



Dr. W. W. Pearson,
Dean, 1909-1913.



Dr. D. S. Fairchild,
Dean, 1903-1909.



Dr. F. J. Smith,
Junior Dean, 1904-1907
Dean of Men, 1907-'13

History of Drake University College of Medicine

FERDINAND J. SMITH, B.S., M.D.

Milford, Iowa

Drake University College of Medicine was organized in 1881. Drake University had been recently established and in its endeavor to assume the character of a university it began at once to organize professional departments, which would enable it better to sustain the dignity of such an institution. The University traced its origin to a Bible College founded at Oskaloosa, Iowa, in 1856 by the Disciples of Christ, and the feeling of its essentially religious character still lingered and influenced the forming of the medical school in a somewhat amusing manner, for we read that: "The scholarly men who made up the official body of the University created a medical department by bringing together a group of eclectic medical men. The board of trustees labored under the belief that eclecticism in medicine was based upon a broader conception of medicine than any other system and consequently better suited for an institution founded by a devoutly religious body of men!"¹

The organization of a medical college was a comparatively simple matter in those days. To begin with, it was not such a costly enterprise as it would be now. The physical needs were met with a few class rooms, an anatomic laboratory, enough equipment to teach the student how to examine urine for specific gravity, acidity or alkalinity, albumin and sugar, which was the ex-

¹ Author's Note: The writer extends to Dr. Jeannette Dean-Throckmorton his appreciation of and thankfulness for her assistance in making accessible sources of information in the State Medical Library and elsewhere.



tent of laboratory teaching in chemistry. Other laboratories did not exist, and how could or why should they? The students were not prepared for advanced laboratory work. Most of them had never gone beyond the public school grades, and a few had a smattering of high school studies, and but rarely was there one who was fortunate enough to have a college education. Remembering, too, that the medical college was in session only about twelve or fourteen weeks each year for two years, one sees that even if it had been possible to have laboratories, there would have been no time to devote to such instruction.

Most of the teaching was didactic, the teachers delivered lectures each day, and after the first day spent ten to fifteen minutes at the beginning of each period in "quizzing," covering the topics under consideration the preceding day. The basic sciences taught included anatomy, physiology, chemistry, materia medica and therapeutics. The remaining subjects were theory and practice of medicine, of surgery, of obstetrics and diseases of women, of diseases of the eye, ear, nose and throat, of mental ailments, of medical jurisprudence and toxicology. Such pathology as was taught was given in connection with the lectures on the principles of the practical branches, and each teacher taught the pathology of the diseases upon which he was lecturing. The only laboratory in operation was that of anatomy.

During the years from 1884 to 1887, inclusive, when the writer was attending a medical college, the anatomic laboratory was intended to give a good course in dissection, but this course was sometimes very meager, owing to the difficulty of obtaining material. Bodies of negroes from the south were brought to the northern medical schools, and "body snatching" was much in vogue, even as late as 1887. The writer has in his pos-

session a letter dated November 2, 1887, of which the following is a quotation:

"Dear Doctor:

"I got a letter from Pete (Pete was the demonstrator of anatomy) and he is in the market for fall chickens. \$40.00 each, not bad! Only wish I had some to sell. *Did* you ever hunt chickens? If so what would be the matter in driving down some night after I have discovered a *covy* and let us try to get a couple. Forty dollars, you know, is not bad, when one has good luck and gets *plenty*. There is an excellent field here as no one disturbs it.

"Say, write to me soon and let me know what you think of my scheme. In hopes to hear from you soon I am as ever

"Your friend, Dr. _____."

Eventually, laws were passed which made available to medical colleges the bodies of all persons who died in poor houses, insane asylums or penitentiaries, unless their relatives or friends would assume the burial charges.

In forming any judgment on the adequacy of medical teaching at a certain time, it is necessary to take into consideration the status of medical science at the same period. In other words, one must ask not only, "What was taught?" but also, "What was there to teach?" It was not until the early eighties of the nineteenth century that Koch was engaged in his epoch-making discoveries in bacteriology, opening up ever increasing vistas in that field. Pasteur and Lister, the former in France, the latter in England, were also at work along this line; but even after Lister published his investigations and gave an insight into the brilliant results he was achieving in overcoming blood poisoning, infections and inflammations, it is truly amazing how much opposition developed amongst some of the best surgeons and obstetricians, men

of ability and intelligence. I have in mind one such surgeon, who was bitterly opposed to Lister's methods and prided himself on being an aseptic surgeon. This same surgeon had one operating gown, which he wore at all operations. When the day's work was done, this gown was hung up behind the operating room door, unsterilized, unwashed, until the next day, and thus it went from day to day and for months without cleansing. The wonder of it all was that in spite of his "technic" he did achieve very good results for those days and was one of the best surgeons in the country.

In considering the brevity of the course and the other deficiencies of the medical schools of those times, it must also be remembered that the medical school made no claim to fit students for the practice of medicine. It was necessary for those who aspired to the degree of doctor of medicine to enter the office of a reputable physician, who became his "preceptor" and directed his studies. As soon as he could do so advantageously, the student was taken along on the doctor's rounds, where he watched the doctor examine his patients, listened to the advice he gave them and saw what he did for them to restore their health. As he progressed, he was permitted to help his preceptor carry out office treatment, to give an anesthetic during an operation, and in many other ways to acquire practical experience. This took the place of the hospital clinics, for hospitals were not found except in the very large cities.

It is a remarkable fact that beginning in the year 1879 there was in operation at the Iowa State College, at Ames, Iowa, a college of veterinary medicine with stiffer entrance requirements and a longer and fuller course of instruction than any college of human medicine in the country. The applicant for admission had to be a high school graduate or pass an examination in subjects usually taught in high schools, and

the course for the degree of bachelor of veterinary medicine was two years of nine months each, and for the degree of doctor of veterinary medicine four years of nine months each. This school afforded the student didactic and laboratory courses in the fundamental sciences (chemistry, bacteriology, pathology, anatomy, histology, physiology and embryology) in addition to the practical branches. Dr. Stalker, a veterinarian, was head of the school and taught all the practical branches, while Dr. D. S. Fairchild, who later became dean of the Drake College of Medicine, was professor of comparative anatomy, pathology, materia medica and therapeutics, and at times of physiology, receiving for all of this the munificent salary of \$1,000 a year. This school is still functioning and is considered one of the best, if not the best, of the veterinary colleges in this country today.²

It was at about the time the Drake College of Medicine was first organized that there began a movement in the profession to exercise some control over medical education through the regulations of the various states. The first step was to set up certain standards for medical colleges which must be met before a school was "recognized" by the State Medical Board and permitted to graduate students eligible to practice medicine legally in the state. By 1887 further progress in medical regulation had been achieved, and it was necessary for the graduate to register with the State Board in order to practice legally.³

On the organization of the college of medicine of Drake University, Dr. E. H. Carter was appointed dean and also professor of theory and practice of medicine. He was succeeded in 1885 by Dr. I. W. Martin, who served until 1887. Other members of the faculty were Drs. J. G. Hall, science and art of surgery; E. M. Harris, diseases of the nose and throat; N. L. Van Sandt, gynecology; B. I. Gadd, materia medica and

therapeutics; J. S. Lee, chemistry and toxicology; H. O. Conway, anatomy, descriptive and surgical.⁴

After a number of years the meeting of the faculty became discordant, and the character of some of the meetings was so abhorrent to the University trustees that the school was discontinued as a part of Drake University.⁵ However, it seems that the faculty continued to function as a college for a while longer; for there is a notice in the *Vis Medicatrix* as follows:—"Iowa Eclectic College of Des Moines versus the Iowa State Board of Health and Medical Examiners has been decided in the district court in favor of the board. The 'college,' however, has appealed to the supreme court on the grounds that the Board has exceeded its powers, and that the law is unconstitutional. In the meantime their diplomas will still fail of recognition by the Board, so that the extent of their 'pernicious activity' seems likely to be small until the appeal is acted upon."⁶ Diligent search fails to reveal what, if any, court action was taken in this case, nor can the exact date of the demise of the institution be ascertained.

