

alby greater than that of any other college president in the United States. This can be said without reflection on other presidents, because of the fact that one of President Pearson's brothers, Dr. Leonard Pearson, is fondly remembered in our profession as one of the greatest men the profession of this continent ever produced. During his administration as Secretary of Agriculture of New York, animal disease control also came under his supervision. Altho the University of Maryland does not have a veterinary college, President Pearson continues his interest in the veterinary profession.

On September 1, 1927, Dr. Raymond M. Hughes took over the administration of the college and everything promises well for Iowa State College.

During Professor Knapp's year as acting-president, we had built the "cattle" wing of the proposed new clinic building and secured money for the new veterinary research laboratory. The latter was approved by the Board of Education on February 26, 1927. Among the regrettable things which stand out during the last few years are the loss of Dr. Murphey and the resignation of Dr. Bemis, who was tempted away by a much larger salary offered by the University of Pennsylvania.

At the present writing, May 1, 1929, everything points to a future full of possibilities and promise. We have an interested and sympathetic president, a young and enthusiastic faculty, a fine student body composed of clean, bright and energetic young men, and a greater demand for our graduates than we can supply; a well trained and industrious research staff and confidence that the State of Iowa will supply the needed buildings and equipment.

The accompanying graphs of the development of our clinics will assist in conveying an idea of that branch of our work. The depression in the curve was due quite largely to a decrease in the ambulatory clinic resulting from decreased vaccination of swine when farmers felt they could not afford to have the work done.

II

FACULTY



THE MOST vital part of any educational institution is its faculty. The faculty is the college. Therefore, the character and personality of the members of the staff determine the kind of a college we have. The burden of this responsibility for the School of Veterinary Medicine from its beginning until June, 1893, was carried by Drs. M. Stalker and D. S. Fairchild. It was shared by Dr. W. B. Niles when he became assistant professor in March, 1891. During this period (1879-1893) there were house surgeons and non-resident lecturers who, however, changed frequently and could not, both on account of their position and short periods of service, relieve the professors to any great extent when it came to responsibility for policy or teaching the important subjects.

The first instructor to be employed (March, 1881) to assist Drs. Stalker and Fairchild was Dr. George C. Faville, the first student to enter the Veterinary School when it opened. Among the house surgeons we find the names of George M. Osborn (1885), W. B. Niles (1886-87), John Tillie (1888), John McBirney (1889), S. B. Nelson (1890), J. C. Norton (1891), W. A. McClanahan (1892). Among the non-resident lecturers are the names of L. J. Alleman and F. E. Cruttenden (1886-89), W. B. Niles (1888).

When Dr. Fairchild resigned to accept a position with the C. & N. W. Railway and Dr. I. W. Smith was elected (1893), Dr. Stalker and Dr. Niles became the "mainstay" of the staff as Dr. Smith's health failed, and after about 18 months of service he was forced to resign and go to California. He died soon afterward. Dr. W. E. Harriman (1895) took the work organized originally by Dr. Fairchild. This organization of the staff continued until January 1, 1899, when Dr. W. B. Niles resigned. On account of Dr. Stalker being State Veterinarian he was away from the college a great deal and as a result a large part of the teaching fell to Dr. Niles' lot. He also was experiment station veterinarian. During this time (1894-99) C. M. Day (1894), A. R. Wake (1895), W. R. Cooper (1896), W. B. Lincoln (1897) and H. E. Titus (1898) served as house surgeons.

Dr. W. B. Niles, who had divided his time between teaching and Experiment Station work, became associated with the Bureau of Animal Industry in the United States Department of Agriculture and became famous as an authority on hog cholera. James Wilson had become Secretary of Agriculture in President McKinley's cabinet, but it was during his service at Iowa State College as Professor of Agriculture and Director of the Experiment Station that he became acquainted with Dr. Niles' worth in connection with experimental work on animal diseases. He was, therefore, glad to get him into the Bureau of Animal Industry.

The contribution made by Drs. Dorset, McBryde and Niles to veterinary science has undoubtedly been of greater significance to animal industry in the middle west than that of any other veterinarians.

As already indicated in the outline of faculty for each year, rapid changes in the faculty began in 1900 and continued until salaries became somewhat adjusted. Many men make some financial sacrifice in order to remain in an educational institution, but no one can afford to make this sacrifice too great and still do justice to himself and family. Repp, McNeill, Klein, Jacob, Gay, Ahlers, Hurt and several others came and went inside of a single decade.

The faculty at present may be said to be the third generation since the beginning in 1879. A more detailed statement concerning those who have served on the faculty is given in the following pages.

Dr. Milliken Stalker became head of the veterinary work of Iowa State College in 1876. Instruction began in 1877.

Dr. Stalker was born on August 6, 1841, in Plainfield, Ind. His ancestors were Quakers. They were typical pioneers. Dr. Stalker's parents moved to Richland, Iowa, when Milliken was still a young lad and it was here that Stalker spent his youth and young manhood. There

were no idle moments in his life on the farm. He attended district school and then the academies in Oskaloosa and Springdale, becoming a district school teacher.

Most people would not think of getting a college education at the age of twenty-four, but he graduated from Iowa State College in 1873 from the course which would now correspond to the general science course.

After his graduation, his professor, I. P. Roberts, well known for his agricultural contributions, became connected with Cornell University, leaving a vacancy. Because of his experience on the farm, the position of professor of agriculture was given to Stalker. He held this position from 1873 to November, 1876, also acting as secretary to the Board of Trustees.

Dr. A. S. Welch, a man with great vision, recommended that education in veterinary science be added to the curriculum. There were few men in this country who had had academic training for this work. However, there were a few brilliant exceptions, Dr. Law of Cornell University and Dr. Liautard of New York College of Veterinary Science being two of them. There was then a school of veterinary science at Toronto, Canada. In order to fit himself for the instruction in veterinary science, Dr. Stalker attended the veterinary schools at New York and Toronto, receiving the degree of D. V. M. from the University of Toronto.

Dr. Stalker had thrust upon him the professorship of agriculture and veterinary science at the close of the year 1876. In the spring of 1879, his work began in the Veterinary College.

Dr. Stalker was instrumental in organizing the veterinary work of the state and for many years he was the State Veterinarian. He is responsible also for the first Veterinary Practice Act in Iowa. He is really responsible for the advanced stand taken in connection with the suppression of contagious diseases among domestic animals in Iowa. The law creating the office of State Veterinary Surgeon was passed in 1884. The law was strengthened by several later acts of the legislature. It was a big task to organize the work of the State Veterinarian and at the same time to carry on the work of the Veterinary School.

The veterinary profession thruout the state had confidence in Dr. Stalker's ripe and sound judgment in all problems connected with the health and diseases of animals. This very significant statement was made by him in 1885, "The fact that the milk of tubercular cows is charged with the poison germs should cause it to be rejected in every instance as an article of food. As tuberculosis in man and in the bovine species is identical, the conclusion is inevitable that a similar experiment on man could be followed by a similar result."

He frequently made the suggestion that the State Veterinarian should be connected with the State Board of Health.

Dr. Stalker was a great lecturer. No one on the faculty of Iowa State College at that time had the ability to express himself in better and clearer English and could present his subject more effectively than Dr. Stalker.

Early during his career as head of the Veterinary department, Dr.

Stalker opened the subject of veterinary anatomy and other veterinary subjects to the science students and I am sure that I am correct in making the statement that no one has ever given instruction in the difficult subject of anatomy who was better able to secure the undivided attention of students than Dr. Stalker and that no student could learn the subject more easily than he could under the wonderful, and charming prince of lecturers.

But he was at home not only in the Veterinary Department but was a keen observer and was able to give to the public splendid lectures on various trips he made. Interesting incidents were always interwoven with these lectures. I never heard a man who was his equal as a conversationalist.

General James Rush Lincoln has said in a tribute to Dr. Stalker, "Perhaps a man's character or work when his life is closed may best be judged by the answer to the question, is he missed? No one who knew Dr. Stalker has other than pleasant memories of the man and reminiscences of delightful experiences with an always agreeable companion."

During the late years of his life, Dr. Stalker was professor emeritus. He has left his impress upon the veterinary science of America, and it is a fine thing to honor his work and his services to the state. Thus, there was dedicated on the college campus, a few years ago, a group of trees in memory of his distinguished services.

Dr. Stalker made a number of very important contributions to our knowledge of the diseases of livestock. One of these was in connection with the disease known as cro-talism. The rattlebox was common in the Missouri River bottoms and was the cause of a good deal of trouble among horses. Dr. Stalker shipped to Ames a large quantity of the material, which he used in experiments to prove that rattlebox was injurious. It was my pleasure afterwards to name this disease cro-talism. These investigations were published in the report of the Department of Botany for 1886, one of Dr. Bessey's reports.

A second very important publication was on his diagnosis of a disease known as ergotism. Quite early in his career as a veterinarian, Dr. Stalker came across a disease of cattle produced by the common ergot. At that time a large quantity of wild hay was consumed by livestock in the state. In 1884 there was a serious outbreak in Kansas of a disease which was at first diagnosed as foot and mouth disease. Dr. Faville of Colorado; Dr. Salmon of the United States Department of Agriculture, Dr. Paquin of Missouri and Dr. Stalker were asked to confer and study the disease. Dr. Stalker at once diagnosed it as ergotism.

On the reorganization of the Iowa Agricultural Experiment Station, January 8, 1891, Dr. Milliken Stalker became the veterinarian of the station, and while in this service gave considerable attention to veterinary work. One of the larger pieces of work which he undertook was the study of bovine tuberculosis under the title "An Investigation of Bovine Tuberculosis in Which Special Reference Is Made to its Existence in Iowa."

Dr. H. J. Detmers—The veterinary work of the college began with the work of Dr. H. J. Detmers.

In a report to the college trustees in 1871, Dr. A. S. Welch, then the president of the institution, urged the necessity of employing a professor of veterinary science. After careful investigation, Dr. Detmers was employed and his work began at the college in 1872. He was to teach comparative anatomy, physiology and veterinary science. He remained with the college a single year, the chair being declared vacant in November, 1873.

It was while he was instructor in veterinary science at the college that he gave courses in pathology, comparative anatomy and physiology. His lectures, according to Dr. O. H. Cessna, were always prepared in a scholarly way. He was thoroly familiar with the subjects he taught.

Two men who knew him intimately at the college at that time were Dr. O. H. Cessna and C. N. Dietz. They tell me that he was genial and friendly in his class associations with students, and all of his students respected him for scholarship and learning. He was regarded by the students as one of the outstanding men of the faculty. He insisted upon faithful, honest work and thoro preparation.

Dr. Detmers left a large impress upon the veterinary work at the Ohio State University and he was a pioneer in many investigations connected with the diseases of animals. He was thoroly familiar with the literature of the subject. Not only was this true with his teaching subjects, but his research work. He kept abreast with what was going on in Europe and made several trips abroad to make himself acquainted with the best technique in connection with the pathological subjects he was teaching and the investigations that he carried on.

One of his students, Dr. Mark Francis, says, "As the years have passed, I think he was simply ahead of his time. The conditions in America were not quite ready for a man of his type—but this was not his fault."

Dr. Detmers occupied positions at the Kansas Agricultural College and in the United States Department of Agriculture, and he inaugurated the work in connection with Texas fever, hog cholera or swine plague. His investigations began as early as 1876. He soon became convinced that hog cholera was an infectious disease and so stated in 1878.

