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NEW YORK STATE VETERINARY COLLEGE

A SPECIAL REPORT

TO THE

President of Cornell University

BY

VERANUS A. MOORE

DIRECTOR

CORNELL UNIVERSITY

ITHACA, N. Y.

1908

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OFFICE OF THE PRESIDENT
CORNELL UNIVERSITY
ITHACA, NEW YORK

November 7, 1908

*To the Board of Trustees of
Cornell University:*

GENTLEMEN:

I beg to lay before you a Special Report on the New York State Veterinary College which, at my request, has been prepared by the new Director, Dr. V. A. Moore. This report describes the present condition and needs of the College, frankly mentioning its characteristic excellences and defects; it sketches its work and achievements in the past; and it outlines the aims which the new Director has conceived for its future development, the agencies by which those aims are to be realized, and the instrumentalities which the State must furnish if the progress and improvements desired by the Director are to be actually accomplished. I commend this report, which is at once instructive and important, to the careful consideration of the Trustees.

Very respectfully yours,

J. G. SCHURMAN,
President.

NEW YORK STATE VETERINARY COLLEGE
DIRECTOR'S OFFICE

ITHACA, N. Y., Aug. 15, 1908.

President J. G. Schurman,
Cornell University.

DEAR SIR :—

At your request I have the honor to submit to you a statement setting forth the condition of the New York State Veterinary College as a teaching and research institution, and outlining somewhat in detail the possibilities for its future development. It is well also to consider briefly its relation to the live stock interests of the State and indirectly to those of the nation.

I desire, first, to express my appreciation of the confidence in me which the Board of Trustees have manifested by my appointment to the Directorship of this College. It is a position for which I had no ambition and I should have much preferred that another had been chosen, in order that I might have continued without interruption the work in my department. However, having been selected to perform these trying duties, I shall do the best I can.

Further, I cannot open a discussion of the work of the New York State Veterinary College without giving expression to my admiration and affection for the retiring Director, Dr. James Law, who for forty years has not only served Cornell University as a teacher of veterinary medicine, but also the State and nation as one of the noblest of his profession. The crowning glory of his useful career has been the establishment of a State Veterinary College with educational requirements for entrance worthy of such an institution and the cause which it is to serve. The first really great work

has been done, for veterinary education has been lifted from the school of the tradesman to the college of a truly professional character. Such is the institution that he established and such the one that you have called me and my colleagues to continue to develop.

THE VETERINARY COLLEGE

The underlying motive which prompted the founding of the New York State Veterinary College was undoubtedly to secure better educational facilities for those wishing to study veterinary medicine. The vast wealth, aggregating more than \$172,000,000,* invested in live stock in this State alone calls for the very best educational and professional training on the part of those who are to guard the animals representing such wealth from the ravages of disease.† The first real mission of the Veterinary College, therefore, is to provide a thoroughly well-rounded professional course of instruction in the science of veterinary medicine. The purpose is to send out men properly trained to treat and protect the flocks and herds of the State and nation. With the accumulation of new knowledge of the cause, nature, treatment and prevention of animal diseases, the requirements for a veterinary education are constantly increasing, thereby calling for more and more equipment and a larger number of teachers to adequately satisfy the demands. In the presence of these facts,

*According to the year book of the U. S. Department of Agriculture for 1906 the live stock values for New York State are :—

SPECIES	NUMBER	VALUE
Horses	695,877	\$77,541,590
Mules	4,208	487,140
Milch cows	1,826,211	65,743,596
Other cattle	944,734	17,307,526
Swine	675,545	6,248,791
Sheep	1,120,000	5,666,080

† The interrelation existing between many of the diseases of animals and those of man emphasizes another and a very vital reason for the thorough preparation of veterinarians.

it is easy to understand that the buildings and equipment provided for a veterinary college and the sum appropriated twelve years ago for maintaining a State Veterinary College, which seemed to be sufficient at that time, are entirely inadequate today. What is true of the buildings and maintenance is likewise applicable to the curriculum. The subjects vital for a professional veterinary course have, through the development of biological and medical sciences, increased in number and expanded individually to such an extent that a curriculum for a veterinary college is beneath the dignity of a great university or a state to maintain which does not adequately provide for instruction and research in the following subjects: namely, Anatomy, Physiology, Pathology, Medicine, Surgery, Sanitary Science and Animal Economics.* Each of these departments is subdivided into several clearly defined but closely related subjects, as shown by the appended analysis:

1. Anatomy includes not only descriptive anatomy but also histology; embryology; biology; zoology; statics and mechanics.

