

THIRD ANNUAL REPORT

OF THE

State Veterinary Surgeon

OF THE

STATE OF IOWA,

FOR THE

YEAR ENDING JUNE 30, 1887.

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PRINTED BY ORDER OF THE GENERAL ASSEMBLY.

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DES MOINES:  
GEO. E. ROBERTS, STATE PRINTER,  
1887.

STATUTES.

LAW CREATING OFFICE OF STATE VETERINARY  
SURGEON.

[CHAPTER 189, LAWS OF 1884]

VETERINARY SURGEON.

AN ACT for the Appointment of a State Veterinary Surgeon and Defining his Duties.

*Be it enacted by the General Assembly of the State of Iowa :*

SECTION 1. The Governor shall appoint a State Veterinary Surgeon, who shall hold his office for the term of three years unless sooner removed by the Governor; he shall be a graduate of some regular and established veterinary college, and shall be skilled in veterinary science; he shall be a member of the State Board of Health, which membership shall be in addition to that now provided by law. When actually engaged in the discharge of his official duties he shall receive from the State treasury as his compensation the sum of five dollars per day and his actual expenses, which shall be presented under oath and covered by written vouchers before receiving the same.

SEC. 2. He shall have general supervision of all contagious and infectious diseases among domestic animals within or that may be in transit through the State, and he is empowered to establish quarantine against animals thus diseased or that have been exposed to others thus diseased, whether within or without the State, and he may with the concurrence of the State Board of Health, make rules and regulations such as he may deem necessary for the prevention, against the spread, and for the suppression of said disease or diseases, which rules and regulations, after the concurrence of the Governor and executive council, shall be published and enforced, and in doing said things or any of them, he shall have power to call on any one or more peace officers; whose duty it shall be to give him all assistance in their power.

SEC. 3. Any person who willfully hinders, obstructs or resists said Veterinary Surgeon or his assistants, or any peace officer acting under him or them when engaged in the duties or exercising the powers herein conferred shall be guilty of a misdemeanor and punished accordingly.

SEC. 4. Said Veterinary Surgeon shall on or before the 30th day of June

of each year, make a full and detailed report of all and singular his doings since his last report to the Governor, including his compensation and expenses, and the report shall not exceed one hundred and fifty pages of printed matter.

SEC. 5. Whenever the majority of any board of supervisors, city council, trustees of an incorporated town or township trustees, whether in session or not, shall in writing notify the Governor of the prevalence of, or probable danger from, any of said diseases, he shall notify the State Veterinary Surgeon, who shall at once repair to the place designated in said notice and take such action as the exigencies may demand, and the Governor may in case of emergency appoint a substitute or assistants, with equal power and compensation.

SEC. 6. Whenever in the opinion of the State Veterinary Surgeon the public safety demands the destruction of any stock under the provisions of this act he shall, unless the owner or owners consent to such destruction, notify the Governor, who may appoint two competent veterinary surgeons as advisers, and no stock shall be destroyed except upon the written order of the State Veterinary Surgeon countersigned by them and approved by the Governor, and the owners of all stock destroyed under the provisions of this act, except as hereinafter provided, shall be entitled to receive a reasonable compensation therefor, but not more than its actual value in its condition when condemned, which shall be ascertained and fixed by the State Veterinary Surgeon and the nearest justice of the peace, who if unable to agree shall jointly select another justice of the peace as umpire, and their judgment shall be final when the value of the stock does not exceed one hundred dollars, but in all other cases either party shall have the right to appeal to the circuit court, but such appeal shall not delay the destruction of the diseased animals. The State Veterinary Surgeon shall, as soon thereafter as may be, file his written report thereof with the Governor, who shall, if found correct, endorse his findings thereon, whereupon the Auditor of State shall issue his warrant therefor upon the Treasurer of State, who shall pay the same out of any moneys at his disposal under the provisions of this act; *provided* that no compensation shall be allowed for any stock destroyed while in transit through or across the State, and that the word stock, as herein used, shall be held to include only neat cattle and horses.

SEC. 7. The Governor of the State, with the State Veterinary Surgeon, may co-operate with the Government of the United States for the objects of this act, and the Governor is hereby authorized to receive and receipt for any moneys receivable by this State under the provisions of any act of Congress which may at any time be in force upon this subject, and to pay the same into the State treasury to be used according to the act of Congress and the provisions of this act as nearly as may be.

SEC. 8. There is hereby appropriated out of any moneys not otherwise appropriated the sum of ten thousand dollars for use in 1884 and 1885, and three thousand dollars annually thereafter, or so much thereof as may be necessary for the uses and purposes set forth.

SEC. 9. Any person, except the veterinary surgeons, called upon under the provisions of this act shall be allowed and receive two dollars per day while actually employed.

Approved April 14, 1884.

#### ACTS PASSED BY THE TWENTY-FIRST GENERAL ASSEMBLY.

AN ACT to amend chapter 11, title 24 of the Code, Relating to Contagious Diseases in Domestic Animals.

*Be it enacted by the General Assembly of the State of Iowa:*

SECTION 1. That sections 4058 and 4059 in chapter 11, title 24 of the Code be hereby repealed, and sections 2 and 3 of this act be substituted therefor, and be known hereafter as sections 4058 and 4059 of the Code.

SEC. 4058. Any person or persons driving any cattle into this State, or any agent, servant, or employe of any railroad or other corporation who shall carry, transport or ship any cattle into this State, or any railroad company, or other corporation, or person who shall carry, ship, or deliver any cattle into this State, or the owners, controllers, lessees, or agents, or employes of any stock yards, receiving into such stock yards or in any other inclosure, for the detention of cattle in transit or shipment, or reshipment, or sale, any cattle brought or shipped in any manner into this State, which at the time they were either driven, brought, shipped or transported into this State, were in such condition as to infect with or to communicate to other cattle pleuro-pneumonia, or splenic or Texas fever, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine of not less than three hundred dollars and not more than one thousand dollars, or by both fine and imprisonment in the county jail not exceeding six months, in the discretion of the court.