This early work was done in Illinois and the swine investigation in this country was really started by Dr. Detmers at a time when researches of Koch and the other early bacteriologists proved that certain contagious diseases were caused by microorganisms.

His work in veterinary science was many sided. At one time, in 1883, he was engaged by the United States Department of Agriculture to make a report on the diseases of sheep, calling attention to the animal parasites. While in Ohio he was busy with many problems connected with the livestock industry. His work at Ohio began in 1884.

The course outlined by him in the Kansas State Agricultural College showed how broad his views were. His services to the livestock industry are recognized by the Saddle and Sirloin Club of Chicago, where a splendid portrait of him is hung, along with those of other noteworthy men who have contributed to the livestock industry of this country.

Dr. E. N. Wentworth, in writing a sketch of his life, said, "The

tenacity with which Dr. Detmers clung to his explanation of his discovery was a full measure of his character. He knew that it was right as far as it went and clung to it to the best of his ability against friend and foe, and he met both. As a matter of fact, Dr. Detmers knew only two kinds of people, friends and foe, and with these he went the limit. For his friends he knew no sacrifice too great—for his foes, no resistance too strong."

Dr. Detmers was born in Germany in the village of Jever in Oldenburg, on April 15, 1833. He was baptized Heinrich, which he changed to Henry Johnson when he came to this country. He attended the village school until the age of 13 and graduated from the Royal Veterinary College, Hanover, in 1853. He subsequently attended the Royal Veterinary College in Berlin, where he graduated in 1859. He came to this country after the close of the Civil War in 1865, locating at Dixon, Ill., where he practiced the profession and became a contributor to the Chicago Tribune and the Farm and Fireside. He went to the University of Illinois in 1869 and to Kansas State Agricultural College in 1871. He died at Columbus, Ohio, on December 11, 1907.

Dr. W. B. Niles was born in Rock County, Wis., on November 5, 1858, of New England ancestry. He was reared on a farm and there received his early education. He moved with his parents to Iowa in 1870. He was educated in the country schools of Wisconsin and Iowa. During the winter of 1882-1883 he taught school near Rhodes, Iowa. He entered Iowa State College in the spring of 1884, enrolling in the two-year veterinary course. He graduated as an honor student in a class of six in 1885. The subject of his thesis was "Actinomycosis."

He discovered actinomyces organism in a tumor removed from the jaw of a cow in the veterinary clinic. This was the first discovery of the fungus west of Chicago. During 1886 he was house surgeon of the Veterinary College, working under the direction of Dr. Milliken Stalker. He also did some bacteriological work with Dr. B. D. Halsted, who was then the professor of botany. He was, therefore, the first Iowa State College special student to do work along this line. It was not a regular prescribed course of the college.

During the fall of 1886, he was appointed Assistant State Veterinarian under Dr. Stalker, and this gave him considerable traveling experience in the state of Iowa, and an opportunity to study glanders in horses and mules.

He started private practice in Webster City, Iowa, in the fall of 1886 and continued until July, 1887, when he was elected professor of veterinary science and veterinarian of the state Experiment Station of the state of South Carolina. The agricultural college was then connected with the university, located at Columbia. From 1888 to 1900 he served in that capacity.

Dr. Niles was active along many lines and during his connection with the State University presented papers before various farmers' institutes. He was a contributor to the reports published by the State Department of Agriculture. It was while in South Carolina that he made the acquaintance of Dr. Meade Bolton, bacteriologist, with whom he wrote a bulletin on hog cholera.

When the Agricultural Department of the university was discontinued because of the establishment of an agricultural college known as Clemson College, Dr. Niles came to Iowa. This was in 1891. He became assistant veterinarian to Dr. Stalker. At the same time, he became connected with the Iowa Agricultural Experiment Station as assistant veterinarian. He taught various subjects in the college, such as surgery-operative and general obstetrics, veterinary materia medica, etc., and had charge of the veterinary clinic. He was a splendid teacher. I had the pleasure of occasionally dropping in and seeing the work done by him. He was concise and methodical, and was able to keep the confidence of the students and his associates.

While connected with the experiment station, Dr. Niles conducted investigations on diseases affecting livestock. Among these was the very perplexing disease, glanders, in connection with which he made some extensive experiments with mallein (Bul. Ia. Agr. Exp. Sta., No. 20. P. 729).

Actinomycosis, which had long been a baffling disease in many parts of the state, received his attention. He experimented with potassium iodide and found it a valuable specific for this disease (Bul. Ia. Agr. Exp. Sta. No. 25. P. 44). Also he wrote popular articles on hog cholera and swine plague (Bul. Ia. Agr. Exp. Sta. No. 35. P. 769). In this bulletin he set forth the main facts then known in regard to the disease. He also wrote an extensive article on the diseases of sheep (Bul. Ia. Agr. Exp. Sta. No. 35. P. 781). In conjunction with Dr. Stalker, he wrote a bulletin on tuberculosis in cattle in Iowa (Bul. Ia. Agr. Exp. Sta. No. 29. P. 241). This bulletin contains results of extensive tests on tuberculin as applied to breeding herds of dairy cattle. Thus, the Veterinary Department of the Iowa Agricultural Experiment Station was the first institution to make use of tuberculin for the detection of tuberculosis in this country. This work was done in Crawford County, Iowa, and the paper clearly showed the value of this agent.

During his connection with the college, Dr. Niles was also Associate State Veterinarian. Hog cholera and swine plague were such important subjects in the state at that time, causing such enormous losses, that the United States government felt the need of engaging specialists to wage war on hog cholera. Therefore, in 1898, Dr. Niles entered the service of the Bureau of Animal Industry of the United States Department of Agriculture. During the years 1898 and 1900, he was in charge of hog cholera work in Fremont County, Iowa, this being one of the counties in which a serum for the prevention of hog cholera, made by injecting horses, cattle and donkeys with the cultures of the hog cholera bacillus (Salmon and Smith), was being tried.

During the winter of 1900, Dr. Niles was engaged in meat inspection work in Omaha. As might be expected, the serum from cattle, horses and donkeys did not work out satisfactorily, and the department resumed its experiments in connection with hog cholera, Dr. Niles, stationed at Sidney, Iowa, being put in charge of the experimental part of the work in the field. In 1905, the station was moved to Ames. The work was under Dr. E. A. DeSchweinitz and later was continued under Dr. M. Dorset, chief of the biochemic division of the Bureau of Animal

Industry. These investigators found that hog cholera was not due to the hog cholera bacillus as previously described by Salmon and Smith, but was caused by what is known as a filterable virus. Attention was, therefore, turned toward finding a vaccine which would be successful in preventing the disease.

In 1905, Dr. Niles started his work with the production of serum, as outlined by Dr. Dorset. This serum was produced at the new Ames Station and was tried out in a limited way late in the season. The results of this serum were most favorable. It was found that shoats injected with a certain amount of the serum were protected against hog cholera when placed in contact with sick hogs or when injected with virulent blood taken from a cholera hog.

The work was continued during 1906, and these experiments confirmed the results of 1905. In the fall of 1907, having accumulated during the season a considerable amount of the serum, they arranged for numerous tests on herds being kept under regular farm conditions. These tests were carried out on something like 50 farms in Story and Boone counties. The results showed that hog cholera could be prevented by the proper use of the anti-hog cholera serum.

The experiments were so successful that in 1908 the Secretary of Agriculture, Chief of the Bureau and various state officials visited the Ames station and witnessed the preparation and use of the serum. The good leaven started then and was carried to other states. Further work was done in Kansas City and Omaha, under the direction of Dr. Niles. Numerous states established laboratories. The laboratory at Ames was enlarged so that larger amounts of serum could be made under the supervision of the veterinarian; and under the supervision of the bureau, veterinarians were stationed in one or more counties in several swine growing states, and herds were treated on a large scale. The results were most encouraging and as the success of the treatment became generally known, private companies were organized for the manufacture of serum. Soon a law was passed by congress putting the manufacture and interstate shipment of serum under the supervision of the bureau.

Dr. Niles had charge of the Ames Station until November, 1928, when, because of his advanced age, he retired. He has made many valuable contributions in the reports of the Bureau of Animal Industry and in veterinary journals. He has left a large impress upon the veterinary work of this country and Iowa State College may well be proud of one of its sons.

Dr. Charles Edwin Bessey—Botany was required for the veterinary students during the early organization of the veterinary college, required because it was felt that a knowledge of plant life is important in connection with the profession. The veterinary students were indeed fortunate that the college had on its faculty a man with the attainments of Dr. C. E. Bessey, who had a broad outlook and was an inspiring teacher, brim full of enthusiasm. The contact with a scientist of his type was worthwhile.

You may be sure that there never was a dull moment in the class-

room and that when the students left his class they knew something about the flower, the functions of the root, stem and leaf, and that the underlying principles of plant physiology were, after all, applicable to animals as well. They knew something about diseases of plants, and the injury to livestock from such plants as ergot, needle grass and rattlebox.

Dr. Bessey was born in a log cabin on an Ohio farm May 21, 1845. He received his early education from his father, then attended an academy in Ohio and, in 1866, entered Michigan Agricultural College with the intention of becoming a civil engineer. But his love of nature led him into the field of botany. He was graduated from the Michigan Agricultural College in 1869, receiving the B. S. degree. He received a call to the chair of botany, zoology and horticulture at Iowa State College in 1870. Later the chair was changed to botany.

In 1885, he accepted the chair of botany at the University of Nebraska. Dr. Bessey was at Ames when the veterinary college was organized; in fact, he was a member of the original faculty at Ames. He was acting-president of Iowa State College in 1882 and vice-president in 1883-1884. At Nebraska he was not only head of the department of botany but because of his fine executive ability was made acting-chancellor in 1899-1907.

Dr. Bessey organized the botanical work at Ames and Nebraska on a high plane. One of the interesting organizations was the botanical seminar, one of the unique organizations of the land.

During Dr. Bessey's connection with the college he published a textbook of botany. It was quite unlike any American textbook. An innovation in this book was a combination of morphology, physiology and systematic botany, in which he followed the German methods. The book was widely used and gave Dr. Bessey great reputation as a botanist.

One of the interesting papers published by him while at Ames was an account of ergot and, with Dr. M. Stalker, an account of the rattlebox, *Crotalaria sagittalis*, one of the toxic plants of the Missouri River bottoms. He made many other contributions to the systematic botany of Iowa and Nebraska and was the organizer of the botanical survey of Nebraska. While at Ames he was elected the first president of the old Iowa Academy of Science. He served in that capacity from 1875-1884. He was a charter member. A great honor was conferred on him when he was elected president of the American Association for the Advancement of Science.

Dr. Bessey was also president of the Botanical Society of America in 1896; president of the Society for the Promotion of Agricultural Science in 1889-1891.

Dr. Bessey was a very unusual man in every way. To him we are indebted for the inauguration of much that is modern in the teaching of botany. The first laboratory for undergraduate students was established between 1870 and 1884 and the veterinary students had the benefit of his fine technique in teaching. To him must be given a large place in the instruction of the early veterinary graduates of Ames.

Dr. Byron D. Halsted, a member of the faculty from February, 1885, to February, 1889, had charge of the botanical work following Dr. C. E. Bessey. After a service of four years, Dr. Halsted resigned to accept the position of professor of botany and horticulture in Rutgers College, New Brunswick, N. J. He served that institution as a teacher and investigator for thirty years.

