

MAINE STATE LEGISLATURE

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PUBLIC DOCUMENTS

OF THE

STATE OF MAINE

BEING THE

REPORTS

OF THE VARIOUS

PUBLIC OFFICERS, DEPARTMENTS
AND INSTITUTIONS

FOR THE YEAR 1915



VOLUME 3

REPORT
OF THE
Live Stock Sanitary Commissioner
OF THE
State of Maine
ON
Contagious Diseases of Animals

1915



BOYDEN BEARCE, Commissioner

WATERVILLE
SENTINEL PUBLISHING COMPANY
1916

22

LETTER OF TRANSMITTAL.

*To His Excellency, Oakley C. Curtis, Governor of the State
of Maine:*

In accordance with provisions of the statute of Chapter 195,
Public Laws of 1911, I have the honor to submit herewith my
annual report for the year ending December 31, 1915.

Yours respectfully,

BOYDEN BEARCE,

Live Stock Sanitary Commissioner.

FINANCIAL STATEMENT FOR THE YEAR 1915.

RECEIPTS.

Appropriation	\$30,000 00
Amount received from sale of hides and carcasses	6,396 70
	<hr/>
	\$36,396 70

EXPENDITURES.

Animals condemned including disinfection of stables	\$30,944 11	
Salary—Live Stock Sanitary Commissioner ..	1,500 00	
Salary—Clerk	500 00	
Commissioner's traveling expenses	394 30	
Veterinary services and traveling expenses ...	969 09	
Hog cholera serum	725 00	
Disinfecting of cars	106 00	
Miscellaneous—Printing, express, postage, telephone, telegraph and office supplies....	1,245 00	36,383 50
	<hr/>	
Amount unexpended		\$13 20

STATISTICS OF CONDEMNED ANIMALS, 1915.

	No.	Amount.	Average per head
Pure blooded cattle condemned for tuberculosis	68	\$5,245 50	\$77 14
Grade animals, condemned for tuberculosis...	426	20,570 99	48 29
Animals condemned at Brighton for tuberculosis	25	1,143 34	45 73
Animals slaughtered for food and carcass condemned for tuberculosis	83	1,512 28	18 34
Horses condemned for glanders	54	2,472 09	45 78
	<hr/>	<hr/>	
Imported cattle condemned for tuberculosis without appraisal	3		
Imported horses condemned for glanders without appraisal	2		
	<hr/>	<hr/>	
	661	\$30,944 11	

ANNUAL REPORT.

In accordance with the provisions of Section 19, Chapter 195 of the Public Laws of 1911, which act is entitled "An act to extirpate contagious diseases among cattle, horses, sheep and swine," I have the honor to present to the Governor of Maine the fourth annual report of the work accomplished and the financial standing of this department for the fiscal year ending December 31, 1915.

This department has, in its life of about five years, grown to be recognized as a safeguard to all humanity by combating and extirpating the infectious and contagious diseases among horses, cattle, sheep and swine. It not only assists the farmer and breeder to healthier herds, better conditions and more profit, but furnishes a better protection to the human family against contracting the diseases of our animals.

I point with pride to the work done by my predecessors. Hon. Van W. Carll being the first Live Stock Sanitary Commissioner, started with a yearly appropriation of \$25,000, and the record of his good work is much in evidence at the present time. He was succeeded by Dr. A. Joly with a yearly appropriation of \$50,000. Dr. Joly was assisted in his work by 52 graduate veterinarians and 13 non-graduates, and the good work went on.

On entering the office of Live Stock Sanitary Commissioner in January, 1915, with a yearly appropriation of \$30,000, and the maximum appraisal for grade cattle raised by the State Legislature from \$50 to \$75, I found that my "candle had been burned at both ends," and that I must enter the good fight, with the work of my predecessors ever before me, and keep within the limits of the appropriation allotted to this department. This I resolved to do, and with the paramount thought that whatever benefited our livestock benefited the whole human family, I have done the best I could, and the results of the year 1915 are before the people.

Much credit is due the inspectors authorized by the Commissioner of Agriculture to work under this department, and I feel to thank them for favors shown me and the reliance and integrity which they have merited.

The Federal Bureau of Animal Industry, and the heads of departments of Animal Industry in the neighboring states, I thankfully recognize as a source of great help, and the co-operation has been with great courtesy.

FOOT-AND MOUTH DISEASE.

With the whole country agitated over the highly infectious and dreaded foot-and-mouth disease raging in the United States, and some of the neighboring states badly infected, and with horses, cattle, sheep, swine, fowl, dogs, cats and other pet animals coming from the infected states into Maine without restraint, and without disinfection, the situation seemed to be a perilous one, and the danger that Maine might be infected was certainly great. In accordance with good authority the following notice was issued from this office:

OFFICE OF THE LIVE STOCK SANITARY COMMISSIONER,

AUGUSTA, MAINE, February 20, 1915.

Notice to Transportation Companies and Others.

The fact has been determined by the Live Stock Sanitary Commissioner of Maine that the contagious disease known as foot-and-mouth disease exists in each of the following states, to wit: Connecticut, Delaware, Illinois, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Montana, New Hampshire, New Jersey, New York, Ohio, Pennsylvania, Rhode Island and Wisconsin.

Now therefore, I, Boyden Bearce, Live Stock Sanitary Commissioner of Maine, under authority conferred on the live stock sanitary commissioner, Sect. 2, of Chapter 195 of the Public Laws of 1911 as amended by Chapter 210 of the Public Laws of 1913, order that the interstate movement of all horses, cattle, sheep, other ruminants, swine, poultry, dogs and doves shall not be made into Maine without a special permit, signed by the live stock sanitary commissioner, and on a certificate of

inspection and disinfection by a Federal inspector, said certificate to accompany the way bill.

And this is to notify all Railroad, Steamship, Express and Transportation Companies of whatever kind, that no animal shall be brought into Maine except in accordance with the above rule, said rule having been made in conjunction with B. A. I. Order No. 234, U. S. Department of Agriculture, Bureau of Animal Industry. Suspicious animals being driven or hauled across our border from other states, should be reported at once to the Live Stock Sanitary Commissioner, Augusta, Me.

The hearty co-operation and watchfulness of every citizen of Maine is asked to prevent this dreaded disease coming into our state, and it is the duty of every individual and transportation company to exercise great care and watchfulness, for the foot-and-mouth disease is gaining ground, and once installed into our state it would cripple every industry, and cost a vast sum of money to stamp it out.

The above named animals imported from Canada for any purpose whatsoever are to be included in this order, except horses as are subject to Federal inspection at the port of entry when the permits from State Authority will be waived.

The above orders to take place immediately, and are subject to amendment.

Approved

OAKLEY C. CURTIS, Governor.

Signed BOYDEN BEARCE

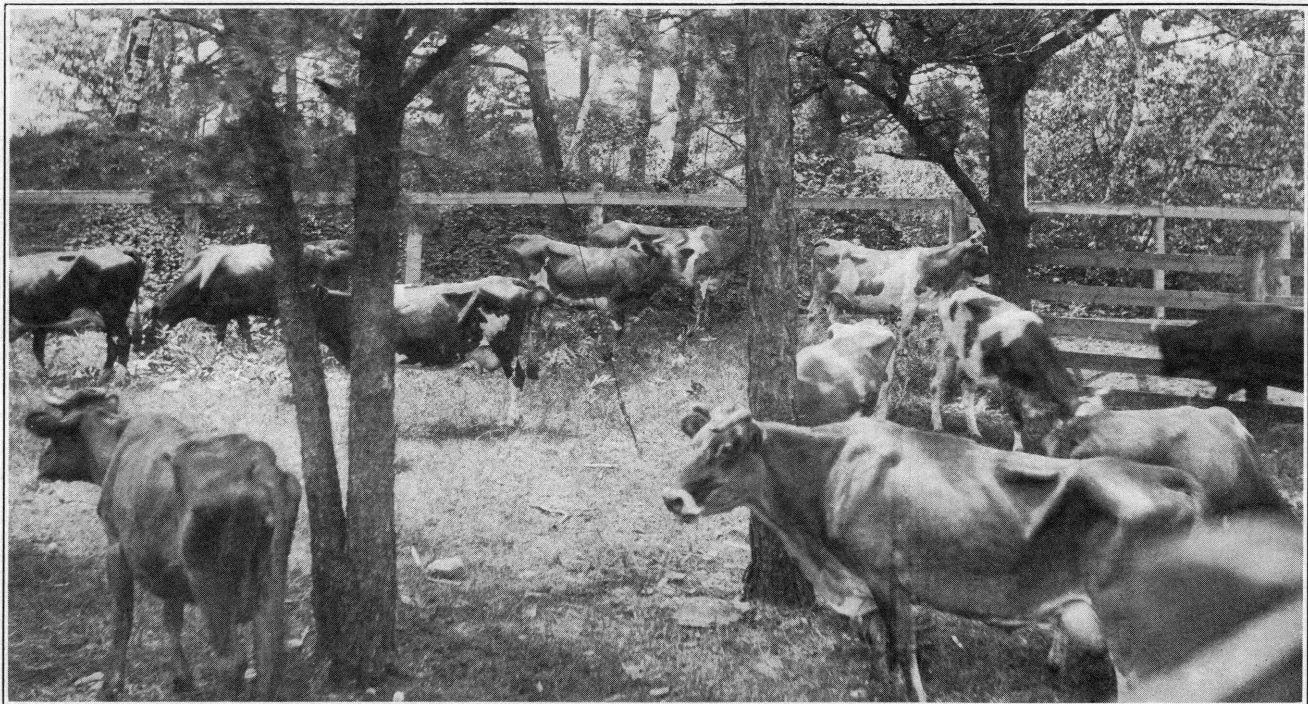
Live Stock Sanitary Commissioner.