2. Physiology embraces in addition to the usual study of the functions of the various organs of the body,—chemistry; principles of nutrition; physiological action of drugs; materia medica, medical botany and pharmacology.

3. Pathology embraces in addition to the principles of general pathology, and the description of morbid processes,—etiology; special pathology; pathological histology; post-mortem examinations; and the pathology of the specific infectious diseases.

4. Sanitary science includes bacteriology; general hygiene; special hygiene or immunity; meat and milk inspection; dairy inspection and epizoötiology.

5. Medicine involves in addition to principles and prac-

*This grouping of subjects was proposed by the Chairman of the Committee on Intelligence and Education of the Am. Vet. Med. Asso., 1907.

tice,—physical diagnosis ; clinical pathology and laboratory diagnosis ; special therapeutics ; and clinical instruction.

6. Surgery demands for its success not only the principles of operative surgery but also surgical anatomy ; surgical diagnosis and pathology ; horse shoeing, obstetrics and clinical instruction in all phases of surgical practice.

7. Animal Economics. This term is used to include a considerable number of topics which should be carefully taught by competent men. They are, among other things, animal production ; breeds of animals : breeding and judging of animals ; stock farm management ; meat packing and manufacturing.

If we contrast with this classification of subjects the present curriculum of the New York State Veterinary College it will be observed that many of the sub-topics are not receiving any attention whatever or they are inadequately provided for. As an educational institution it is of the highest importance that at least the subjects outlined should be satisfactorily taught, which means material equipment and a sufficient number of competent teachers. To be more specific in the comparison of our present curriculum with that already outlined, it may be well to point out somewhat in detail our defects, to the end that the weak places may be strengthened and the strong ones made even more so.

The weakness of the New York State Veterinary College is apparent in the inadequate equipment and funds for research and for practical clinical work, and in equipment and teachers for giving instruction in certain subjects that should be taught but which have not been included in the curriculum. The field of veterinary science in the United States is in many respects uncultivated. For the building up of the veterinary profession, therefore, as well as to stimulate good teaching, many investigations and researches should be made. To better fit our students for their professional duties, we should give them more practical training in clinical medicine and surgery. In order to bring our specific needs directly

into focus, I wish to call attention to omissions in our curriculum, taking as a standard for comparison the very conservative requirements previously outlined which are considered by the leading veterinarians of today necessary to complete a well-rounded course in veterinary science.

1. *Anatomy.* In this department we are lacking in general biology, statics and mechanics. The importance of parasites demands a course in invertebrate zoology and helminthology. There should be a course including both lectures and laboratory work in veterinary zoology.

2. *Physiology.* In the department of physiology we lack medical botany, and equipment to study animal nutrition and chemical physiology.* Toxicology is practically wanting.

3. *Pathology.* The most conspicuous weakness in this department is our utter lack of facilities for teaching gross pathology and for proper post-mortem examinations. We have neither place nor equipment for this most important part of a well-rounded course in pathology. There is not a recognized veterinary college in Europe that is not well provided for teaching this subject.

4. *Sanitary Science.* In this department dairy inspection, which at present is becoming so vitally important, is practically wanting. The instruction in animal hygiene is very inadequate and the course in meat inspection is, for want of time and facilities, unsatisfactory.

5. *Medicine.* Medicine is lacking in practical instruction in *physical diagnosis*. There are no facilities for the proper examination of a large number of cases that come to this clinic. For want of funds the medical clinic has materially deteriorated, so that the reputation of the institution is suffering thereby. No provisions are made for chemical, bacteriological or pathological laboratory examinations for diagnosis.

*This does not refer to the teaching of elementary chemistry, but to the chemistry peculiar to the various phases of chemical physiology as applied to the different species of animals.

The subject of clinical pathology, which is so superbly provided for in nearly every great veterinary college, is unfortunately poorly provided for. The essential reason for this defect has been the want of a suitable building for medical examinations.

6. *Surgery.* Surgery is weak in many practical features owing largely to the exposure of our grounds and the lack of room and equipment for casting horses indoors. Horse shoeing is practically missing from our schedule, notwithstanding its very great importance in the treatment of many forms of foot disease and lameness. Surgical and clinical pathology is not provided for and likewise the clinical work in obstetrics is insufficient. The defects here are largely due to the lack of proper equipment and an experienced instructing staff.