In 1874, or about that time, Dr. A. G. Field began to talk in favor of founding a medical school in Des Moines, and he finally succeeded in interesting Drs. Kennedy and Blanchard. Conferences were held with increasing frequency and Drs. Fairchild and Priestley and others were also consulted and promised their support.⁷ One of the arguments advanced in behalf of this move was that Des Moines, being the State Capital, was sure to grow and out-distance all of the other cities of the state, and that, because the city was centrally located with reference to the state as a whole and the surrounding country, was well developed and settled, and would eventually become much more densely populated, they could envisage the building of hospitals in the city and the

possibility of developing a large and fine ambulant clinic. The greater size of the city would provide a much better opportunity for the selection of a group of able teachers to constitute a faculty for the college. An organization was not effected until April, 1882.⁸ The medical college was begun on a private and independent basis. The first dean of the school was Dr. John A. Blanchard, who was also head of the department of theory and practice of medicine. The following gentlemen were members of the first faculty: Drs. A. C. Simonton, principles and practice of surgery; J. F. Kennedy, obstetrics and diseases of children, and secretary of the faculty; H. A. Ward, gynecology; W. W. Hale, L.L.B., materia medica and therapeutics; F. E. Cruttenden, diseases of the throat and nasal passages; C. M. Colvin, adjunct in gynecology and demonstrator in anatomy; D. S. Fairchild, physiology and pathology; E. H. Hazen, eye and ear; Professors C. C. Nourse, medical jurisprudence; and T. E. Pope (professor of chemistry at the Iowa State College), chemistry. The newly organized faculty circularized the profession as follows:

"In issuing this circular announcing the organization of the College of Physicians and Surgeons of Iowa, at Des Moines, the incorporators desire to assure the profession that it is organized in the interest of a higher standard of medical education and that it will be the aim of the faculty to merit the confidence of the physicians of this and other states.

"Our requirements for graduation will be kept up to the standard of the best medical schools of the country. Three full years of study under the direction of a regular physician, including not less than two full lecture terms; or a graded lecture course of three years, will be required in all cases. Also a good preliminary education in the higher English branches will be demanded.

"The facilities for clinical instruction will be equal to those of any school, except such as are located in our largest cities, and will increase with the growth of the city.

"The college year will begin on the second Tuesday of October, 1882, and will include twenty weeks of instruction.

TERMS

Matriculation fee (paid but once).....	\$ 5.00
Tickets for all lectures (twenty weeks)...	40.00
Demonstrator's ticket	5.00
Fee for final examination.....	25.00

"Material for dissection was furnished at cost, and a hospital ticket was gratuitous."

The opening of the college was marked by an able address delivered by Dr. D. S. Fairchild in the main lecture room on the upper floor of a building adjoining the old Register printing office on Court Avenue. The college enrolled eight students in its first year, and of this number three were graduated. The standards of the school were no different from those of the great majority of American medical schools. This was due in part to a keen desire to obtain students; schools which increased the standards above the general run or which lengthened their courses were avoided by prospective students. Northwestern College of Medicine and Rush Medical College, both in Chicago, and the College of Medicine of the University of Michigan were at that time the largest and most influential of the western schools. Their annual course of lectures, starting early in December, continued for sixteen weeks. Many of the larger cities had more than one college, and there were homeopathic and eclectic medical schools also. A few exclusively women's medical colleges were located in the east. At one time or another there existed in the state of Iowa nine medical schools, two of which were in Keokuk,

two in Iowa City, three in Des Moines, and one in Sioux City, and it seems to the writer that the other one was in Council Bluffs. Of these colleges, two were eclectic and one was homeopathic.

Hospitals were still very few and were located almost exclusively in the largest cities. Most of these hospitals were not available for clinical instruction to the students. The people generally were prejudiced against hospitals and would not consent to go into them until the danger to life was very great. The delay resulted in a higher mortality rate than was necessary and confirmed the people's belief that entrance into a hospital meant almost certain death.

Physicians who engaged in teaching in the medical colleges were divisible into two groups; those of the smaller group looked upon it as an ethical way of advertising their skill and ability, while those of the larger group valued the stimulus to increase their own knowledge afforded them by the contact with eager young students and the continuous challenge of the healthily critical mind of youth.

I have before me a report of the third annual commencement exercises of the Iowa College of Physicians and Surgeons. They were conducted in the English Lutheran Church, March 5, 1885, and Dr. J. A. Blanchard, dean of the faculty, delivered a short address to the students and graduates. He reviewed the history of medical education, its progress and literature, and called attention to the great advancement being made in all departments in recent years, especially in our country. He noted that "there are now sixty-two recognized regular medical colleges which are in good standing, besides numerous irregular and sub-standard schools styling themselves medical colleges."⁹ In his final charge to the graduating class he urged: "You should engage in constant

study of the science and practice of the art of medicine, which is the only way in which to become what society has a right to expect of you, that you be intelligent and successful practitioners. Our profession is a jealous one, requiring one's whole time, and will not bear mixing or diluting with any other calling or business."⁹ Dr. D. W. Crouse, of Waterloo, Iowa, delivered a splendid commencement address, after which the faculty, graduates and their friends were hospitably entertained at the home of Dr. James T. Priestley.

At the beginning of the school year 1886-1887 the Iowa College of Physicians and Surgeons became affiliated with Drake University; but this affiliation was at first merely nominal. Had it not been for the energy and persistence of Dr. Lewis Schooler, who had in the meantime succeeded Dr. Blanchard as dean of the medical college, the school could not have survived. The college was now able to pay rentals and other expenses from the student fees. It was in good standing with the Iowa State Board and the other State Boards, and also with all of the recognized colleges. The faculty members rendered their services gratis, not one of them received anything for his work. At this time the following men constituted the teaching staff of the college: Drs. J. F. Kennedy, A.M., emeritus professor of obstetrics; D. S. Fairchild, medicine and pathology; A. C. Simon-ton, principles and practice of surgery; H. Landis Getz, obstetrics; Lewis Schooler, dean of the college, anatomy; W. W. Hale, *materia medica*; H. B. Page, physiology and hygiene; Robert Stephenson, gynecology; E. Lawrence, chemistry and toxicology; E. H. Hazen, eye and ear; F. E. Cruttenden, nose and throat and clinical ophthalmology; Robert McNutt, psychologic medicine; Hon. J. Mitchell, medical jurisprudence; E. C. Cherrie, demonstrator of anatomy; Woods Hutch-

inson, hygiene; A. J. Crawford, orthopaedics; and W. H. S. Mathews, dissecting.¹⁰

According to the catalogue, the students were to receive full didactic and laboratory courses in the practical and basic sciences, and they were permitted to take, without extra charge, the courses in botany and pharmacy, offered by the pharmacy department.

In the *Iowa State Medical Record*, Vol. I, page 9, is to be found an address delivered by Dr. C. J. Williamson to the graduating class of 1888, a portion of which follows:

"I need hardly say that the diploma placed in your hands represents no *ism*, *pathy* nor *sect* in medicine. I refer to this because some who know better, and others who do not, will characterize you as 'allopathic' doctors, implying by the term allopathic that you are adherents of a long obso-



Fig. 1. Early quarters of the Drake University College of Medicine.

lete dogma or speculation concerning the essence of disease, and the manner in which medicine acts in eliminating it from the system. The sixteenth century was a time of great intellectual activity, and philosophers of that period essayed the solu-

tion of the most intricate problems of nature, including those of diseases and their treatment, by means of the logical faculty. It had been handed down to them from the great lights in medicine, as a doctrine not to be questioned, that diseases were so many distinct entities to be expelled, and which must be expelled by medicines whose properties were in some way intimately related to the entities to be expelled, and that such relation must of necessity be one of *similarity, contrariety* or *in-difference*. No other relation or mode of action, it was said, was conceivable; hence the terms homeopathy, antipathy and allopathy came into use as descriptive of the modes in which remedies were supposed to act in the cure of disease. Men distinguished for learning and brilliancy of intellect were arrayed in defense of one or another of these propositions, and sought to demonstrate its truth, not by clinical observation, or experiment, but by logical processes. Here then are the origin and significance of the terms which came to designate these sects in medicine. Now, if there is today, anywhere a believer in antipathy or allopathy, I am safe in saying nobody knows it. All controversy on these subjects ceased long ago. Homeopathy, too, died the same natural death at the same time, but was revived by Hahnemann some two hundred years later, and made to serve in connection with his fancyism or 'infinitesimalism' and 'spiritualizing' of medicine, and it is now under condemnation of the 'second death.' If therefore any of you expect to be 'allopathic' doctors my advice is return the diploma to the college. It is sufficient that you are known as a physician, or if a distinguishing adjective must be used, let it be the word 'regular' which contains no theory or dogma on the nature of disease, or method of cure."