The placing of this embargo upon the interstate movement of livestock caused much comment at first, many in praise and a few in opposition. The main object of the embargo was to get control of all livestock coming into the State, and at one time the passing of people from badly infected areas into Maine caused much anxiety. On one occasion I was notified by the Federal Authorities that a certain man, who resided in a badly infected area, had been in Maine and purchased a carload of cattle. His travels were located and a careful watch kept over the places he had visited but no infection was found.

Many suspicious cases were reported, and in each case a careful and prompt investigation was made. One particular

case was reported by Dr. B. L. Pratt of Caribou. The animal was a pure blooded Guernsey bull six months old, and had recently been imported into the State. Dr. A. L. Murch of Bangor was dispatched for consultation and he reported foot-and-mouth disease, and the farm was placed under quarantine. The Federal Bureau of Animal Industry was notified, and Dr. J. H. Kiernan, who had charge of the eradication of this disease in Massachusetts, hastened to the outbreak. He voiced the opinion of the others, that it was a typical case of foot-and-mouth disease, but advised that we wait a few days for developments before slaughtering the whole herd. In the meantime Transportation Companies were notified, other Federal inspectors were on the spot, and all was in readiness for a grand fight, but I am pleased to report that the fight never came as the bull died and no other animal in the herd was affected.

The embargo was raised April 23 and a notice sent to the Transportation Companies, yet a careful watch is maintained by this department and its seventy inspectors in various parts of the State. The latest reports show that the disease is nearly stamped out.



From a herd of seventeen, on a Kennebec County milk farm, sixteen were condemned and slaughtered and found badly diseased.

TUBERCULOSIS.

The war against tuberculosis is carried on in Maine to a greater extent than in any other state in the Union to my knowledge, and the maximum appraisal, per head, paid by the state for cattle re-acting to the tuberculin test, condemned and slaughtered, equals or exceeds that paid by many states. This may be a wise provision of the Law or not, but the farmer or breeder, who allows a tubercular animal to remain in his herd is himself to blame, as the state amply provides that tubercular animals may be destroyed with but little cost to the owner.

"Safety First" is the popular slogan, and it is just as applicable to our domestic cattle as to the railroad, for it is my belief that the majority of people had rather be taken away by a railroad accident, than the slow gnawing diseases contracted from insanitary conditions and diseases of the animals whose products we are ever dependent upon.

There have been 15,245 cattle tuberculin tested in the state the past year, and with a few exceptions, I believe the tests have been faithfully executed.

Much credit is due the Turner Centre Creamery Company for offering to pay one cent extra per pound for butter fat from a tuberculin tested herd. This has been an incentive in many cases to have whole herds tested annually, and is working good for the whole state.

Below is a table showing the number of cattle tested and condemned in each county the past year, and one can judge from this whether the disease is on the decrease or not. We note in counties where testing has been done annually fewer condemned animals are found in proportion to the number tested.

Name of County.	No. Tested.	No. Condemned
Androscoggin	3,564	57
Aroostook	365	14
Cumberland	1,302	34
Franklin	1,004	13
Hancock	107	2
Kennebec	1,422	66
Knox	105	2
Lincoln	279	3
Oxford	4,602	85
Penobscot	818	55
Piscataquis	43	1
Sagadahoc	233	2
Somerset	432	10
Waldo	158	18
Washington	11	1
York	800	81
Total	15,245	494

Of the whole number of cattle condemned 454 have been sent to abattoirs at either Auburn, Houlton or Portland and slaughtered. By post-mortem no tubercular lesions were found in 26, or 5 $\frac{3}{4}$ %; 10 of the 26 were found to be suffering either with chronic-broncho pneumonia or pyemia.

In another part of this report will be found an article written by E. T. Gill entitled "A Breeder's Opinion of the Value of the Tuberculin Test." This is a clean cut statement, hewing close to the line, and should be read by every farmer and breeder in Maine. It shows to me that the eradication of tuberculosis is not so difficult a task if every farmer and breeder were alert to the situation, and ever ready to do their part.

We also print an article from the pen of Dr. Olin S. Pettigill, Superintendent of the Western Maine Sanatorium, "The Communicability of Bovine Tuberculosis to Man." It is an able article and answers the questions of many eager inquirers regarding this subject.

We also give a "Summary of Directions for Making the Tuberculin Test" as given by the United States Department of Animal Industry. We believe every owner of cattle should

make a study and become familiar with the manner of administering the test, and that every farm should have among its equipments a syringe and thermometer; the cost of both, delivered by Parcel Post, need not exceed three dollars. Tuberculin may be purchased through any reliable druggist.

The farmer and breeder should study the health of his cattle with the same degree of interest that he studies the best method of feeding or breeding, or that the merchant and manufacturer studies every detail connected with their business; by so doing he would be better able to administer the tuberculin test with honesty and efficiency than any stranger.

County Demonstrators in Extension Work should be qualified to explain and teach the work of this test; with tuberculous animals in every town, it is essential and important that the farmer knows how to help and defend his own interest. True, under the present Law, a test made by a farmer could not be recognized by this department, neither could the farmer test his neighbor's cows without breaking the veterinary law, but tuberculin will work as well in the hands of the farmer as it does in the hands of a professional man. The tuberculin test is not a preventative or a cure, but a diagnostic agent by which to pick out the diseased animals, and the farmer with a clean herd, and well equipped to make the tuberculin test, could keep his herd free from the disease. If he found a re-actor, or one suspicious, in due time he could call an inspector authorized by this department to test cattle, and have his whole herd tested, and the re-actor condemned and destroyed under the present law.

"Knowledge is Power" and the more knowledge the farmer has of the diseases of his animals the better able he is to cope with the world.

GLANDERS.

In reporting the condition of glanders in Maine allow me to make this statement, "One horse diseased with glanders is more dangerous to the health of a community than twenty-five tubercular cattle." During the year, 1915, permits have been issued for the importation of approximately 8,500 horses. Upon arrival nearly every one has been examined by an inspec-

tor from this department, either by physical examination or the ophthalmic mallein test which is recognized by the best authority as the most reliable test. Two of this number were found to be affected with glanders and were destroyed without appraisal. Among those which have been owned in the state one year, 54 were found affected with glanders; these have been destroyed and paid for by the state.

There seems to be a tendency among horse owners to cover up this disease as long as the horse is in condition to work, or to trade for a better one. This method is an obstacle in the way of eradicating or even controlling the disease. A horse may be affected with glanders and still be able to work for sometime, but every stable, horseshed or blacksmith shop he enters, as well as the watering trough and hitching-post, are germ receiving stations and from them the germ is communicated, not only to other horses, but to members of the human family as well. Glanders in man is considered a contagious and deadly disease with no available remedy known.

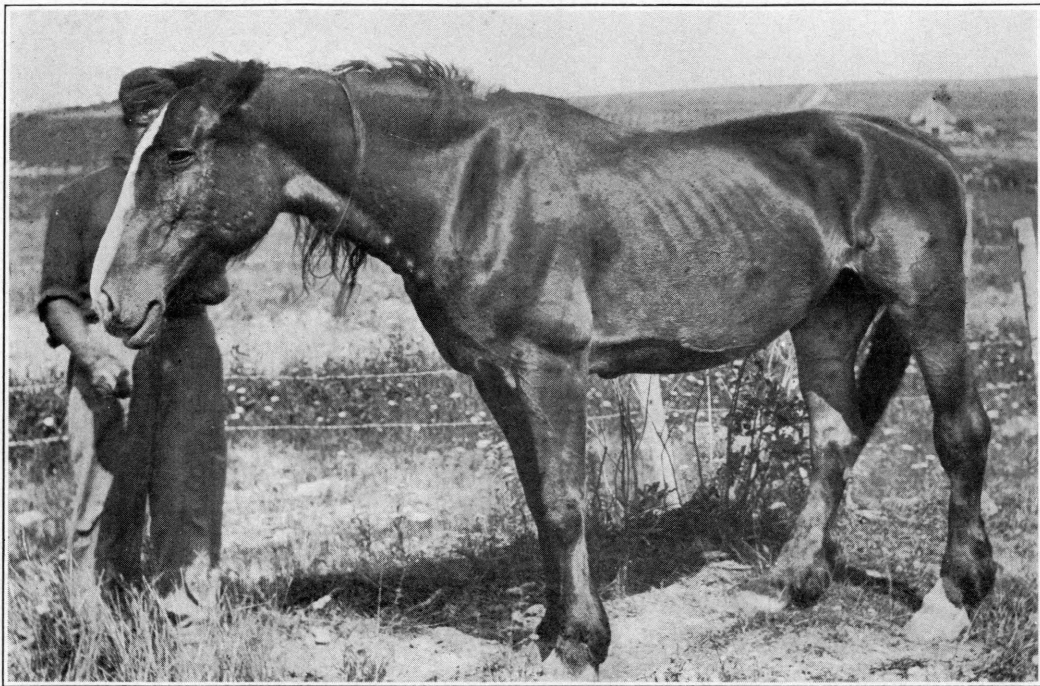
It cautions everyone to be on the watch for this dreaded disease among horses. Much credit is due the inspectors for this department, the Local Boards of Health and the Society for the Prevention of Cruelty to Animals for their care and watchfulness, and their promptness in reporting suspicious cases from different localities to this department. Their co-operation is earnestly solicited for future work.

CONTAGIOUS ABORTION.

Contagious abortion is the worst disease among cattle which the farmer and breeder have to contend with, taken from a financial standpoint. Not but a few cases have been reported, but by inquiry we find that it quite generally prevails. No remedy has yet been offered. The words of my predecessor "Herds which are free from the disease can stay clear it is believed by not coming in contact with other cattle," are true and the one safeguard.