7. *Animal Economics.* In this department the subject of hippology, meat production and stock farm management are not considered in any course.

In subjecting the curriculum of our institution to such an analysis, we find that a few subjects and several sub-topics are wanting. To remedy this a corresponding increase in material equipment and teachers is required. In readjusting our courses we are able to remedy a few of the defects, especially along the practical lines, but there are some gaps that we are unable to fill with our present resources. These omissions must be provided for if the College fulfills its mission as an educational institution. The improvement should begin at once and continue until the goal of the ideal is approached if not actually touched.

In criticising our curriculum, however, there is a tendency to forget the important element of *time*. It is impossible to crowd too many subjects or subdivisions of the same into a three year course. To meet the demands we must, as soon as sufficient progress is made, specify the important subjects for entrance and extend the course to *four years*. More than this, we should establish graduate courses, especially in sanitary science and clinical medicine and surgery.

As the educational requirements for entrance to a veterinary college are by law much higher in this State than in most other states in the Union we have a greater responsibility in seeing to it that our curriculum, equipment and character of teaching correspond, so that our graduates will exemplify by their superior work the wisdom of the University and the State in imposing upon the candidates for the veterinary profession the present exacting preliminary educational requirements. The records of our alumni are most gratifying in this respect.

The Strength of the College. I have pointed out the most glaring defects or weak places in the New York State Veterinary College as a teaching and research institution. It is equally just that the good features should not be overlooked. The strength of the Veterinary College lies in several conditions, three of which should be mentioned:

First, as already stated, through the untiring efforts of the retiring Director, the State law governing veterinary education, which demands that a candidate for the veterinary degree must have a four year high school course or its equivalent for admission, has been put into *actual practice*. This assures to the College a class of students capable of assimilating the technical professional knowledge necessary to properly equip them for the work of their choice.

Secondly, the loyalty of the Faculty to the high ideals of veterinary education wrought out and put into tangible form by Dr. Law. It is a very important factor in any educational institution to have in its faculty thoroughly and scientifically trained men enthused with the spirit of research. In this respect we are more than fortunate. Conditions have not been such that after the drudgery of classroom work, the maximum amount of research desired has been accomplished in any department. However, we have a Faculty as a whole of superior trained men and with better conditions for work they will be enabled to bring credit to each of the departments separately and the College as a unit. At present there

are in the Veterinary Faculty, exclusive of the instruction given in chemistry, histology and embryology, and animal husbandry provided by the University, eleven men who devote their entire time to teaching and research, and four student demonstrators. Of the eleven, nine are regular graduates of a veterinary college, one of a medical college and one of an agricultural college. Two have the degree of Doctor of Science, one Master of Science, and two Bachelor of Science. All of those who have not academic degrees have had a full four year high school course or its equivalent and one a year in a state university. Because the Faculty is composed of trained scientific men it complies with the standard set by the European veterinary colleges, to measure the real strength of their professors. It is recognized in Europe, and in other colleges in this University, that it is more important to train men in principles, in order that they may meet conditions as they exist, than to drill them in the handling of isolated or prescribed cases.

The third tower of strength is its environment in a University community where the spirit of research stimulates the students to higher ideals and the better conception of the real work in a useful professional life.

Students. Some comment has been made by veterinarians both within and without the State on the small number of students in the New York State Veterinary College. The explanation for this is not difficult. In the past the veterinary students as a class have come to the colleges with but very little if any general or technical education, and after receiving some special instruction they have entered upon the practice of their profession. Of the 1,577 veterinarians who were registered in 1907 in the county clerks' offices in this State, in accordance with the present law, but 513, less than one third, were graduates of any veterinary school. The veterinary colleges existing in this country prior to 1895 were largely private institutions requiring little or no educational preparation as a requisite for matriculation. It is evident,

therefore, that a veterinary college which requires a four year high school course as a preparation must meet the same difficulties relative to students that all other professional schools have encountered when the terms of entrance have been materially raised. As the science of veterinary medicine has been neglected in this country, its true place in the economics of animal industry and its value in sanitary science have not been appreciated. For these reasons some effort is necessary to bring the true function of this profession to the attention of those who are competent and qualified to pursue it. The attendance has been good considering the state of veterinary education and the general lack of appreciation of the veterinary profession in this country. As there are not properly qualified veterinary graduates enough to begin to fill the natural demand for veterinarians it seems fitting that the facts concerning the entrance requirements for the veterinary colleges of this State, and the present opportunities for well-qualified veterinarians, should be brought more generally to the attention of young men about to choose a profession. As I have already pointed out, the veterinary profession in America is just beginning to be differentiated from agricultural sciences and animal husbandry, so that the real and great value of veterinary science to the live stock owners of this country is practically unknown. With an annual loss of from \$250,000,000 to \$300,000,000 worth of animals in this country from preventable diseases alone, a loss which can be avoided only by the application of the science of disease in preventive measures, no further comment on the actual need of having a sufficient number of well-educated and thoroughly trained veterinarians is necessary.