During his time as a teacher at Ames, Dr. Halsted made a marked impress as a teacher and research worker.

Dr. Halsted was born in Venice, New York, on January 9, 1852. He received his early education in the secondary schools of that state and thru the influence of some relatives entered Michigan Agricultural College in 1871, receiving the degree of B. S. in 1875 and, three years later, the degree of M. S. Subsequently he attended Lawrence Scientific School of Harvard, a student of Dr. William G. Farlow, the leading authority in the country on lower plant life.

Dr. Halsted was the first to receive the degree of Sc. D. in this country. He was a member of many scientific societies, a charter member of the American Botanical Society and was recognized everywhere as an outstanding botanist.

The reports of the botany department are of especial interest because they give us an insight into his methods of teaching. These reports were published in 1886 and 1888. He tells how the students were asked to train their powers of observation. You may be sure that the students were well grounded in general morphology. In a report for 1888, of work done in 1887, he tells us, "In the Veterinary School, the seniors are given a lecture once a week on that portion of botany which is most nearly related to their future work. The subject of bacteriology is made a first feature and is approached by lectures and laboratory work on higher cryptograms." The germs mentioned here were then known as bacterium termo, which covers a multitude of species.

Dr. Halsted certainly left his impress upon the institution at Ames, and his lectures were of invaluable service to the veterinary students.

Dr. L. H. Pammel came to Iowa Agricultural College in 1889, to take the headship of the department of botany. He found awaiting him courses in the veterinary science classes.

For these his training and outlook had especially prepared him, and he gave to this work a vital interest, which engaged a quick response from the students.

Dr. Pammel gave the first course in bacteriology offered to veterinary students. He gave also the first courses in bacteriology to general science students, in this country. The three-year course in veterinary science, which was offered at I. A. C. in 1899, included one term of elementary botany, first year; one term pharmaceutical botany, second year; and one term of bacteriology, third year.

The first term's work included morphology and flowering plants and identification of drugs.

The second term's work required the preparation of an herbarium of medicinal plants and included the study of fungi, such as rusts, smuts, ergot; yeasts, and causes of fermentation. The courses in bacteriology included history of the subject, study of growth of cultures and means of preventing contagion. Poisonous plants of meadows and other plants injurious to stock were discussed.

In 1900 was offered a course on poisonous plants, to veterinary students, on suggestion of Dr. Repp, who had been a student of Dr. Harshberger of the University of Pennsylvania. This course in much greater detail was embodied in the publication "Poisonous Plants."

Since this, many papers have been published by Dr. Pammel on poisonous plants, and he has edited for a long period a department on poisonous plants in the Journal of Veterinary Medicine.

Dr. Pammel was born at LaCrosse, Wis., April 19, 1862. His parents came to Wisconsin from Germany in the year 1856; 10 years later the farmstead near the city of LaCrosse became the family home and here Dr. Pammel's boyhood was spent. The father was a progressive, self-reliant man of high intelligence, who loved to be trying out something new in his dairying and orchard operations. The varied natural surroundings of a beautifully situated country home appealed to the son and were ideal surroundings for a young botanist.

Dr. Pammel received from Wisconsin University his degree of B. Agr. in 1885, M. S. in 1889 and, in 1925, honorary Doctor of Science, Sci. D. He received Ph. D. from Washington University in 1899. Following graduation at Wisconsin in 1885, he became assistant to Dr. Farlow and later aided in scientific work in several branches of the United States Department of Agriculture. Later at Missouri Botanical Garden, he was associated with Dr. Wm. Trelease, the source, Dr. Pammel has said, of a deep and lasting inspiration to him.

He became a member of the State Geological Board in 1894; and served as chairman of the State Board of Conservation, 1918-1927. He has served as vice-president Section G., the American Association of Science. Botanical and scientific societies have given him general recognition, in offices which he has held. Dr. Pammel is well known in Iowa for his work in the establishment of state parks.

He has had a busy pen, at all times, and his contributions to scientific literature have been many. Included among them are:

Anatomical Characters of Seeds of Legumes, Grasses of Iowa, Flora of Uintahs, Weed Flora of Iowa, Manual of Poisonous Plants and many publications upon plants and fungi harmful to animals.

As a teacher, he believed in pupils working out their own destinies: if the student applied himself, the science became a lasting part of his equipment; if he was indifferent, the loss was his own.

Dr. Pammel has a wide outlook upon the science of botany as related to the general field of knowledge. He possesses the open mind toward research and a generous attitude toward honest efforts of others. In field work with Dr. Pammel, the students caught a touch of enthusiasm for plant study. This fairness and a spirit of friendliness toward his

classes have contributed their share to the lasting impression made upon his students.

Veterinary science has received a rich contribution thru the services of Dr. Pammel.

Dr. Herbert Osborn—Many of the problems connected with the diseases of animals are zoological. In the organization of the Veterinary College, full recognition was given to zoological work. One of the strong men of the veterinary faculty was Dr. Herbert Osborn, born at Lafayette, Wis. March 19, 1856. He moved to Fairfax, Iowa, with his parents. He had his preliminary training in the public schools. Later he graduated from Iowa State College in 1879, receiving the degree of Bachelor of Science. The degree of Master of Science was conferred upon him in 1880. Because of his distinguished services at Iowa State College in entomology the degree of Doctor of Science was conferred upon him in 1916. He also had contact with Dr. Hagen of Harvard University during his early work.

He became assistant to Dr. F. E. C. Beal in 1880, serving until 1883, when he became assistant professor, 1883 to 1885, and professor of entomology in 1885, serving until 1898, at which time he had the call from Ohio State University where he has since served as professor, and, since 1916, as research professor.

He became the entomologist of the Iowa Agricultural Experiment Station in 1890 and director of the Biological Survey of Ohio in 1912. To him the State of Iowa is indebted for the creation of the State Entomologist. He served as State Entomologist for one year. He has ably directed the research laboratories in zoological and entomological work of Ohio State University.

Dr. Osborn is a member of many important entomological and other societies such as the American Entomological Society, the Entomological Society of France and Society of Economic Entomologists. He was president of the Iowa Academy of Science in 1887; the president of the Ohio Academy of Sciences 1904-1905; vice-president of the zoology section of the American Association for the advancement of Science in 1917. For a number of years he has been connected with the Tropical Plant Research Foundation for the United States Department of Agriculture. He worked up the Mallophaga and was consulting entomologist of the Maine Agricultural Experiment Station in 1918.

To the veterinary students Dr. Osborn gave some general courses in entomology. These courses were thoro in the fundamentals. He gave to the students a special course on animal parasites. His fine research work on these animal parasites made him a great asset to the faculty. His indomitable energy and fine personality were impressed on the students.

Of particular interest in this connection is Dr. Osborn's work on parasitic insects of domestic animals. Especially Pediculi and Mallophaga of man and lower animals, a classic paper, published by the United States Department of Agriculture.

Dr. F. E. L. Beal, who came to Ames as a civil engineer, was trans-



View from Old Main toward the northeast. About 1886



Present-day view from Central toward the northeast



View from Old Main toward the southeast about 1886



Present-day view from Central toward the southeast

ferred to the Department of Zoology. He had long been interested in zoology and his major contributions pertained to a knowledge of bird life.

My earliest recollections concerning him were his associations with Dr. Osborn and Charles Aldrich. Dr. Aldrich was especially interested in Dr. Beal because of their mutual interest in the extinct animal of Iowa, the buffalo. They found a number of buffalo horns near Ames.

Dr. Beal was born in Middlesex County, Mass., March 9, 1840, and died at Branchville, Md., October 1, 1916. At an early age Beal was left an orphan.

He enlisted in the Thirty-sixth Massachusetts regiment. As a youth he was diagnosed as having tuberculosis and was discharged from the services on February 5, 1863. He then settled on a farm and there for several years studied birds, insects and trees. He graduated from the Massachusetts Institute of Technology in 1872 and became an engineer on the C. B. and Q. railroad. His thesis was "A Design for a Howe Truss Bridge," which is carefully preserved in the Boston Institute of Technology. He became a surveyor for the Burlington and Missouri railroad, stationed at Crete, Nebr.

He became an instructor in mathematics of the Boston Institute of Technology and later, for a few years, was connected with the United States Naval Academy at Annapolis. He came to Iowa Agricultural College on March 20, 1876. In 1882 he became professor of zoology as well as geology, his assistant in geology being Dr. Herbert Osborn. His work in Iowa brought him in contact with Dr. Aldrich who was an enthusiast on the subject of birds.

Henry Elijah Summers became connected with Iowa State College in July, 1898, when Professor Osborn resigned to accept a position at Ohio State University. Professor Summers became professor of zoology and entomology and continued until February, 1918.

Professor Summers was born in Rochester, N. Y. in 1863. He received his early education in that state and was graduated from Cornell University in 1886. He served as fellow in that institution from 1886 to 1888. From 1888 to 1891 he was associate professor of biology at the University of Tennessee. From 1892 to 1893 he was assistant professor in the Illinois State University Laboratory of Natural History under Dr. Forbes. From 1893 to 1897 he was assistant and associate professor of physiology in the same institution.

He became State Entomologist for Iowa in 1898. The work of the State Entomologist had been partly organized by Professor Osborn, but the real organization began with the work of Professor Summers.

He gave lectures to the veterinary students on the subjects of zoology, animal parasites and entomology.

Professor Summers is a member of numerous associations and scientific societies, among these the American Association for the Advancement of Science, in which organization he is a fellow, Association of American Entomologists, of which he was the president in 1905 and the vice-president in 1909. He was also a member of the Microscopical Society, the Iowa Academy of Science,

of which he was president in 1902 and treasurer from 1907 to 1909.

Alfred Allen Bennett, who for a number of years was connected with Iowa State College, and under whose direction the Veterinary students took courses in chemistry between 1885 and 1914, was born in Milford, N. H., on November 30, 1850. He received his early education in the public schools of his native town. He entered the State University of Michigan and received the degree of B. S. in 1877.

Because of his valuable services as a teacher, Iowa State College in 1887 conferred upon him the degree of M. S. Shortly after graduation from the University of Michigan he became teacher of science in the Michigan Military Academy, serving this institution from 1878 to 1880. He then became professor of physics and chemistry at Iowa Wesleyan College, Mount Pleasant, Iowa, and remained there from 1881 to 1883.

He became professor of chemistry in the old University of Chicago in 1883 and served until 1885.

On the resignation of Professor Pope at Ames, Professor Bennett was asked to assume the chair of chemistry. He was active in his work until failing health compelled him to let up his strenuous duties. He received a one year leave of absence from 1913 to 1914, resumed his work for a short time but was forced to take another leave of absence in 1915. Later he was made emeritus professor of chemistry. Professor Bennett died at Orange, Calif., from accidental drowning June 19, 1919.

Professor Bennett published little, but in the year 1893, a work of his, "Textbook of Inorganic Chemistry, Part I," was published, and in 1894, Part II of the same work was brought out.