HEMORRHAGIC SEPTICEMIA.

This is practically a new disease among the cattle of Maine and few veterinarians have seen an animal effected with it



A typical case of glanders showing farcy buds on neck and legs. From Aroostook County.

although 15 cattle have died in Maine the past year, and by newspaper reports 150 in Massachusetts. This disease prevails in wet seasons when cattle are on pasturage and in the low land pastures where there are wet runs and swale.

I invite the attention of the readers to an article on this disease written by Dr. G. R. Inglis which may interest many.

HOG CHOLERA.

In 1915 some twenty-five outbreaks of hog cholera were reported, and in almost every case hog cholera serum, furnished free by the state, has been administered. In some instances I feel that the serum has saved the lives of hogs, but in a majority of outbreaks we feel that the percentage of deaths was not lessened by the use of the serum. Of the whole number of outbreaks reported, everyone except two was where the hogs were being fed swill, or garbage, from some institution, hotel or city, and in no case had the swill been sterilized or cooked. It is my opinion, and that opinion is based in part upon statements made by some of the best veterinarians, both in this state and in other states, that in a great majority of cases where city swill is being fed to swine and the herd becomes diseased, it would be found by a properly conducted post-mortem, that the disease would be ptomaine poisoning, tuberculosis or some digestive troubles caused by feeding unsterilized swill or garbage. I believe that good authority will bear me out in the assertion that to feed city swill or garbage, without sterilizing it, thereby killing every disease bearing germ, to an animal which is intended for food for the human family, ought to be an offense punishable by a fine.

CONCLUSION.

The mission of this book is not only to report the condition of contagious diseases among the horses, cattle, sheep and swine of Maine, but to encourage the raising of more and better live stock.

Farming is the greatest industry in the world, there is no occupation that precedes it, and cattle raising is one branch of farming. Every man, woman and child who can enjoy the blessing of country life upon a farm, ought to be proud of the appellation "Farmer."

Good horses, cattle, sheep and swine mean good people, good homes and good surroundings. We note with regret the decrease in the number of our live stock from year to year.

More than 8,000 horses have come to Maine within the past year and nearly everyone of this number was raised in the west. Not only the horses, but a greater part of the grain to feed them on, has come from the west. With all the abandoned farms in Maine isn't this an object lesson to some.

Twenty-one thousand western hogs have been brought to Maine for slaughter in the year 1915. 25 shoats weighing 40 lbs. each, fenced within an acre of rough pasture land, will dig the stones, plow and harrow the acre in one season, and get a good part of their sustenance while doing the work. They will benefit the land twenty-five dollars. With a little extra care and feed they will increase in weight from 100 to 150 lbs., and be ready for market by housing-time in the fall. Our Maine packers are anxious to buy everyone of them at a good price.

Statistics show that there has been a yearly decrease in the number of sheep owned in Maine of nearly 10,000 head per year for 35 years. No state in the Union offers better facilities for sheep raising than Maine, and there is no excuse for this decrease in the flocks. I have secured a valuable paper on sheep husbandry by a Maine breeder, and it gives me pleasure to present it to the readers of this book. I know it will be read with much interest.

The great demand for horses, sheep, swine and the dairy cow with her products, furnishes an object lesson for every man, either young or old, who has money, or muscle, or mind to invest.

A big crop of potatoes this year buys a thousand dollar automobile; failure in the crop next year, and the auto must be sold to pay the fertilizer bill. With a herd of twenty-five or thirty cattle an automobile can be bought any year, and the cattle furnish an abundance of the best of fertilizer for any crop.

Cattle are a sure crop, protected by the State from contagious diseases, and the ravages of dogs and wild animals, which is really an insurance with the indemnity paid by the State.

It matters not in what branch of farming we are engaged, we are not really living, not advancing, if the close of each day sees no deeds to our credit.

IMPORTATION OF HORSES.

An exact account has been kept of the number of horses entering Maine, which number is 8,379, many of these coming direct from the west. I believe this is the largest number imported in any year. Nearly all of these have been inspected upon arrival at destination, and 2 were condemned as glandered.

IMPORTATION OF CATTLE.

There have been 207 cattle imported into the state for breeding purposes and 187 of this number were pure bred. When tested after being here thirty days, three of them reacted to the tuberculin test and were condemned without appraisal, according to the law.

IMPORTATION OF SHEEP AND SWINE.

Two hundred and fifty-one sheep have been imported for breeding purposes and 639 for slaughter. Seven hundred and thirty-four hogs have been received for breeding purposes, and 21,851 for immediate slaughter.

EXPORTATION OF CATTLE.

On account of the foot-and-mouth disease the Brighton Stock Yards were closed for eight months the past year, consequently the shipment of milch cows from Maine to the Brighton Market has been small, only 2,191 cows have been shipped. These have all been tuberculin tested upon arrival and 25 head condemned.

Summary of Live Stock in Maine as returned by the local assessors from every municipality in the State of Maine for the years indicated below.

	Number for 1912.	Number for 1913.	Number for 1914.	Number for 1915.
Horses.....	118,833	119,448	120,007	119,687
Three-year-old colts.....	3,333	3,104	3,027	3,009
Two-year-old colts.....	4,007	4,188	4,045	3,616
One-year-old colts.....	4,304	4,432	4,139	4,161
Cows.....	138,065	135,088	130,661	133,890
Oxen.....	7,507	6,625	6,174	6,572
Three-year-olds.....	17,733	20,032	24,261	24,709
Two-year-olds.....	30,737	37,179	36,729	37,228
Yearlings.....	46,870	47,109	47,780	48,798
Sheep.....	133,702	120,722	105,516	96,333
Swine.....	50,675	39,908	35,275	41,321

HEMORRHAGIC SEPTICEMIA.

By DR. G. R. INGLIS, Auburn, Me.

Hemorrhagic Septicemia is a name applied to a highly infectious disease effecting cattle and some of the other domestic animals. It is due to a special micro-organism which produces defined characteristic lesions. This organism is known as the *Bacterium Bovisepticum*, and is in the same class as the one causing swine plague.

Hemorrhagic Septicemia has been known for years in most all parts of the world. In the United States it has appeared mostly in the southern and middle states, but at various times during very wet seasons, it has appeared in New England. During 1915 it appeared in at least two places in Maine, New Gloucester and South Berwick, with fatal results in both cases, three dying in the former and seven in the latter place.

This disease is similar to anthrax, blackleg, cornstock disease and cerebro-spinal meningitis. It is essentially a septicemic, or bloodpoisoning disease, the organism entering the animal through injuries to the mucous membrane or skin.

The disease shows itself in three forms, viz. superficial, thoracic and intestinal; it may appear in one or all three forms at the same time, and may be mild or severe. In the superficial form you will notice swellings on the skin, throat, dewlap and legs, loss of appetite, drying up of milk secretions, temperature high, pulse and respirations quick. When the respiratory organs are effected a blood stained discharge passes from the nostrils, and all membranes show a hemorrhagic condition. I have seen the blood oozing from the skin in various parts of the body. When the intestines are effected there is a profuse diarrhea, stained with blood and mucous, the animal strains continually and grows weaker and weaker until death takes place, which is from one to six days according to the severity of the case. In severe cases the animals may die in a few hours, while in mild cases they may live from six to eight days.

The prognosis is very unfavorable, and practically all cases succumb to the disease.

The characteristic lesions of hemorrhagic septicemia consist of hemorrhagic areas in the subcutaneous, subserous and muscular tissues, the lymph glands and viscera, in fact, most anywhere in the body. The spots vary in size from a mere speck to the size of a silver dollar. Bloody extravasations may be seen in the subcutaneous tissue in various locations, but more especially around the neck, dewlap, tongue, pharynx, larynx and mouth; the lymph glands are swollen and are full of bloody serum; the diaphragm, heart sac and heart walls show bloody extravasations; the intestines, kidneys, liver and spleen often show the same conditions.

Treatment is absolutely useless.

A BREEDER'S OPINION OF THE VALUE OF THE TUBERCULIN TEST.

By E. T. GILL.

Taken by permission from Mulford's Veterinary Bulletin.

Tuberculin was discovered by a German scientist, Dr. Koch, in 1890, and was first used experimentally in treating tuberculosis in man. In existing cases of this disease it was observed that its injection was followed by a rise of temperature, which led veterinarians to apply tuberculin to suspected animals to see if a similar reaction resulted. Numerous experiments showed this to be the case, and since 1891 the use of tuberculin as a diagnostic agent for tuberculosis of cattle has been almost universally adopted in all parts of the civilized world. No one accepts it as absolutely infallible, but it is far more dependable than any other method thus far discovered.

Tuberculin is the sterilized and filtered glycerine extract of cultures of tubercle bacilli. It contains the cooked products of the growth of these bacilli, but not the bacilli themselves. Consequently, when this substance is injected under the skin of an animal it is absolutely unable to produce the disease, cause abortion, or otherwise injure the animal.

In the application of tuberculin we take not less than three initial temperatures—say at 3, 6 and 9 o'clock in the afternoon and evening. At the last temperature taken we inject the tuberculin hypodermically, the amount to be used for each injection having been specified on the label. Nine hours later, at 6 o'clock the next morning, we begin taking temperatures again, continuing every two hours up to the twentieth hour from the time of injection, and even longer should there be any rise of temperature. In reading temperatures subsequent to injection it is advisable not to recognize as reactions an elevation of less than 2° F. and the temperature reaction must at the same time have the characteristic rainbow curve. Suspicious animals and those



From a Penobscot County herd of ten cattle four cows and one calf were condemned, and by post-mortem found badly diseased.

recently tested must have double doses; and when there is a question of doubt as to a reaction, isolate the animal and test again in six or eight weeks with a big dose of retest tuberculin.