SEC. 4059. Any person who shall be injured or damaged by any of the acts of the persons named in section 4058, and which are prohibited by such section, in addition to the remedy therein provided, may bring an action at law against any such persons, agents, employes or corporations mentioned therein, and recover the actual damages sustained by the person or persons so injured, and neither said criminal proceedings, nor said civil action, in any stage of the same, shall be a bar to a conviction or to a recovery in the other.

OFFICE OF STATE VETERINARY SURGEON, }  
AMES, JUNE 30, 1887. }

HON. WM. LARRABEE, *Governor* :

IN accordance with the provision of Chapter 189, Laws of 1884, the report of the State Veterinary Surgeon for the year ending June 30, 1887, is herewith submitted.

M. STALKER,  
*State Veterinary Surgeon.*

## REPORT.

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IT has been my custom to present to the Governor of the State, annually, an epitome of the work done by the State Veterinary Surgeon and his assistants, since the preceding report. The law of the State, in fact, makes this obligatory on the State Veterinarian. I have in former reports presented short articles on various diseases affecting live stock. In these articles I have addressed myself more particularly to the farmer than to the executive of the State, my purpose being to give some simple and practical suggestions to the breeders of live stock, rather than propose a course of executive action. These articles have been submitted in connection with a brief history of the work done, and the expenses incurred, during the year. It cannot be expected that the matter in these reports can take the place of exhaustive treatises on veterinary science, or supplant the practitioner of the veterinary specialty of medicine. In fact, one of the most prevalent mistakes on this subject is the overconfidence of the public in that which is written. There is a widely prevailing opinion that the veterinary surgeon should be able, on the most meager and unsystematic presentation of symptoms, to diagnose the case at once, and prescribe measures that will effect an early cure. There is also the deeply rooted, and closely related fallacy that the farmer, with a single empirical work on veterinary medicine, can become his own physician. This is quite as much an error as it would be for him to attempt, by the same method of preparation and the same means in his hands, to become a successful practitioner on the members of his family and those of his neighbors. It has not been my purpose in writing these short essays on disease, to foster either of these notions, but rather to discourage them. Sanitary regulations, preventive measures, prophylactic medicine, are much more successful in the hands of the farmer than curative agents. In fact, the work of the trained physician in lessening the mortality

rate is much more successfully directed along this line. It is equally the course of wisdom on the part of the State to direct its effort to the prevention and suppression of disease among domestic animals by proper sanitary police regulations, rather than in the futile search after specifics. No State would any longer think it the part of wisdom to offer rewards for the discovery of a drug that would cure small-pox or measles. Within a very recent period it has, to some extent, become known that it is equally useless to look for results from a similar policy toward highly fatal forms of disease affecting our live stock. This should not lead to error in the other extreme, viz., that it is entirely useless to prescribe remedial agents to animals that are sick. The intelligent, cautious treatment of the sick by agents calculated to have a definite effect on the course and progress of disease, is to be most highly recommended. But I mean to be understood as saying that the successful methods of coping with the actively contagious and highly fatal diseases of domestic animals will be found, in the end, to be almost wholly *preventive*.

As I have from time to time given the farmer the benefit of my observations and opinions on most of the diseases met with on our Iowa farms, I propose in this paper to leave that branch of the subject untouched and devote the space to making some suggestions for the more successful prosecution of the work of exterminating disease.

First, I think it may not be amiss to give an outline of the plan under which the work of this office is conducted, to show wherein the work has been successful, and the means that have contributed to its success, and afterward make some suggestions for improvement.

On the 28th day of last April I completed the first term of three years in the office of State Veterinary Surgeon, and on that date was commissioned for a second term. During this period the office has been conducted in connection with the professorship of veterinary science, in the Agricultural College at Ames. I have a personal acquaintance with nearly all the State and Territorial veterinarians of the West, and have frequently conferred with them as to their methods of conducting the public work in order to compare results with the work in our own State. These comparisons have led to the conclusion that our system is quite as successful as that adopted in any of the States, and much more so than in a great many of them. While this is true, and the enormous

proportions of our live stock interests, as compared with that of most of the States and Territories, is familiar to all, it is also true that our State has provided the merest pittance for the protection of this large interest, as compared with what has been done by other sections with a tithe of our wealth. It is also true that other interests in our own State that are the merest trifles compared with this, have been provided for in a much more liberal manner. Frequently, when matters have come before the incumbent of this office for decision, such questions could not be settled on the basis of the best plan, absolutely, but on the basis of what was *possible* with the means at hand. These solutions have frequently been beset with about the same difficulties that would be encountered in attempting to provide a whole family with suits from a single sheet. The State provides \$3,000 annually for defraying all the possible expenses of conducting this work. From this fund the State Veterinary Surgeon, as well as all deputies under him, receives five dollars per day and expenses, "when actually engaged in the discharge of their official duties." Five deputies are commissioned in different portions of the State. These deputies, when acting under instruction, may perform any official act that might be performed by the State Veterinary Surgeon in person. The purpose in having this number of deputies commissioned was to economize in traveling expense and to obviate delay; as by employing the telegraph a surgeon can frequently be sent to an infected locality much earlier than would be possible were one man required to visit all the localities where disease is reported. By this system I am able to be at my office every day and attend to the correspondence, and at the same time have all infected localities promptly visited. The remote parts of the State are thus reached by the deputies, while I see in person the cases that occur in less remote locations, and make occasional visits to distant parts of the State in extraordinary cases. I have found this system to possess many points of advantage over the plan of putting the entire work of the department in the hands of a single man, and keeping him constantly in the field. It soon develops that a large amount of office work becomes a daily necessity. This must be neglected if the veterinarian is constantly from home; or, in the event of his attending promptly to the office work, the practical outdoor business must suffer. I have talked with a number of State veterinarians from other States, where the work is practically in the hands of one man, who have informed me

that it would be quite impossible for them to answer any considerable per cent of the calls made upon them, and which, under the law, they are required to meet. As an illustration of the manner in which demands are made on this office, I quote the following passage from the law :

SEC. 5. Whenever the majority of any board of supervisors, city council, trustees of an incorporated town or township trustees, whether in session or not, shall in writing notify the Governor of the prevalence of, or probable danger from any of said diseases, he shall notify the State Veterinary Surgeon, who shall at once repair to the place designated in said notice and take such action as the exigencies may demand, and the Governor may in case of emergency appoint a substitute or assistants, with equal power and compensation.