Four years later we find the following news item concerning the school in *Vis Medicatrix*,

published by Dr. Woods Hutchinson: "The most satisfactory year of the Iowa College of Physicians and Surgeons of Des Moines, was brought to a close by the commencement exercises, held April 7. The doctorate address by Professor Hazen, on the 'Etiquette of the Profession' was clearly professional, and abounded in wholesome advice to the class. Degrees were conferred by Chancellor Carpenter of Drake University, upon a class of nine, two of whom being ladies. Mr. J. H. Stalford was the valedictorian of the class,



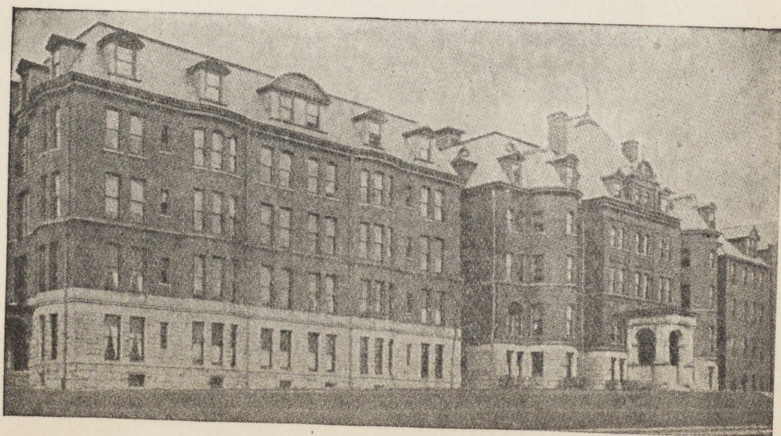
Fig. 2. The original Senior Medical Building.

and in choice language gave an earnest and able tribute to the science of medicine. After the exercises the faculty, alumni, students and graduates repaired to the Kirkwood, where a bountiful repast awaited them."¹¹

The 1892 catalogue announced that a "dispensary service has been instituted by the college, and is being well patronized. It is under the control of a competent staff composed of faculty members and it affords an abundance of clinical instruction in the various departments, to which students have access all of the time. Arrangements have been

perfected with the management of the Cottage Hospital so that a large amount of bedside instruction will be available in the next college session."

The school year 1894-1895 began September 18, 1894, and closed March 14, 1895. It is noteworthy that for the first time mention was made of laboratory courses in bacteriology, histology and pathology: "Each student will be required to become familiar with the manipulation of the microscope and accessories, to imbed, cut, stain, mount and examine the various tissues and organs of the body and thus acquire practical knowledge of its microscopical structure. Requirement for graduation, three years in school and four years' study including preceptorship."¹² The same catalogue contains the announcement: "The Cottage Hospital has been greatly enlarged and improved during the last year. It is now the largest and most complete hospital in the state, and affords an abundance of clinical material of all kinds. A large amphitheater has been built for the benefit of the class, where all are comfortably seated."



Mercy Hospital, Des Moines

In the fourteenth annual announcement (1895-1896) of the college is a picture of the new building, which housed the departments of medicine and law, and a half-tone engraving of Mercy Hospital, just completed. It speaks of the assistance which this hospital will be to the school in affording clinical material for the instruction of students, and states that the hospital is provided with an amphitheater for convenience in teaching and a laboratory where chemical and microscopical investigations can be made at once when necessary. It describes the new hospital as well lighted, well ventilated, heated by steam, and thoroughly equipped with all modern hospital facilities.

Candidates for admission to the college were required to be graduates of a recognized high school or to pass an examination showing an equivalent education. They must have attended three lecture courses of six months each, not more than one in any one calendar year. Four years of study were required, the time not spent at school being spent with a preceptor.

In the fifteenth annual announcement (1896-1897) is found for the first time a schedule showing the number of hours devoted to each branch of the basic sciences, in the lecture room and in the laboratory. There were laboratory courses in anatomy, chemistry, a short laboratory course in pathology, and laboratory demonstrations by the department of physiology. A course in histologic laboratory work was also given. The last two years were devoted entirely to the practical branches, partly didactic and partly clinical lectures, and demonstrations in the hospital.

A ruling of the Iowa State Board of Medical Examiners made the above requirements the irreducible minimum to be offered by medical colleges after July, 1898. To graduate, the student must have completed four yearly courses of medi-

cal lectures. An exception was made in the case of students having completed three full courses at the end of the school year 1898.

Clinics in surgery were held at the hospital on Wednesday afternoons, in gynecology on Thursday afternoons, and in eye, ear, nose and throat and in general medicine on Friday afternoons.

Beginning with the year 1901-1902, the length of the medical college year was advanced to twenty-six weeks each year. The school prospectus stated that the first term would open on September 18, and the graduating exercises be held on April 27. On June 13 freshman and sophomore examinations closed. It no longer mentioned the necessity of the students having a preceptor. The laboratory work required of students during the freshman year was as follows: chemistry, 120 hours; histology, 60 hours; dissecting, 36 hours (latter part of term); in the sophomore year: chemistry and urine analysis, 60 hours; general pathology, 60 hours; dissecting, 36 hours (latter part of term).

In the year 1902-1903 laboratory work was given in histology, chemistry, physiology, anatomy, bacteriology, pathology, toxicology and physiologic chemistry. Clinical lectures were given in this year by the departments of medicine, surgery, gynecology, genito-urinary diseases, otology, ophthalmology and diseases of the throat and nose. The following announcement appears in the catalogue:

"The college would take it as a great favor if physicians receiving these announcements would send us such cases as they do not care to be troubled with in their private practices, and cases which to them would be of no pecuniary profit. Hospital accommodations will be furnished all such patients, when necessary, at the nominal price of \$7.00 weekly, which includes board, wash-

ing, nursing and everything pertaining to residence and treatment in a hospital."

This was the last year of Dr. Schooler's deanship at the Drake Medical College. He had for years given of his time and energy, unreservedly and unremittingly, and so he thought he deserved a rest from his many efforts in behalf of the college. Had it not been for his enthusiasm and desire to see the college perpetuated, it would have perished long before.

Dr. D. S. Fairchild, who had been with the institution from the very beginning, was appointed to succeed Dr. Schooler. Dr. Fairchild was a very able man, thoroughly conversant with all of the departments of a medical course, having taught nearly every branch of the basic and practical medical sciences. He was a fine lecturer. The heavy teaching burden that he bore during his connection with the veterinary medical college at Ames has been mentioned. At the Drake College of Medicine he taught by turns diseases of the nervous system, principles and practice of medicine, pathology, mental diseases, practice of surgery and clinical surgery. He also gave to the senior students at the Iowa State College a course of lectures on the brain, preparatory to the study of psychology, and all of the students without exception were profoundly interested in this part of the psychology course.¹³

In the late fall of 1903, Dr. Fairchild communicated with Dr. F. J. Smith, his one time student at the Iowa State College, explaining to him that he intended to put the first two college years on a salaried full time teaching basis, and asking if he would be willing to come and help him do this work. It was agreed between Dr. Fairchild and Dr. Smith that the latter would be made dean of the junior college and would be given a free hand in carrying out Dr. Fairchild's plans. Im-

mediately thereafter (January, 1904) Dr. Smith took up advanced work at Heidelberg University, in Germany, in the laboratories of the department of physiologic chemistry, under the direction of Professor Kossel.

The Junior Dean returned to Iowa and removed to Des Moines in time for the opening of the fall term. Previously he had obtained the services of Dr. H. J. H. Hoeve, a graduate of the College of Physicians and Surgeons, Chicago, for the department of anatomy. He became the first full time teacher of anatomy on a salary basis. The department of bacteriology was placed in charge of Prof. L. W. Ross, of the biology department (he was the Des Moines collaborating bacteriologist for the State Health Laboratory). The department of medical chemistry was taken over by Dr. Smith. These were the only full time, salaried teachers in 1904. In the years immediately following, additions were made to the teaching staff of the Junior Medical College until all departments were manned. Dr. Alexander S. Beggs took over the department of pathology, histology and embryology; Dr. W. S. Mendenhall, that of physiology and pharmacology; Dr. Paul E. Lineback became assistant in histology and anatomy. These were all full time, salaried teachers. The new faculty met together and organized. They appointed each Friday evening as a time for conferring together, when each departmental head should report on any new and noteworthy developments in his department.

