400	picture cord	2.35	
15 rolls	picture cord	7.10	
Repair	ng flags	86.75	
	tering 44 chairs	14.50	
	auts for chairs	20.95	
	es and brackets	4.75	
1 water	filter		
	ers and tumblers and cups	8.99	
	V8808	4.50	
	liquid glue	2.00	
4 ttn dr	awers and tin	7.20	
Dressir	g lumber	13.80	
5 pieces	leather and binding	7.71	
Picture	moulding	1.60	
ā dozen	cuspidors	13.50	
	lishes	1.20	
	ng elevator	1.00	
	I and stamp	1.25	
	stars and 2 plates	4.50	
	tand set	2.15	
	on picture hooks	.90	
	res, 1 brush	40	
	netting	2.00	
	thermometers	6.00	
	ing letter press	1.25	
		25.00	
	orary pins	1.85	
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			349.4
ork, 21% lbs, lead pt	pe and solder	2.10	
	raps	10.00	
	2 drums	11.50	
	pples and couplings	2.18	
	l bibbs	10.85	
		5.64	
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		52.00	
	mirror	8.00	
	and lumber	23.60	
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	custodian's office case	9.29	
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Respectfully submitted,

GEORGE METZGER, Custodian.

# TENTH ANNUAL REPORT

OF THE

# State Veterinary Surgeon

OF THE

STATE OF IOWA.

FOR THE

YEAR ENDING JUNE 30, 1894.

PRISTED BY ORDER OF THE GENERAL ASSEMBLY

DES MOINES: G. H. RAGSDALE, STATE PRINTER. 1894.

OFFICE OF STATE VETERINARY SURGEON, LAMES, IOWA, June 30, 1894.

FRANK D. JACKSON, Governor of lowa:

In accordance with the provisions of Chapter 189, Laws of 1884, the report of the Veterinary Surgeon, for the year ending June 30, 1894, is herewith submitted.

M. STALKEE,

State Veterinary Surgeon.

# REPORT.

I have the honor to submit this, the tenth annual report of the State Veterinary Surgeon of Iowa. The report contains a condensed statement of the expenses incurred from June 30, 1893, to June 30, 1894, for which proper vouchers are filed with the Auditor of State.

So far as I have been able to acquaint myself with the condition of the live stock throughout the State I have found comparatively little disease prevailing. The season has been one that might reasonably have been expected to cause an unusual amount of disease. The unprecedented drouth, with consequent inadequate water supply and shortage of pasture certainly favored such conclusion. But an unusual condition of good health prevails with some exceptions which I will note later in this report. The demoralized condition of the horse market has caused neglect of this class of stock in many instances, particularly where the animals possessed little value, and many of the cheaper grades of horses or those of little value have been destroyed to save expense. This of course does not apply to any large proportion of our horse stock and would not appreciably affect an invoice of this class of farm animals.

A few outbreaks of swine plague have appeared in various parts of the State, mostly from the shipment of infected stock from drouth-stricken districts to the west of us. Farmers and dealers seem to have overlooked the danger incident to the indiscriminate shipping and mixing of such stock with home herds. If the animals comprising such shipments are apparently free from disease, in the mind of the average purchaser, this is sufficient guarantee of safety. But it frequently transpires that animals carried in freight cars become infected or the carriers of infection, though they may not have been within a hundred miles of a case of swine plague. Cars contaminated with the poison are a ready source of infection

to healthy stock, and farmers purchasing store hogs from dealers making shipments from remote counties or different states, frequently become heavy losers through this source of contagion. Several centers of infection engendered in this way have come to my knowledge during the present year. Fortunately most of these have been detected in time to prevent general infection and serious loss. The public has come to comprehend the fact of the highly contagious nature of this disease, and the consequent precaution taken by swine owners is materially lessening the loss from this source. It is to be hoped our legislature may supplement these precautions with such protective legislation as will aid in eradicating the disease in the State.

Glanders has ceased to be a matter of serious consideration on account of the large number of cases. Ten years ago fifty-one counties were infected, and the annual destruction on account of the disease reached as high as 350 cases. During the past year barely a dozen animals were destroyed. This is probably as near complete freedom from the disease as we can expect to attain while the malady is permitted to exist in the country. The contingencies of traffic will at intervals introduce disease in the face of any vigilance the State may be able to exercise, but with ordinary precaution there need not be a general infection.