By adopting the system authorized above, I have been enabled to meet the calls for examination during a considerable portion of the year. Last year the fund was exhausted early in October, and all work had to be discontinued from that date to January first of the present year. The indications are that the appropriation will be absorbed at an earlier date this year, and work must again cease for the want of funds to defray expense.

It must be borne in mind that in order to extend the appropriation over nine or ten months of the year the most rigid economy must be practiced, and much important work has to be neglected altogether. The fund has been employed entirely for the purpose of sending officers to localities where outbreaks of disease have been reported, for the purpose of investigating and advising in the cases.

No money has been employed to indemnify owners for loss of stock. As no stock can be slaughtered without first being appraised, and as this is an exceedingly complicated and expensive process under the law, it has been thought best to not attempt this method of procedure in cases of glanders, but to rely entirely on the authority to establish quarantine, as affording protection to the community. The system of appraisement and slaughter would exhaust all our fund in a few weeks, and during the remainder of the year it would be impossible to carry on any work, no matter how great the necessity. In order to make this the uniform rule of action the State Board of Health adopted the following rule:

RULE 10. No animal diseased with glanders or farcy shall be deemed to have any property value whatever, and no appraisal thereof will be made.

*Reasons for Rule 10.* Glanders is an incurable disease, and there is no warrant for expending public money in appraising property manifestly worthless, and which can be compensated for only at "its actual value in its condition when condemned." Also to prevent the introduction of diseased animals into the State, and the inoculation of worthless ones for speculative purposes.

RULE 11. Whenever the owner, or person having in charge any animal declared by the State Veterinary Surgeon or other authorized person to have the glanders, shall neglect or refuse to destroy said animal, the premises whereon such animal is kept shall be quarantined until such animal is destroyed and the premises thoroughly disinfected.

In order to illustrate the impracticability of carrying out the section of law providing for the slaughter of animals, I quote section six of Chapter 189, laws of the Twentieth General Assembly.

SEC. 6. Whenever, in the opinion of the State Veterinary Surgeon the public safety demands the destruction of any stock under the provisions of this act he shall, unless the owner or owners consent to such destruction, notify the Governor, who may appoint two competent veterinary surgeons as advisers, and no stock shall be destroyed except upon the written order of the State Veterinary Surgeon countersigned by them and approved by the Governor, and the owners of all stock destroyed under the provisions of this act, except as hereinafter provided, shall be entitled to receive a reasonable compensation therefor, but not more than its actual value in its condition when condemned, which shall be ascertained and fixed by the State Veterinary Surgeon and the nearest justice of the peace, who if unable to agree shall jointly select another justice of the peace as umpire, and their judgment shall be final when the value of the stock does not exceed one hundred dollars, but in all other cases either party shall have the right to appeal to the circuit court, but such appeal shall not delay the destruction of the diseased animals. The State Veterinary Surgeon shall, as soon thereafter as may be, file his written report thereof with the Governor, who shall, if found correct, endorse his findings thereon, whereupon the Auditor of State shall issue his warrant therefor upon the Treasurer of State, who shall pay the same out of any moneys at his disposal under the provisions of this act; *provided* that no compensation shall be allowed for any stock destroyed while in transit through or across the State, and that the word stock, as herein used, shall be held to include only neat cattle and horses.

It will be understood without comment, that it would be impossible to carry out the provisions of this section, for such diseases as are represented by a large number of cases, without a correspondingly large appropriation to meet the expense. The rule of the Board of Health on this matter has occasioned some dissatisfaction, inasmuch as the general impression obtained by reading the statute alone, is

that animals are to be appraised, slaughtered, and paid for. Without this rule it would be impossible under the existing law to continue the work more than a few months each year.

In order to facilitate the business of recording all work done, I have caused to be printed a series of blanks, with the proper rulings and headings, in order to show the locality in which disease has occurred, number and kind of animals affected, nature of the disease, how the animals were disposed of, and other facts necessary to give a tabulated statement of each case. These blanks are furnished to the deputies, who return them at the end of each month, with the proper entries, showing the facts as above indicated. This system was not adopted until after the beginning of the present year; so we have not the tabulated data from which to make up the full annual report in accordance with this form. I will be able to furnish hereafter, for the benefit of the executive office, complete monthly statements in the form indicated.

I am greatly indebted to some of the departments of the Agricultural College for valuable assistance rendered in the work of investigation. This is especially true of the departments of Chemistry, Botany, and the several departments in the school of veterinary medicine. It is a most important aid, to be able to command the services of experts in these several lines of scientific work, especially as veterinary science is in its infancy, and much of the work done by veterinarians involves methods of original investigation. The State work in turn has been of very great value to the veterinary school of the Agricultural College, as it brings before the students of this school the results of investigation in all parts of the State. They are thus kept informed as to the prevalent diseases, their distribution, and methods of dealing with them. The college and State work have in this manner supplemented each other in a most important way.

As I have already indicated, the work done during the past year has been almost exclusively attending calls, made in conformity with the law, noted above. Practically no time has been given to the work of experimentation, there being no means of accomplishing more than simply answering urgent calls for opinions on existing diseases.