In the year 1909 the Carnegie Foundation undertook an inspection of all the medical colleges of the United States and Canada, and also of all schools that claimed to teach any form of a healing art. The purpose of the inspection was to determine the qualifications of the many colleges existing at that time and to classify them

according to their ability to prepare young men and women for entrance into the medical profession or to practice any other kind of healing art. Dr. Abraham Flexner was appointed to make this investigation. Dr. Flexner arrived at Drake College of Medicine in April, and, in the absence of Dean Fairchild, was accompanied about the medical school by Dean Smith. The Junior College was first visited and all of the laboratories were investigated and the work being done in them was observed. He met all of the heads of departments. From here Dr. Flexner was taken to the Methodist Hospital¹⁴ and immediately after to the Mercy Hospital. In one of the hospitals he was able to be present at a surgical clinic. As the Salvation Army Rescue Home was a considerable distance from the heart of the city, he did not visit it, but interviewed instead the head of the obstetric department for the information he needed. The end of the tour was the Senior Medical Building, which he inspected thoroughly. He was shown the dispensary service, which had but recently been put into operation.¹⁵ He saw the medical library, the auditorium and other rooms.

A little later in the same spring the Council on Medical Education of the American Medical Association, through its executive secretary, Dr. N. P. Colwell, also investigated our school. The next year the medical faculty and the university authorities had the satisfaction of finding the school reported among the class "A" colleges.

In this same year the president of the Keokuk Medical College, Dr. George F. Jenkins, realized that the time was soon coming when it would be necessary for the faculty of this college to meet requirements for greatly increased laboratory facilities and full time, salaried instructors. Without an ample endowment, this could not be done.

The faculty was called together by Dr. Jenkins and after mature consideration it was decided to close the school before it should lose caste. It was decided, further, to negotiate with the Drake College of Medicine for a merger of the two institutions, all of the movable equipment to be taken over by the Des Moines institution. Drake was also to take over the alumni list, so that Keokuk graduates should have an Alma Mater by adoption, which would give them the feeling that the old Keokuk College was still living and on the other hand give the Drake College of Medicine additional hope and courage. The merger was completed late in September, 1908.

(For a history of events leading up to the formation of the Rock Island and thereafter the Davenport Medical College, which subsequently became the Keokuk Medical College, see a later compilation, to be published after the present history.)

In the fall of 1909, the late Dr. E. E. Dorr arranged for a meeting between Drs. Walter L. Bierring and Henry Albert, of the State University, and President Hill M. Bell and Dean Smith. There was a feeling at that time that the medical college belonged in Des Moines where there was much the largest population of any city in the state and where there was every indication of a considerable growth for years to come. In addition, Des Moines already had a number of large hospitals where clinical material was abundant. The two visiting physicians were offered the positions of head of the department of medicine and clinical medicine, and of pathology and bacteriology, respectively. After a few weeks Dr. Bierring accepted the position as head of the department of medicine. He requested that Dr. John H. Peck, his assistant, also be retained, as assistant professor of medicine and director of

the dispensary service. This was granted, and they were asked to report for the beginning of the fall term of 1910.

In the latter part of October, 1909, Dr. D. S. Fairchild handed in his resignation as Dean of the Medical Department, to go into effect at once. He had served the college continuously for twenty-five years. His home was in Clinton, as were his office and his headquarters as Division Surgeon of the Chicago and Northwestern Railway, and his consultation practice was very large. His resignation was regretfully accepted.

President Bell asked the Junior Dean to take the office, urged him to do so; but he refused, for in his opinion Dr. William W. Pearson was the logical man for the position. The president, while more than willing that Dr. Pearson should have the position, doubted very much that he would accept it. The acting dean visited Dr. Pearson and acquainted him with the president's offer and his desire that he should accept the position. He also re-inforced the president's offer as strongly as possible and then visited some of the other members of the faculty asking them to use their influence with Dr. Pearson. It took considerable pressure, for Dr. Pearson was a very busy man, but in the end he accepted, to the joy of everybody concerned.

The formal installation of Dr. Pearson was set for November 23, 1909. A three day program was arranged for the occasion.

On the afternoon of the 23rd, at three o'clock, the alumni of Keokuk College of Physicians and Surgeons and of Drake University Medical College held a joint meeting in the auditorium of the Senior Medical Building. The oldest class represented at the meeting was the 1876 class of the former college, but there was also a letter from Dr. A. A. Noyes, of Mason City, Iowa, who was

from a much earlier class. He was graduated in the class of 1850 from the Upper Mississippi River Medical College, in Davenport, Iowa, the first year that this antecedent of the Keokuk college was west of the Mississippi River, and in the same class with Judge Dillon, who was graduated in medicine before he began the study of law, became an Iowa judge, then a federal judge, and finally a member of the law department of a large Eastern university. Dr. Robert L. Parker, the president of the Drake alumni, presided at the meeting. In his opening address he gave as one of the objects of the meeting the desire of the Drake alumni to meet with their newly acquired brethren, and to bid them welcome to their new Alma Mater. He suggested that this was a very good opportunity for all of the alumni, old or new, to look about and see the quality of the work done by the Drake College of Medicine, and they would see that the school deserved the support of both bodies of alumni. He spoke of the clinical advantages the large city has over the small one; there were two large general hospitals in Des Moines, and there were others not so large, but also offering all kinds of help to the school. The Salvation Army Rescue Home was a source of obstetric experience for the senior students. The beginnings for a tuberculosis hospital were also in prospect. A number of those present, amongst them some of the faculty members, made short addresses, and there was ample evidence of a spirit of good fellowship between the old alumni of Drake and the new alumni members from the Keokuk school.

At eight o'clock the same evening Dr. Pearson's installation ceremonies were held in the Drake Auditorium on Twenty-fifth Street and University Avenue. President Bell presided. After a musical selection had been rendered, the University Chaplain, the Reverend Dr. Charles S. Med-

bury, offered the invocation. Immediately following, President Bell introduced to the audience Dr. John B. Deaver, of Philadelphia, Pennsylvania, who delivered an address, a portion of which is here regiven:

THE MAKING OF A SURGEON

"That 'times change and we change with them' is nowhere better illustrated than in the alterations which have taken place within our own generation in the standards demanded of the medical profession and the consequent development of methods of medical education. The law of supply and demand operates strongly upon the professions as it does in the business world.

"With a rapidly growing population and one engaged largely in conquering the vast resources of the country, there was an urgent need for physicians and surgeons to keep pace with the increase in population. Circumstances and the materialistic tendency of the times permitted the upgrowth of a large number of medical schools, too often but the expression of commercial motives on the part of the founders, but partially justified by the real need for men who would devote themselves to the healing art. Many of these schools thought it necessary to teach only so-called essentials and, as usual, where this is the case, these essentials were taught very badly. Not in all cases was this condition of affairs present, but it was true in sufficient instances to lower the general professional average quite materially and retard the progress of medical education.

"Even now we are not emancipated from the poor schools with insufficient facilities whose chief object is to enable the matriculant to pass his state board examinations. Gradually, however, a new order is replacing the old. Already supply has gone beyond demand and the result is to improve the quality of the output. Opportunities

for study have been increased, facilities have been improved. The tendency of the times is well illustrated by this University College of Medicine. Standing as it does, the result of successive fusions of smaller schools, it has placed medical education in this city upon a University foundation, the only proper basis for such a school at the present time. The requirements of modern medicine have necessitated expensive laboratories and equipment and a large annual outlay for instruction. Properly conducted, a medical school is a losing institution, from a financial standpoint, and the private schools must therefore cease to exist or change their policy. The Medical School of Drake University stands on the threshold of a great opportunity. Dr. Pearson is to be congratulated upon being chosen as the man of the hour to shape its destiny. The school certainly felicitates itself upon securing a man whose character and abilities have so signally marked him for the position."