Tuberculosis now furnishes the most serious problem this office has to deal with. Until recently I have not been obliged to contend with this disease in any official way. It is true that ever since my connection with veterinary work in the State I have occasionally been called on by breeders for opinions and personal investigations where some form of chronic malady existed in valuable herds. I have in several instances found tuberculosis prevailing to a serious extent, and owners have voluntarily destroyed affected animals, and by other precautionary means succeeded in partially or wholly eradicating the disease. Not many such herds came under my observation, but enough to convince me that the disease was becoming seriously prevalent. During these years no such reliable means were known for the recognition of the disease as are now in use, and consequently only such cases as had declared themselves by clearly recognizable symptoms could be detected. The obscure cases greatly outnumbered the clearly apparent ones and the results were by no means satisfactory where the owner wished to thoroughly free his herd from the infection. Cases thus overlooked would in the course of time develop an aggravated type and in the meantime the disease had been communicated to

the offspring or other members of the herd, thus prolonging and complicating the process of stamping out. There was this degree of complication where the owner was intelligent, observing, conscientious and thoroughly in earnest in his endeavors to secure a perfectly healthy herd. But, where one or all of these essentials were wanting, as was not unfrequently the case, and so long as precautionary measures were purely voluntary with the owner, little progress could be made. In fact, it now seems evident that no advancement toward restricting the disease was made during these years. But on the contrary the insidious nature of the malady made it possible for it to gain additional foothold.

Thirty years ago tuberculosis was hardly thought of as a possibly contagious disease by even the better class of physicians. Practically all the valuable scientific knowledge on this subject has been brought to light and given to the world within a dozen years; and the facts of most practical value to the veterinarian have been discovered at more recent dates. I refer more especially to the diagnostic value of Koch's lymph, a subject which I will again refer to later on. The unanswerable proofs of the infectnous nature of the disease stand among the important facts brought to the knowledge of the world, through the independent investigations of scientific men in different countries. I take it for granted that the average reader understands this disease to be what is popularly known as consumption when affecting human beings. It is a fact now well known to the scientific world that consumption or tuberculosis of the human family is identical with the disease under the same name, affecting nearly, if not all species of warm blooded animals. This identity has been so repeatedly proven by experimental transmission from man to the lower animals, and from one species of the brute creation to another that it has practically ceased to be a debatable question in the realm of pathology. The microscope reveals the identity of the micro-organism, whether taken from the diseased tissue of a man. a mouse or a monkey; and thousands of tests made on living animals demonstrate the uniformity of results when this poisonous organism is introduced into the circulation, whatever may be its source. This question is by no means then, wholly an economic one. It involves one of the greatest problems of public health the sanitarian has to deal with. The pecuniary loss is a matter of minor consideration though by no means an insignificant one. The public mind has not yet been quickened on this question to the degree of gravity the situation demands. The fact that one death out of every seven or eight that occurs in the human family is due to tubercalosis, and in certain centers of population where sanitary precantions are totally disregarded, more than one-half the entire mortality is due to the same cause, is not an occasion that gives rise to general alarm. Its work is insidious and extends over a large portion of the inhabited globe. The scene is too familiar to inspire feelings of terror. Yet, if any sudden and violent epidemic were to carry off a tithe of the population that annually falls victims to this wasting disease, it would mark an epoch in the century. But, with the present state of the public mind. the officer who attempts to interpose restrictive measures for preservation of life and health is regarded as an alarmist, as opposed to good public policy and his motives not unfrequently called in question. This eminates not alone from those who suffer pecuniary loss through the adoption of sanitary police regulations, whose views might well be expected to be colored by self-interest, but such sentiments frequently find expression before the public, from those of whom we might expect better things.

But the question presents itself for solution and must be met. Among domestic animals the bovine species presents the greatest degree of susceptibility, and of these, milch cows are much more frequently affected than any other class of cattle. This is due to a variety of causes. First, the milking function is one that makes strong draughts on the vitality of the animal; and all vital force thus expended diminishes by so much the power to resist the encroachments of disease. Again, this class of stock is kept much longer than beef animals that are hurried to condition for slaughter and to market at the earliest possible age. So many additional years of life add so much to the chance of infection, besides bringing the animal to an age when it would more readily contract the disease than during the more vigorous period of its life. Cows that have been regularly in the dairy for a number of years. becomes particularly susceptible subjects. But probably the most potent cause operating to produce general infection in milking herds is the manner in which they are kept. By far the greater number of cattle, aside from dairy stock kept on Iowa farms, lead almost exclusively an outdoor life; while nearly all dairy herds are kept for a considerable portion of the time in quite close confinement. Where animals are crowded together in close under-ground stables, with inadequate air space and ventilation the chances for infection are infinitely increased. If a single case of tuberculosis exists in the herd others are almost certain to develop as a

result of such co-habitation. Few, I may say none of our bank barns, are sufficiently ventilated to render them safe habitations for dairy stock, crowded as they usually are into the narrowest possible space. I have tested a herd kept in such quarters where the disease had broken out, and have found almost every individual affected in the parts of the building most remote from windows and other provisions for ventilation, while a less serious state of affairs existed near the doors and windows.