#### EPIZOOTIC DISEASE.

There has been no general epizootic disease prevailing in the State during the past year. Cattle have been especially free from disease. The few calls that have been made to investigate disease among cattle have resulted in tracing the disease to some local cause, usually of a diatectic character.

#### GLANDERS.

Glanders still continues to exist among horses in several localities, but appears to be on the decrease. This disease, or the fear of its existence is the occasion of most of the calls on this office. Assuming as it usually does in this country, the chronic type, it is a very unsatisfactory disease to handle. Its slow and uncertain development renders the owners of stock incredulous as to the diagnosis, and often leads to some dissatisfaction.

The plan of placing such animals in quarantine for an indefinite time, usually leads to convincing the owner of the true nature of the malady, and to his voluntary destruction of the animals. Order of quarantine has, I think, in nearly every instance, been sufficient to restrain diseased animals, and no case of communicating disease through violation of these orders has come under my observation.

#### PLEURO-PNEUMONIA.

Pleuro-pneumonia, the disease from which we have most to fear, has not found its way to our State. When we consider the extent of our cattle traffic with other States, and the proximity of the disease to our borders on several occasions, we have much occasion for congratulating ourselves on our escape from the scourge thus far. The nearest approach the disease has made to our State were the outbreaks in Missouri, Illinois and probably Dakota. The disease was stamped out in Missouri at a very heavy cost to the cattle industry of the State, directly and indirectly. The cattle in Dakota suspected of having the disease were promptly slaughtered, and the outbreak, if such it actually was, terminated in a summary manner. In the State of Illinois the disease assumed much more serious proportions. During the fall of 1886 Dr. Casewell, the State Veterinary Surgeon of Illinois, discovered that cattle in several of the feeding sheds connected with the distilleries in Chicago, were affected with contagious pleuro-pneumonia. The United States authorities were promptly no-

tified of the fact, and experts from the Bureau of Animal Industry came on the grounds to aid in the work of suppressing the disease. At once a bitter contest arose over the matter. It was apparent to every one that the distribution of the disease through the city of Chicago, would necessarily interfere in a serious manner with cattle traffic. Here, in the midst of a city carrying on the largest live-stock trade of any city in the world, has appeared the most insidious and difficult disease to contend with known to veterinarians. The situation was a grave one, and it was promptly resolved by a large number of interested parties, especially the representatives of several periodicals, that the present interest of Chicago's cattle traffic should take precedence over everything. In accordance with this theory a most systematic and energetic crusade was entered upon to mislead the public on this assertion. Offers to bet large sums of money were freely indulged in, and everything that blow, bluster and bluff could suggest to mistify the public and mislead them as to the actual dangers were resorted to. In the face of the most incontrovertable proof, the position was still maintained that there was not a case of pleuro-pneumonia in the city; that it was a scheme of the veterinarians for speculation. In short, that it was an artificial scare, gotten up for selfish ends. The fact that hundreds of animals were being condemned and slaughtered, and careful post-mortem examinations, giving the indisputable proofs of pleuro-pneumonia, was no proof to the parties who were in the field with judgments already formed on the other side. During the fall and winter I visited Chicago several times in order to make a careful study of the disease, as well as to perfect arrangements looking to the protection of our own interests. During these visits I met the most experienced veterinarians from all parts of the United States, as well as some of the best talent of Europe. In this army of experts I did not find a single man who ever expressed a doubt as to the true nature of the disease. Notwithstanding this "multitude of council," such publications as the Drovers' Journal continued to evolve from their editorial rooms the assertions that there was no pleuro-pneumonia in the city. All through this struggle, to protect the interest of the live-stock men, the western farmer was daily treated to this form of sophistry. Considerable delay was experienced in getting the State machinery into successful running order, so as to begin the work of stamping out the disease. In the mean time the disease had found its way to

many small herds and private barns in the northwest portion of the city where the distilleries are situated, and to the suburban villages. The practice followed in the outskirts of the city of allowing family cows to range on the commons, had contributed to the distribution of the disease. A general system of inspection was found necessary, and a large force of veterinarians was finally put to the work of making individual examinations of all cattle in this quarter of the city. All diseased, or suspected animals were placed in quarantine and properly tagged, to insure recognition. Finally the legislature made an appropriation of \$50,000 to defray expenses and partially indemnify owners for cattle destroyed. The United States came to the aid of the State of Illinois, and the work of slaughtering commenced. Since the initiation of this plan the work has been steadily progressing. Some impatience with the work of the Board of Live-stock Commissioners has been indulged in. Many thought the disease should be stamped out in a few days. The magnitude of such an undertaking is not comprehended by those who have not looked into the details which it involves. The work, so far as I am able to learn, has already involved the inspection of between 10,000 and 20,000 individual animals. These cases must be critically examined, and all symptoms carefully noted. The symptoms are often very obscure, and several successive examinations may be necessary to determine with certainty the presence of disease.

The work is still progressing, and the authorities hope to effectually eradicate the disease in the near future.

In a letter received from the Commissioners within the last few days, the loss to the State of Illinois from this outbreak of pleuro-pneumonia is placed at \$2,000,000. The States of Missouri and Kentucky suffered almost as severely before they were free from the disease. These figures show that the darkest pictures given by sanitarians as to existing dangers have never been overdrawn. They teach conclusively that the economical method of dealing with this cattle scourge is to keep it out of the State. Once it obtains a foothold the only practical method of dealing with it is to slaughter all diseased and exposed animals. All conservative methods have failed.

