

SIXTH ANNUAL REPORT

OF THE

State Veterinary Surgeon

OF THE

STATE OF IOWA,

FOR THE

YEAR ENDING JUNE 30, 1890.

PRINTED BY ORDER OF THE GENERAL ASSEMBLY

DES MOINES:
G. H. RAGSDALE, STATE PRINTER.
1890.

OFFICE OF STATE VETERINARY SURGEON, }
AMES, IOWA, June 30, 1890. }

HON. HORACE BOIES, *Governor*:

In accordance with the provisions of Chapter 189, Laws of 1884, the report of the Veterinary Surgeon for the year ending June 30, 1890, is herewith submitted.

M. STALKER,
State Veterinary Surgeon.

REPORT.

I submit this, the sixth annual report of the State Veterinary Surgeon. The report covers the period from June 30, 1889, to June 30, 1890. During the last annual period there have been a less number of demands made on this office than during any similar period since its creation. This is due to two principal causes. The first exists in the fact that some of the types of contagious disease affecting our live stock are approaching extermination in the State, through the assistance rendered by this office. At the time the act was passed creating the office of State Veterinary Surgeon, more than half the counties in the State had one or more glanders infected centers, and not less than three hundred and fifty cases have been condemned in a single year. At present probably less than one-fourth of the counties would be found to contain a single case; and the number of victims for the last twelve months would reach little more than ten per cent of the loss for some former years. The reduction is due mainly to the operations of the State law applying to this matter. The number of infected districts that existed a half dozen years ago, would if not interfered with, have spread the contagion to thousands of victims before this and rendered the work of extermination an almost hopeless task. The work of eradication is necessarily slow, but each year finds the number of cases reduced, so that it becomes a question of time and a work of patience to effect the extermination of the loathsome disease.

The second cause which has contributed to lessen the calls on this office, is the increasing better management of domestic animals, and more intelligent methods of precaution against disease. Many of the diseases affecting farm animals are well nigh hopelessly uncontrollable when once fastened on their victims; the only hope for the farmer resting in his successful efforts at prevention. Through the efforts of stock-breeders associations, sanitary boards, newspapers, the constant warning of intelligent veterinarians and many other agencies that contribute to the dissemination of useful knowl-

edge on sanitary science and preventive medicine, the farmer is rapidly becoming a thinker on these subjects that lie so close to his material interests. How many farmers were there in the State a half dozen years ago, who would have entertained the suspicion of danger at placing with their native cattle, a healthy looking bullock from any part of the southern range? Now, how many are there who would not look on such an animal as the personification of pestilence if coming direct from many portions of the Gulf States, during the warm months? He is now aware that such exposure is equivalent to an outbreak of Texan fever.

The farmer has ceased to look on corn as the genesis of swine plague, or to harken to the teachings of the breeders of blonde or brunette pigs, that safety alone is to be found in the charmed color that is unfailing proof against the malady. He has come to know it as a contagious disease, springing from a specific contagium that multiplies, and reproduces its like just as effect follows cause elsewhere. He knows if he would avoid the frightful effects of the scourge he must prevent exposure to the contagious influence. He must adopt just such precautionary measures as would secure the members of his household against diphtheria or small pox. A little of this leaven of intelligence among the farming community will accomplish more for their interest, than all the so-called specifics that have ever been devised. There is growing to be a great deal of it, and its practical application to the livestock business is contributing as much to do away with devastating epizootics, as any one agency. But a knowledge of the means that will tend to the suppression of contagious disease, does not comprise all the sanitary knowledge required by the stockgrower. By no means all the losses, and probably not the most considerable, through death of farm stock, are to be attributed to contagious disease. The food supply and water supply are important factors in the health problem. In fact I have on different occasions found a satisfactory explanation for heavy losses of animals, in an impure or inadequate supply of water, or in the use of coarse, innutritious or indigestible food. This is particularly true of cattle. Their more ravenous and less selective habit of eating than that exercised by the horse, causes the bovine to be a much more frequent sufferer from diatetic influences. The horse rejects ergot and many other injurious forms of vegetation that are so readily taken by the ox, that the effects are frequently mistaken for contagious disease. The results frequently lead to the report of "a new contagious disease," and a state of

general alarm in the neighborhood. The conditions leading to such results are usually more obscure and difficult of detection by the farmer, than the circumstances leading to an outbreak of contagious disease, such as direct exposure to infected animals. Hence, the means of prevention are less clearly understood and less frequently employed. It is often very difficult for the farmer to give himself a satisfactory explanation for the death or severe sickness of a large number of animals in rapid succession, on any other theory than the presence of contagious disease, or from malicious mischief. But there is growing intelligence on this subject that in time will very much diminish losses from this cause.

