academic year. This was to take the form of a special convocation, known as Founders’ Day, and the first address would be delivered by Dr. Webster. In this unplanned manner a traditional landmark was inaugurated, although it was not dignified by mention in the Dean’s annual report.

A perennial criticism of educational systems is the loss they entail and the lack of good relations they forego through not utilizing the broad experience of their faculty members when retired from active service. The Medical Council sought to meet this problem in 1922 by creating a small board of Medical Counselors, selected from the retired professors and elder alumni. It was planned that these should be called together twice a year, at least, to discuss matters of general policy, and that each should deliver one lecture to the Senior class annually. Three members were selected from the emeritus rank and three (subsequently five) from the alumni. It is not clear how successful this experiment proved to be, although there were attempts to utilize the Counselors; they were invited to attend Council meetings and were ranked as a special committee of that body. None was replaced as the list became depleted through deaths, and in the early Forties there were no survivors. Not until 1974 did a better organized and more vigorous board of this sort come into being (p. 242).
Money matters are apt to be prosaic, but they do reveal much about educational institutions. At the time (1909) of its first major inspection the income of Northwestern University Medical School was $89,000. This put the School in the same rank with Rush and Toronto; the showing was much better than that of Western Reserve ($63,000), Washington University, Yale, Syracuse, and Vanderbilt ($25,000); it was slightly inferior to Johns Hopkins ($103,000), Tulane and Jefferson; yet it was wholly outclassed by Harvard ($251,000), Columbia and Cornell. Like four out of five schools at this time, Northwestern was essentially dependent on fees alone. In the past there had been no difficulties on this score. For example, residual debts amounting to $108,000 had been paid off in the years 1906-10, just before the increased entrance requirements began to take damaging effect on enrollments. Thereafter, conditions changed; annual deficits became routine, and the return of larger classes did not compensate for the increased costs of running a School that tried to keep pace with the times.

The expenditures for 1913-14, when the enrollment was lowest, was $96,000; of this amount, earned income accounted for $73,500. This budget was twenty per cent short of the $120,000 recommended in the recent Carnegie Report. Yet the showing for the pre-clinical division was commendable because the difference lay in the lack of paid clinicians and in the teaching beds made available without cost by the hospitals. About ninety per cent of the budget went for laboratory teachers and courses, research, administration and upkeep. The remaining ten per cent supported the dispensary.

The earlier prediction of President James that the University would have to become reconciled to meeting deficits was fulfilled. Earnings in 1906, when the University absorbed fully the Medical School, were $83,000, overtopping expenditures by $13,400. Three years later the operational profit was three times this amount. By contrast, the income in 1926 reached $179,600, but this amount had to be supplemented by $68,700 from general University funds in order to meet expenditures. Acting-President Holgate, in anticipating these contributions from general funds, was willing to justify such expenditures not because of any excellence on the part of the School in preparing young men to earn a useful living, but solely to the degree that a public service would be rendered in adding to the universal store of knowledge and in maintaining scholarly stand-
ards. He refused to concede that supplying practitioners, competent to alleviate human suffering and improve national health, was in itself worthy of support from University funds.

The total cost of operating the Medical School in 1926 was $248,300. This was the year in which the move was made to the new Campus, and the annual expenditure was 3.6 times that of twenty years before at the beginning of the current period. Yet the 1926 cost can be put in perspective with present day spending by stating that in 1974 our telephone bill alone was twenty per cent higher!

A restricted benefaction came fairly early in the present period, and it was most opportune at a time when income was becoming halved. In 1910 Mr. James A. Patten gave $250,000 for the endowment of a laboratory of experimental research, with the request that the immediate object of study be tuberculosis. This laboratory was established, under the direction of Dr. A. I. Kendall, in 1912. The improvements made in the several other laboratory departments, in the years directly following the gift, could not have been effected without the liberality of the donor in permitting the application of its income to purposes somewhat divergent from his original intent. More lavish was a gift of $1,000,000 in 1914 by Mr. James Deer-ing, intended to convert Wesley Hospital into an effective teaching arm of the Medical School. How this gift passed into the control of the Hospital, and how the plain conditions of the benefaction were disregarded for decades, is told in Chapter XI.