In addition to the purely commercial aspect of the profession, it stands in close relation to the sanitary work of our country. In order to protect meat consumers from the flesh of diseased animals our government pays annually \$3,000,000 or more, of which New York's quota is over \$300,000. The intercommunicability between man and

beast of rabies, anthrax, glanders and tuberculosis, all of which exist in this State, is an additional reason for building up the profession which has to deal directly with these great scourges of man and beast. It seems fitting at this time that the training and truly professional character of the work of veterinarians should be set forth in such a manner that they may become better known. The live stock economics of this State demand more properly trained veterinarians. We should have at least fifty graduates each year.

Alumni. In discussing the topic of students, it would not be just to omit the good work of our graduates. Although but 24 Regents' counts were demanded by the Education Department for admission to the veterinary colleges in this State until the fall of 1905, the number of students was, because of this preliminary educational preparation, small. The number graduating each year from this College since its doors were opened are as follows:

In 1897.....	3	In 1901.....	9	In 1905.....	26
1898.....	4	1902.....	10	1906.....	26
1899.....	6	1903.....	12	1907.....	32
1900.....	7	1904.....	16	—	—
Total.....					151*

Of this total of 151 graduates:

75 or 49.7% are in private veterinary practice.

4 or 2.6% are veterinarians in the U. S. Army.

5 or 3.3% are in the government service in the Philippines, in Cuba and the United States.

33 or 21.8% are veterinary inspectors in the U. S. Department of Agriculture.

14 or 9.3% are teaching.

11 or 7.3% are engaged in sanitary work and laboratory investigations.

* At the present Commencement 18 were graduated. This was the first class to graduate which entered with the full four year high school preparation.

- 4 are foreigners whose present occupation is not known.
- 2 have gone into commercial business.
- 1 has studied human medicine.
- 2 have died.

Of the 75 who have gone into private practice, 60, or 80%, have settled in the State of New York. Seven of them are in the employ of the State Department of Agriculture. The other eight are practicing in seven other states. The 14 engaged in teaching are found in nine state universities or colleges. The fact that nearly 10% of our graduates have been sought for and engaged by educational institutions to teach some part of veterinary science is a high tribute to the influence our graduates are exerting in molding veterinary education in this country. It should be stated that none of these 14 men entered upon their course with the idea of preparing themselves for teachers. The employment of 7% of our graduates in sanitary work and research is likewise significant.

Like other institutions, we have graduated some men who have not developed into desired types of scholars or citizens, but the great majority of them have commanded the high respect of those with whom they are associated. The large number now in practice, and the few who have gone into other occupations, is a strong testimonial to the devotion of our graduates to their profession. Among the veterinary practitioners of the State they are already among the more successful.

Research. One of the purposes of the New York State Veterinary College as set forth in the statute* establishing it, is to carry on researches in the various phases of animal diseases and their treatment and prevention. This requires the enrollment of a sufficient number of competent assistants to enable either the head of a department or the assistants to have the necessary unbroken time for these researches.

*Chapter 153 of the Laws of 1894.

This necessary complement of men calls for at least one assistant professor with one or more instructors and assistants in each department. This would enable the much needed investigations to be carried out with profit to the students and the profession and with great benefit to the live stock interests of the State.

It is not necessary to outline the various investigations that the live stock interests in this State demand as a consequence of the one hundred and seventy-two millions of dollars invested therein. There is not one of the animal diseases prevalent in our State that is in every particular understood sufficiently to guarantee the greatest protection possible or in the presence of an epizootic of the same to reduce the loss it might occasion to a minimum. The extensive losses due to glanders, rabies, anthrax, infectious abortion and tuberculosis can undoubtedly be greatly lessened by a more accurate knowledge derived from the results of well-directed researches along definite and clearly defined lines. Again, the diseases of poultry, swine and pet animals are all waiting for further inquiries into their nature and means of prevention. Every lover of animals of whatever species is anxious for better and more successful methods of protecting them from disease and suffering.