## QUARANTINE MEASURES.

While the above state of things existed in an adjoining State, it devolved on the authorities of Iowa to take such steps as might best protect her interests. So soon as the true state of affairs in Illinois became known, the shipment of cattle from that State into Iowa was forbidden by executive proclamation, except under proper restrictions formulated by the State Board of Health. It is one thing for the Governor of Iowa to forbid the people of Illinois to bring cattle into this State. It is another thing to see that this requirement is obeyed. We had no funds to pay for the establishment of quarantine posts at the various points of entry along the Mississippi river. This would involve placing an officer at each of these several points, to take charge of all stock coming into the State in violation of law. It also involved the expenditure of a considerable sum of money, which I have already stated we did not have to spend. I proposed the plan of asking the managers of all railroads running from Illinois into Iowa to impose such restrictions on the shipment of cattle as would afford all the protection that would be afforded by a system of quarantine stations. With a view to perfecting such an arrangement I visited Chicago, in company with the Governor of Iowa, and called on the principal officers of all the railroads connecting the two States. The necessity for action in the matter was placed before these gentlemen, who uniformly took an active interest in the plan. The result of these interviews was the adoption of a form of health certificate, to be furnished by all shippers of cattle after the blanks had been properly filled out by the health officer.

All the railroad companies entered into a voluntary agreement to receive no cattle for shipment from the State of Illinois into the State of Iowa, unless accompanied by this certificate, properly signed. All local agents in Illinois were instructed in accordance with this plan, and thus went into effect, a system for protecting the cattle interest of this State, that costs us nothing. It was the outgrowth of absolute necessity, but has proved of incalculable benefit to Iowa. The railroad companies in this particular, have done what entitles them to the gratitude of the State. Without their action in this matter it would have been impossible with the means at our disposal to have controlled the shipment of ailing cattle.

The following is the form of certificate:

OFFICE OF STATE VETERINARY SURGEON, }  
DES MOINES, IOWA, May 10, 1887. }

*To whom it may concern:*

The following amended rules governing the introduction of cattle into this State from the State of Illinois are hereby promulgated:

1. The importation of cattle kept within the last twelve months in Cook county, Illinois, or any of the counties adjoining it, is absolutely prohibited.

2. The importation of other cattle coming from the State of Illinois is prohibited, unless their owner, shipper or attendant furnish the following evidence that they are free from contagious disease:

Certificate from the Veterinary Surgeon of the State of Illinois that he finds the cattle to be shipped free from pleuro-pneumonia and other contagious diseases; that he has made a careful investigation, and is satisfied that said cattle have not, within the last twelve months preceding the date of shipment, been kept in Cook county, Illinois, in any of the counties adjoining Cook county, or any other locality in which pleuro-pneumonia exists; and that they have not in any way been subjected to the influence of any contagious disease.

Affidavit of two disinterested and reputable citizens and free-holders of the county from which the cattle were shipped, to the effect that they have personal knowledge that said cattle were owned by the shipper, and kept on his premises for at least twelve months immediately preceding the time of shipment, and that they were not exposed to pleuro-pneumonia during that period.

Affidavit of owner that the cattle are the identical animals examined by the State Veterinary Surgeon and described in his certificate; that the cattle have not been exposed to any contagious disease while in transit, and that the cars in which they are transported were thoroughly cleansed and disinfected before shipment.

3. All cattle coming into this State in violation of the proclamation of the Governor or the foregoing rules may be held in quarantine for ninety days at the expense of the owner.

M. STALKER,  
*State Veterinary Surgeon.*

Approved, May 10, 1887.

P. W. LEWELLEN, M. D.,  
*President Iowa State Board of Health.*

J. F. KENNEDY, M. D.,  
*Secretary of Iowa State Board of Health.*

Approved, May 25, 1887.

WM. LARRABEE,  
FRANK D. JACKSON,  
J. A. LYONS,  
V. P. TWOMBLY,  
*Executive Council.*

I believe the railroad companies have acted in good faith in this matter, and that the regulation has been enforced.

Quarantine restrictions are still in force against the following States the quarantine against the State of Missouri having been removed:

Connecticut, New York, New Jersey, Pennsylvania, Maryland, Virginia, West Virginia, Delaware, Ohio, Kentucky, Tennessee, Indiana, Illinois, and the District of Columbia.

#### LEGISLATIVE RECOMMENDATIONS.

I venture to make a few suggestions as to the amendment of the law. While in most respects the law has worked smoothly, and I am well satisfied that a very large amount of good has accrued to the State, there are nevertheless some difficulties in obtaining all the results desired. In the first place, the appropriation is too small to meet the most obvious needs of the office. While it may be customary for public officers to think that larger sums of money should be placed at the disposal of their several offices, and the scope of the work extended, I am convinced that a dispassionate examination of this question will convince any one that the means are entirely disproportioned to the importance of the work. The experience of other States, already alluded to, is sufficient proof that the economical method of handling contagious diseases is to keep them out of the State. One hundred dollars expended in keeping disease out of

the State, will accomplish more than a thousand expended in combatting it on our own territory. The sum now provided is not only too small to accomplish anything in the way of protecting our borders against disease from neighboring States, but is not adequate to pay the small expense incident to making visits to infected districts within the State. This small service must be discontinued before the end of each year for the want of necessary funds. No work whatever can be attempted in the line of systematic investigation from the same cause. The live stock interest of this State is too important to be put off with the poor apology of \$3,000 per annum. A sum not less than twice this amount should be appropriated to meet the current expenses of the office, and a much larger sum should be placed at the disposal of the Executive Council in case a great emergency should arise. Millions of dollars have been sacrificed in a number of our States for the want of proper sanitary police regulations, and a few thousands of dollars with which to defray the expense of stamping out pleuro-pneumonia, as soon as it was found to exist in the State.

*Second.* There should be fixed penalties attached to the violations of quarantine rules, or other sanitary regulations. It has been found very efficient to enforce by legal process these orders when parties have been disposed to violate them.

*Third.* It should be made the duty of some local officer to enforce such rules and orders as may be issued from time to time. It is quite impossible for the State Veterinary Surgeon to look to the details of carrying out his orders in a dozen or twenty widely separated sections of the State at the same time.