The address of Dean W. W. Pearson was then given as follows:

"We are here in the interest of Drake University, one of the greatest educational institutions of the state of Iowa; she being one of the greatest states in the Union, is deserving of our best efforts. Her citizens have just pride in her products and are looking for improvement in every line.

"The medical department has been in existence for a number of years. Many of the best equipped and most successful practitioners of this state and other states, are numbered among her graduates. They have begun their medical study in this school and have met the legal requirements. Some have realized that the medical school of the past has merely introduced them to the study and opened the way to unlimited medical literary effort. They have profited by their teaching and have continued their study until now they are in

possession of a store of knowledge that serves them in fulfilling their daily duty to the sufferer in the most approved manner; the farther they have gone the more they have been impressed with the necessity of constantly adding to their store of knowledge.

"Only last year the Keokuk Medical School, one of the oldest medical institutions west of the Mississippi River, feeling the influence of the times, decided to quit, and was absorbed by our department. With the number of medical schools reduced, the remaining ones feel more keenly their responsibility and are putting forth every effort to justify their existence and merit their continuance.

"The medical profession has kept abreast of the times, but not being content with ordinary standards, it is our purpose to advance so as to be with the leaders in our noble profession. We realize that nothing but concerted and earnest effort will accomplish our purpose.

"The entrance requirements to the medical department are to be advanced. Young men applying for admission will be required to give more evidence of character, they will recognize that their entrance into the study of medicine means much to them; they will give the subject more serious consideration than has been the case in the past. The young man applying for admission will come after serious deliberation and with a determination to become a doctor among real doctors.

"We will not only insist on qualifications acquired in literary institutions of standing, but after his admission to our school, we expect to watch his progress from year to year in his professional development, and when, in our judgment, his capability and application falls short of our requirements, he will be advised to sever his connection with us. We will know our students so well that this embarrassment will scarcely ever come to an upper classman.

"Medical education is today in a transitional period, everything is tending to great improvement. Many more earnest workers are entering the scientific study and daily publishing the results of their investigations. The demand for the practitioner with this knowledge is being heard from every quarter. Certain influences are at work that will do more to improve the physician's proficiency than have ever aided us in the past.

"Medical schools that were formerly conducted for profit, scarcely exist today. The teachers of medicine and the lawmakers, who define the requirements of the doctor, are more fully appreciating what a medical school needs in the way of equipment. The scientific laboratories and hospital wards filled with patients, are an absolute necessity.

"A certain amount of didactic work will always be required but the practical part of the training will be made prominent from year to year.

"The laws formulated by our state board are justly becoming more stringent and the citizen is being educated to appreciate it. The leaders in the profession are setting a pace that must be maintained, and those members who are disposed to lag are beginning to feel the loneliness of their position. Incentive is necessary to urge us on to better efforts. This is increasing from year to year with the development of our country. The air of Des Moines is full of it and men are appearing in our midst to control and properly direct it. Competition in the profession of medicine is as strong a factor to higher attainment as it is in ordinary business life.

"We of the medical profession of Iowa are greatly interested in our calling and look to the department of the State University and that of Drake University to work in conjunction with the State Board of Medical Examiners to see to it

that the practitioners of this great state rank with the best of any land.

"I feel honored to have been selected as the head of this department of Drake University, the members of whose faculty represent the best in it, and I am proud to call them my friends.

"I sincerely promise that my one purpose and my best efforts will be devoted to the advancement of the interests of the profession, and the execution of the wishes of the faculty.

"If, in the years to come, I hear it said that the doctor educated in the Department of Medicine of Drake University takes rank with the best, I will feel that our efforts have been rewarded."

The installation program continued on November 24, with a medical clinic conducted by Dr. Arthur R. Edwards of Chicago at Mercy Hospital and a surgical clinic by Dr. John B. Deaver of Philadelphia. Portions of these clinics are hereby reproduced.

Medical Clinic by Dr. Arthur R. Edwards

"The patient is a housekeeper, forty-four years of age, who has had ten children, all but one still living. Her family history is negative. Two months ago the patient noticed an enlargement of the spleen. On October 16 the spleen was enlarged nearly to the umbilicus, but there was no enlargement of superficial glands. The urine is negative. The blood count shows 3,300,000 red cells, the hemoglobin 90 per cent, and the white corpuscles total 160,000, of which leukocytes, the lymphocytes total 99 per cent, and most of them are of the small type.

"The patient is seen to be fairly well nourished, and without even making a superficial examination, we notice at once she has an enlargement of the abdomen. You see that the patient, as the count would indicate, outside of the possible flush that might come from being brought here, has a

fair color as well as fair nutrition. On examination first what appears to be the most striking point, both in her history and on inspection, there is seen in the abdomen a swelling which occupies, as you notice chiefly the left side of the abdomen, and probably more its upper than its lower part. In this enlargement there is noticed a distinct prominence, you might almost say an edge, at this point, which enlargement passes downward from the respiratory inflation. On the right side we can distinctly feel—and probably also it will be demonstrated even at this distance—the edge of the liver. As the patient takes a deep breath, you see it slide distinctly under the finger, the edge of the liver being somewhat firm and by deep breathing can be pressed over to this point, where it disappears beneath the edge of the spleen. And then this prominence, which is clearly noticed, I think, even at a distance, can by pressure of deep inspiration be brought up so as to show clearly the edge of the organ, in which there is felt at this point a notch; possibly also another here, although not as clearly to be demonstrated as the one at the epigastrium; the organ is fairly firm, and reaches down to this point, where its edge disappears behind the pelvis.

“Clearly then from its inspection, and the fact that we find its edge, and above all, the crenac or notches in the spleen, we are dealing with an enlarged leukemic spleen. On percussion this flattens, you see, almost to a level with the normal location of the apex, and there is flatness down to the palpable edge. When the patient takes a long breath, this flatness is shown to be subphrenic, because it moves so distinctly with respiration.

“The record shows very little enlargement of the lymph glands. The lymphadenoid kernels are barely palpable behind the external mastoid, but probably not much more palpable than we might

frequently feel in a normal individual, at least, we lay no stress upon their enlargement; also some here behind the clavicle, although they can't be clearly outlined.

“Glands are barely palpable in the submaxillary region. They can be seen as they are held in the finger, when it is allowed to escape, just as I felt the edge of the spleen and the liver, but it has been a striking point in this case that the glands have not been enlarged long, nor to any great extent. When the patient first came, as I understand, under Dr. Priestley's observation, the glands were barely palpable and not essentially enlarged. Now also they can be felt in the groins, as well as in the cervical and axillary regions, but are not to be felt at the elbow. An examination of the throat shows that both tonsils are considerably enlarged, more particularly the right tonsil. That falls in with the case of which Dr. Bierring and Dr. Prentiss were speaking last night, in which a patient with leukemia had, as the sole obvious evidence of the disease, an enlargement of the cervical glands, but with a massive hypertrophy of the tonsils and an enlargement of the cervical glands. There is in these tonsils absolutely no sign of necrosis and there is no infiltration of the gums.

“She has a little epigastric tenderness. There is a distinct tenderness of the sternum, as is often the case; no tenderness, apparently of the shins. And there is a tenderness, apparently, in the epigastrium and a pain, which is not unnatural from the degree of enlargement, both of the liver, but particularly of the spleen, where, as the viscera enlarge, the capsule is rendered tense, and, as is very often the case, there develops over this tense capsule, which often later is seen to be thickened, a certain degree of either perispleenitis or perihepatitis. The apex beat appears to be nearly in the normal location, despite the fact that you

would expect to find a certain degree of tilting outward, as we might in pregnancy, from the enlarged abdomen.

"On percussion of the chest we find a normal resonance, and, without going into unessential points, practically the normal limitations of pulmonary and cardiac outlines. There is heard in the neck a venous hum—what we might well take to be a functional—and an anemic systolic murmur over the base, but also heard with somewhat diminishing intensity toward the right side of the heart and toward the apex. The patient has shown no hemorrhages. There is here in the subcutaneous tissue just above the elbow a distinct ecchymosis, and during the various blood counts that were taken the patient showed a tendency to bleed from the points of the puncture. The lower extremities show nothing except the varicosities and the dilatation of some of the small capillaries. This whole trouble has only run along over a couple of months, according to Dr. Priestley. It would probably cover a month longer—practically only two or three months for the clinical history.