Dr. Irving W. Smith was born in Franklin, Delaware County, N. Y., March 1, 1851. He resided with his parents at the place of his birth until he was about six years of age, when they moved to Iowa and located at Charles City. Dr. Smith graduated from the schools of that city. He then attended the Iowa Agricultural College at Ames, where he was graduated with the first class in 1872, with first rank. He then attended the medical department of the Iowa State University and from there went to Jefferson Medical College, Philadelphia, from which he was graduated. After graduation from the medical college he at once entered the practice of medicine in his home town of Charles City, where he continued from 1875 to 1893. In 1876, Dr. Smith was married to Miss Sallie Stalker, who was also a graduate of the Agricultural College. In 1893, Dr. Smith was elected to the professorship of pathology, therapeutics and college physician of the Agricultural College at Ames, which he held for about a year, achieving marked distinction and working out a brilliant career for himself, when he discovered in himself signs of tuberculous troubles. He at once resigned his professorship and with his family went to the Pacific coast to seek its healing climate. He was greatly improved in health by the change, but was attacked by malaria fever, from which he steadily declined until his death on October 29, 1895.

Wilbert Eugene Harriman was born at Cherokee, Iowa, December 4, 1871, and when five years old removed with his parents to Hampton, graduating from the Hampton high school in June, 1890. He entered the Iowa Agricultural College in 1890 enrolling for the scientific course. He was always popular as a student for he was wide-awake and generous. Being prominent in college activities, he was a loyal member of the Welch Eclectic Literary society, captain of Company E in the college battalion, manager of the baseball team and during his sophomore year class president. At the close of his sophomore year he began the study of medicine in the office of Dr. W. A. Rohlf of Hampton, continuing this work thro the winter vacation of 1891-92. At the close of his junior year in November, 1892, he entered the medical department of the State University and at the close of this year's work had the satisfaction of winning the prize offered for the best examination in histology. Returning to Ames in the spring he completed his course, graduating in November, 1893. In May, 1894, he passed the examination of the State Board of Medical Examiners and began the practice of medicine at Gilbert, Story county, where he remained until October, 1894, when he entered Jefferson Medical College at Philadelphia, graduating May 15, 1895. He located at Ames the month following and on July 16 was elected to the position of college physician and surgeon and professor of pathology, histology and physiology at Iowa State Agricultural College, a position which he filled for 12 years with honor to his profession and credit to his Alma Mater.

From 1895 to 1901 Dr. Harriman taught pathology to the junior and senior veterinarians, histology to the first year veterinarians, general surgical therapeutics to the veterinary seniors and physiology to a multitudinous class comprised of freshman veterinarians, juniors and seniors of the general science course and seniors of the ladies' domestic science course. This amounted to 18 lectures and two laboratories per week, classes convening in old Agricultural Hall.

The student body had increased from about 350 students in 1895, to nearly 600 in 1900. At the close of the typhoid epidemic of 1900 the doctor realized that he could no longer teach and at the same time give the sanitation and student illness proper care. So the Board of Education, having placed upon its records a resolution of appreciation of the faithful and unremitting services of the college physician, granted him the privilege of discontinuing the teaching so that he might have time for the care of the student body and an increasing private practice.

Doctor Harriman's life work was ended by an untimely death March 17, 1909.

He is survived by his widow, Mary Wormley Harriman, Ex. '95, who is now residing in Ames. Their three children, Loretta Harriman Jones, '19, Walter F. Harriman, '20, and Dorothy Harriman Sutton, '23, are all alumni of Iowa State College.—By Mrs. W. E. Harriman.

Dr. D. S. Fairchild was born September 16, 1847, at Fairfield, Vt.

He was educated at the academies of Franklin and Barre, Vt., during the years 1866, 1867 and 1868, attended medical lectures at Michigan University at Ann Arbor and was graduated from the Albany Medical College of Union University in December, 1868. He read medicine in the office of J. O. Cramton, of Fairfield, Vt.

The high rank attained by the Iowa State College Veterinary College is due in a large measure to the high quality of the men who gave instruction to students. Dr. Fairchild's connection with the Veterinary College was in a way accidental. The doctor located at Ames to practice medicine, having had previous experience in the practice of medicine in the little village of High Forest, Minn. It was while he was a practitioner in Ames that he came in contact with the students as medical advisor in the fall of 1872. There is a full account of his life in the *Alumnus of Iowa State College* (November 1925, 145). In 1872 he was appointed the regular college physician. In 1878 he became college health officer at the magnificent salary of \$100 a year, it being understood that he had the privilege of a private practice. It was during an epidemic of typhoid fever in 1883 that Dr. Fairchild, along with his colleagues, Professor J. L. Budd and F. E. L. Beal, found a defective sewage system, which they thought was responsible for the epidemic. These men privately borrowed the money from the Union National Bank and made the system safe.

It was during his incumbency that a college hospital was built in 1884, thus making the student medical service more efficient. These were indeed pioneer times and this kind of service was a venture.

When the Veterinary College was established in 1879, Dr. Fairchild became, along with his other duties, the professor of pathology, histology and therapeutics, and later there was added to these comparative anatomy. Along with his other duties he gave a few lectures to the students in psychology. All of this work was done at a salary of \$200 a year.

Dr. Fairchild, in an account of the trials of the Veterinary College says, "We have a feeling even to this day, that the professor (reference to Dr. H. Osborn) was somewhat amused at the course of instruction. We did not venture very far from the two volume work of Balfour on Embryology; this was a comparatively new branch of science. We had no apparatus, not even a chart. The best we could do was to make some drawings on a blackboard." There were many discouragements and disadvantages in giving instruction to the students. There was but little equipment, scarcely any room. The house formerly occupied by Dr. A. S. Welch became his laboratory in histology.

Dr. Fairchild remained with the college and was an active lecturer until 1893 when he moved to Clinton, Iowa.

Dr. Fairchild has made many fine contributions to medical science and his fine literary ability is shown in his extensive work in the *Journal of the Iowa Medical Society*. The historical articles are especially valuable. His paper on Pioneer Practice is a most note-

worthy one. He is a member of the leading medical science societies. He was honored by being elected president of the American Association of Railway Surgeons in 1914, president of the Iowa State Medical Society in 1894, president of Western Surgical Association in 1898, and of the American Medical Association in 1914. He is a fellow in the American College of Surgeons and was first vice-president.

In 1873 he helped organize the Story County Medical Society and was made its first president. In 1874 he assisted in organizing the Central District Medical Society and was twice elected its president.

Dr. J. H. McNeil was graduated from the University of Pennsylvania in 1899. He remained with the School of Veterinary Medicine at the University for one year after graduation, as house surgeon. Dr. Beardshear secured Dr. McNeil to teach anatomy and surgery, beginning in September, 1900. Dr. McNeil had been a student of medicine and was interested in the breeding of fine livestock. He soon became a warm friend of President Beardshear and was one of the main factors in putting new life and energy into the division after its reorganization.

I have never been associated with a man who had more energy and greater capacity for work than did Dr. McNeil; his energy was not only possessed in large quantities but was well directed. He is a deep thinker and had a wonderful insight into the personalities of his students. A number of the members of our present staff are former students of Dr. McNeil, and the writer feels indebted to him more than any one other person for his interest in the profession and the many opportunities which have come to him during the 22 years since he was graduated. Dr. Bemis, now of the University of Pennsylvania, Dr. Guard and Dr. Covault of our own staff, Dr. Graham of the Jensen-Salsberry Incorporation, and a number of others I could mention, undoubtedly got their inspiration from Dr. McNeil. The fact has already been referred to, that the first four-year course to be established in any veterinary college in the United States was established by him while he was dean of the Veterinary Division. This has now become the established requirement in all schools. He never liked publicity and above all he was an enemy of any misrepresentation or "sailing under false colors." Dr. McNeil was very active in attempting to help the livestock breeder to better methods of livestock production and was a frequent speaker on livestock breeders' programs. He was one of the first to urge systematic control of tuberculosis among livestock of the state and started the work of eradicating the disease from the college herd, which work was well under way when he resigned to go to the Ohio State University.

I have never known a truer friend; he never was friendly in your presence and unfriendly in your absence. Usually if he was your friend you were well aware of the fact. If he was not your friend

you also knew it. A friend like that is worth much when the test comes. I doubt whether we all realize how much he really meant to us when we were students.

Since leaving Iowa State College, Dr. McNeil served at Ohio State University as professor of surgery. Later he accepted a position with the Brazil Land and Cattle Company and spent five years in South America. After his return from South America, he accepted a position as Chief of the Bureau of Animal Industry of the State of New Jersey, which position he still holds.

Dr. L. A. Klein was born in Philadelphia in 1871; was educated in the public schools and Brown Preparatory School in Philadelphia, and was graduated from the School of Veterinary Medicine in 1897. He practiced his profession from 1897 to 1898 and was then employed by the Bureau of Animal Industry in the United States Department of Agriculture (1898-1899). Dr. Klein came to Iowa State College in September, 1900, at the same time Dr. McNeil accepted his position. Dr. Klein taught medicine and sanitary science, but resigned, effective January, 1902, after a period of service of about 15 months. After leaving Ames, he became professor of veterinary science at Clemson Agricultural College, 1904-1907, and deputy state veterinarian of Pennsylvania in 1907, which position he held until 1909 when he was offered the position of dean of the School of Veterinary Medicine at the University of Pennsylvania. This position he has filled with great credit since that time.

Dr. Klein has always been active in association work and has the reputation of being a good teacher and clear thinker. Among Dr. Klein's contributions to veterinary literature is a book, "Principles and Practice of Milk Hygiene," and a translation of Eugen Frohner's "Allgemeine Therapie Fur Tierarzte," as well as numerous papers.

Dr. M. Jacob was graduated from the University of Pennsylvania in 1902 and came to Iowa State College in September, 1903. Since leaving Iowa State College, Dr. Jacob has been connected with the faculty of the University of Tennessee at Knoxville. He has also served concurrently for a period of years as a state veterinarian of Tennessee. Dr. Jacob was on the staff as teacher of medicine when the writer was a freshman, and I remember distinctly the enthusiastic comments of the upper classmen regarding his teaching. It was a disappointment when we returned to college next year to find that he had resigned. Dr. Jacob has served our national association since 1918 as treasurer. This indicates the confidence and respect the profession has for him. He has served for a number of years on the tuberculosis committee of the United States Live Stock Sanitary Association where his counsel has always been progressive, yet safe. It is the regret of many of us that men of his type and ability could not have remained in veterinary colleges, so that the students might have the inspiration and benefit of their personality and ability.

Dr. W. A. Stuhr was born in southwestern Iowa. His early edu-

cation does not seem to have been recorded at the college, but he was graduated from the Veterinary Division in June, 1902. Upon graduation he remained at the college as house surgeon until 1903, when he was promoted to assistant professor in which capacity he served until August, 1907. Dr. Stuhr was a good teacher and a brilliant student. He was always very careful about his personal appearance and as a student we remember him as very thoro and deeply interested in his work. After leaving Iowa State College, Dr. Stuhr took up the study of medicine in Northwestern University, and upon completing his course, he remained in Chicago where he is very successful in the practice of his profession, specializing in surgery. It is regretted that a more recent photograph of him could not be secured.

Dr. L. M. Hurt was born at Newton, Iowa, November 5, 1880. After graduating from Newton high school, he came to Iowa State College, where he completed the veterinary course in 1904. He was retained on the faculty, serving until August, 1907. While a member of the staff, Dr. Hurt continued to take college work and when he left in 1907 had completed a considerable part of the course in agronomy, in which he received his Bachelor of Science degree in 1916. After leaving Iowa State College he became associated with the Division of Veterinary Medicine of the Michigan Agricultural College at East Lansing, where he served until 1911. He then went to California where he became city veterinarian of Pasadena. Dr. Hurt was made county veterinarian of Los Angeles County in 1913 and has succeeded in building up one of the finest livestock sanitary organizations on the west coast, an organization which he is still directing.