Since 1894 we have annually tested fifty to one hundred animals at Haddon Farms, and during these twenty-one years no injurious effects whatever have resulted from the use of tuberculin. No animals were brought into the herd without at least one tuberculin test, and when purchased from indifferent owners or from those who did not test systematically, two tests were made before allowing an animal in the herd. In most cases our own veterinarian made the test, as it is difficult to get local men regularly employed by the owners to test with the same thoroughness.

Now what has been the result of this scrupulous care? In all these years we have discovered but five tuberculous animals on the farm—and they had not been bred there, but were purchased and had passed a tuberculin test before coming into the herd.

Beside these five, two other cows made perfect reactions, but upon subsequent retest one of them failed to react. This one was destroyed years after because of old age, and was found upon examination to be perfectly sound. She had reacted because she had not voided her placenta. The other animal had been in the herd four years and annually had passed the test; but not being a valuable animal she was killed and examined. Dr. C. J. Marshall could find no reason for the typical rise in temperature, except that the cow was of nervous temperament, and had recently been moved to the end of a section where strangers passed. He even took portions of gland from the different parts of the body, with which he injected guinea-pigs, and these at the proper time were killed and failed to show any signs of the disease. Had this cow been a valuable animal she would have been retested.

The five cows that reacted were found to be but slightly affected and were not considered carriers of the disease. Why they did not react at previous tests was probably because the tubercles had become encysted or were in a state of incubation.

To sum up, in the past twenty-one years over 1,500 animals have been tested at Haddon Farms, with but seven reactions resulting. This low percentage of reactions was

undoubtedly due to the careful and judicious testing by my own veterinarian of all animals coming to the farms, as well as those already on the farms. Two of the seven reacting failed, upon post-mortem examination, to show any trace of the disease. In other words, only two tests out of over 1,500 failed to indicate properly the condition of the animals, as far as tuberculosis was concerned. The test has, of course, its limitations, since we cannot learn from reaction what progress the disease has made. Again, there are often times when high temperatures may be traced to digestive troubles coincident with the test. There may be a difference of 2° F. or more before and after an animal has filled itself with cold water. Young animals and those advanced in pregnancy are apt to run higher, and exposure to extremes of temperature has a decided effect one way or the other. For instance, at different times I have taken for experimental purposes the temperatures of thirty animals on a cool afternoon; and the next day proving hot and sultry I have found in from two to four animals a rise of 2° to 4° F. These temperatures, however, were generally spasmodic and not in the perfectly curved line characteristic of a tuberculin reaction. Practical experience and common sense are surely needed in making the tuberculin test.

During these years of testing much time and money were expended not only on my herd, but also on prospective purchases; and had it not been for the tuberculin test Haddon Farms could not have continued so free from the disease through so many years, nor could it have given satisfaction to purchasers all over the country. By the test great animals have been protected and saved to perpetuate their blood and to raise the standards of stock breeding.

I once attended a sale of Guernseys advertised as tuberculin tested, and a certificate of health was to accompany each animal. Knowing nothing of the reliability of the tuberculin used, I made a special agreement with the owner to purchase subject to my own test, with the understanding that should one animal react, I was to take none of them. I purchased three, had them tested by the same veterinarian who tested for the owner with retest tuberculin from the University of Pennsylvania, and every animal reacted. This was a clear case of poor tuberculin in the earlier test, and the retest certainly paid me—

not only in saving the purchase price of these animals, but also in averting the danger to which my herd would otherwise have been exposed.

Again: I once sold to a man in Minnesota some high class Guernseys. At the same time he also purchased in New York state. Months later he wrote me that he had had his herd re-tested and all he had purchased from me had successfully passed the test, while many of the others had reacted, and that hereafter he preferred to pay more and deal with careful, honorable breeders. I knew the parties who sold the cows from New York, and believe the animals were honestly tested, but they had probably associated with diseased animals and so acquired germs which had lain dormant until the long and exposed trip westward had weakened them and caused them to succumb to the disease and react to the test.

Tuberculosis in live stock causes an annual loss in the United States of over \$14,000,000. If, also, as some authorities declare, bovine tuberculosis can be communicated to man, it becomes a serious menace to our nation. Considering that the vast livestock industry has a greater earning capacity annually than have all the railroads of our country, why should not a commission of our best farmers and business men have the practical handling of so important an enterprise? Why can not tuberculosis be eradicated? For it is costing us more annually than any other animal disease.

Most of the objections to the tuberculin test would probably be removed if some method of adequate compensation for the destruction of reacting animals could be devised, and both Federal and State governments should appropriate more money to fight this insidious disease that is costing millions annually not only to breeders and dairymen, but also to every consumer of meat, butter and milk. As conditions are now in New Jersey, the money expended in testing and slaughtering is practically useless. What permanent value is there in testing animals coming into the State, even if it could be honestly done, while sales of diseased animals are allowed within the State? What use is there in testing a farmer's herd, killing the reacting animals, and then allowing him to bring more animals into his stables that have not been properly disinfected, and also discontinuing the tests to detect latent cases?

There can be no two opinions of the value of the tuberculin test. If it did nothing more than point out a few cases it would be well worth while. The great advantage is that it discloses such cases before further damage is done.

The greatest evidence to the general public of the value of the tuberculin test from the breeder's standpoint lies in the advertisement so generally found in the agricultural publications all over the land: "This herd is tuberculin tested."

You have asked my opinion as a breeder as to the value and usefulness of the tuberculin test. After twenty-one years of experience I firmly believe:

1. That its use is fundamental as an economic safeguard to producers and consumers of dairy products, any responsible breeder who neglects or ignores the test overlooks this greatest dairy asset. Its use is simply "Safety First."

2. I am positive that absolutely no injury to the animals can be traced to the administration of tuberculin, providing such animals are normal.

3. The healthy cow is the essential unit for milk and calf production, and the tuberculin test is recognized by our foremost authorities as our best means of determining such healthy conditions.

4. I believe we owe such precautions not only to our cows, but to our babies and our Quaker consciences.

After all, in the last analysis the value of the test rests upon honor, upon the purity of the tuberculin, the skill and thoroughness of the veterinarian and the honesty of the owner.

Haddonfield, N. J., June 30, 1915.



A pair of six-year-old Holstein oxen from Androscoffin County; estimated weight of pair 3,100 lbs. This demonstrates the error of the Law requiring that dairy and breeding stock shall be tuberculin tested before exhibiting at Agricultural Fairs, while oxen may be exhibited without being tested.

THE COMMUNICABILITY OF BOVINE TUBERCULOSIS TO MAN.

To what extent, if any, man is in danger of acquiring tuberculosis from cattle is a subject that has had many and various theories advanced by different observers. The reports from investigations and experiments along this line are now extensive and exact enough to prove something of value.

The history of the investigation of this subject dates back to the beginning of the 19th century. Klenke, in 1848, attempted to show the infectiousness of milk from tuberculous cattle. In 1865, Villemin, by inoculating animals with tuberculous material from both man and cattle, practically proved the infectiousness of tuberculosis to animals.

It was recognized at this early date that the infectious material from animals, when inoculated into other animals, produced a disease far more severe and quickly fatal than that from man. Koch, by his discovery of the tubercle bacillus in 1882, proved the disease in man and cattle to be caused by this bacillus. Investigations by Rivolta and Maffucci, followed by Theobald Smith in 1896 and the careful comparative work of Vagedes in 1898, demonstrated beyond a doubt that the bacillus producing the disease in birds, cattle and man, was not only the tubercle bacillus of Koch, but the bacillus found in each was a distinctly different variety of the tubercle bacillus. These varieties are spoken of as avian, bovine and human.

The identity of these different varieties is determined by their growth in certain laboratory media and by the number it takes to produce a rapidly fatal tuberculosis when inoculated into the venous circulation of certain animals like the rabbit. In doubtful cases calves have been used for inoculation because the test is more accurate. This is due to the fact that infectious material from man, when inoculated into calves in large doses, rarely, if ever, produces more than a localized non-pro-

gressive tuberculosis; whereas, that from bovine infection produces a rapidly fatal tuberculosis. The identity of the different varieties of tubercle bacilli can in this way be determined with accuracy.

The many experiments to prove the comparative virulence of the three different varieties of bacilli to animals have been so uniform in their results that the question is no longer in doubt. To prove the virulence to man by experiments is out of the question. The only way available is to determine the type of infection in the cases of tuberculosis in man and to find out, if possible, to what extent these cases were exposed to bovine tuberculosis. The principal source of exposure to bovine infection occurs from eating or drinking dairy products containing this variety of bacilli. Infected dairy products must come from cows afflicted with an open tuberculous lesion and the discharges from these lesions must contaminate the milk directly or indirectly.

In this connection it should not be forgotten that, besides the bovine variety of germ found in milk, there must be many of the human variety. It is universally known with what ease typhoid bacilli contaminate milk if the milk, or containers, are handled by persons suffering from typhoid fever. Just as easily must contamination take place with the human tubercle bacilli, if given an equal chance.

Extensive examination of the milk supply of New York and other cities by the Research Laboratory, Dept. of Health, New York City, yielded tubercle bacilli in 6% to 16% of all samples examined. This probably does not vary much from the average milk supply of any large city and means that the majority of children consuming this milk for any length of time are exposed to bovine infection.

Koch, after experimenting for six months to determine the virulence of human and bovine bacilli to cattle, announced his views to the public in 1901, as follows: "So far results do not indicate the occurrence of bovine tuberculosis in man. Although the question whether man is susceptible to bovine tuberculosis has not been definitely answered, and probably cannot be immediately answered, we may safely say that if such susceptibility does exist, the infection takes place rarely." These

views aroused renewed interest in this subject and violent opposition to them.