*Fourth.* A more simple and less expensive method for the disposition of animals rendered worthless and dangerous by reason of disease, should be devised than that provided for in section six. If any compensation is to be made for condemned animals, some method of determining their values should be adopted, that is more practicable than the present plan. When animals are condemned, it should be made the duty of some township or city officer to destroy such animals and disinfect the premises, where such precaution is necessary, and do whatever else may be required to carry out the intent of the law, looking to the protection of the public.

With these slight modifications, I am convinced we would have a system that would recommend itself to the public, and prove an in-

estimable benefit to our large and rapidly increasing live stock industry.

## FINANCIAL EXHIBIT.

The following exhibit shows the expenditures from June 30, 1886, to June 30, 1887. Itemized bills covering the amounts are filed with the Auditor of State :

*State of Iowa, to M. Stalker, Dr.*

|   |           |
|---|-----------|
| To 129 days' service as State Veterinary Surgeon, @ \$5 per day.... | \$ 645.00 |
| To personal expense.....  | 381.04    |

*State of Iowa, to W. B. Nils, Dr.*

|   |           |
|---|-----------|
| To 103 days' service as Deputy State Veterinary Surgeon, @ \$5 per day..... | \$ 515.00 |
| To personal expense.....  | 476.33    |

*State of Iowa, to R. M. Nicholson, Dr.*

|   |           |
|---|-----------|
| To 106 days' service as Deputy State Veterinary Surgeon, @ \$5 per day..... | \$ 530.00 |
| To personal expense....   | 466.61    |

*State of Iowa, to M. E. Johnson, Dr.*

|  |          |
|--|----------|
| To 12 days' service as Deputy State Veterinary Surgeon, @ \$5 per day..... | \$ 60.00 |
| To personal expense.....   | 52.38    |

*State of Iowa, to J. C. Milnes, Dr.*

|  |           |
|--|-----------|
| To 29 days' service as Deputy State Veterinary Surgeon, @ \$5 per day..... | \$ 145.00 |
| To personal expense.....   | 135.41    |

*State of Iowa, to C. H. Flynn, Dr.*

|  |          |
|--|----------|
| To 18 days' service as Deputy State Veterinary Surgeon, @ \$5 per day..... | \$ 90.00 |
| To personal expense.....   | 102.90   |

*State of Iowa, to J. A. Campbell, Dr.*

|  |          |
|--|----------|
| To 10 days' Service as Deputy State Veterinary Surgeon, @ \$5 per day..... | \$ 50.00 |
| To personal expense.....   | 53.86    |

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\$3,703.03

## LAWS, RULES AND REGULATIONS.

I annex hereto copies of all laws, quarantine proclamations, and rules and regulations passed by the State Board of Health that pertain to the suppression and restriction of contagion among domestic animals. I find it necessary to keep on hand such a compilation to meet the frequent demands made on this office for information on these points.

## A PROCLAMATION.

STATE OF IOWA, }  
EXECUTIVE DEPARTMENT. }

BY THE GOVERNOR.

WHEREAS, Reliable information from the State Veterinary Surgeon, and otherwise, has reached me, that the dread epidemic, pleuro-pneumonia, exists in virulent and contagious form in many of the States of the Union, among the cattle thereof; and,

WHEREAS, In view of the prominent position held by Iowa as a cattle producing and cattle feeding State, being first in value and rank therein among all the States and Territories, and the immense investments in such stock held by our people; and,

WHEREAS, It is of greatest importance that this vast interest, involving many millions of valuable property, should be protected to the people of the State, and to the end that the good name of the State as a stock and food producing district shall be maintained.

Now, therefore, I, BUREN R. SHERMAN, Governor of the State of Iowa, by virtue of the authority in me vested by the constitution and laws of the State, do hereby declare and establish quarantine at the boundaries thereof, against all animals affected with said disease, pleuro-pneumonia, or that have been exposed thereto, and I do hereby absolutely prohibit the importation into the State, all cattle shipped or driven from the States hereinafter named, unless the same shall be accompanied by a certificate of health given by the State Veterinary Surgeon of said States, who shall have first made careful examination of such cattle, viz:

The States of Connecticut, New York, New Jersey, Pennsylvania, Maryland, Virginia, West Virginia, Delaware, Ohio, Kentucky, Tennessee, Indiana, Illinois, \* Missouri, and the District of Columbia. All railroad and transportation companies are hereby forbidden to bring into this State any cattle from the localities above named unless the proper health certificate, as above specified, shall accompany the shipment.

I appeal to all good citizens to assist in the enforcement hereof, and especially direct all sheriffs, constables, and other peace officers, and the boards of health throughout the State, and the State Veterinary Surgeon and his several deputies, shall see that this proclamation is obeyed.

\* Restrictions against Missouri removed.

In testimony whereof, I hereunto set my hand, and caused to be affixed the great seal of the State of Iowa. Done at Des Moines, this 29th day of April, A. D. 1885.

[SEAL.]

BUREN R. SHERMAN.

By the Governor:

FRANK D. JACKSON, *Secretary of State.*

## QUARANTINE PROCLAMATION.

STATE OF IOWA, }  
EXECUTIVE DEPARTMENT. }

WHEREAS, Many of the prominent farmers and stock-growers of the State, more and more realizing the extreme danger of pleuro-pneumonia, request that additional restrictions be placed upon the importation of cattle from the State of Illinois:

Therefore, I, WILLIAM LARRABEE, Governor of the State of Iowa, do now forbid the importation into this State from Illinois of any cattle, except in such special cases as may be approved by the Veterinary Surgeon of this State and upon compliance with such regulations as he may prescribe.

And I again appeal to all the citizens of the State, and especially to all State, county and municipal officers, to aid to the best of their abilities to ward off from our State the calamity of an invasion of that dreadful plague.

In testimony whereof, I have hereunto set my hand and caused to be affixed the great seal of the State of Iowa.

Done at Des Moines, this fifteenth day of February, A. D. 1887.