Many of the researches suggested above can be made with comparatively little expense in excess of the salaries of those making them. Certain of these should be under way continuously in the various departments of the College. To a limited degree they have been made, and they would have been to the full extent desired if the departments had been provided with sufficient assistants and the small funds to procure the necessary material.

There are, however, many investigations involving the utilization of cattle and horses as well as other large animals that cannot be made without the use of sufficient land and buildings. These would require a considerable amount of money. In order that this work be done it is necessary

that an experimental farm for the study of animal diseases be established and properly maintained in connection with the Veterinary College and under its immediate supervision. Such a farm has been provided by the State of Pennsylvania for the Veterinary College of the University of Pennsylvania. It is very gratifying to learn that the Board of Trustees of Cornell University have secured a suitable tract of land for this purpose for the New York State Veterinary College. The State cannot afford to do less than to make appropriations sufficient for the carrying out of much-needed investigations. Already we have been called upon by the Commissioner of Agriculture to cooperate with that department in carrying out certain investigations. This is also true of the State Department of Health.

In pointing out the research work that it is the duty of this College to do, it might be inferred that little has already been accomplished along these lines. It is unfortunately true, that in the management of the College during the last twelve years very little provision has been made for research. The occasion for this apparent neglect was that *instruction*, which was more immediately mandatory, claimed first attention and practically all of the College resources. A review of the work of the Faculty, however, will show that in the face of excessive work in the classroom, clinic and laboratory, and with a scarcity of funds, it has done much both for the veterinary profession and animal owners by way of research and investigation. These have been directed along several channels. Perhaps the most conspicuous work, and under the circumstances the most desirable, has been in the development of methods for teaching in a practical, efficient manner the various subjects in the curriculum. This has resulted in the preparation of several laboratory guides and text books. Some of these have been published and are meeting with a gratifying reception, while others are still being tested and will be printed later. It is a conservative statement that during recent years a large part

of the preparation or correlation of subject matter for students in veterinary medicine in this country has been made in this College. The pedagogical side has been given careful attention. Two of the Faculty have spent considerable time in studying veterinary pedagogical methods in Europe.

The outcome of all this work has been the developing of methods of instruction which together with those about to be adopted will undoubtedly enable this College to rank among the very foremost veterinary colleges in America as a teaching institution. The publications of this College have been referred to by a distinguished investigator and teacher in the following terms: "Works that have been produced by the staff of the veterinary college are going to give the college a standing that will be a credit to the state and to the university, and will in the end bring all the students that can be handled."

There have also been many researches made in physiology, on the action of drugs, in surgical technic and operations, in anatomy, and in bacteriology and pathology, that have enriched the veterinary literature of this country, and not a few contributions have appeared in European veterinary chronicles. (See appendix, for the publications of the Faculty.) It is difficult to measure the value of many of these technical papers but already the beneficial effect of a few of them is apparent. These facts are mentioned not only in verification of a previous statement concerning the Faculty but also to point out the amount of scientific and educational work that this College has been doing. Much of it has been, for America, pioneer work which in due season will be appreciated. Not a small part of the investigations of this College have been in connection with epizoötics of various kinds and in the preparation of tuberculin, mallein, and anthrax vaccine, and in making diagnoses of infectious diseases of animals for the State Department of Agriculture, veterinarians and stock owners of the State. In subsequent paragraphs I shall speak of this in more

detail. The records of the work of this College show that in research it has done all that the State could expect without a more liberal financial support.

WORK FOR THE VETERINARIANS OF THE STATE AND THE
STATE DEPARTMENT OF AGRICULTURE

The statute directs that this College shall make investigations into the nature of animal diseases and also prepare tuberculin, mallein and various vaccines for the diagnosis, prevention and treatment of the same. Under this provision the College has, during the last twelve years, done all that it could to assist the veterinarians of the State as well as the Commissioner of Agriculture. The extent to which the laboratories of the College are being utilized for diagnosis and agents for that purpose can be determined from the appended table, which gives the work of this kind for the year beginning April 1, 1907.

Diagnosis for rabies	130 cases.
Diagnosis for glanders, serum test	152 "
Diagnosis of other infectious diseases	32 "
Tuberculin sent out	28,790 doses.
Mallein sent out	820 "
Anthrax vaccine	9,180 "

This College has made many investigations for the Department of Agriculture in swine diseases, anthrax, glanders and tuberculosis. It has also developed technic for increasing the efficiency of methods for controlling infectious diseases.