It has been my constant practice so far as I have been able, through practical suggestions, to assist in lessening disease resulting from preventable causes. In this way an extensive correspondence has grown up with stockmen in all parts of the State, to say nothing of the numerous inquiries that come from more remote sections of the country. I have endeavored to answer all inquiries, either by personal letter or through printed matter pertaining to the subject.

All in all the livestock interest of the State is in a most satisfactory condition so far as the matter of health is concerned. Occasionally discouraging losses are sustained by individual farmers; but these are the rare exception in a business that as a rule is characterized by marked prosperity, and are only such losses as are incident to every branch of business.

Appended will be found copies of the laws, and rules established by the State Board of Health, that have to do directly with the operations of this office, together with a statement of expenses incurred during the last twelve months.

RULES AND REGULATIONS.

OFFICE OF THE IOWA STATE BOARD OF HEALTH, }
DES MOINES, December 28, 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 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 enclosures 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, unenclosed lands, street, road, public highway, lane, or alley; or permit it to drink at any public water-trough, pail, or spring; nor 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 enclosure 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 chlorine; chloride of lime, slaked 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 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.

Chloride of Lime. Chloride of lime and slaked lime for disinfecting floors, yards, carcasses and ground where dead or diseased animals have lain, in fine powder, should be scattered over the surface of objects to be disinfected thickly, so as to form a complete covering.

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 muratic 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 to 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 disease among animals, to adopt speedy measures to eradicate the same, and to co-operate with the State Veterinary Surgeon in securing such result 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.

B. R. SHERMAN,
Governor.

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

CHAPTER 189.

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 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 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 powers 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 finding 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 herein 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

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.

ACTS PASSED BY THE TWENTY-SECOND GENERAL ASSEMBLY.

CHAPTER 67.

RELATING TO DISEASED ANIMALS.

AN ACT to amend section 1 of chapter 79 of the Acts of the Twenty-first General Assembly of Iowa, Relating to Diseased Swine.

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

SECTION 1. That section one of chapter 79 of the acts of the Twenty-first General Assembly is hereby amended by adding at the end thereof, the following: It shall also be unlawful for any person, negligently or willfully to allow his hogs or those under his control, infested with hog cholera or other plague or contagious disease, to escape his control or run at large.

Approved April 3, 1888.

STATE OF IOWA, Dr.

To M. Stalker:

To 120 days service as State veterinary surgeon, at \$5.00 per day.....	\$ 600.00
To personal expense.....	362.57

To L. S. Butler:

To 11 days service as deputy State veterinary surgeon, at \$5.00 per day.....	55.00
To personal expense.....	57.19

To J. A. Campbell:

To 18 days service as deputy State veterinary surgeon, at \$5.00 per day.....	90.00
To personal expense.....	65.88

To E. E. Sayers:

To 52 days service as deputy State veterinary surgeon, at \$5.00 per day.....	260.00
To personal expense.....	301.70

To S. Stewart:

To 18 days service as deputy State veterinary surgeon, at \$5.00 per day.....	90.00
To personal expense.....	54.65

To L. A. Thomas:

To 2 days service as deputy State veterinary surgeon, at \$5.00 per day.....	10.00
To personal expense.....	10.70

To John Tillie:

To 5 days service as deputy State veterinary surgeon, at \$5.00 per day.....	25.00
To personal expense.....	25.85

To C. H. Flynn:

To 4 days service as deputy State veterinary surgeon, at \$5.00 per day.....	20.00
To personal expense.....	7.50

To G. A. Johnson:

To 26 days service as deputy State veterinary surgeon, at \$5.00 per day.....	130.00
To personal expense.....	111.99

To M. E. Johnson:

To 20 days service as deputy State veterinary surgeon, at \$5.00 per day.....	100.00
To personal expense.....	79.44

\$2,457.47

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