In a recent letter from Baldwin, replying to inquiries on this subject, is this statement: "So far as adults are concerned, there is no reason to think that bovine infection is any more or less virulent than the human. It has not been possible to find a bovine type of tuberculosis in pulmonary cases in adults. There have been a few cases recorded in which the bovine bacillus has been found in glands of adults, and the human bacillus in the sputum. This raises the question as to whether there was a transformation of one into the other, which is very doubtful; or, as to the double infection, the first being in childhood in the glands, and later, the pulmonary infection from the outside on the alveoli."

In 1912, Park and Krumwiede published the final summary of cases investigated by them in New York City to determine the relative importance of the bovine and human types of tubercle bacilli in the different forms of human tuberculosis. This report contains the summary of 478 cases studied by them and the tabulation of 1,933 cases reported from foreign countries, including the Royal Commission of London. The combined series make a total of 1,511 cases from which to draw conclusions and estimate percentages.

The cases were classified according to the region of the body primarily affected and according to the ages of the patients. The series studied by Park and Krumwiede were not selected and represent the average incidence of tuberculosis in New York City. Some of the series tabulated from foreign countries were selected cases and are not of value in estimating the comparative incidence of tuberculosis. Not all the cases tabulated were fatal, but were discovered at autopsy following death from other causes, or during some surgical operation.

Pulmonary tuberculosis or phthisis is far the most common of primary tuberculosis in adults, while in children the lymph nodes and abdominal viscera are the organs most frequently involved. In this series of 1511 cases tabulated there were 831 of pulmonary tuberculosis and, of this number, fifty were children. Only four cases showed bovine infection and these were doubtful. There were 174 cases of tuberculosis in adults, involving other regions than the lungs. Of this number 6.8%

were of bovine infection. There were 495 children afflicted with tuberculosis other than pulmonary. Of this number 2.4% showed bovine infection.

In a previous report by Park and Krumwiede this statement is made: "In the two types of tuberculosis, which mainly constitute the fatalities in young children, the percentages range from five and one-half per cent to eighteen per cent. All things considered, we feel safe in saying that the percentage of deaths from bovine tuberculosis in young children, viz., six and one-third per cent to ten per cent, as deduced from our unselected cases in New York City, are applicable to most cities throughout the world whose milk supply is similar to ours." Of the fatal cases in children reported in the combined series there were little less than ten per cent due to bovine infection.

CONCLUSIONS.

The control of bovine tuberculosis is necessary from a commercial standpoint.

In adults, pulmonary tuberculosis or consumption causes by far the great majority of deaths from tuberculosis and is the type of disease responsible for its spread from man to man. It is rarely, if ever, due to bovine infection.

Bovine tuberculosis produces in children tubercular cervical adenitis and often the rarer forms of abdominal tuberculosis. The very young children are in the greatest danger and here the fatal cases vary from six and one-third per cent to ten per cent.

It is safe to assume that the danger from the human type of tuberculosis is ten times greater to man at any age than the bovine type.

OLIN S. PETTINGILL, M. D.,

Supt. Western Maine Sanitorium.

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TEN REASONS WHY SHEEP SHOULD COME BACK.

By HON. W. B. KENDALL, Bowdoinham, Maine.

There are 350,000 less sheep in Maine in 1915 than there were in 1880, or a decline of 10,000 head each year for 35 years, caused in part by the decline in the prices of wool, meat values, the old-time expensive method of fencing, destruction by dogs, and more than anything else it got to be a fashion to cut out the keeping of sheep. It spread all over the state in much the same way as the advent of potato growing caught on to the farmer from one to another throughout Central Maine, taking its cue from Aroostook county. There seems to be too much of a habit among farmers to follow the latest popular lines, with not the conservatism that they manifest so often in other directions. Although the majority of farmers have abandoned sheep raising in the last twenty years, yet they almost universally admit that "it paid to keep sheep."

Another reason that should not be lost sight of as to why the sheep industry in Maine met with such a decline was the action of the big western beef houses, who early in the game concentrated the meat supply of the country through a few western firms. They authorized high priced agents in Maine and New England with instructions to buy up all the sheep they could, and in order to buy the flocks to tell all the discouraging stories they could to farmers of the unprofitableness of keeping sheep and to paint a black story for the future of the business. That this campaign on a part of the western houses was successful, one has only to view the situation as it exists today, but it is now high time to commence to rebuild, for no agriculture can successfully maintain itself in New England unless it is based largely on the livestock industry, of which sheep should bear a far more important part. The sheep should come back for ten or more potent reasons.

FIRST: Because for the past five years we have much higher meat values. Years ago when farmers said that it paid

to keep sheep, the price for good sheep at that time was \$4.00 and the price of a lamb \$2.00, and for mutton 4c to 8c per lb., with now the price of a sheep at from \$8.00 to \$10.00 and mutton 8c to 12c per lb., and this is practically 100% more for each carcass.

As to wool values, the profit in keeping sheep in New England must always rest upon the meat value of the sheep and lamb and not on the wool product. The question of the price of wool must be a secondary consideration. The sheep population of the world is down so low that it would seem reasonable to presume that the wool would not range less than 20c or 25c a lb. for many years to come, and at 25c a pound a flock of sheep of good size, well kept, will easily average 8 pounds per fleece, or an actual wool clip of \$2.00 per head, and the value of a good four months old spring lamb for the past five years has averaged up around \$5.00, whereas in the old time days such a lamb was worth only \$2.00. This makes the value of the meat product of the sheep two and a half times the value of the wool, and with an average of \$5.00 for the lamb and \$2.00 for the wool, and averaging the increase at 125% yearly, we have a gross income per sheep of: lamb \$6.50, wool \$2.00, or \$8.50. The gross income ten years ago was not over \$4.50 or \$5.00.

SECOND: Improved Breeds, which means that the Hampshires, Suffolks, Cheviots, Shropshires, Dorsets, which have all been developed and come to the front in recent years, will put on from 15% to 30% more flesh with the same feed than the old grade sheep universally kept in the years past. This factor of improved breeds is a most important one and becomes 100% proficiency when applied in small flocks throughout New England, in other words, much more adaptable and successful than on the range flocks of the West, in So. America or Australia can be.

The English breeders on their \$200.00 per acre lands can successfully raise lambs to yearlings better than we can do it in New England, but after that Maine climate, feed, and conditions, will maintain the quality, size, and excellency of the sheep as well as the British breeders can do it.

THIRD: Low cost of fencing. Aside from advance in meat prices and improved breeds, there is no other factor that

carries so much with it toward the possibility of keeping sheep in many numbers in Maine, as the factor of a secure, inexpensive, and permanent fence. At the present price of lumber and labor, the old time wooden fences would be so costly that it would be practically prohibitive to fence for sheep. We might have the breeds and the market and feed on ten thousand farms for the sheep, but if they could not be kept within bounds without the cost of fencing meaning more than the income from the flock, the business would be down and out from this factor alone, but with the woven wire fence at less than 20c per rod, and a cedar stake costing 3c or 4c, we have a very rapidly built, secure, economical and successful solution of keeping the sheep within any certain enclosure, and if there are woods on either side of the pasture it need not be fenced at all. This fence can also be easily taken up and replaced. Mowing fields after haying have short periods in which sheep will thrive splendidly, and if not kept on them too long it will benefit and not injure coming crops.

FOURTH: Labor factors. In these days of high priced labor and the growing inefficiency of hired help, that branch of farming or stock raising which will permit of the smallest amount of labor of common ability, demands our most careful consideration. Sheep proverbially call for less attention than any other farm animal, both from the owner and his assistants. Three men will easily attend to a flock of 600 sheep and have time at their disposal for other things, and do not forget in this connection of the demands of sheep against the farmers, that in the busiest season of the year they care for themselves entirely, going to pasture about the 20th of May and needing no care whatever until the middle of November, except the general oversight of perhaps a weekly visit to the pasture. This kind of stock leaves the farmer entirely to himself during the planting, haying, and harvesting season, and during the winter season when he has the most time at his command, it is their busy season with him.

FIFTH: Sheep should be restored in Maine because of the great reduction in the keeping of beef cattle, which came about at about the time the sheep went out, but there are many advantages presented for keeping sheep that do not really apply to beef cattle. To be most successful with sheep, however, one

needs a special liking for them. The natural cattle man will win out best with cattle, and the sheep man with sheep, but among the advantages of keeping sheep over that in keeping cattle, it should be noted you can produce a pound of mutton easier than you can a pound of beef, that the increase of the flock is fully 125 per cent, and of cows only 100 per cent. A sheep needs less care, will thrive on rougher feed, and being an animal of lighter weight, can be fed on mowing fields without injury to the same after heavy rains, whereas the heavy weight of cattle would prove of great injury to such fields, and six sheep can be kept on less than one cow.

SIXTH: The adaptability of Maine Conditions. To develop a sheep to its highest proficiency our climate conditions are superior. Our state abounds in the purest spring water. The rather broken structure of our land making nearly all pastures contain some high and low areas, on which the sheep thrive best, and over this broad state of ours we have the greatest variety of feed, from the sweetest grasses to a half hundred varieties of weed, shrub and bush growth, a mixture of which the appetite of the sheep crave for their best condition of health and growth. It is a too common saying with too little meaning that there are hundreds of thousands of acres in Maine producing such feed during the summer season, but fall down before autumn frosts and have created no value to their growth, that could be utilized by sheep and converted into mutton and wool, which would at least reflect greater intelligence to the farmers of Maine and put thousands of dollars into their pockets, and don't forget that the process of gathering this crop is done by your agents the sheep while you are employed in other ways, and each individual one of them is working for you, "gathering up the fragments that nothing be lost." All the world loves a sheep, and the stranger within our gates as well as the true hearted lover of Maine never fails to respond to the beauty of a flock of sheep on a hillside, attentive, patient, willing, woolly workers. Since the time of Abraham it has been so. Can we the farmers of Maine representing the basic principles of economy continue to let our possession of such rich values pass away unappropriated?