One of the most valuable contributions along this line was the work on the agglutination method for diagnosis of glanders. The demonstration of the Bang method for the control of tuberculosis in badly infected herds of cattle which was carried out in cooperation with the Geneva Experiment Station, and with private dairymen, has been of great value to the cattle interests of the State. The investigation into the nature of the so-called hog cholera in this State, which revealed the fact that the swine were being poisoned instead

of dying from a specific disease, was of much value not only in actually preventing heavy losses but also in largely removing the stigma of the prevalence of hog cholera from the pork-producing industry of the State. A large number of bacteriological examinations of milk and other substances have been made for the Commissioner of Agriculture. Somewhat extensive reports on bacteria in milk, bacterial diseases of bees, swine diseases, anthrax and tuberculosis have been made to and published by the State Department of Agriculture. Considerable work has been done for that Department on the question of "pure food" and important investigations are about to be taken up on the very significant and perplexing subject of "bob" veal.

In addition to the diagnosis and research work that has been done for the State, the College has taken an active part in the educational work in the Farmers' Institutes by way of lectures on methods for the prevention of the preventable diseases of animals. A few bulletins have been written for the Cornell Agricultural Experiment Station on animal sanitation, especially in reference to bovine tuberculosis. Without entering into detail, it can be stated that this College has as far as possible assisted the veterinarians of the State and cooperated with other organized agricultural institutions of the State.

THE RELATION OF THE NEW YORK STATE VETERINARY COLLEGE TO THE LIVE STOCK INTERESTS OF THE STATE

While the first duties of this College are undoubtedly its obligations to veterinary students, the veterinary profession of the State, and the State Department of Agriculture, it has a still broader and an intimate relation to the live stock interests of the State. As already pointed out, the veterinary profession in America is in the process of development. The diseases of animals are just as difficult to understand as those of man himself. To successfully treat or prevent them requires just as specialized a training in the science of diseases and sanitation as the people are demanding of the physician.

It is clear, therefore, that to treat the individual animals we must have properly trained veterinarians, but to enable the stock owners to prevent epizootics and other preventable diseases among their animals we must instruct them in methods of prevention. The investigations already referred to have enabled many farmers to prevent serious losses. The new methods for diagnosis, the studies on the action of drugs, the poisoning of swine, the better treatment of milk fever, the more successful operation for poll evil, and the new operation for roaring, have all tended either directly or indirectly to an actual benefit to the live stock owners. The advantages to be derived by the farmers from the work in this College are twofold: (1) The discovery of new facts relative to the nature or treatment of disease which increases the efficiency of his veterinary service and (2) the application of better methods for preventing losses from preventable diseases. The science of veterinary medicine, like that of human medicine, is tending rapidly to the prevention rather than the treatment of disease.

There are at present heavy losses from poultry and swine diseases, infectious abortion, anthrax, glanders and tuberculosis. These losses can be greatly reduced by the acquisition of more knowledge concerning them. By the introduction of new methods based on present knowledge much improvement would be made. While the live stock owners cannot treat diseases they are unable for want of professional knowledge to diagnose, they can apply better prophylactic measures. These methods can and should be formulated and given to them. This calls for more work in sanitary science, which if properly performed will greatly enhance the value of the live stock of the State.

In the extension work of the College, along with that of sanitary science, is that of horse-shoeing. Many of the causes for lameness in horses are due to affections that can be greatly benefited by proper shoeing. It seems fitting, therefore, that this College should offer a short course in horse-shoeing to

the farriers of the State. In Germany the farriers are obliged to have an extensive training of this kind in one of the veterinary colleges. As soon as we procure a suitable building for it, this College should arrange for such a course, which will greatly improve the value of many farm and driving horses.

PRESENT POLICY

It seems right that the present policy concerning the operation of the Veterinary College should be stated, in order that timely criticisms or suggestions may be offered by the University officials. While I shall endeavor at all times to do the best I can to the end that the College shall attain to the highest degree of usefulness possible, the general course proposed at present and by which it is hoped success will follow, may be summarized as follows :

1. To inaugurate and maintain the best possible curriculum for a veterinary college and to have the teaching of the highest possible character.

2. To develop as a unit the scientific and practical parts of the curriculum.

3. To institute and carry out as far as possible research work the results of which shall be,—

(a) To add to the knowledge of the veterinary sciences.