Another, and much greater, gift to support instruction and research came near the close of the present period. The Medical School’s share of this endowment, made jointly to the medical and dental divisions by Mrs. Montgomery Ward, amounted to $3,200,000. It was to play a large part in the expansion of activities on the new campus now readying for occupancy. Promise of support for the library was given in 1924 by Dr. Archibald Church, Professor of Nervous and Mental Diseases, and Mrs. Church, who made an initial deposit of $100,000, subject to annuity restrictions. Some other substantial gifts had raised the total endowment earmarked for the Medical School to $4,700,000 in 1926, as compared with $62,300 twenty years earlier at the beginning of this period. Donations related to the new campus and its medical building will be described in more detail in Chapter IX.
The simplicity of operation still present in the 1906-26 period is reflected in a Minute of the University Trustees in October, 1913. The School of Pharmacy and its Registrar were then transferred to the Medical School buildings with the hope that the joint office, with a common Registrar, could be conducted "with a force consisting of a cashier (who keeps the accounts, conducts the student bank, attends to correspondence relating to bills and other financial matters, answers the telephone, etc.) and a stenographer (who takes dictation for general correspondence, keeps the scholarship records and has charge of the library). [On the contrary,] this office force is found to be insufficient, especially for the personal correspondence with prospective students." Hence permission was granted to hire another "stenographer from October 1 to June 30, at a salary not exceeding $60 per month." The manifold duties of the Registrar at an earlier period and in this one have already been enumerated (pp. 99, 195). Until about 1910, at least, it was customary for Dr. J. H. Long, Professor of Chemistry since 1881, to go about the various departments turning off gas cocks and disconnecting electric connections before he left for his summer vacation — so personal was his feeling of responsibility, as the senior professor, for the building that he had helped design.

END OF AN ERA

The middle Twenties, when the current period came to an end, also marks a transition from a phase of clinical medicine that had already based itself firmly on scientific principles into an era that would advance with giant strides. Trained investigators were coming into maturity who would revolutionize treatment with newly discovered means such as vitamins, hormones, extractives and antibiotics. Already the control of killing diseases such as diabetes and pernicious anemia was at hand. The importance of vitamins, viruses and allergies was becoming understood, while discoveries on Rickettsia organisms were introducing a new insight into the causative factors of disease. Knowledge of blood groups had enlightened the technique of transfusion. Reliable tests for diphtheria and scarlet fever were being used. Cures or methods for preventing various diseases and epidemics were available. The possibilities for the future
were, indeed, inviting and seemingly limitless.

Clinical pedagogy was advancing rapidly into the field of individual student-participation and, correspondingly, the operative clinic and mass instruction were disappearing, if not gone already. Everywhere a greatly increased interest in medicine had developed through observing the importance of its science and art, as exercised in both civil and military life. One result of this awakening was being expressed in a surplus of applicants for matriculation, so that the quality of the student-body began to improve, and there was less wastage by the weeding out of incompetents.

For the Chicago-located professional schools there was about to develop something of a university-sense that had been lacking previously because of their manner of origin, and their physical isolation. Each arose as an independent entity and, even after its affiliation or absorption into the University, the tradition of independence delayed the growth of a true university consciousness and sense of unity. Hence it was formerly customary for the professional schools to speak of the "University at Evanston" when referring to the College of Liberal Arts, and for many years to consider the University Trustees as belonging largely to the College of Liberal Arts alone. Northwestern, although chartered as a university, remained for some years simply a college of arts — and for a far longer time the College was supreme in the University. For this reason it is perhaps natural that this hard institutional core shared and fostered the feeling of its primacy and superiority. So it was that both its prestige and influence were jealously guarded.

But with the Medical School at last absorbed fully, like Law, Dentistry and Pharmacy before it, and with other Schools arising, President Harris sought to bring about a change in attitudes. He came early to regard, as one of the prime objectives of his administration, the promotion of a feeling of unity throughout the University and the binding of the individual schools into a composite "whose units would consider themselves peers in privilege, in loyalty and in duty." To a limited extent he may have been successful, but geographical separation of the professional Schools from Evanston was an obstacle, and the completely isolated location of the Medical School for more than half a century did not help matters. The sense of "apartness" was to be remedied, to a considerable degree, only later. This was when those Schools, needing a
city environment, consolidated on a campus that had initial dignity — and gradually developed atmosphere and charm.