"We have here, then, the findings which would go with the history indicated, a lymphatic leukemia, and probably more of the chronic than the acute type. One would think that, first, because of the general condition of the patient; and although the clinical observations cover only a couple of months or a little over that, still the general nutrition of the patient, the lack of more disseminated, diffuse hemorrhages, especially into the mouth or into the skin, the absence of any necrotic or infiltrated troubles of the mouth, (because we know that the acute type of leukemia is very apt to produce local leukemic infiltrations of the mouth, and especially in the tonsils, with hemorrhages and subsequent necrosis,)—all these points would tend to make one feel certain, even on this superficial examination, that this was a case of

chronic rather than acute lymphatic leukemia. In the blood count the striking features are not merely the large number of leukocytes, which number in itself is not so remarkable as the fact that of these leukocytes fully 99 per cent of all the white cells, are of the lymphocyte type.

"The next point in which this case rather differs from the usual case is that we have by far more enlargement of the spleen than is common in the lymphatic leukemia proper, and not as much enlargement of the lymph glands as is common. If we look on the disease as one of the blood making organs, there are several points that might come out as to the treatment of the case and its prognosis. In the first place, one would naturally ask himself how it is that in these leukemias we have enlargements of the lymph structures—both the ordinary lymph structures and the glands of the analogous structure, as the tonsils, which show clearly hyperplasia; and how we explain, next, the enlargement of the spleen. We have here, then, a moderate although systematized enlargement of the glands, and an enlargement of the spleen which is more of the type or degree that we would expect to meet in what is known as splenomedullary leukemia, in which the lymphocytes do not prevail, but certain modifications of the leukocytes, the myelocytes and so on. Now it is probable that we should look on all these cases of leukemia as a disease whose origin is not so much different in its different types, although the clinical picture differs; yet probably most of the leukemias, both the acute and the chronic, and the so-called myelogenic, are diseases of the bone marrow itself, with wholly secondary participation of other organs.

"In this case the query has arisen as to whether the patient should be treated by medical means, or whether, on account of the rather solitary enlargement of the spleen, it might possibly fall within the province of surgery. If we look on all these

cases, whether acute or chronic, myelogenic or of the so-called lymphatic nature, involving the abdominal region and the lymph glands, or whether we look on this case—which is of course excluded by the blood picture, as of the myelogenic type, yet we come back constantly to the important pathologic and therefore therapeutic, origin of the lesions in the bone marrow. Modern investigations into leukemia rather favors this view, although of course the subject is extremely complicated, as to the origin of the cells and their function and the functions of the bone marrow. The view must be favored, however, that the disease is one of the bone marrow, and that the other organs are affected by metastases, we might say; if we have the overproduction of this or that type of lymphocyte, these cells infiltrate various organs, for example, the liver; or we here find enlarged lymph glands, the liver, tonsil, the spleen. And while surgery might be considered, and some would advocate the removal of the spleen in this condition, yet if we look on this patient as exhibiting a blood disease, and therefore with the prominent, possibly the sole etiologic condition in the bone marrow, it could hardly be considered as coming under this head. Therefore I would feel, although knowing that others could easily take a different opinion, that it would be better in this case to treat the patient by arsenic, which sometimes is of value, and to treat both the enlarged glands and the bones, where they are exposed close to the skin, like the sternum, the tibia, and so on, with the x-ray, and also treat the enlarged spleen by that means, rather than invoking surgical extirpation of what is, after all, merely a metastatic involvement.”

“The next patient was that of a man, thirty years of age, who had been ill, first with tonsillitis, which was followed within six days by pneumonia. The pneumonia lasted nine days. Following the

pneumonia there developed two abscesses, one on each side of the hip. That was two weeks after, and in another week an abscess developed on the back. After two more weeks the patient developed an empyema, which was opened and drained for two months. This was in September. On November 17 he developed an abscess in the left thigh which is his trouble at this time. A surgical operation was recommended.”

“The third patient was expectorating much pus and on occasion it had a very putrid odor. Examination showed that he had an abscess cavity in the lower lobe of the right lung.”

“The fourth case was that of a youth seventeen years of age, who had scarlatina, which was followed by a nephritis, from which he is now suffering. He is passing numerous casts, and has plenty of albumin in the urine. He was ordered to bed, and to remain there until there were no more casts, nor any more albumin in the urine. He also was given an appropriate medicinal treatment, and a proper diet.”

Surgical Clinic by Dr. John B. Deaver

“It is with very great pleasure indeed that I am here this morning and greet my friends in Iowa. I had the pleasure of appearing last night before an Iowa audience in my dress clothes, but now I am in my working clothes, and I think I feel a little more comfortable here than I did last night. It is, of course, only embarrassment to operate before such a large number.

“I will not speak of this case other than from the operative standpoint. You have heard so much this morning and so well by our colleague from Chicago that I would hesitate to speak of the symptomatology, particularly in his presence. I am sure that we are in accord. There was a time, as you well know, when medical men and surgeons were far apart in connection with the subject of

appendicitis, but today they are together, and the consequence is, they know as much about the diagnosis and the advisability of operative interference as the surgeon; therefore my remarks will be confined to the surgical side of it, and more particularly to the mechanical side.

"I do not know anything about the history of this patient except what Dr. McCarthy told me a moment or two ago. There is no doubt about the patient having trouble in his abdominal cavity. I will discuss the various operations done for this condition. The operation which I personally prefer in the majority of the cases, not that it is feasible in every case, is the McBurney operation. I like to call it the McBurney operation, not only because it was originated by McBurney, but because it has been my pleasure to know him for a number of years, and I have regarded him as one of the master surgeons of the age. I saw, by the way, McBurney's surgical drawings before his article appeared, and it was my pleasure to go over the drawings with him from the anatomical standpoint, and I was struck with the admirable qualities of the operation mapped out by him, and which has stood so well for these many years. I believe where the case is such that it is feasible to do this operation, and the patient gets a better abdominal wall, other things being equal, than by any other operation. I do think, however, it is not an operation for the novice; I think he should have some experience in this line of work before he attempts the McBurney operation, as there are more difficulties in operating through that incision than through the ordinary perpendicular incision. Furthermore, it is very much easier to enlarge your incision for one who does not do many abdominal operations. For those of us who do many, it is just as simple to enlarge by this route as through the rectus. I do nearly all my acute cases through the McBurney incision. I do not do it

in the presence of students, but in the presence of doctors. I have long since learned that it is not a good thing to do complicated operations in the presence of medical students, but in the presence of doctors it is a different thing altogether. The McBurney incision is very readily enlarged, in the majority of instances, sufficient to give you access by pulling over the rectus muscle and dividing the posterior sheath. Where you want more room, it is an easy matter to throw aside the rectangular flap, and you can get all the room that is necessary."

Following this first operation there were two appendectomies performed for chronic appendicitis, one for a pelvic abscess, one for a pyosalpinx, and one for a double pyosalpinx, and finally a goiter operation.

On November 25 Dr. Van Buren Knott conducted a surgical clinic at Mercy Hospital. The first operation was an appendectomy. This was followed by an operation for the relief of uterine retroversion, by the Alexander procedure. The same patient had also a repair of a laceration of the uterus. The last case was one of scrotal varicocele; the veins concerned were ligated.

Dr. R. A. Gifford, of Omaha, conducted an eye clinic at Mercy Hospital. The first case was one of long standing trachoma with ectropion. The next case was a bad corneal burn, due to a splash of molten iron. In a case of convergent strabismus a double tenotomy was made for its relief. The final case was one of pterigium, which was immediately operated upon in the usual way.

The faculty of the junior medical college desired to improve, as much as possible, the instruction given the students in the basic science years. To further this objective an entirely new schedule of studies was devised and tried out during the school year 1909 and 1910. The new venture was so satisfactory to the students and teachers alike

that it continued in force throughout the remainder of the life of the school.

The periods of instruction were for four hours, in the forenoon and again in the afternoon, throughout the entire school year. For freshmen, histology and embryology came every forenoon in the first half year, followed by a course in biologic chemistry the second half year. Through the entire first year anatomy was taken every afternoon. One hour of preparatory didactic instruction was followed by three hours of laboratory work. Every afternoon during the entire second, or sophomore year, was devoted to bacteriology and pathology, except in the second semester, when there was a fifty hour course in physical diagnosis from four to five o'clock on Mondays, Wednesdays and Fridays, and a course in minor surgery at the same hour every Tuesday for twelve hours. The forenoons of the second year, until January, were devoted to physiology, in January there were courses in practical pharmacy and toxicology, and physiology was continued during February and March, and followed by a course in pharmacodynamics lasting until the end of the term.