Dr. F. R. Ahlers graduated in the class of 1902 from Iowa State College. He made a fine record as a student, and when in 1904 Dr. McNeil needed an anatomist, Dr. Ahlers was chosen for the position. He was very much liked by the students, being sincere and frank. Instruction work, however, was not much to Dr. Ahlers liking, and he returned to the practice of his profession at Lamotte, Iowa, where he has been operating a farm and practicing his profession since leaving the college in 1905.

Dr. Ahlers has taken an active part in association work, having served the Eastern Iowa Veterinary Association as president.

Dr. T. S. Leith received his country and grade school education in Nebraska. His high school education was secured at Appleton, Wis., and after attending the University of Wisconsin for a semester, he transferred to the Iowa State College at Ames, completing the veterinary course in 1914. Following graduation he entered general practice in Iowa, and in 1916 became associated with the Veterinary Division as assistant and instructor until 1919. After the war period he located in Georgia for a while and then removed to DeFuniak Springs, Fla., where he is located at the present time. Dr. Leith rendered good service to the Iowa State College during the war period and is a very successful practitioner.

Dr. Kurt Schern was born September 10, 1880, in Berlin, Germany,

and after completing his preliminary education, enrolled in the Berlin Veterinary College, where after eight semesters, he passed the state veterinary examination in 1904. He then attended the University of Leipzig for three semesters, studying natural science. Following this, he entered the practice of his profession and was employed largely in a substitute capacity for official and practicing veterinarians. On April 1, 1906, he accepted a position as assistant in the veterinary section of Kaiser Wilhelm Institute at Bromberg under supervision of Dr. Meissner. He gave special attention to the bipolar organisms as well as diseases of cattle and sheep.

In 1908 he became associated with the imperial board of health (Kaiserlichen Gesundheitsamt) under Dr. Uhlenhut. In 1911 he took over food hygiene work in Berlin and in 1913 came to Iowa State College in connection with our veterinary research work. He was detained in Germany during the war and is now in Uruguay, South America.

Dr. L. E. Willey was born in Boone County, Iowa. At an early age his parents moved to Ames, where he received his preliminary education including high school. He entered the Iowa State College and was graduated from the Veterinary Division in 1911. Following graduation he became associated with the University of Minnesota as assistant professor until 1914, when he came to Iowa State College, where he remained until 1920. In 1920 he accepted a position as pathologist with the Sioux City Serum Company, where he is still employed.

When the war broke out, Dr. Willey enlisted as a second lieutenant on November 28, 1917. He was stationed at Ft. Keough, Mont., Camp Custer, Camp Greenleaf, Ft. Oglethorpe, Ga., and Camp Meade, Md. He was promoted to first lieutenant on July 10, 1918, and is at present a member of the Officers Reserve Corps.

Dr. Willey's association with the Research Department during its formative period was a great help to us, and he has continued his scientific trend of thought and research attitude in his present position.

Dr. N. L. Nelson became house surgeon in September, 1911, and after serving for one year was advanced to instructor, in which capacity he served until June, 1913. He returned to the college as assistant professor in September, 1915, having engaged in private practice during the time intervening. He remained on the staff in this capacity until April, 1918, when he became affiliated with the Sioux Falls Serum Company.

The ambulatory clinic work was started with Dr. Nelson in charge. His pleasing personality and his practical ideas soon made him popular as a teacher and created a demand for his services among the farmers of this community.

When the United States entered the World War, Dr. Nelson volunteered his services. He distinguished himself abroad and when the war closed he was acting as assistant chief veterinarian of the army of occupation. His service record is as follows:

Enlisted October 17, 1917, with the rank of major in Veterinary Corps. He was assigned to the Division Veterinary Headquarters of the Thirtieth Division. He was transferred to Headquarters Veterinary Hospital No. 5, thence to Headquarters of the 3rd Army as Corps Veterinarian (October 2, 1918) and from here to Headquarters of the army of occupation from December, 1918, to April, 1919. Dr. Nelson was in foreign service from May 1, 1918, to June 1, 1919, and was present at Kimmel Hill, St. Mihiel and Argonne. His discharge was dated June, 1919. We were glad when he returned, but the lure of possibilities in the commercial field attracted him, and as usual he has "made good." Dr. Nelson is with the Sioux Falls Serum Company at Sioux Falls, S. D.

Dr. R. R. Bolton was graduated from Cornell University Veterinary College and joined the veterinary staff of Iowa State in February, 1914. This was during the busy organization year and the additional burden of the State Biological Laboratory and other hog cholera work was upon us. Dr. Bolton taught medicine and physical diagnosis. He resigned in April, 1918, and is now located at Newburg, N. Y.

George Judisch, altho always a "part time" member of the staff has had a prominent place in the work of the division for 25 years. He began teaching pharmacy to the veterinary students about 1900. In order better to equip himself, he studied veterinary physiology, materia medica, poisonous plants, and took some work in agricultural chemistry. Mr. Judisch was thoro in his work not only at the college, but in his own business (pharmacy). He was always ready to help the students out of class and laboratory hours as well as during the scheduled periods. Many a veterinary student has spent hours at his store downtown receiving helpful suggestions and advice. In recognition of his service, the Iowa State College a few years ago granted him a certificate of 25 years of eminent service to the institution.

He established a scholarship awarded each year to the "best senior student in veterinary medicine," consisting of four years' membership in the American Veterinary Medical Association and a subscription to the official journal (\$25.00).

Mr. Judisch has been a leading factor in his own profession not only in Iowa but in the National Pharmaceutical Society as well and has always stood for high ethical and educational standards. He has been honored with the degree D. Ph. from Des Moines University and has served on the Iowa Pharmacy Commission since 1924.

Dr. H. S. Murphey was reared in Coshocton County, Ohio. Following his graduation from the Veterinary College of the Ohio State University in 1908, he engaged in private practice and worked on a per diem basis for the Ohio Livestock Commission. From this work he came to Iowa State College in September, 1909. He remained with the Veterinary Division until his death on September 25, 1926. When Dr. Murphey first joined the faculty he taught physiology and sanitary science. When Dr. Dykstra resigned, Dr. Murphey

was appointed head of the anatomy department in which position he continued until his death.

Probably no student who studied under Dr. Murphey will ever forget his insistence on thoro work. I doubt if Dr. Murphey ever knowingly gave a passing grade to a student who did not deserve it. It cannot be said that he was a popular teacher (with the students) because he was considered too exacting and "hard." In most cases, however, when these same students became alumni, they spoke of their appreciation of the man who "had taught them to work." Dr. Murphey was as strict with himself as he was with his students for he was an almost tireless worker and as some one has said "a typical scientist."

At the time of his death, Dr. H. P. Hoskins, secretary of the American Veterinary Medical Association, said: "Only 43 years of age, his death removes from the veterinary profession an outstanding anatomist, a tireless investigator and an unusually successful teacher." "The report made by this committee (committee on abortion) at Lexington was a marked departure from the reports of the same committee of previous years. It is no less valuable by reason of its unusual character, and reflects in only a small way the vast amount of work that Dr. Murphey did as chairman of the committee. He plunged into it, heart and soul, just as soon as he was notified of his appointment. Dr. Murphey did things just that way."

One of his colleagues (Dr. Murray) in a tribute to Dr. Murphey wrote: "His superior qualities of intellect, his steadfastness to his ideals, his love for his friends, his loyalty to his institution and to his co-workers so far out-measure his short-comings that we can think of none of the latter. Students stood in awe before him until they came to know and appreciate him and, on their return to the college as alumni, their first inquiry was for 'Pat.' He hated hypocrisy—he loved the truth."

Dr. W. W. Dimock was born in Tolland, Conn., in 1880. He graduated from the Connecticut Agricultural College in 1901 (B. S.), after which he attended the New York State Veterinary College, graduating with the class of 1905. Following graduation he went to Cuba, becoming assistant chief of animal husbandry (1906-1908) and later (1908-1909) chief veterinarian of the National Board of Health of Cuba. From this position he came to Iowa State College in October, 1909, and remained until September, 1915, when he accepted his present position as professor of veterinary science at the University of Kentucky. While at Iowa State College, Dr. Dimock was advanced to the rank of professor and vice-dean. He was appointed head of the Department of Pathology when the division was divided into departments in 1911. Dr. Dimock has been very active in association work, especially the American Veterinary Medical Association, before which he has presented many papers.

Dr. R. R. Dykstra was born in Grouingen, Holland, in 1879, and came to the United States when still young. He graduated from the Orange City (Iowa) High School in 1895. Following graduation from high

school he took up the study of pharmacy and was admitted to the practice of that profession in 1900. He was engaged in the drug business until the fall of 1902 when he entered Iowa State College and took up the study of veterinary medicine. Following his graduation in 1905 (course then three years) he accepted an appointment on the staff of the Veterinary Division to teach anatomy. (Dr. Dykstra's class was the last to enter the college as a three-year class.) Dr. Dykstra served on the faculty of Iowa State College from September, 1905, to August, 1911, having advanced to the rank of full professor during that time. Dr. Dykstra was always considered a good lecturer. After leaving Iowa State College, he became a member of the faculty of the Kansas Agricultural College, where he is now dean of the Division of Veterinary Medicine.

Dr. George W. McNutt was born in Kossuth County, Iowa, and graduated from the Algona high school. He entered the Iowa State College and after completing the four-year course in 1917 entered general practice at Stratford, Iowa. He served as veterinary inspector for the Bureau of Animal Industry for four months, when he enlisted in the army as second lieutenant. After the war he became associated with the Iowa State College as instructor in pathology. He was transferred to the Anatomy Department in 1920, where he served until 1927. Dr. McNutt was very closely associated with Dr. Murphey in both his teaching and research work, and much of the careful work done on some of the ductless glands was due to Dr. McNutt's efforts. He is a very thoro worker and an excellent teacher. Many of the research publications from the Anatomy Department of this division carry his name as a co-author. He is now professor of anatomy in the College of Veterinary Medicine in Washington State College.

Dr. H. E. Bemis was born at Cawker City, Kas., and after "exhausting" local educational facilities enrolled at Northwestern University (Evanston). After completing about two years of work there he came to Iowa State College and studied agriculture for one year. This was his preparation for the veterinary course which he completed in 1908. He entered the inspection service of the Bureau of Animal Industry and was stationed in Chicago, but Dr. McNeill resigned that fall and suggested Dr. Bemis as a good man to help carry on the work of the division. The wisdom of this selection was soon demonstrated, as he was appointed head of the Department of Surgery in 1911, which position he filled with dignity and efficiency until the University of Pennsylvania needed a man to take the place of the late Dr. Adams. Dr. Bemis was ever loyal even under difficult circumstances; he has a pleasing personality and was always popular with the students. Dr. Bemis, in addition to his other duties, served as vice-dean from 1915 to 1927.