[SEAL.]

WM. LARRABEE.

By the Governor:

FRANK D. JACKSON, *Secretary of State.*

## RULES AND REGULATIONS.

OFFICE OF THE IOWA STATE BOARD OF HEALTH,  
DES MOINES, December 23, 1884.

PURSUANT to authority vested by Chapter 189, Laws of the Twentieth General Assembly, the State Veterinary Surgeon by and with the approval of the State Board of Health, the Governor, and the Executive Council, does hereby make and establish the following rules and regulations for the prevention and restriction of contagious diseases among domestic animals:

### DISEASES.

**RULE 1.** All neat cattle that have been reared, or kept south of the parallel forming the north boundary of Indian Territory, or 37° north latitude, and that have not subsequently been kept continuously at least one winter north of said parallel, and which may be brought within the limits of this State between the first day of April and the first day of November following, except for transportation through the State on railways or boats, shall be subject to quarantine; and all land on which such cattle may have been kept or fed, within this State, shall in like manner be subject to quarantine.

**RULE 2.** All cattle, as defined in Rule 1, while in transit through this State, which may be removed from any car or boat, within this State, for the purpose of feeding, watering, re-shipment, or other cause whatsoever, shall be confined in yards, stables, or enclosures, separate and apart from all other animals, and no other cattle shall be permitted to come within such yards, stables, or enclosures, or in contact with such quarantined and enclosed cattle.

**RULE 3.** Between the first day of April and the first day of November following, no cattle whatsoever, except such as are defined in Rule 1, shall be placed within any stable, yard, or other enclosure where cattle have been quarantined under Rule 1, unless such yards, stables and enclosures have been previously thoroughly cleansed and disinfected.

**RULE 4.** All cattle brought within this State from any county or parish within the United States where pleuro-pneumonia is known to exist, shall be subject to quarantine for a period of not less than sixty days.

**RULE 5.** The carcasses of all animals that have died from anthrax, shall, without removal of the hide, or any part of said carcass, be burned, or buried not less than four feet deep in the ground, and thoroughly covered with kerosene before covering with earth.

*Reasons for Rule 5.* To prevent the possibility of a recurrence of this disease from germs existing in the grave, which if not destroyed by some powerful agent will retain their vitality for a number of years, so as to impart the disease.

As anthrax is communicable by inoculation to human beings, great precaution should be used in handling animals affected with this disease.

**RULE 6.** No person owning or having the care or custody of any animal affected with glanders or farcy, or which there is reason to believe is affected with said diseases, shall lead, drive, or permit such animal to go on or over any public grounds, uninclosed lands, street, road, public highway, lane, or alley; or permit it to drink at any public water trough, pail, or spring; nor to keep such diseased animal in any enclosure, in or from which such diseased animal may come in contact with, or close proximity to, any animal not affected with such disease.

**RULE 7.** Whenever notice is given to the trustees of a township, or to the health officer of a local board of health, of animals suspected of being affected with glanders or farcy, said trustees, or health officer, shall immediately require such suspected animals to be isolated and kept separate and apart from all other animals until released by order of the State Veterinary Surgeon or some person acting by his authority.

**RULE 8.** An animal must be considered as "suspected" when it has stood in a stable with, or been in contact with an animal known to have the glanders; or if placed in a stable, yard or other inclosure where a glandered animal has been kept.

**RULE 9.** Whenever any animal affected with glanders or farcy shall die, or shall be killed, the body of such animal shall be immediately burned, or buried not less than four feet deep, without removing the hide from the carcass.

**RULE 10.** No animal diseased with glanders or farcy shall be deemed to have any property value whatever, and no appraisal thereof will be made.

*Reasons for Rule 10.* Glanders is an incurable disease, and there is no warrant for expending public money in appraising property manifestly worthless, and which can be compensated for only at its actual value in its condition when condemned." Also to prevent the introduction of diseased animals into the State, and the inoculation of worthless ones for speculative purposes.

**RULE 11.** Whenever the owner, or person having in charge any animal declared by the State Veterinary Surgeon or other authorized person, to have the glanders, shall neglect or refuse to destroy said animal, the premises whereon such animal is kept shall be quarantined until such animal is destroyed and the premises thoroughly disinfected.

### QUARANTINE.

**RULE 12.** The term "quarantine" shall be construed to mean the perfect isolation of all diseased or suspected animals from contact with healthy animals; as well as the exclusion of such healthy animals from the yards, stables, enclosures or grounds wherever said suspected or diseased animals are or have been kept.

## DISINFECTION.

Among the most efficient and convenient agents for destroying disease germs are heat, solutions of carbolic acid, sulphate of iron, caustic soda, or sulphate of copper; fumes of sulphur or chlorine, chloride of lime, slacked lime, lime-water, whitewash and kerosene oil.

**HEAT.**—This is conveniently applied by means of boiling water or oil, and is especially recommended for disinfecting fabrics of all kinds, leather or wood. Articles of iron or other metals may be purified by heating in a fire. All bedding, litter, excrement, etc., that have accumulated about animals affected with any form of contagious disease, and the carcasses, together with all blood, or other fluid elements that have escaped from such carcasses, should be burned, as the surest means of eradicating the disease.

Dirt or earth floors of stables wherein animals affected with glanders or anthrax have been kept, should be removed to the depth of four inches and burned.

## SOLUTIONS.

*Carbolic Acid.*—Add one part of the acid to five or ten parts of water or oil.

*Sulphate of Iron, Copper and Caustic Soda*—Add as much of the substance to a given quantity of warm water as will be dissolved.

*Whitewash.*—For disinfecting interior walls of buildings, feed-boxes, mangers, yard fences, etc., the application of a coating of whitewash prepared from lime in the ordinary way, so thoroughly done as to completely cover every part of the surface designed to be cleansed, is an economical method.