Drs. Mendenhall and Begg, who were sponsors of this modification in teaching the basic sciences, and who are at this time teachers in Boston University Medical College, say that a similar method is pursued in both Harvard and Boston Medical Colleges.

In the spring of 1910 President Hill M. Bell called a meeting of the medical faculty and announced to them that at the close of the school year the medical college would have to be discontinued, since the university could no longer finance it. This was very bad news for the medical faculty, just at a time when the medical department was really able to look forward to a bright future; but it was the student body who took it the hardest. They waited on the Dean of the Junior Col-

lege bright and early the next day, to see if something could be done to insure a continuance of the college. They offered to help in every way they were able. As most of these young men and women were working their way through college, having part time jobs during the school year and full time jobs the rest of the year, something which it was practically impossible for them to obtain on short notice anywhere else, it threatened the end of their medical career.

The Junior Dean suggested to these students that if a campaign to raise funds for the use of the medical department were put into action, obtaining first the cooperation of the Des Moines newspapers, then of the business men, manufacturers and others, it might be accomplished. The campaigners might carry banners with the slogan "Save the Medics!" It would be necessary for them to enlist the help of the college band and the students of the other departments. In any case, it could do no harm, and it might lead to their goal. The students were more than willing to do this. The Junior Dean took this matter up with President Bell, who would not hear of it, and forbade the enterprise.

This information was brought back to the students, who were much disappointed. However, Dr. Smith told them to go ahead without the president's consent.

By about ten o'clock the Drake University band and practically every student of the university were in the parade and on the way to the business district. Their committees met the editors and proprietors of the newspapers and received from them promises of cooperation. They also visited many of the business men of the town and others concerned and were much encouraged by the responses.

All the newspapers carried articles calling upon the people to support the Medical College and the

University, a committee recruited from the business men, the faculty, with President Bell himself, and many others put on a flying campaign, and in a very short time the battle was won. The then sophomore class deserves much praise and credit for this. They had made up their minds to turn defeat into victory, and it was victory which resulted from their efforts. The campaign resulted in the pledging of \$150,000.00, to be available in five yearly installments.¹⁶

Through the efforts of Dr. Bierring, the College was fortunate enough to secure the services of Dr. Alexander R. Robertson, a Canadian and a graduate of McGill University College of Medicine, to head the department of bacteriology and pathology. He remained with the college for one year, thereafter accepting a position with the Medical College in Vancouver, B. C. At the present time he is engaged in private practice in Seattle, Washington.

With the funds now available President Bell decided to enlarge immediately the senior medical college building. The enlargement would provide for the departments of anatomy, physiology, biologic chemistry, histology and embryology, and bacteriology and pathology. Each of these departments consisted of a student laboratory, a private laboratory, a store room, and a private office for the head of the department. A greatly increased space was made available for the use of the dispensary service. The library space was also much enlarged. A room was also made available where microphotographic work as well as natural color photography could be performed. It was equipped with the latest and best appliances.

Before the "Save the Medics" campaign the institution already possessed a very good working library, but after the campaign this received considerable additions. Additional books were purchased for use of the teachers and students hav-

ing to do with the fundamental sciences, with handbooks and encyclopedic works of reference. Dr. E. E. Door presented his large and well selected and up-to-date library of over twelve hundred volumes to the College Library. Standard European and American medical journals, bound and unbound, were on file in the library. Dr. Jean Mendenhall became the librarian. The students also had free use of the University Library, the City Library and the State Library.

Owing to the additional quarters available for the dispensary work, the service was greatly extended and improved and much modern equipment was installed. Being near the heart of the city and easily accessible was also a valuable asset for the dispensary. Examination and treatment rooms were provided for medical, neurological, pediatric, dermatologic, general surgical, orthopedic, genito-urinary, gynecologic, obstetric, eye, ear, nose and throat patients. To facilitate the making of chemical and microscopic examinations, a clinical laboratory was located on the same floor as these rooms. The dispensary pharmacy was placed under the care of a registered pharmacist. A small ward of five beds was connected with the service in which operative surgical treatments were carried out, especially designed for emergency cases. The daily attendance at the dispensary at that time averaged fifty cases. Sessions were held from one to three o'clock on six days of the week. During the year ending April 1, 1912, the total number of visits at the dispensary was 10,309.

On March 1, 1911, a tuberculosis dispensary was established, the sessions being held on Tuesday and Friday forenoons at eleven o'clock. Ridge Camp Sanatorium for advanced cases was then under the supervision of the College of Medicine and offered additional advantages for the study of tuberculosis. On the second floor two

rooms had been completely equipped with x-ray and other electric appliances of the latest and most approved patterns, in which all forms of examinations and treatments pertaining to this branch could be properly conducted. The dispensary afforded unusual opportunities to both the third and fourth year students for the study of ambulant patients. Dr. John H. Peck was the director of the dispensary.

The facilities for teaching clinical medicine for the school year 1912 and 1913 were unusually good. By special arrangements the College of Medicine then controlled for clinical purposes five hundred beds in the hospitals of Des Moines. Of these the Iowa Methodist and Mercy Hospitals furnished one hundred and fifty ward beds; the Salvation Army Rescue Home from five to ten cases of obstetrics each month; the Children's Home had a capacity of forty beds; the Detention Home, fifty beds, and the Polk County Hospital had constantly two hundred and twenty-five or more patients, for the most part with mental and other chronic diseases. At the first two hospitals mentioned clinical laboratories and lecture rooms were provided for teaching purposes. In each the operative department and the equipment for the treatment of diseases by means of electricity, x-ray, hydrotherapy, orthopedic and other physical measures was of the most modern type.

It was necessary to fill immediately the vacancies caused by the resignations of Drs. Robertson and Hoeve. Dr. Paul Lineback, who was at the time taking postgraduate work in anatomy at Harvard, applied for the position vacated by Dr. Hoeve. He was engaged as professor of anatomy and head of the department. Dr. Daniel J. Glomset was engaged to fill Dr. Robertson's position in the pathology and bacteriology department. He came to the college from the University of Chicago and Rush Medical College. Dr. Begg was

made head of the department of histology and embryology.

During the last three years of the Drake Medical College the requirements for entrance were raised to two years of college work in an accredited college of liberal arts, and the following subjects were demanded:

	Semester hours
Chemistry, general and qualitative.....	12
German or French.....	10
Physics*	6 or 10
Biology (Zoology or Botany, 1 year).....	6
Electives	22 or 26

*Only six hours were required if one year's work had been done in the high school.

Dean Pearson was indefatigable in his efforts to bring every department up to the highest state of efficiency, and to obtain the cooperation of those working in them. He made changes wherever needed, transferred some faculty members to other departments where they could fit in to better advantage, and succeeded in welding together all of the groups into one harmonious whole, producing a very high grade of cooperation amongst the faculty, which brought about the very best of results. Quoting from Dr. David S. Fairchild: "In the last years of its existence under the administration of Dean Pearson the facilities, equipment and thoroughness of instruction reached a high degree of efficiency and bid fair to equal the best of the smaller colleges."

The graduates of the institution during all of these years were able practitioners and reflected much credit on their Alma Mater; some of them are now occupying positions of great responsibility as heads of departments in some of the best schools of the country. One is at the head of a department in the Mayo Clinic, at Rochester, Minnesota. Quite a number of our graduates as well as of our teachers attained high rank in the medical service of our country during the World War.

The story of the final abandonment by the University of its Medical Department for lack of

funds, after the money so generously subscribed by the citizens of Des Moines a few years earlier had been exhausted, the writer will leave to be told in the vivid words of Dr. W. S. Mendenhall, professor of physiology at Drake Medical College at the time of its abandonment and now professor of pharmacology at Boston University School of Medicine. Dr. Mendenhall's overgenerous praise for the writer's own efforts for the college, he allows to stand, apologetically, rather than damage by mutilation the stirring narrative of his erstwhile colleague.

SIDE LIGHTS ON THE HISTORY OF
DRAKE MEDICAL SCHOOL

By Walter L. Mendenhall, M.D.