Among those members of the veterinary staff who entered the service during the World War, Dr. Bemis was the first to enlist. He entered with the rank of major at Camp Funston, Kas., on October 4, 1917. He acted as division veterinarian to the Eighty-ninth Division and on January 3, 1918, was transferred to Veterinary Hospital No. 3,

Camp Lee, Va. On September 1, 1918, he was assigned to the office of chief veterinarian, A. E. F., at Tours, France. On November 18, 1918, Dr. Bemis was assigned to the position of chief veterinarian, 3rd Army Headquarters, Coblenz, Germany. He saw eighteen and a half months of foreign service and made a fine record. During his service he was promoted to lieutenant-colonel, V. C. He received his discharge at Washington, D. C., June 24, 1919. The decoration, "Officier du Merite Agricole, Republique de France," was awarded Dr. Bemis by the Republic of France for work done in reclaiming diseased and debilitated horses after the Armistice, so they could be returned to agricultural service.

It is always difficult to adjust oneself to the loss of a staff member of Dr. Bemis' type and personality, especially when you have labored together over a period of 18 years and have shared each other's joys and sorrows.

Dr. C. H. Stange was born in Cedar County, Iowa, May 21, 1880, and after attending public and German school, entered Lowden high school, graduating in 1896. He worked on a farm until 1903, when he came to Iowa State College, graduating in the class of 1907. He was employed by the Bureau of Animal Industry until the opening of college in the fall of 1907, when he accepted a position on the faculty of the Veterinary Division, Iowa State College. He pursued work at the University of Chicago during the summer session of 1908 and has since been identified with the Veterinary Division.

Dr. Henry Dale Bergman was born in Newton, Iowa, November 22, 1886. He was graduated from the Newton high school in 1904 and from Iowa State College, Division of Veterinary Medicine, in 1910. He did graduate work at the University of Chicago during the summers of 1911 and 1914. He has been on the faculty of Iowa State College from September, 1910, until the present time. Dr. Bergman's present position is professor and head of veterinary physiology and pharmacology.

Dr. Charles Murray was born in Greenfield, Ohio, February 8, 1876. At an early age his family moved to Russell, Iowa. His preparatory education was taken at Chariton, Iowa, and Drake University at Des Moines, from which institution he took the Bachelor in Pedagogy degree in 1906. He came to Iowa State College in 1908 and was assistant from 1908 to 1912, when he had completed the veterinary course and received the degree of Doctor of Veterinary Medicine. In the meantime, having taken sufficient science work, he secured the Bachelor of Science degree in 1910. Following graduation he became associated with the Veterinary Pathology Department as bacteriologist and in 1917, after it became apparent that Dr. Schern could not return because the United States had joined the Allies, Dr. Murray was appointed head of the Department of Veterinary Research, and continues in that capacity at the present time. Dr. Murray has to his credit many research papers and has a number of projects in process at the present time.

Dr. E. A. Benbrook was born in South Orange, N. J., on May 15,

1892. After graduating from the South Orange high school, he entered the University of Pennsylvania, graduating in 1914. He remained at his Alma Mater as instructor in veterinary pathology for one year, when he accepted a position at Oklahoma A. & M. College, where he served as instructor and assistant professor until he came to Iowa State College in 1918 as associate professor of veterinary investigation. He was made head of the Department of Veterinary Pathology in 1919, in which capacity he is still serving.

Dr. C. D. Rice was born in Richmond, Ky., on March 16, 1881. After completing the high school work in Richmond, he entered Georgetown College (Kentucky) and was graduated in 1902 with the Bachelor of Science degree. He entered Iowa State College and received his Doctor of Veterinary Medicine degree in 1913. He served on our extension staff from 1913 to 1915, during the hog cholera wave. Commercial work attracted him from 1915 to 1917 when he returned to the Veterinary Division. He is now associate professor of pathology.

Dr. W. F. Guard was born at Cleves, Ohio, January 29, 1890. After completing his preliminary education he studied science for one year at Moores Hill College, then went to Ohio State University, graduating in 1912. He remained at his Alma Mater for one year as assistant in veterinary medicine and practiced his profession until October, 1914, when he came to Iowa State College. He is at present professor and head of veterinary surgery.

Dr. C. H. Covault was born at Troy, Ohio, November 1, 1886. He received his preliminary education in the Staunton Township public schools and the preparatory and science department of Lebanon University. He taught in township schools from 1905 to 1907, when he entered Ohio State University, graduating in 1911. He entered practice and did field work for the Ohio Agricultural Commission from 1911 to 1914 and practiced his profession at Akron, Ohio, from 1914 to 1917, when he came to Iowa State College as associate professor of medicine, which position he still occupies.

Dr. Frank E. Walsh was born in Garner, Iowa, in 1890, was graduated from high school, and from Iowa State College in 1918, receiving the degree of Doctor of Veterinary Medicine. He engaged in private practice until the fall of 1919, when he came to Iowa State College. Since that time he has been assistant professor of medicine in charge of ambulatory clinics.

Dr. W. A. Aitken was born at Paullina, Iowa, April 11, 1895. He graduated from the Paullina high school in 1912 and Iowa State College in 1917. He served in the United States army, August, 1917 to August, 1919. He was deputy state veterinarian for a short period before he accepted a position in the Department of Anatomy, Iowa State College. He was made associate professor of surgery in 1927, in which position he is still serving.

Dr. H. E. Biester was born December 13, 1892, in Chicago; was graduated from the public schools of Philadelphia, attended Temple University, George Washington University and the University of Pennsylvania, at which institution he received the degree of V. M. D. in 1919.

He spent the next year in post graduate work in pathology. He served as interne in the University of Pennsylvania Veterinary School, which position he left to work for the United States Bureau of Animal Industry at Lancaster, Pennsylvania. In 1920 he accepted the position of instructor in veterinary pathology at Iowa State College, which place he resigned to go to the University of Illinois as associate in animal pathology. Dr. Biester is now assistant professor of veterinary investigation at Iowa State College.

Dr. S. H. McNutt was born at Algona, Iowa, in 1892. He received his preliminary education in Algona, after which he entered upon the study of veterinary medicine at Iowa State College, graduating in 1917. Following graduation, he remained in the Department of Veterinary Pathology for one year as an assistant. He was transferred to the veterinary research staff, where he now holds the position of assistant professor.

Dr. H. H. Dukes was born at St. George, S. C., on September 9, 1895. After completing his high school education he entered Clemson College, South Carolina, graduating with the Bachelor of Science degree in 1915, following which he came to Iowa State College, completing the work for his D. V. M. degree in 1918 and Master of Science degree in 1923. He was assistant professor of Veterinary Science at Clemson College from 1918 to 1920 and in private practice until 1921, when he came to Iowa State College. He is at present assistant professor of veterinary physiology. Dr. Dukes is being transferred to veterinary research at the close of the present college year.

Dr. Harry L. Foust was born in Ohio, March 22, 1886. He attended grade and high school and Valparaiso University. He graduated from the Ohio State University in 1914 with the degree D. V. M. In addition, he took one year of chemistry and biology at North Dakota Agricultural College, two sessions at the University of Wisconsin Medical School and one year in the Medical School and Veterinary Division of the University of Minnesota. He served the North Dakota Agricultural College as a teacher and research man for 10 years and came to Iowa State College as head of the Department of Anatomy in 1927, in which position he is still serving.

Dr. Mack A. Emmerson was born at Pisgah, Iowa, May 15, 1903. He attended grade school at Grand Forks, N. D., and high school at Minot and Lakota, N. D. He attended North Dakota Agricultural College, 1921, to 1923, and Iowa State College, 1923 to 1925, receiving both his D. V. M. degree in 1925 and his Master of Science degree in 1928 from Iowa State College. Following graduation in 1925, he acted as house surgeon for two years and is now completing his second year as instructor in anatomy.

Dr. I. A. Merchant was born in Paonia, Colo., February 9, 1898. After graduation from the Paonia high school he attended the Colorado Agricultural College, receiving the degree, Doctor of Veterinary Medicine, in 1924. He was employed by the Bureau of Animal Industry until November, 1925, when he came to Iowa State College as instructor in veterinary pathology. He received his Master of Science degree in 1928 and is at present assistant professor of pathology.

Dr. George R. Fowler was born May 17, 1890, at Cross Lake, Mich. He received preparatory work in England in a private school, spent one year at the University of Missouri and one year at the University of Idaho and was graduated from Washington State College in 1925 with the degrees Bachelor of Science and Doctor of Veterinary Medicine. He joined the faculty of Iowa State College in 1928 as assistant professor of veterinary anatomy, after having served three and one-half years as instructor of anatomy in the faculty of his Alma Mater.

Dr. Chester Daniel Lee was born in Salt Lick, Ky., September 3, 1904. He received his preliminary education in high school and military school, and spent three years at Morningside College in Sioux City, Iowa.

He was graduated from Iowa State College in 1927, receiving the degree of Doctor of Veterinary Medicine. Since that time he has served this institution as house surgeon and as instructor in veterinary pathology.

Dr. Walter H. Chivers was born in St. Joseph, Mo., December 23, 1892. He was graduated from St. Joseph Central high school. In 1928 he was graduated from Iowa State College, receiving the degree D. V. M. His present position is house surgeon.

Joseph E. Guthrie was born in York, Livingston County, N. Y., September 24, 1871. He attended the public schools of his native town and was graduated from the high school at LeRoy, N. Y., in 1895. He matriculated at the University of Minnesota in 1896, receiving his B. S. degree from there in 1900. He received the degree of M. S. in 1901. He is interested especially in entomology and herpetology and has done a large amount of excellent work in connection with snakes.

Professor J. E. Guthrie has been connected with Iowa State College since 1901, serving in the capacity of instructor until 1904, assistant professor until 1914, associate professor until 1917, when he was made professor of zoology, which position he still holds.

Professor Guthrie has been teaching veterinary students for 27 years. The students in veterinary medicine who have had work with him in general zoology and embryology all speak of him in the highest terms.

He is a member of numerous societies, among which are: Fellow, American Association for the Advancement of Science, Reptile Study Society, American Herpetological and Ichthyological Society, Wilson Ornithological Society, Iowa Academy of Science, Iowa Ornithological Union, Sigma Xi, Gamma Sigma Delta and Phi Kappa Phi.—L. H. Pammel.

Maria M. Roberts was born in Harrison County, Iowa, June 29, 1867. She completed her common and high school education by graduating from the Dunlap high school at the age of 14. She was graduated from Iowa State College with the class of 1890. After graduation she taught in the Des Moines schools for a while, but resigned to accept a position in the mathematics department of her Alma Mater. In 1892 and 1893 she did post graduate work at Cornell University. When Dr. Storms became president, he organized the college into a junior and senior college (1904). Dr. E. W. Stanton was appointed dean of the junior college, in which all freshman and sophomore students are clas-

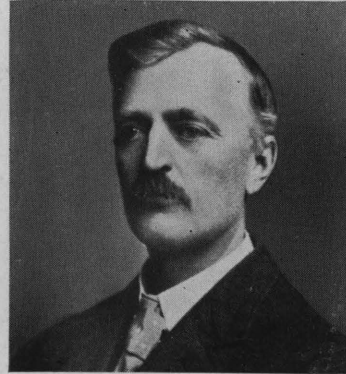
sified. Miss Roberts was appointed vice-dean of the junior college (1914) and, on the death of Dean Stanton (September, 1920), succeeded him as dean. All veterinary students entering Iowa State College since 1909 have been classified during their first two years in her office. They know of her sympathy with the students in their problems and appreciate her fine ideals of scholarship. Probably no member of the staff of Iowa State College is so widely and favorably known among alumni as Miss Roberts.