After dairy stock, the class of cattle most liable to be affected is the breeding herd. Let no man flatter himself that this danger is confined alone to the milking breeds and to the enfeebled strains. I have met with it in the most robust breeds of beef cattle, which are as helpless against its ravages as are the Channel Island families. I do not mean to imply that well bred cattle will contract the disease more readily than scrubs or that they have less power of resistance; this may or may not be the case; but the conditions under which such cattle are ordinarily kept are highly favorable to the dissemination of any infectious malady. What I have said with reference to housing dairy herds will apply with almost equal force to this class of stock. In addition to this, the owner considers such animals too valuable to lose or destroy simply for the sake of being rid of the disease. He is likely to become aware of the creature's diseased condition before it would be recognized by the casual observer, and it is disposed of to some unsuspecting purchasers. Thus the animal goes out to start a fresh center of disease, or is used to perpetuate its kind and its malady in the parent herd. This is not an indictment to be entered against all breeders, but self interest is a motive so powerful that conscience usually gives the road at its approach.

I have said that the bovine species furnishes by far the greatest number of tuberculous subjects among domestic animals, and that milk stock are the most frequent subjects of attack among common cattle. They are likewise the greatest source of danger, even in equal numbers, when we consider the subject from the standpoint of danger to the human family. Both the flesh and the dairy products form so important a part of our food supply, that if these can in any sense be a possible source of infection, the danger is not to be lightly regarded. Are they? They unquestionably are. The diseased tissue of the consumptive patient reveals under the microscope the presence of a minute vegetable organism. So minute that it would require seventy or eighty thousand of them placed side by side to cover a linear inch. It is found that these

germs, minute as they are, when introduced into the tissues of a perfectly healthy animal will produce tuberculosis. It is true that in most cases, the plainly apparent results of this disease are circomscribed. The visible effects may be confined to the lungs, the liver, the mesenteric glands or other special parts of the body. But no portion of the system can hardly be said to be exempt. The bones, glands in the inter-muscular spaces, the udder, nervous system, all may be affected. Whether recognizable progress of the disease is to be found in any edible part of the animal or not. it is a well demonstrated fact that the germs of the disease can be. and are carried to various portions of the body remote from the special seat of the malady. As these are the disease-producing seeds, masses of diseased tissue are not alone to be regarded as sources of danger. Both milk and the juices of the flesh have been found to contain these organisms where no ordinary means of investigation could have detected the slightest evidence of unwholesomeness in these products. Yet the organism is the disease producing agent. It may not then be argued, that because the diseased parts have been removed from a carcass the remainder can be used for food with impunity. It may be suggested that as a mere theory this is plausible, but the inquiry may also be raised, do the facts of experimental science bear out the theory? Is there experimental proof of danger from such sources or any of them? The test of producing the disease by feeding susceptible animals on the milk of tuberculous patients has been repeated with affirmative results so often that this feature of the question may be regarded as at rest. It is true, that in most cases a diseased condition of the mamary gland was found an essential condition. But it is not safe to rely on any external observation as evidence of freedom from disease in this organ. The deposits may be so deep seated or generally diffused so as to render them unrecognizable. Besides the case is not proven that the milk from a tuberculous cow is a safe article of food though the mamary glands be perfeetly free from disease. But as a matter of fact the udder is an organ prone to be the seat of tubercular deposit. As to the danger from the juices of the flesh, the best evidence is the fact that tuberculosis has been repeatedly produced by injecting this liquid into the circulation of small animals. While it is true that injections of this substance are not followed by uniformly affirmative results. it is likewise true that such results have followed in a sufficient number of cases to demonstrate the danger of employing such meat as an article of food. It is true that infected food products

taken into the stomach are less likely to produce disease than when the microbes from these same tissues are injected directly into the circulation. But contaminated food when ingested in the ordinary way has so repeatedly produced tuberculosis that the stomach can not be regarded as a reliable disinfecting apparatus.