SEVENTH: The Sheep Industry as an industry is practical for farmers' wives and business women. There are al-

ready quite a large number of successful flocks of sheep owned and conducted by women in Maine, and in all cases we believe showing a splendid balance on the right side of the ledger. The small amount of labor required to successfully carry along a flock of sheep, lends particular interest to the adaptability to this line of work for women, this should also lead business men who are perhaps raised on farms and want to come back to some line of agriculture, or stock raising, to take up sheep on a sharp financial basis on which they would be practically sure to win.

EIGHTH: Dog Laws. The Maine dog law protection in favor of the keeper of sheep is the most liberal of any law in any state in the Union. We ought to be proud of this law. No one ever seems to have attempted its abuse. It is too familiar to be quoted, but the western sheep papers, the middle west sheep and agricultural papers are fond of quoting Maine's liberal dog law under which a sheep owner gets as near proper compensation for the ravages of dogs among his flock, as it is perhaps possible for him to get. The ravages of dogs among sheep and the hazard of keeping sheep on account of dogs would be a negligible quantity if all farmers kept sheep. If they did sheep killing dogs would get little head way before they would be destroyed, and if larger flocks were kept it would be practically impossible for dogs to destroy more than a portion of the flock, whereas with the small flocks now kept sometimes the entire flock is destroyed.

NINTH: The practicability of keeping large flocks as above referred to, three men can easily take care of a flock of 600. This would apply to sheep in Maine much more satisfactorily than to cattle. In the years immediately before us flocks of sheep up to 1,000 should not be uncommon. It is entirely practical to keep them as a paying business proposition. A large flock can be made to pay better than a small one, on the same basis that a business of large quantity can be handled more profitably than a smaller one, if good plain business principles are applied.

TENTH: Reckless speculation of potato growing should swing us toward more stable conditions. Our State, especially in the past two years, has suffered severe financial losses in an effort to successfully speculate in potato growing, and the

end is not yet, for while farmers should of course as a part of their business raise potatoes, yet not to the extent of the hazard of their other property, which has so often been done. The failure and losses that have come to many Maine potato growers within the past two years should teach them to swing toward more stable conditions, that of hay raising, the dairy, stock raising or sheep raising. Until such a time comes about Maine agriculture will not be in the safe condition that it ought to be, for the potato crop, although it comes next in volume and value to our great hay crop, is uncertain and many times disastrous to those engaged in it.

In conclusion, although the sheep population has been swept off so badly in Maine, it is perhaps not an unmitigated evil, any more than a fire that sweeps through a populous city, while carrying terrible destruction in its path, has its favorable side, for almost invariably such a fire takes a large partion of third and fourth rate buildings and old shacks, and when the city is rebuilt it is on so much larger lines and improved conditions, and so it will be when the sheep flocks are rebuilt in Maine, as they are sure to be by the improved breeds and all the higher standards, and on these lines we are sure to reap the rich reward which comes from a settled conviction that the best line of livestock to follow in Maine, all things considered, is the sheep.

PERIOD OF GESTATION IN DOMESTIC ANIMALS.

The average duration, approximately, of the period of gestation in domestic quadrupeds may be given as stated below:

The Ass..... 365 days.	The Sow 113 days.
" Mare.... 330 "	" Dog 63 "
" Cow.... 282 "	" Cat 50 "
" Sheep... 148 "	" Rabbit ... 30 "
" Goat.... 149 "	" Guinea Pig 21 "

The average duration, approximately, of the period required in hatching the eggs of the various domestic breeds of fowls may be set down as follows:

The Goose... 30 days.	The Guinea Hen 26 days.
" Turkey.. 29 "	" Hen 21 "
" Duck.... 29 "	" Pigeon ... 18 "
" Peahen.. 28 "	

The extremes in the duration of the period of gestation in the mare, the cow, the ewe and the sow may be set down as follows:

The Mare	295 days to 370 days.
" Cow	265 " " 300 "
" Ewe	145 " " 154 "
" Sow	110 " " 118 "

The extremes in the duration of the period of incubation in the various classes of domestic fowls named below may be given as follows:

The Goose	27 days to 33 days.
" Turkey	26 " " 30 "
" Duck	26 " " 32 "
" Peahen	28 " " 30 "
" Guinea Hen	25 " " 26 "
" Pigeon	16 " " 20 "

It is not intended that the figures given above will cover every possible variation that may occur, but that they fix the

limits beyond which extremes occur but rarely in the period included in gestation and incubation respectively.

OBSERVATIONS.—1. There is unquestionably some relation between the size of the various classes of animals and the duration of the periods covered by gestation and incubation respectively. While the period during which the female elephant carries her young may be given as from twenty to twenty-three months, that during which the female sheep carries her young is approximately five months, and while the period of incubation with geese may be given as thirty days, with hens it is only twenty-one days. And this relation would seem to hold true, in some degree at least, between the larger and smaller breeds of the same species.

2. It is probably true that early maturity exercises some influence on the period covered by gestation and incubation, the early maturing breeds coming into existence in a somewhat shorter period than those which mature later.

3. In the process of incubation it has been noticed that eggs from the smaller species of fowls hatch rather more quickly when incubated under fowls of a larger species, owing it is thought, to the greater heat which descends from their bodies.

4. The opinion is prevalent that males take a somewhat longer period to mature in embryo than females, and it would seem to be true, but further evidence is necessary before the correctness of the opinion can be looked upon as established.

5. The influences that lead to the great variations noticed in the period of gestation in animals of the same species are by no means clearly understood, but it will doubtless be correct to say that they include size, heredity, bodily vigor, food and climate, and, in some instances, disease.

6. The influences that tend to produce variation in the period covered by incubation in the same class of fowls, include size, heredity, freshness or staleness in the eggs, atmospheric changes and disturbances, and attention or inattention on the part of the sitters.

SUMMARY OF DIRECTIONS FOR MAKING THE TUBERCULIN TEST.

1. Stable cattle under usual conditions and among usual surroundings, feeding and watering in the customary manner.

2. Make a physical examination of each animal, and give to each one some designation by which it will be known throughout the test.

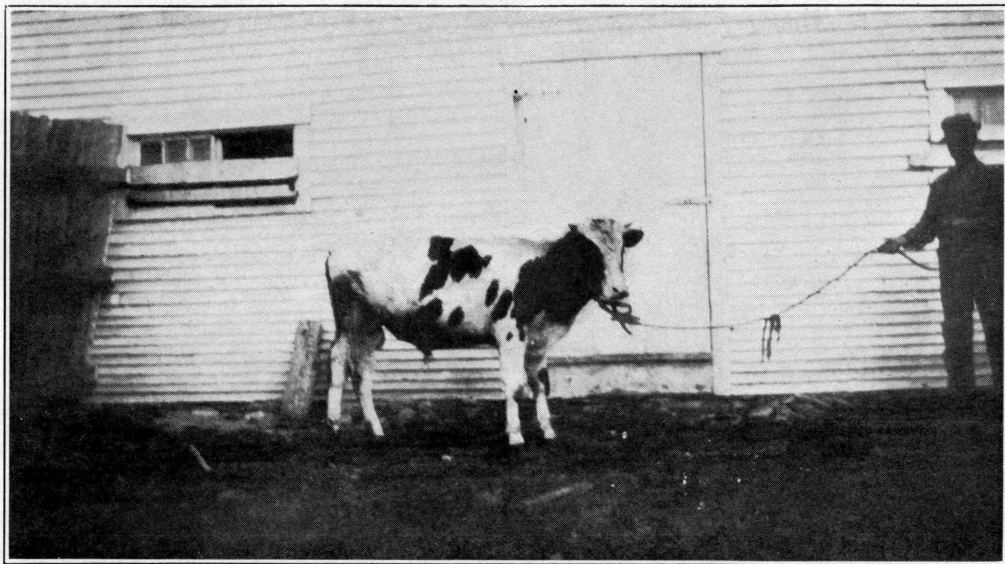
3. Take each animal's temperature at least three times at two to three hour intervals on the day of injection; for instance, at 2, 5, and 8 P. M. When the last preliminary temperature (which would immediately precede the injection) registers above 103° F., the tuberculin test should not be made; the test of such animal should be postponed.

4. At 10 P. M., inject a dose of tuberculin under the skin in the region of the shoulder, using a sterile hypodermic syringe after disinfecting the skin at the seat of injection with a 5 per cent solution of carbolic acid or a similar antiseptic solution.

5. The dose of the tuberculin made by the Bureau of Animal Industry is 2 c. c. for an adult animal weighing about 750 pounds. Yearlings and 2-year-olds, according to size, should receive from 1 to 1 1-2 c. c., while bulls and very large animals may receive 3 c. c. Double or even triple doses should be given cattle recently injected with tuberculin; also, in the case of animals which, on physical examination, are suspected of being tuberculous.

6. At 6 A. M. on the day following the injection of tuberculin commence taking temperatures, and continue every two or three hours until the twentieth hour after injection, at which time if there is no tendency for the temperature to rise the test may cease.

7. A rise of 2° F. or more above the maximum temperature observed on the previous day, or one which goes above 103.8° F., should be regarded as an indication of tuberculosis, provided the temperature reaction shows the characteristic rainbow curve.