FACULTY ORGANIZATION

- 1873—H. J. Detmers, professor.
 1877-79—M. Stalker, professor agriculture and veterinary science.
 1880—M. Stalker, professor; D. S. Fairchild, professor.
 1881—M. Stalker, professor; D. S. Fairchild, professor; G. C. Faville, instructor.
 1882-84—M. Stalker, professor; D. S. Fairchild, professor.
 1885—M. Stalker, professor; D. S. Fairchild, professor; G. M. Osborn, house surgeon.
 1886—M. Stalker, professor; D. S. Fairchild, professor; W. B. Niles, house surgeon; L. J. Alleman, lecturer; F. E. Cruttenden, lecturer.
 1887—M. Stalker, professor; D. S. Fairchild, professor; W. B. Niles, house surgeon; L. J. Alleman, lecturer; F. E. Cruttenden, lecturer.
 1888—M. Stalker, professor; D. S. Fairchild, professor; W. B. Niles, lecturer; F. E. Cruttenden, lecturer; John Tillie, house surgeon; L. Schooler, lecturer.
 1889—M. Stalker, professor; D. S. Fairchild, professor; F. E. Cruttenden, lecturer; L. Schooler, lecturer; John McBirney, house surgeon.
 1890—M. Stalker, professor; D. S. Fairchild, professor; S. B. Nelson, house surgeon.
 1891—M. Stalker, professor; D. S. Fairchild, professor; W. B. Niles, assistant professor; J. C. Norton, house surgeon.
 1892—M. Stalker, professor; D. S. Fairchild, professor; W. B. Niles, assistant professor; W. A. McClanahan, house surgeon.
 1893—M. Stalker, professor; D. S. Fairchild, professor; W. B. Niles, assistant professor; J. A. Replogle, house surgeon.
 1894—M. Stalker, professor; I. W. Smith, professor; W. B. Niles, assistant professor; C. M. Day, house surgeon.
 1895—M. Stalker, professor; I. W. Smith, professor ($\frac{1}{2}$); W. E. Harriman, professor ($\frac{1}{2}$); W. B. Niles, assistant professor; A. R. Wake, house surgeon.
 1896—M. Stalker, professor; W. E. Harriman, professor; W. B. Niles, assistant professor; W. R. Cooper, house surgeon.
 1897-98—M. Stalker, professor; W. E. Harriman, professor; W. B. Niles, assistant professor; W. B. Lincoln, house surgeon.
 1898-99—M. Stalker, professor; W. E. Harriman, professor; W. B. Niles, assistant professor; J. J. Repp, assistant professor; J. E. Bingham, lecturer; M. F. Patterson, lecturer; S. C. Brownlee, lecturer; C. G. Lee, lecturer; H. E. Titus, house surgeon.
 1899-00—M. Stalker, professor; J. J. Repp, assistant professor; Bur-



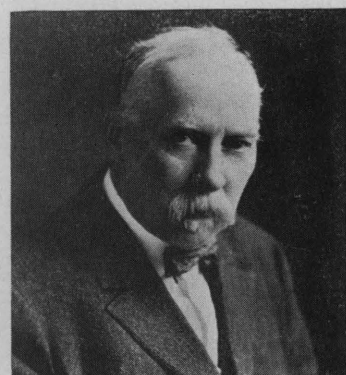
DR. DAVID S. FAIRCHILD



DR. W. B. NILES



DR. W. E. HARRIMAN



DR. L. H. PAMMEL



DR. L. A. KLEIN



DR. M. JACOB



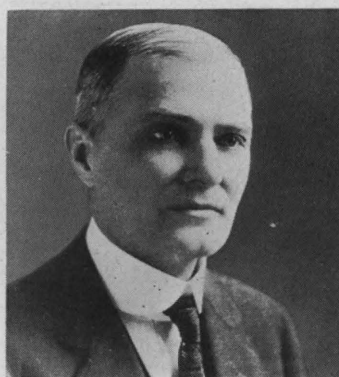
DR. L. M. HURT



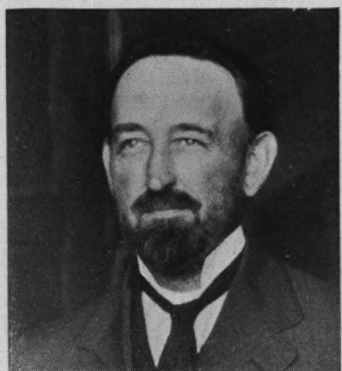
DR. F. R. AHLERS



DR. R. R. DYKSTRA



GEORGE JUDISCH



DR. H. S. MURPHEY



DR. H. E. BEMIS



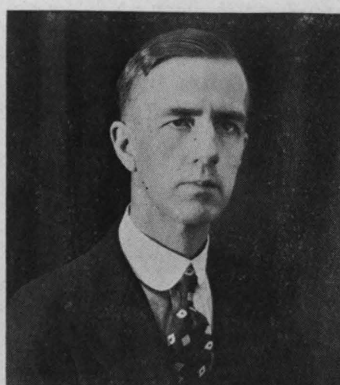
DR. L. E. WILLEY



DR. T. S. LEITH



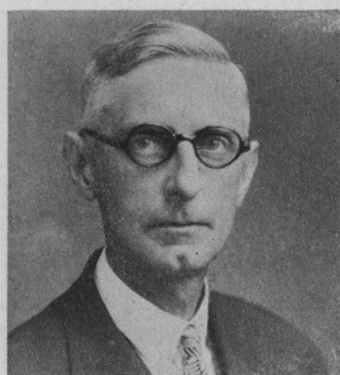
DR. G. W. McNUTT



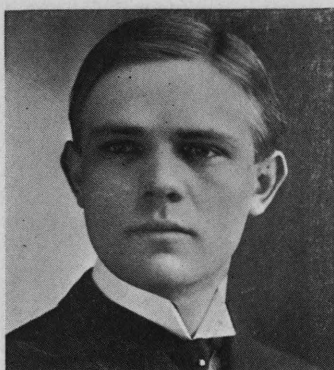
DR. E. A. HEWITT



DR. J. D. GROSSMAN



DR. W. W. DIMOCK



DR. W. A. STUHR



DR. W. E. MADSON



DR. R. R. BOLTON



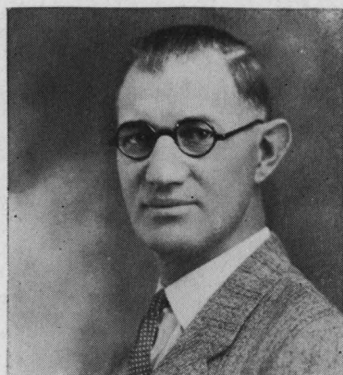
PROF. J. E. GUTHRIE



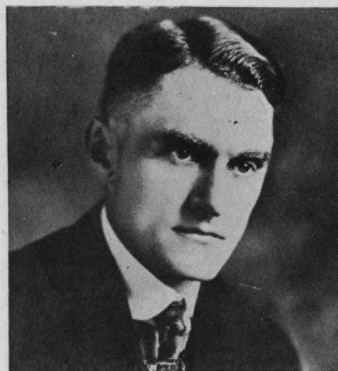
DEAN MARIA M. ROBERTS



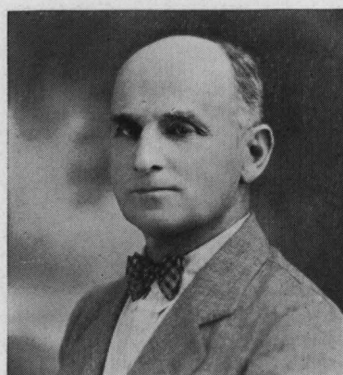
DEAN R. E. BUCHANAN



DEAN C. H. STANGE



DR. H. D. BERGMAN



DR. CHARLES MURRAY



DR. C. D. RICE



DR. W. F. GUARD



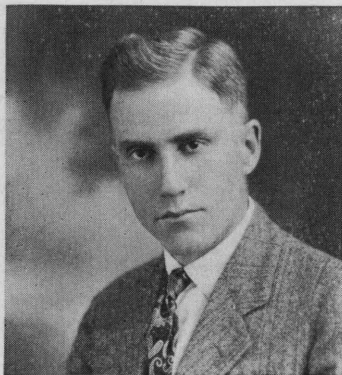
DR. C. H. COVAULT



DR. F. E. WALSH



DR. E. A. BENBROOK



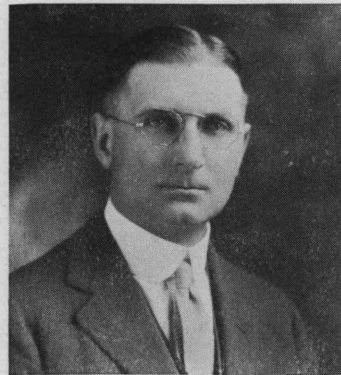
DR. S. H. McNUTT



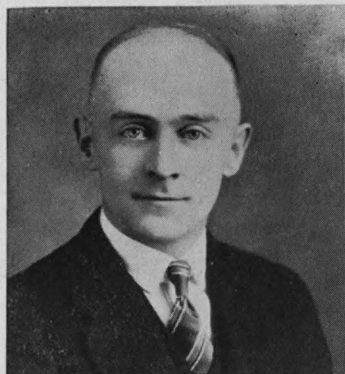
PAUL PURWIN



DR. W. A. AITKEN



DR. H. E. BIESTER



DR. H. H. DUKES



D. F. ANDERSON



DR. H. L. FOUST



DR. GEORGE R. FOWLER



DR. I. A. MERCHANT



DR. C. D. LEE



DR. M. A. EMERSON



View of the campus about 1870. Note South Hall in foreground, Chemistry Building in the left background and the Maples to the extreme left

ton Rogers, house surgeon; J. E. Bingham, lecturer; M. F. Patterson, lecturer; S. C. Brownlee, lecturer; C. G. Lee, lecturer.

1900-01—J. H. McNeill, professor; L. A. Klein, professor; J. J. Repp, professor; M. Stalker, lecturer; C. G. Lee, lecturer.

1901-02—J. H. McNeill, professor; L. A. Klein, professor (1/02); J. J. Repp, professor; C. W. Gay, instructor; M. Stalker, lecturer; G. Judisch, lecturer.

1902-03—J. H. McNeill, professor and dean; C. W. Gay, professor; J. J. Repp, professor; W. E. Harriman, professor; W. A. Stuhr, house surgeon; M. Stalker, lecturer; G. Judisch, lecturer; C. G. Lee, lecturer.

1903-04—J. H. McNeill, professor and dean; M. Jacob, professor; C. W. Gay, professor; W. E. Harriman, professor; W. A. Stuhr, assistant professor; M. Stalker, lecturer; C. G. Lee, lecturer.

1904-05—J. H. McNeill, professor and dean; W. E. Harriman, professor; W. A. Stuhr, associate professor; F. R. Ahlers, assistant professor; L. M. Hurt, assistant professor; M. Stalker, lecturer; G. Judisch, lecturer; C. G. Lee, lecturer.

1905-06—J. H. McNeill, professor and dean; W. A. Stuhr, associate professor; R. R. Dykstra, assistant professor; L. M. Hurt, assistant professor; W. E. Harriman, professor; M. Stalker, lecturer; G. Judisch, lecturer; I. J. Scott, lecturer.