## FUMIGANTS.

*Sulphur.*—Fumes of sulphur are adapted to disinfecting buildings that can be closed so as to confine the fumes, and especially such parts of buildings as are not readily accessible for cleaning. They may be generated by placing a few pounds of sulphur in an iron vessel, adding a small quantity of kerosene oil, or alcohol, and setting fire thereto.

*Chloride of Lime.*—Chloride of lime and slacked lime for disinfecting floors, yard, carcasses and ground where dead or diseased animals have lain, should be thickly scattered over the surface of objects to be disinfected.

*Chlorine.*—To generate, take peroxide of manganese (to be obtained at any drug store), place in an earthen dish and add one pound of hydrochloric acid (sometimes called muriatic acid) to each four ounces of the peroxide of manganese. Care should be taken not to inhale the gas.

After the floors, walls, etc., of a contaminated building have been cleansed, they should be fumigated by some of the foregoing agents. The doors should be closed, and the building otherwise made as tight as possible. Fumes should then be evolved in the building for not less than half a day, and the doors kept closed not less than twenty-four hours, when air and sunlight should be freely admitted.

## BURIALS.

*Kerosene Oil.* Carcasses buried in the earth, where there is danger of exhumation by other animals, should, previous to burial, be thoroughly saturated with kerosene oil. This will tend to destroy the virus, and will prevent carnivorous animals disturbing the carcass and thereby spreading the disease.

**FREEZING.** It has been demonstrated repeatedly in Iowa, that the frosts of winter thoroughly disinfect pasture lands that have been poisoned with the virus of Texas fever by herds of Southern cattle during the summer months. From the first of April to the first of November, the virus is likely to retain its vitality, and the strictest precaution is necessary to prevent communication of the disease of Northern cattle. The purifying effect of frost, however, cannot be relied upon for destroying the virus of any other disease than Texas fever, liable to attack live stock in Iowa.

It is for the interest of every community, on the appearance of contagious or infectious diseases among animals, to adopt speedy measures to eradicate the same, and to co-operate with the State Veterinary Surgeon in securing such results in the shortest possible time.

M. STALKER,  
State Veterinary Surgeon.

APPROVED:

W. S. ROBERTSON,  
President State Board of Health.

L. F. ANDREWS,  
Acting Secretary State Board of Health.

BUREN R. SHERMAN, Governor.

J. A. T. HULL, }  
J. L. BROWN, } Executive Council.  
E. H. CONGER, }

RULES AND REGULATIONS GOVERNING QUARANTINE AGAINST PLEURO-PNEUMONIA AMONG DOMESTIC ANIMALS.

OFFICE OF THE IOWA STATE BOARD OF HEALTH, }  
DES MOINES, June 1, 1885. }

WHEREAS, Buren R. Sherman, Governor of the State of Iowa, did on the 29th day of April, 1885, by proclamation, establish quarantine against introduction into this State of all cattle from the following named States, to-wit: Connecticut, New York, New Jersey, Pennsylvania, Maryland, Virginia, West Virginia, Delaware, Ohio, Kentucky, Tennessee, Indiana, Illinois, Missouri and the District of Columbia, except such animals are accompanied by a certificate of health, signed by the State Veterinary Surgeon of the State from which the animals were shipped.

Now, therefore, by and with the concurrence of the Governor, the Executive Council, and State Board of Health, I, M. Stalker, State Veterinary Surgeon of the State of Iowa, in order to provide more adequate protection

to the cattle interests of the State, by virtue of the power vested by chapter 189, section 2, laws of the Twentieth General Assembly, do hereby promulgate the following rules and regulations governing quarantine and the introduction of cattle into the State of Iowa from the above mentioned subdivisions of the United States, against which quarantine has been established.

#### RULES AND REGULATIONS.

*First.* The owner, shipper or attendant of all cattle coming into this State from localities quarantined against, will be required to furnish the following evidence that said animals are free from contagious disease:

(a.) Certificate of health signed by the State Veterinary Surgeon of the State from which the cattle were shipped; or by some other competent veterinary surgeon commissioned by the Governor to make inspections and grant such certificates; or by a veterinary inspector of the United States Bureau of Animal Industry.

(b.) Affidavit of two disinterested citizens of the county from which the cattle were shipped, that they have personal knowledge that the animals have not been exposed to contagious pleuro-pneumonia during a period of four months immediately preceding the date of shipment.

(c.) Affidavit of owner made at the point of entry into this State that the cattle are the identical animals described in the bill of health and foregoing affidavit, and that they were shipped in cars free from virus of pleuro-pneumonia; and that they have not been exposed to any contagious disease while in transit.

*Second.* The foregoing evidence shall be submitted to the mayor of the nearest city or town in this State to the point of entry.

*Third.* A copy of the above evidence shall be furnished by such mayor to the State Veterinary Surgeon of this State.

*Fourth.* All cattle coming into this State in violation of the proclamation of the Governor, or the foregoing rules and regulations, may be held in quarantine for ninety days at the expense of the owner.

M. STALKER,  
*State Veterinary Surgeon.*

APPROVED:  
W. S. ROBERTSON, M. D.,  
*President Iowa State Board of Health.*

J. F. KENNEDY, M. D.,  
*Secretary Iowa State Board of Health.*

BUREN R. SHERMAN,  
*Governor.*

J. W. CATTELL,  
FRANK D. JACKSON,  
V. P. TWOMBLY,  
*Executive Council.*

The foregoing embraces the laws providing for the appointment of State Veterinary Surgeon, the proclamation of the Governors against the importation of cattle from districts affected with pleuro-pneumonia, and the rules framed for carrying out the intent of the proclamation. These with the special restrictions against the State of Illinois, found on page 19 of this report, embrace all the law and the rules pertaining to the work of this office that are now in force.

All of which is respectfully submitted.

M. STALKER,  
*State Veterinary Surgeon.*

*Ames, June 30, 1887.*