A pure bred Holstein bull calf six months old, imported from Rutland, Mass. He was given the tuberculin test within thirty days, as the Law requires, and re-acted. Was placed in quarantine for forty days and given a re-test, and again re-acted. The bull was destroyed without appraisal.

8. Animals which, after injection, show a rise of temperature of 2° F., with a maximum between 103° and 103.8° F., as well as those which show a rise of less than 2° F., with a maximum temperature of 103.8° F. or more, are to be regarded as suspicious. These suspicious cases should be held for a retest six weeks later, giving double the original dose.

DOMESTIC ANIMALS.

CHAPTER 195, PUBLIC LAWS OF 1911.

An Act to extirpate contagious diseases among cattle, horses, sheep and swine.

Whereas the term of office of the present state of Maine cattle commissioners expires May first, nineteen hundred and eleven, and whereas it is necessary for the live stock interests in Maine that this act should take effect on the first day of May, in the year of our Lord nineteen hundred and eleven, therefore in the judgment of the legislature, the measure herein proposed is immediately necessary for the preservation of the public peace, health and safety.

Be it enacted by the people of the State of Maine, as follows:

Section 1. That for the purpose of facilitating and encouraging the live stock interests of Maine, and for extirpating all insidious, infectious and contagious diseases, now or that may be among cattle, horses, sheep and swine, and especially tuberculosis, the governor of the state is hereby authorized and required, immediately after the passage of this act, to appoint one person of known ability, who shall be charged with the execution of the provisions of this act, and who shall be known and designated as the live stock sanitary commissioner and whose powers and duties shall be those provided for in this act, and whose tenure of office shall be four years, unless sooner removed by the governor. Said live stock sanitary commissioner shall work in conjunction with and under the general direction of the commissioner of agriculture.

The compensation of said commissioner shall be fifteen hundred dollars per year and actual traveling expenses and five hundred dollars for clerk hire.

He shall take oath to faithfully perform the duties of his office devolving upon him by the provisions of this act.

Section 2. [As amended by P. L. 1913, c. 210 and P. L. 1915, c. 304.] That it shall be the duty of the live stock sani-

tary commissioner to cause investigation to be made as to the existence of tuberculosis, pleuro-pneumonia, foot and mouth disease, glanders, hog cholera and other infectious and contagious diseases, among cattle, horses, sheep and swine; and such live stock sanitary commissioner or his duly constituted agent, is hereby authorized to enter any premises or places including stock-yards, cars and vessels, within any county or part of the state, in or at which he has reason to believe there exists any such disease, and to make search, investigation and inquiry in regard to the existence thereof.

Upon the discovery of the existence of any of the said diseases, the live stock sanitary commissioner is authorized to give notice, by publication of the existence of such diseases, and the locality thereof, in such newspapers as he may select, and to notify in writing the officials or agents of any railroad, steamboats or other transportation company, doing business in or through such infected locality, of the existence of such disease; and is hereby authorized and required to establish and maintain such quarantine of animals, places, premises or localities, as he may deem necessary to prevent the spread of any such disease, and also to cause the appraisal of the animal or animals affected with the said disease, in accordance with such rules and regulations, made by him, as hereinafter authorized and provided, also to cause the same to be destroyed, and a proper disposition of the carcass made, according to rule and regulation as aforesaid, and to pay to the owner or owners thereof their value, as determined upon at the time of appraisal, out of any moneys appropriated by the legislature for that purpose; provided, however, that no appraised value shall be more than one hundred dollars for cattle, with a pedigree recorded, or recordable in the recognized herd books, of the breed in which the cattle destroyed may belong, nor more than seventy-five dollars, for the cattle which has no recordable pedigree; and all other animals so destroyed shall be paid for at the rate of one-half of their cash value; provided, that no appraised value shall exceed one hundred dollars for any horse condemned; and provided, further, that in no case shall compensation be allowed for any animal destroyed under the provisions of this act, which may have contracted or been exposed, to such disease in a foreign country, or on the high seas, or that may have been brought into this state,

within one year previous to such animal showing evidence of such disease, and the owner or owners thereof shall furnish satisfactory evidence as to the time such animal or animals shall have been owned in the state; nor shall compensation be allowed to any owner who in person, or by agent, knowingly and wilfully conceals the existence of such disease or the fact of exposure thereto in animals of which the person making such concealment, by himself or agent is in whole or part owner.

Section 3. That the live stock sanitary commissioner is hereby authorized and required to make record, and publish rules and regulations, providing for and regulating the agencies, methods and manners of conducting the investigation aforesaid, regarding the existence of said contagious diseases; for ascertaining, entering and searching places where such diseased animals are supposed to exist; for ascertaining what animals are so diseased, or have been exposed to contagious diseases; for making, reporting and recording descriptions of said animals so diseased, exposed and destroyed and for appraising the same, and for making payment therefor; and to make all other needful rules and regulations, which may in his judgment be deemed requisite, to the full and due executions of the provisions of this act. All such rules and regulations before they shall become operative, shall be approved by the governor of Maine, and thereafter published in such manner as may be provided for in such rules and regulations and, after such publication, said rules and regulations shall have the force and effect of the law, so far as the same are not inconsistent with this act and other laws of the state, or the United States.

Section 4. That any person or persons who shall knowingly and wilfully refuse permission to the live stock sanitary commissioner, or his duly constituted agent, to make, or who knowingly or wilfully, obstructs said live stock sanitary commissioner, or his duly constituted agent, in making necessary examination of, and as to animals supposed by the live stock sanitary commissioner or his agent to be diseased as aforesaid, or in destroying the same, or who knowingly attempts to prevent such live stock sanitary commissioner or his duly constituted agent, from entering upon the premises and other places hereinbefore specified, where any of said diseases are by the live stock sanitary commissioner supposed to exist, shall be punished by fine.

not exceeding one hundred dollars, or by imprisonment, not exceeding ninety days, or by both at the discretion of the court.

Section 5. That any person who is the owner of or who is possessed of any interest in any animal affected with any of the diseases named in section two of this act, or any person who is agent, common carrier, consignee or is otherwise charged with any duty in regard to any animal so diseased, or exposed to the contagion of such disease, or an officer or agent, charged with any duties under the provisions of this act, who shall knowingly conceal the existence of such contagious disease, or the fact of such exposure to contagion, and who shall knowingly and wilfully fail within a reasonable time to report to the live stock sanitary commissioner the knowledge of their information in regard to the existence and location of such disease, or of exposure thereto (shall be deemed guilty of a misdemeanor) and shall be punished as provided in section four of this act.

Section 6. That when the owner of animals adjudged under the provisions of this act, by the proper authority, to be diseased, or to have been exposed to contagion, refuses to accept the sum authorized to be paid under the appraisal provided for in this act, it shall be the duty of the live stock sanitary commissioner to declare and maintain a rigid quarantine for thirty days as to the animals adjudged as aforesaid, to be diseased, or exposed to any contagious or infectious diseases and of the premises or places where said cattle, horses, sheep or swine may be found, according to the rules and regulations to be prescribed by said live stock sanitary commissioner, approved by the governor, and published as provided in the third section of this act.

Section 7. That no person owning or operating a railroad, nor the owner or owners or masters, of any steam, sailing or other vessel, within the state, shall receive for transportation, or transport from one part of the state to another part of the state, or to bring from any other state or foreign country, any animals affected with any of the diseases named in section two of this act, or that have been exposed to such diseases, especially the disease known as tuberculosis, knowing such animal to be affected or to have been so exposed; nor shall any person or persons, company or corporation, drive on foot, or transport in private conveyance, from one part of the state to another

part of the state, any animal knowing the same to be affected with, or to have been exposed to, any of said diseases; the proper movement of these animals under the direction of the live stock sanitary commissioner for purposes of slaughter and disposal, excepted. Any person or persons violating the provisions of this section shall be punished by a fine not exceeding one hundred dollars, or by imprisonment not exceeding three months, or by both.

Section 8. [As amended by P. L. 1913, c. 74 and P. L. 1915, c. 304.] When cattle shipped from Maine to the quarantine station at Brighton, Massachusetts, are subjected to the tuberculin test, and respond to such test, and the inspector for the Cattle Bureau of Massachusetts shall find upon post-mortem examination that such cattle were diseased from tuberculosis, and will so state in writing within thirty days from shipment from the state, to the live stock sanitary commissioner, and shall also give in writing, a description of such animal, the name of the owner, the shipper, the date and name of place from which same was shipped, the name of the party of whom it was bought and the fair cash value of such animal at time condemned, and shall also comply with any other rule or regulation that the live stock sanitary commissioner may require, the owner shall be entitled to receive a fair market value, not to exceed seventy-five dollars for grade and one hundred dollars for thoroughbred cattle, with a pedigree recorded or recordable; but in no case shall he be paid for any animal condemned under the provisions of this section, until he has filed with the live stock sanitary commissioner a claim, stating the name of the owner, the shipper, his post-office address, place and date of shipment, a fair market value of such animal, name of the person from whom said animal was purchased or consigned and such other information as the live stock sanitary commissioner may require; such claim shall be accompanied in every instance with a "sale ticket" for such part of the animal as may have been sold, and the amount of such sale shall be deducted from the appraised value due the owner of the condemned animal. Cattle re-acting to the tuberculin test may be sent to establishments maintaining a United States government meat inspection service, and be killed under federal government inspection, and be disposed of according to the requirements of the Government Meat Inspection Act.

Section 9. [As amended by P. L. 1913, c. 210.] Any person or persons bringing horses into the state of Maine must have a permit and shall notify the live stock sanitary commissioner within forty-eight hours after their arrival, who shall at once cause the same to be examined either by a physical examination or to be tested with mallein, or the blood test used, at the expense of the owner, and if an animal is found to be glandered no compensation shall be allowed.