1906-07—J. H. McNeill, professor and dean; W. A. Stuhr, associate professor; R. R. Dykstra, assistant professor; L. M. Hurt, assistant professor; W. E. Harriman, professor; M. Stalker, lecturer; G. Judisch, lecturer.

1907-08—J. H. McNeill, professor and dean; R. R. Dykstra, associate professor; C. H. Stange, assistant professor; W. E. Madson, assistant professor; G. Judisch, instructor; M. Stalker, lecturer.

1908-09—C. H. Stange, professor; R. R. Dykstra, associate professor; H. E. Bemis, assistant professor; W. E. Madson, assistant professor; G. Judisch, instructor.

1909-10—C. H. Stange, professor and dean; R. R. Dykstra, professor; W. W. Dimock, associate professor; H. E. Bemis, assistant professor; H. S. Murphey, assistant professor; G. Judisch, lecturer.

1910-11—C. H. Stange, professor and dean; R. R. Dykstra, professor; W. W. Dimock, professor; H. E. Bemis, assistant professor; H. S. Murphey, assistant professor; G. Judisch, lecturer; H. D. Bergman, assistant.

1911-12—C. H. Stange, professor and dean; N. L. Nelson, house surgeon; H. S. Murphey, associate professor; H. D. Bergman, associate professor; G. Judisch, lecturer; W. W. Dimock, professor; Chas. Murray, instructor; H. E. Bemis, associate professor.

1912-13—C. H. Stange, professor and dean; N. L. Nelson, house surgeon; H. S. Murphey, associate professor; H. D. Bergman, associate professor; G. Judisch, instructor; W. W. Dimock, professor; Chas. Murray, instructor; H. E. Bemis, professor.

1913-14—C. H. Stange, professor and dean; R. R. Bolton, assistant professor; H. S. Murphey, professor; H. D. Bergman, associate professor; G. Judisch, instructor; W. W. Dimock, professor and vice-dean;

Chas. Murray, associate professor; J. W. Lumb, instructor; H. E. Bemis, professor; Glen Darbyshire, instructor.

1914-15—C. H. Stange, professor and dean; R. R. Bolton, assistant professor; H. S. Murphey, professor; H. D. Bergman, associate professor; G. Judisch, instructor; W. W. Dimock, professor and vice-dean; Chas. Murray, associate professor; J. D. Grossman, assistant; H. E. Bemis, professor; W. F. Guard, assistant and house surgeon.

1915-16—C. H. Stange, professor and dean; R. R. Bolton, assistant professor; H. S. Murphey, professor; H. D. Bergman, associate professor; G. Judisch, instructor; W. W. Dimock, professor; Chas. Murray, associate professor; J. D. Grossman, instructor; H. E. Bemis, professor and vice-dean; W. F. Guard, assistant and house surgeon; N. L. Nelson, assistant professor.

1916-17—C. H. Stange, professor and dean; R. R. Bolton, assistant professor; H. S. Murphey, professor; H. D. Bergman, associate professor; G. Judisch, instructor; W. W. Dimock, professor; Chas. Murray, associate professor; J. D. Grossman, instructor; H. E. Bemis, professor and vice-dean; W. F. Guard, assistant professor; D. F. Anderson, pharmacist; N. L. Nelson, assistant professor.

1917-18—C. H. Stange, professor and dean; R. R. Bolton, assistant professor (4/18); H. S. Murphey, professor; H. D. Bergman, professor; G. Judisch, instructor; W. W. Dimock, professor; Chas. Murray, professor; J. D. Grossman, assistant professor; H. E. Bemis, professor and vice dean; W. F. Guard, assistant professor; D. F. Anderson, pharmacist; T. S. Leith, instructor; E. A. Hewitt, instructor; C. D. Rice, associate professor; Steiner, instructor.

1918-19—C. H. Stange, professor and dean; C. H. Covault, assistant professor (12/14/17); H. S. Murphey, professor; H. D. Bergman, professor; G. Judisch, instructor; W. W. Dimock, professor (8/19); Chas. Murray, professor; J. D. Grossman, assistant professor (11/19); H. E. Bemis, professor and vice-dean; W. F. Guard, assistant professor; E. L. Harvey, pharmacist; B. T. Larsen, instructor; E. A. Hewitt, instructor (6/19); C. D. Rice, associate professor; G. W. McNutt, instructor.

1919-20—C. H. Stange, professor and dean; C. H. Covault, associate professor; H. S. Murphey, professor; H. D. Bergman, professor; G. Judisch, instructor; E. A. Benbrook, professor; Chas. Murray, professor; W. A. Aitken, instructor; H. E. Bemis, professor and vice-dean; W. F. Guard, associate professor; F. E. Walsh, assistant professor; D. F. Anderson, pharmacist; H. E. Biester, instructor; C. D. Rice, associate professor; G. W. McNutt, assistant professor.

1920-21—C. H. Stange, professor and dean; C. H. Covault, associate professor; H. S. Murphey, professor; H. D. Bergman, professor; G. Judisch, instructor; E. A. Benbrook, professor; Chas. Murray, professor; W. A. Aitken, assistant professor; H. E. Bemis, professor and vice-dean; W. F. Guard, associate professor; F. E. Walsh, assistant professor; D. F. Anderson, pharmacist; H. E. Biester, instructor; C. D. Rice, associate professor; G. W. McNutt, instructor.

1921-22—C. H. Stange, professor and dean; C. H. Covault, associate professor; H. S. Murphey, professor; H. D. Bergman, professor; G. Ju-

disch, instructor; E. A. Benbrook, professor; Chas. Murray, professor; W. A. Aitken, assistant professor; H. E. Bemis, professor and vice-dean; W. F. Guard, associate professor; F. E. Walsh, assistant professor; D. F. Anderson, pharmacist; G. E. Jacobi, instructor (9/21); H. H. Dukes, instructor (8/21); C. D. Rice, associate professor; G. W. McNutt, instructor; G. A. Evans, instructor.

1922-23—C. H. Stange, professor and dean; C. H. Covault, associate professor; F. E. Walsh, assistant professor; H. S. Murphey, professor; G. W. McNutt, instructor; W. A. Aitken, assistant professor; H. E. Bemis, professor and vice-dean; W. F. Guard, associate professor; D. F. Anderson, pharmacist; H. D. Bergman, professor; H. H. Dukes, instructor; G. Judisch, instructor; E. A. Benbrook, professor; G. E. Jacobi, instructor (12/23); C. D. Rice, associate professor; C. J. Dods-worth, instructor; E. Janssen, technician.

1923-24—C. H. Stange, professor and dean; C. H. Covault, associate professor; F. E. Walsh, assistant professor; H. S. Murphey, professor; G. W. McNutt, instructor; W. A. Aitken, assistant professor; H. E. Bemis, professor and vice-dean; W. F. Guard, associate professor; D. F. Anderson, pharmacist; H. D. Bergman, professor; H. H. Dukes, assistant professor; G. Judisch, instructor; E. A. Benbrook, professor; C. Larsen, instructor (12/23); M. Sloss, technician; C. D. Rice, associate professor; B. A. Zupp, instructor; E. Janssen, technician

1924-25—C. H. Stange, professor and dean; C. H. Covault, associate professor; F. E. Walsh, assistant professor; H. S. Murphey, professor; G. W. McNutt, instructor; W. A. Aitken, assistant professor; H. E. Bemis, professor and vice-dean; W. F. Guard, associate professor; D. F. Anderson, pharmacist; H. D. Bergman, professor; H. H. Dukes, assistant professor; G. Judisch, instructor (6/25); E. A. Benbrook, professor; C. Larsen, instructor (10/25); M. Sloss, technician; C. D. Rice, associate professor; B. A. Zupp, instructor; E. Janssen, technician.

1925-26—C. H. Stange, professor and dean; C. H. Covault, associate professor; F. E. Walsh, assistant professor; H. S. Murphey, professor; G. W. McNutt, assistant professor; W. A. Aitken, assistant professor; H. E. Bemis, professor and vice-dean; W. F. Guard, associate professor; D. F. Anderson, pharmacist; H. D. Bergman, professor; H. H. Dukes, assistant professor; E. A. Benbrook, professor; I. A. Merchant, instructor (12/25); E. M. Watkins, technician; C. D. Rice, associate professor; B. A. Zupp, instructor.

1926-27—C. H. Stange, professor and dean; C. H. Covault, associate professor; F. E. Walsh, assistant professor; H. S. Murphey, professor; G. W. McNutt, associate professor; W. A. Aitken, associate professor; H. E. Bemis, professor and vice-dean; W. F. Guard, associate professor; D. F. Anderson, pharmacist; H. D. Bergman, professor; H. H. Dukes, assistant professor; E. A. Benbrook, professor; I. A. Merchant, instructor; M. Sloss, technician; C. D. Rice, associate professor; B. A. Zupp, instructor; D. Boozer, technician.

1927-28—C. H. Stange, professor and dean; C. H. Covault, associate professor; F. E. Walsh, assistant professor; H. L. Foust, professor; W. F. Guard, professor; W. A. Aitken, associate professor; D. F. An-

derson, pharmacist; H. D. Bergman, professor; H. H. Dukes, assistant professor; E. A. Benbrook, professor; I. A. Merchant, instructor; M. Sloss, technician; C. D. Rice, associate professor; M. A. Emmerson, instructor; D. Boozer, technician.

1928-29—C. H. Stange, professor and dean; C. H. Covault, associate professor; F. E. Walsh, assistant professor; H. L. Foust, professor; W. F. Guard, professor; W. A. Aitken, associate professor; D. F. Anderson, pharmacist; H. D. Bergman, professor; H. H. Dukes, assistant professor; E. A. Benbrook, professor; I. A. Merchant, assistant professor; M. Sloss, technician; C. D. Rice, associate professor; M. A. Emmerson, instructor; G. R. Fowler, assistant professor; C. D. Lee, instructor; Lois Calhoun, technician.

III

BUILDINGS AND LANDS



UR Veterinary School, even as the college itself, had its beginning, so far as buildings were concerned, in a very humble way. Dr. Fairchild writes, "We had now (1879) a fully developed veterinary school but "no place to go." After some canvassing we finally discovered in the house then known as the 'President's House,' which had been vacated by President Welch (having himself built a new home called the "Gables") a small bedroom with one window which could be used as a laboratory (it was the best we could find)." This building was occupied together with botany during the college years 1879 and 1880. This building was later variously known as South Hall, Domestic Economy and Music Hall.

The second building to be occupied by the Veterinary School was also in "partnership" and Dr. Fairchild again gives us a clear idea of these accommodations in the following words:

"In March, 1881, the Veterinary Department and Department of Botany moved to North Hall. We find in the Aurora for March 1881, the following notice, 'North Hall, although not completely finished, is in running order. The botanical and Veterinary Departments have moved into it, and students in those classes enjoy the luxury of large and commodious classrooms.'"

"The main lecture room occupied the west end of North Hall, the laboratory occupied jointly by the Veterinary and Botany Departments was located in a room running along a part of the north side of second floor. Professor Bessey occupied the room facing the east and south, and Dr. Fairchild occupied a small adjoining room facing south.

"The laboratory arrangements consisted of a series of tables of triangular shape with the base next to the window, two students working on each side and one at the end. The microscopes were the Beck student microscope provided with 1/4 and 1/6 objectives. As this was at a time before bacteriology had been developed, very few accessories were