But the question is asked: Does not cooking destroy these germs or render them inert? It does. The temperature of boiling water or a temperature considerably below the boiling point will effectually destroy the reproductive power of these organisms. It may safely be said that the thoroughly cooked flesh of an animal affected with tuberculosis will not generate the disease. Neither will the flesh of a glandered animal reproduce that disease when it has been subjected to the same process. Neither case furnishes a satisfactory argument in favor of the consumption of such food. Neither do these facts prove that such food products are not harmful to the consumer, if they do not produce the specific disease from which the animal suffered. Scientific investigation has proven that certain products, poisonous in their nature result from the presence of the disease producing germs in the liquids in which they live and multiply. It is further proven that heat does not disintegrate or destroy the potency of these toxic products. Cooking them does not remove this form of poison. Whatever effects it is capable of producing are exerted whether the article containing it be taken naw or cooked. This poison is of such a nature that its effects are different when administered to healthy individuals and to those suffering from the disease furnishing the germs by which the poison was elaborated. No more striking results could be asked for than those furnished by the hypodermic injection of tuberculin, or Koch's lymph, before referred to. This is a product resulting from the action of the bacillus tuberculous in a suitable liquid: the same as is produced in the living tissues of a tuberculous subject. All disease producing organisms have been carefully removed from the liquid before it is employed for use. If a small quantity of this liquid, say sixty drops, be injected hypodermically into a cow affected with tuberculosis a pronounced fever will come on as a result. If a perfectly healthy animal be so treated no appreciable effects will follow. The maximum of fever in the diseased animal will be reached in from twelve to sixteen hours, after which it will gradually subside. Repeated injections of this kind have been found to aggravate established cases of tuberculosis. This is, in effect, feeding a tuberculosis patient on food from a tuberculous animal, the food first having been cooked, so that all the living germs may have been destroyed. Just how far these unchanged poisons in such food products are a real source of danger may require additional evidence to demonstrate. But it is a safe conclusion, that any compounds contained in milk or meat that will cause a rise of four to six degrees in the body temperature in the course of twelve or fifteen hours is a food to be discarded. Instances are not wanting where proof positive is furnished that tuberculous infection of human subjects has originated from the consumption of milk from patients similarly affected. From known facts bearing on the means through which transmission of this disease is effected, the conclusion is inevitable that our meat and milk supply is responsible for the infection of no small percentage of our consumptives.

I have tested a herd of milch cows consisting of fifty-one animals, in which twenty-seven were found to be tuberculous and at least half a dozen more in doubtful health. These were furnishing the daily milk supply to an Iowa town. I have become aware that it is a regular practice among the owners of such stock to put them on the beef market as soon as it becomes apparent that they are reaching the stage of decline from disease. It is true that some of these are detected and condemned in the slaughter houses where some form of inspection is employed. But it is my belief from facts in my possession that more than three fourths of all this class of death's heads pass unchallenged through any form of inspection . service in operation in this country. One of the great sources of danger lies in the fact that many animals in quite advanced stages of the disease give no such external evidence as would enable even an expert to determine the fact with certainty. I have seen many cows that so far as external appearances were concerned were entirely free from disease, but on application of the tuberculin test were found to give the characteristic reaction. I have never in one instance failed to find well marked tuberculous lesions when making post mortem examinations of subjects giving the reaction, no matter what the apparent condition of health may have been. That the meat and dairy products from such animals are safe articles of food cannot be successfully maintained. That all consumers of meat and milk are not infected is not a logical argument in favor of diseased products. That millions are infected is an argument against their consumption. The question then arises, are all the herds of Iowa tuberculous? Would the slaughter of the diseased seriously cripple our cattle industry? To both of these questions, emphatically, no. In herds that have shown such evidences of disease as to demand investigation, I have found the number of infected animals to range from four to nearly sixty per cent of the entire herd. I do not doubt but a series of critical examinations would reveal a diseased condition of almost every individual in some herds. But to offset this, there are thousands of herds in the State where no amount of investigation could detect a single case of tuberculosis. At least this is presumably true. If every tuberculous cow in the State were slaughtered at once the result would not seriously affect the sum total of the nominal cattle values. The actual value would be appreciated by such a course.