(b) To add to the efficiency of the veterinarian in the practice of his profession, and

(c) To increase our knowledge of sanitary science whereby animal scourges may be more effectively combated.

4. To make use of the method of extension work in order that the College shall be of as much assistance as possible (1) to the practitioner of veterinary medicine* and (2) to the

*In this work it is proposed (1) to have a conference for veterinarians at the College at least once during the year, when the latest and most approved methods for both treating and preventing diseases of animals shall be set forth by lectures, demonstrations and clinics; (2) to issue from time to time to the veterinarians of the State circulars giving important information that the practitioner should know but which he has little opportunity of finding out by himself. One such circular has already been issued.

stock owners, by helping them to prevent destructive epizootic diseases.

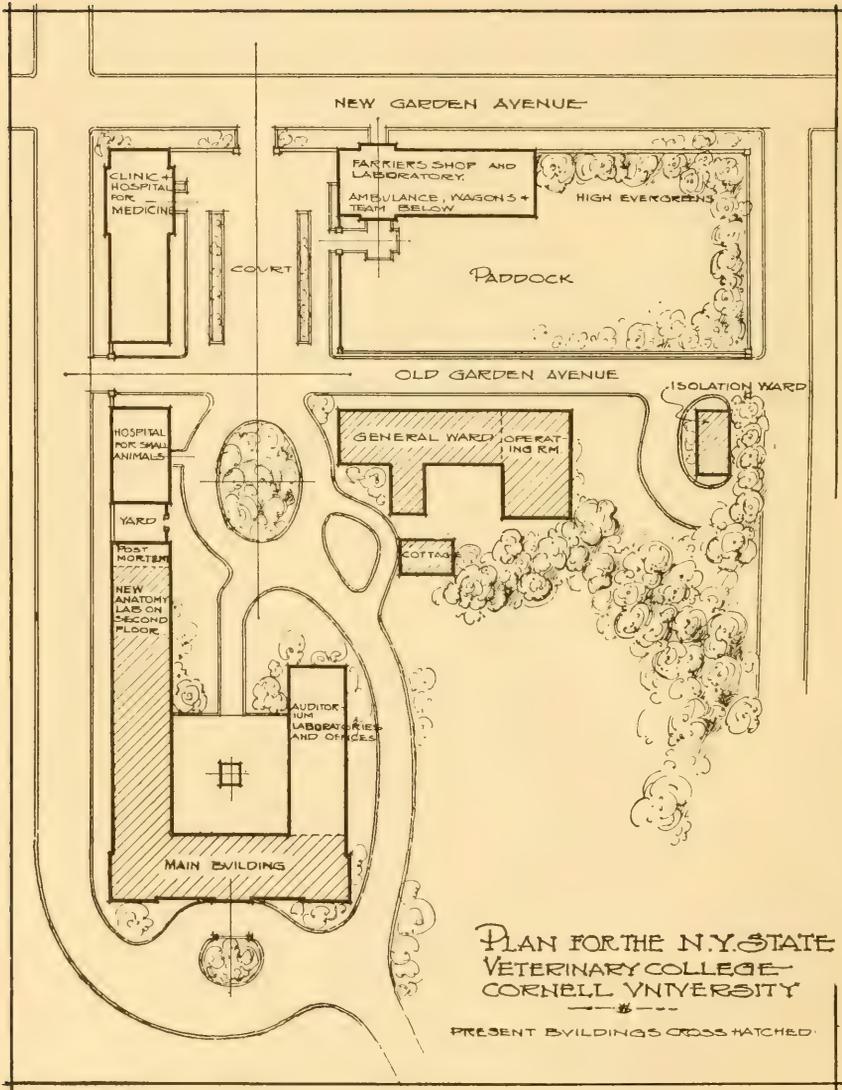
5. To cooperate with the State Department of Agriculture, State College of Agriculture, Geneva Experiment Station and State Department of Health, to the end that all that the College can do shall be done to enhance the value of the live stock of the State, to minimize the loss from epizootic diseases and to reduce the danger of human infection from animal plagues.

To succeed in these various lines will require the support and cooperation of all concerned. It is hoped that this will be forthcoming and that the actual worth of the College will be realized. There are many difficulties to be overcome, but it is expected that they will disappear. The veterinary profession is calling for the results of carefully conducted investigations along many lines in order to enable it to meet the demands of the live stock owners to reduce the loss from animal diseases. The aim of the College is twofold: good teaching and thorough research.