Boston University School of Medicine

"No history of Drake University Medical School would be complete unless a thorough insight is gained in those last few years of its existence. It may be truly said that the school was brought to a sudden end while in the midst of a rejuvenation that was both remarkable and splendid. This awakening of medical education at Drake dated no doubt from the beginning of Dr. David S. Fairchild's deanship. Dr. Fairchild must have felt the need for a more sound training in the fundamental sciences and in keeping with that idea he early called upon Dr. Ferdinand J. Smith to reorganize the first two years' work, to obtain as rapidly as possible full time instructors and properly to equip laboratories so that the fundamental sciences might better serve the students upon their entry into the so-called practical years. It was about this time that the Carnegie Foundation was investigating medical schools throughout the country. Dr. Smith, in assuming the task of reorganizing the first two years, was so successful that he was first made Junior Dean, and later Dean of

Men, in which capacity the duties devolving upon him made his office virtually a deanship.

"Dr. Smith gathered around him many of the younger men. He gave them responsible positions and all knew that the manner in which they carried on in their responsibilities meant not only their own success or failure, but that of the school as well. Through many years of teaching since then, the writer can truthfully say that he has never been connected with any institution in which the enthusiasm was so genuine as in that group which Dr. Smith welded into the first two years of the medical course. Dr. Smith, himself an indefatigable worker, always was willing to advise and assist the younger men. His richness of experience and education together with a kindly disposition made him most approachable not only to students, but to the younger men on the staff.

"In the fall of 1909 Dr. Fairchild's age and extensive consultation practice made him feel that he ought to resign the deanship to a younger man, one who had the youth and vigor to push this reorganization to a successful conclusion. Who was better suited for this important position than that prince of fellows, Dr. William W. Pearson? Here was a man who had the vigor to push the new school ahead. He not only took a keen interest in the reorganization of the clinical subjects, but also an equal interest in the preclinical subjects. Dr. Pearson investigated the preclinical subjects and knew what each department was offering. He was a tower of strength and had the admiration of every member of the faculty, an admiration and esteem that continued until the fateful day when the faculty voted to close the school rather than run anything but a first class college.

"The reports of the investigation of medical schools by the Carnegie Foundation in 1910 was a bombshell to medical education. And like a war time bomb which scattered death in its wake, so

this report resulted in the death of many medical schools, but in those surviving it resulted in a powerful stimulus to meet the mythical standards proposed in that report. Fortunately, by reason of the foresight of Dr. Fairchild in giving Dr. Smith the reorganization of the science years in medicine, Drake did not suffer extinction at this time but received a stimulus to growth and improvement that spread like a contagion throughout the faculty.

Following the Carnegie report, the question of closing the Drake Medical School became a serious problem. It was practically decided to close the school when an unusual circumstance changed the aspect of the situation. It was felt that if a certain amount of money were raised a complete reorganization of the school could be effected; full time professors could receive a more commensurate remuneration, and the physical equipment could be extended and enlarged. But where should the money be obtained? Estimates were made for a five year period. The securing of the money seemed a hopeless task. It was at this time that an idea came to the resourceful Dr. Smith. Why not arouse the business men of Des Moines to appreciate the meaning of the loss of the medical school? It was Dr. Smith's plan to arouse their interest by a student parade. This was the most critical time of the whole situation. Had Dr. Smith not acted, the school would have closed 'pronto.' But Dr. Smith did act in his irresistible manner. He organized the student parade. It invaded the downtown business district. Business men were attracted by it and became interested. In connection with the University, they organized a campaign to raise funds to save the medical school. The sum estimated to provide for an enlargement of the personnel and physical equipment for a period of five years was \$150,000. (This sum proved later to be far from ade-

quate.) Daily lunches were held down-town and daily reports of the progress in the campaign were made. Enthusiasm was unbounded. The sum was quickly raised. Drake Medical School was saved. Too little credit has been given to Dr. Smith for this undertaking. There is where the credit is due, for he actually inaugurated the movement.

"Not until the Carnegie report was published did many college presidents realize that the work of a medical college was important enough to secure full time instructors. The stimulus to improve was not confined to the curriculum but extended to physical quarters as well. The new building on Center Street was greatly enlarged to accommodate the laboratory sciences and the fundamental sciences, and while the junior faculty was regretfully severing the associations of the campus, yet they joyfully entered these new quarters. The head of each department had planned his own laboratory. No one can quite describe the joy of anticipation and final realization by these men. It was the custom of these men always to improve themselves at every opportunity and the summer months found them visiting and studying teaching methods in the largest schools of the country. As younger men, heads of departments, life was indeed a zestful existence. And then came the Doom! The writer of these lines was studying research methods at the Western Reserve Medical College during the January following the meetings of the American Physiological Society in Cleveland. He received a confidential note from Dr. Smith in which was the information that Drake would close its medical school in June and that if he should happen to hear of another position it would be wise to accept it. Here was shown one of Dr. Smith's characteristics. He realized that all those young men who had given up their practice to devote their lives to teaching would be unceremoniously cut off from a means of liveli-

hood. His note to the writer was evidence of his interest in the men serving with him.

"The effect of this announcement was like plunging from sunshine to gloom. All hopes and aspirations for the moment seemed blunted, and speaking as one who lived through the experience I may say that never again were hopes or aspirations raised to such a height. These new departments were our own creations. We looked forward to proving that our plans were justified, but it was not to be. Final leave-takings were over. Young men were starting anew. Dr. Begg and Dr. Mendenhall turned to Harvard Medical where they had previously engaged in study; Dr. Begg in the department of anatomy with Drs. Minot and Lewis, Dr. Mendenhall in physiology with Drs. Cannon, Martin, Stiles, and Forbes. Later Dr. Lineback returned to the same institution in anatomy. Thus three of the former Drake medical faculty were now transplanted temporarily at Harvard. Dr. Glomset became a consulting pathologist.

"Dean Pearson, like the captain of a great ship, stood on the bridge and went down with the rest of the crew on that old medical ship 'Drake.' With the disappearance of that old vessel beneath the waves of progress there has always existed the feeling that the ship should not have sunk. Medically speaking, she was entirely seaworthy. The ship was top heavy with the weight of its faculty and students and alumni. All it needed was ballast to keep it upright and afloat. That ballast should have been provided. This is attested by the successful and splendid careers of the graduates of that honorable institution, Drake University School of Medicine."

REFERENCES

1. History of Medical Education in Iowa. Vol. I, p. 96.
2. Stange, C. H.: History of the Veterinary Medical Department of Iowa State College.
3. The writer was graduated in the year 1887 and was a member of the first class to be registered. His registration number is six.

4. Blanchard, John A.: History of Drake University.
5. Fairchild, David S.: History of Iowa College of Physicians and Surgeons, p. 96.
6. *Vis Medicatrix*, p. 50, June, 1891.
7. Fairchild, David S.: History of Medicine in Iowa, Vol. I, p. 94.
8. *Ibid*, p. 94.
9. Iowa State Medical Reporter, p. 106, Vol. II, 1885.
10. Catalogue of Iowa College of Physicians and Surgeons, 1886-1887.
11. *Vis Medicatrix*, p. 347, April, 1892.
12. Drake University College of Medicine Catalogue, 1894-1895.
13. The writer was privileged to be a member of one of these classes.
14. Bulletin No. 4, of the Carnegie Foundation: "Medical Education in the United States and Canada," p. 222: "Laboratory facilities (at Drake College of Medicine): Modest laboratories, whose condition speaks well for the conscientiousness of those in charge, are provided for chemistry, anatomy, pathology, and bacteriology. The provision for physiology is somewhat more slender."
15. Bulletin No. 4 of the Carnegie Foundation: "Medical Education in the United States and Canada," p. 221, footnote: "A few institutions possess small, moderately well equipped dispensaries, the conduct of which indicates a conscientious desire to do the best possible under the circumstances. Creditable examples are the dispensary of Drake University (Des Moines, Iowa)" and others.
16. Bulletin No. 4 of the Carnegie Foundation: "Medical Education in the United States and Canada," p. 222, footnote: "As this report goes to press, it is announced that a fund of \$100,000 had been subscribed with which to improve the school." (Correction by Dean Smith: Actually \$150,000 was subscribed.)