#### 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 graduated 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 advisors, 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 herein 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 veterieary 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 copperate 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 of 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 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 enucled by the General Assembly of the State of Iowa:

SECTION 1. That sections 4038 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 4038 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 rask, 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 splenetic 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 4055, and which are prohibited by such section, in addition to the remedy therein provided, may bring an action at law against any such persons, agonts, 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.

## [Chapter 50, Laws of Twenty-first General Assembly.]

Part of Section 1. If any person shall sell or exchange, or expose for sale or exchange, deliver or bring to another for domestic use or to be converted into any product of human food whatsoever, any \* \* milk taken from an animal having disease, sickness, ulcers, abscesses or running sore, or was taken from an animal fifteen days before, or less than five days after parturition, shall, upon conviction thereof, be fined not less than twenty five dollars (\$25.00) nor more than one hundred dollars (\$100.00), and be liable in double the amount of damages to the person or persons upon whom such fraud shall be committed.

SEC. 4035. If any person knowingly sell any kind of diseased, corrupted, or unwholesome provisions, whether for meat or drink, without making

the same fully known to the buyer, he shall be imprisoned in the county jail not more than thirty days, or by fine not exceeding one hundred dollars.—Code of 1873.

SEC. 4041. If any person throw, or cause to be thrown, any dead animal into any river, well, spring, cistern, reservoir, stream or pond, he shall be punished by imprisonment in the county jail not less than ten nor more than thirty days, or by fine not less than five nor more than one hundred dollars.—Code. of 1873.

#### SHEEP INSPECTION.

[Chapter 49, Laws of Twenty-fourth General Assembly.]

AN ACT to Provide for the Appointment of Sheep Inspectors, and Prescribing their Duties.

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

SECTION 1. The county board of supervisors of any county in the State when notified in writing, by five or more sheep owners of such county, that sheep diseased with scab, or other malignant contagious disease exists in such county, shall, at any regular or special meeting, appoint and commission a suitable person, to be known as county sheep inspector, who shall take an oath of office prescribed by the board of supervisors and whose duties shall be hereafter prescribed, and whose term of office shall be two years, or until his successor is appointed and qualified.

SEC. 2. It shall be the duty of the county sheep inspector, upon the information of three or more sheep owners, that any sheep within his jurisdiction have the scab, or any other malignant contagious disease, to immediately inspect and report in writing the result of his inspection to the county auditor of his county to be filed by him for reference by the county board of supervisors, or any party concerned; and if so desired, shall command the owner or agent to dip or otherwise treat such diseased sheep, and shall inspect such diseased sheep every month thereafter until such disease shall be cured or otherwise eradicated.

Size 3. A world such owner or agent fail to comply with the provisions of section two of this act, he or they shall be subject to a fine not to exceed one hundred dollars, and such fine shall be a lien on such sheep, and shall be recovered in an action of debt, together with all costs in any court of competent jurisdiction; and it is hereby made the duty of the county board of supervisors and county attorney to prosecute such cases of negligence.

SEC. 4. It is hereby made the duty of the sheep inspector to dip or otherwise treat such diseased sheep, should the owner or agent refuse to do so, and all costs, expenses or charges together with a per diem of three dollars per duy, shall be charged against such sheep for such costs, expenses or charges, and may be collected together with all costs in any court of competent jurisdiction.

SEC. 5. The compensation of sheep inspector shall be three dollars per day, and shall be paid by the owner of the sheep or his agent, if the disease is found to crist.

SEC. 6. Upon the arrival of any flock of sheep within the State from a distance of more than twenty miles outside the boundaries of the State, the owner or agent shall notify the inspector of the county in which such sheep are being held and he shall inspect such flock of sheep at the expense of the owner or agent, and if the sheep are found sound shall furnish the owner or agent a certificate which shall be a passport to any part of the State. Provided, however, in transport on board of

railroad cars, or passing through the State on such cars, shall not come within the provisions of this act. Any violation of the provisions of this act by the agent or owner of any sheep shall subject the owner to a fine not to exceed one bundred dollars, and shall be a lien and may be collected as in section three of this act. This act shall be in full force and effect from and after its passage.

Approved April 9, 1892.

[Chapter 79, Laws of 1896, as amended by Chapter 67, Laws of 1888.]

AN AUT to Prohibit the Traffic in Hogs infected with Swine Plague or Hog Cholera, and to Prevent the Spread of the same.

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

SECTION 1. All traffic in swine which have died with the swine plague or hog cholers, or from other contagious or infectious diseases within the State is hereby prohibited, and it shall be unlawful for any person to haul in any vehicle or public conveyance any dead hogs which have so died or known to be affected with such disease, upon any public road or highway or upon any enclosure other than that upon which said hogs have died.