RECOMMENDATIONS

Until I have become better acquainted with the administrative work, it is impossible to make suggestions along many lines. It will probably be necessary to make them later. There are, however, the questions of buildings, maintenance, and a farm for the experimental study of animal diseases, concerning which I desire to make a few recommendations.

Buildings. The buildings which have been provided are inadequate for practical teaching. The present clinical or operating room was originally put up as a temporary structure pending the erection of buildings suitable for such work. Thus far the permanent structures have not been erected. For the practical or clinical side, therefore, there is immediate need for suitable rooms and facilities. We have a good operating room and hospital for surgical cases,



and a contagious ward that will accommodate a few animals. There are, however, no hospital facilities for medical cases, except such stalls as may be free in the surgical ward. Suitable rooms for medical and consulting clinics are badly needed. The hospital for small animals is inadequate in size and equipment. The farriery has been neglected, although horse-shoeing forms an important part of the curriculum in all other good veterinary colleges. The department of anatomy needs additional quarters and in a very short time will, if the students continue to increase in numbers, demand more room. The laboratories for experimental physiology and pharmacology are badly crowded. In the near future, at our present rate of growth, every laboratory in the College will be overcrowded. At present the lecture and recitation rooms are inadequate.

In order to overcome these pressing needs it is hoped that the system of buildings proposed by the Committee of the Veterinary Council, a ground plan of which accompanies this report, may be provided as speedily as possible. The building most needed immediately is the one to stand in the north-east corner of the veterinary grounds and to house the medical clinic. Following this a building for the consulting clinic; the enlargement of the anatomical laboratory by completing the north wing; a hospital for small animals; a post-mortem room; a suitable building for the care of ambulance, wagons and team; a shop and laboratory for the farrier; and the erection of the south wing to the main building, with a suitable auditorium, class and office rooms,—should follow as quickly as possible.

Appropriations. If I have been clear in my efforts to set forth the needs of this State for the work of the Veterinary College, and the requirements of the College in order that it may satisfy these wants, it is apparent that the Veterinary College should be more adequately supported by the State. In view of this mutual relationship I would recommend that the Trustees ask the Legislature for the following appropriations:

1. For maintenance for the college year 1909-10, \$40,000, an increase of \$10,000 over the present appropriation. The maintenance of this College as a teaching institution will soon require at least \$50,000 per annum.

2. For research, experimental work and extension work, \$10,000. This should be raised, as the work becomes organized, to \$25,000.

3. For clinical buildings and equipment, \$125,000.

4. For farriery, horse-shoeing laboratory, stable for team and wagons, and fence, \$50,000.

5. For the completion of the wing at the north end and the erection of the one at the south end of the main building, as originally planned, \$150,000.

The increase in maintenance, the \$10,000 for research and extension work and the erection of the clinical buildings and the completion of the north wing should be asked for this year. The farrier's shop and laboratory and the erection of the wing at the south end of the main building should follow next year.

The amounts suggested may seem to be large but a major part of the total sum is to complete the veterinary buildings which were undertaken by the State but not finished. If the total amount was granted it would make the cost of the Veterinary College only \$505,000. The State of Pennsylvania a short time since appropriated \$200,000 for the construction of a building for a Veterinary College, and last winter the Ohio legislature appropriated \$90,000 for a clinical building. In Germany the government has established and generously maintains a number of veterinary colleges. Either the one in Berlin, Hanover, Dresden or Munich could not be duplicated in this country for less than from \$1,000,000 to \$1,500,000. In addition to the first cost, they are constantly adding to them and but recently the German government has erected a new college in Freiburg. France, Austria and Hungary each have elaborate veterinary colleges. If these countries, which possess live stock values of far less

magnitude than ours, find it advantageous to spend millions of dollars in building and maintaining veterinary colleges, the Empire State should arise to the opportunity it has for applying the same principle for the protection of its flocks and herds.

The total expense of adequately maintaining this College, together with the interest on the first cost of the buildings when completed, would equal but a fraction of one per cent of the loss to our State by the death of animals from diseases that are largely preventable. The money asked for to complete, equip and maintain this College cannot be considered excessive in the light of the experience of other countries where the worth to the state of veterinary colleges has been demonstrated.

Respectfully submitted,
VERANUS A. MOORE,
Director.

APPENDIX

The following is a list of publications on technical subjects by the Faculty of the New York State Veterinary College since its opening in 1896 :—

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