SEC, 2. Any person baving in his possession swine which have died from the swine plague, hog cholern or other infections disease, shall, within a reasonable time, cause the same to be burned or buried to the depth of at least thirty inches so as to prevent the spread of the disease.

SEC. 3. Any person violating or failing to comply with any provision of this act shall be deemed guilty of a misdemeanor, and upon conviction thereof, shall be punished by Sne of not less than five dollars nor more than one hundred dollars, at the discretion of the court. [It shall be unlawful for any person, negligently or willfully, to allow his bogs, or those under his control, infected with hog cholers, or other plague, or contagious disease, to escape his control or run at large.—Chapter 67, Large of 1888.]

SEC. 4055. If the owner of sheep, or any person having the same in charge knowingly import or drive into this State, sheep having any contagious disease, or turn out, or suffer any sheep having any contagious disease, knowing the same to be so diseased, to ran at large upon any com min highway, or unenclosed lands, or sell or dispose of any sheep, knowing the same to be so diseased, he shall be deemed guilty of a misdemeanor and punished by a fine in any sum not less than fifty dollars nor more than one hundred dollars—Code of 1873.

SEC. 4056. If any person knowingly import or bring within this State, any horse, mule or ass, arc-ted by the disease known as manalgiest, flanders or button-farcey, or suffer the same to run at large upon any common highway or uninclosed land, or use or tie the same in any public place, or off his own premises, or sell, trade, or offer for sale or trade, any such horse, mule or ass, knowing the same to be so diseased, he shall be deemed guilty of a misdemeanor, and shall, on conviction, be punished by a fine of not less than fifty dollars, nor more than five hundred dollars; and in default of payment shall be imprisoned for any period not exceeding twelve months, or by both fine and imprisonment, as the discretion of the court.—Code of 1873.

SEC. 4057. If any horse, mule or ass, reasonably supposed to be diseased with manil gleet, glanders or button-farcey, be found running at large without any known owner, it shall be lawful for the finder thereof to take such borse, mule or ass, so found, before some justice of the peace, who shall forthwith cause the same to be examined by some veternary surgeon, or ether person skilled in such diseases and if, on examination, it is ascertained to be so diseased, it shall be lawful for such justice of the peace to order such diseased animal to be immediately destroyed and buried; and the necessary expense accuring under the provisions of this act shall be defrayed out of the county treasury.—Code of 1873.

SEC. 1484. The sheriff, constable, police officer, officer of any society for the prevention of cruelty to animals, or any magistrate, shall destroy any horse or other animal having the disease called and known as glanders, or any disabled creature unfit for other use.—Code of 1873.

### 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 ploced 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 disease, 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. Gianders 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 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, should be scattered thickly, in fine powder over the surface of the object to be disinfected, so as to form a complete covering.

Chlorine. To generate, take peroxide of manganese (to be obtained at any drug store), place in an earthern dish and add one pound of hydrochloric acid (sometimes called muriatic acid), to each four onness 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 carniverous animals disturbing the carcass and thereby spreading the disease.

FREEZING. It has been demonstrated repeatedly in fowa, 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 Sumer 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 frest, 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 cooperate 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.

I. F. Andrews, Acting Secretary State Board of Health.

B. R. SHERMAN,

Governor.

J. A. T. HULL, J. L. BROWN, E. H. CONGER,

# FINANCIAL EXHIBIT.

The following statement shows the amount of warrants drawn from June 30, 1893, to June 30, 1894, for which itemized bills are on file with the Auditor of State:

то wном.	No. of days	Per diem.	Expenses.
M Stalker	179	8 895.00	8 862 89
G. A. Johnson	28	140.00	129.59
	17	85 00	79.86
	80	150.00 20.00	181,37
	13	65.00	25,71
	6	30.00	201.214
F. A. Brown W. E. Watson	11	55 00	39.34
	2	10.00	7.40
Totals	202	8 1,460 00	# 854.64
		884.64	27.00000
Grand total		8 2,044 64	

# **ELEVENTH ANNUAL REPORT**

OF THE

# STATE VETERINARY SURGEON

OF THE

STATE OF IOWA,

FOR THE

YEAR ENDING JUNE 30, 1895.

PRINTED BY ORDER OF THE GENERAL ASSEMBLY.

DES MOINES: F. B. CONAWAY, STATE PRINTER. 1863.