No permit or examination will be required for horses used in circuses and to perform on the stage.

Whoever violates any of the provisions of this section shall be punished by a fine as provided in section sixteen.

Section 10. Such sum as may be deemed necessary by the live stock sanitary commissioner shall be used from their appropriation for the purpose of vaccination of cattle against tuberculosis, under the rules and regulations as shall be made for the control of such work.

Section 11. Cattle used for dairy purposes or for breeding purposes that are to be shown in competition for prizes, in any state agricultural shows, Bangor, Waterville and Lewiston, shall be tested with tuberculin, within twelve months of the opening date of the exhibition where they are to be shown. Such test shall be made under the direction of the live stock sanitary commissioner, who shall furnish a certificate of such test, to the owner or owners of such animals. State agricultural associations who receive any aid from the state, shall demand a certificate of test, duly authorized by the live stock sanitary commissioner from owners of cattle that are to compete for prizes in accordance with the above, under penalty of forfeiture of such aid; calves under one year excepted.

Section 12. [As amended by P. L. 1913, c. 210.] The live stock sanitary commissioner shall make all needful rules and regulations as to the manner in which application shall be made to him for the investigation of tuberculosis in the herds of the state, provided, however, he employ regular skilled veterinarians and shall regulate the way and manner in which the test shall be applied, and the state shall not be held responsible for any private test made. Provided, that any registered veterinarian in good standing may have the right to use the tuberculin test by filing with the commissioner of agriculture evidence

of his registration and that he is in good standing. Upon receipt of such evidence the commissioner of agriculture shall issue a permit granting him the right to practice for the department. The live stock sanitary commissioner having sufficient evidence that he is incompetent or has been engaged in fraudulent practices in the use of the tuberculin test, shall suspend him from practicing by written notice, which notice shall state the reason for his suspension. The live stock sanitary commissioner shall immediately file with the governor and commissioner of agriculture the evidence of incompetency or of fraudulent practice in the use of the tuberculin test. The governor and commissioner of agriculture shall give the party a hearing, and if they find he is incompetent or has been engaged in fraudulent practice in the use of the tuberculin test they shall strike his name from the list; but if found competent or not guilty of fraudulent practice in the use of the tuberculin test they shall notify the live stock sanitary commissioner of their finding, and he shall notify the party that he can resume practice for the department.

Section 13. There shall be left with the owner of all condemned animals a proper certificate, duly authenticated, showing the number condemned and the value at which they are appraised, which shall be transferable only with the consent and acceptance of the commissioner.

Section 14. That the live stock sanitary commissioner shall thoroughly disinfect all stables and premises where condemned animals were found or cause the same to be done by a competent agent in the employ of such commissioner and the expense incurred on account of such disinfectant one-half shall be paid from the appropriation allowed for the use of such commissioner and one-half by owners or person in control of such stable and premises.

Section 15. That it shall be the duty of the assessors of all cities, towns and plantations, to keep a record of all pure blood cattle kept for breeding purposes, and to make a report of the same to the live stock sanitary commissioner on or before the first day of July of each year, showing the name of the owner, number in the herd, age and sex; such reports to be made upon blanks furnished by the live stock sanitary commissioner.

Section 16. That all persons selling pure blood cattle, or cattle represented to be pure blooded, for breeding purposes, shall before delivery, make a report to the live stock sanitary commissioner, upon blanks furnished by them upon application, stating the number of cattle sold, the age and sex and to whom sold, and before delivery thereof, such cattle shall be tested with tuberculin under the direction of, and a certificate of health given by the live stock sanitary commissioner, unless such a test has been carried out under the direction within one year; calves under one year excepted. Such certificate of health shall be delivered to the buyer by the seller. Whoever violates any provisions of this section, shall be punished by a fine not less than twenty-five dollars or more than fifty dollars for each offense.

Section 17. That no neat stock, (calves, cows, steers, oxen or bulls), or stags of any age, shall be allowed to enter the state of Maine, from any other state or country, neither for dairying purposes, breeding purposes nor for slaughter, (except cattle in transit under the control of the federal government) without a permit duly authorized by the live stock sanitary commissioner, said permit to accompany the shipment. Such animals shall be tested with tuberculin within thirty days of arrival regardless of any other test made and shall be held in quarantine upon premises of the owner, until released by the live stock sanitary commissioner. Whoever violates any provisions of this section shall be punished by a fine as provided in section sixteen.

Section 18. It shall be the duty of the several county attorneys, to prosecute all violations of this act, which shall be brought to their notice or knowledge by any person making the complaint under oath; and the same shall be heard in any supreme judicial court having jurisdiction in the county in which the violation of this act has been committed.

Section 19. That the live stock sanitary commissioner shall make and preserve a full record of all rules and regulations promulgated under the provisions of this act, and all payments and expenses hereunder incurred, and all other transactions performed by him, in the discharge of his duties as herein provided; and he shall on or before the first Wednesday in January, of each year, under his continuance in service, and at other times as he may deem conducive to the public interest, or as he may

be required so to do by the governor of the state, report to said governor, full and accurate accounts of his expenditures and other proceedings under the provisions of this act, and of the condition of said disease, if any in the state, to be communicated by him to the legislature. Whenever the functions of said live stock sanitary commissioner shall be suspended or terminated, he shall turn over to the secretary of state, all of his books, papers, records, and other effects, taking his receipt therefor and he shall remain the custodian of the same until such time as the functions of said live stock sanitary commissioner may be restored.

Section 20. That the live stock sanitary commissioner shall have power and is hereby authorized to employ skilled veterinarians in all tuberculin tests and such other agents and employees as they may deem necessary to carry into effect the provisions of this act, and to fix the compensation of the person or persons so employed, and to terminate such employment at his discretion; and he is authorized out of the moneys by this act appropriated to make such expenditures as may be needed for the actual and necessary traveling expenses of himself and said employees, stationery, expense of disinfecting the premises, cars and other places, destroying diseased and exposed animals, and paying for the same and such other expenses and expenditures that he may find to be actually necessary to properly carry into effect the provisions of this act.

Section 21. That the moneys appropriated by this act shall be paid by the treasurer of the state of Maine upon requisition, upon vouchers approved by said live stock sanitary commissioner. The said live stock sanitary commissioner before entering upon his duties of the office, shall take an oath to faithfully discharge the duties of said commissioner, and shall enter upon a bond with the state of Maine, with sureties to be approved by the governor and council in such a sum as they may designate, for the faithful performing and discharging of all duties devolving upon said commissioner under the provisions of this act.

Section 22. That for the purpose of carrying into effect the provisions of this act the sum of twenty-five thousand dollars for the year nineteen hundred and eleven, and a like amount for the year nineteen hundred and twelve, or as much thereof as may be necessary, together with all moneys received or that

may be received from the sale of hides and carcasses of condemned animals, is hereby appropriated out of all moneys in the treasury not otherwise appropriated.

Section 23. Chapter nineteen of the revised statutes of nineteen hundred and three, together with chapter one hundred and thirty-three of the public laws of nineteen hundred and nine are hereby repealed.

All acts and parts of acts inconsistent herewith are hereby repealed.

Section 24. This act shall take effect May first, nineteen hundred and eleven.

CHAPTER 322, RESOLVES OF 1915.

Resolved, that the sum of thirty thousand dollars for the year nineteen hundred and fifteen, and the sum of thirty thousand dollars for the year nineteen hundred and sixteen, be and hereby is appropriated to be used under the direction of the live stock commissioner for the control of contagious diseases among domestic animals.

RULES AND REGULATIONS OF THE LIVE STOCK SANITARY COMMISSIONER.

*(By authority of Chapter 195 of the Public Laws of 1911, and
as by Chapters 74 and 210 of the Public Laws of 1913.)*

RULE 1. When it shall appear to the live stock sanitary commissioner that any contagious or infectious disease exists in a herd of cattle in the State, then QUARANTINE shall be declared upon such herd and its products, by notice to the owner in the following manner :

“ToTown of
The herd of cattle owned by you and kept at your premises in are hereby placed in quarantine. They are to be kept entirely isolated from all animals, shall not be sold nor offered for sale. Said herd consisting of animals shall not be removed from said premises, neither shall any animal of the herd.

The barn or stable where such animals are now kept, is declared to be a quarantined station, from which no animal be allowed to depart, nor shall any animal be placed with the herd or exposed to contact in any manner with the herd under penalty as provided in Chapter 195 of the Public laws of 1911, and proper notice shall be posted on barn or stable when animals are kept in quarantine.

Said notice shall be served upon party or parties named in the above notice, by any civil officer, and his return shall be made thereon to the live stock sanitary commissioner.

RULE 2. Cattle reacting to the tuberculin test, when condemned, shall be sent by the live stock sanitary commissioner's order to establishments maintaining a United States Government inspection, and be killed under federal inspection, and be disposed of according to the requirements of the Government Meat Inspection Act.

RULE 3. The subcutaneous tuberculin test shall be the standard method of testing animals for this department and no other test will be recognized without the consent of the live stock sanitary commissioner.

Inspectors employed to apply the tuberculin test, shall first make a physical examination of all the animals in the herd, noting conditions of herd, conditions of stable, number in herd over one year old, number in herd under one year old. All animals over one year old shall be tested unless some sufficient reason is given why certain designated animals should not be tested. In testing, rules established by the Bureau of Animal Industry of the United States Department of Agriculture must be followed.

RULE 4. The expense of the inspection shall be paid by the owner, except when investigation is ordered by the live stock sanitary commissioner, and no inspection will be recognized as official, unless made by an inspector recommended by the live stock sanitary commissioner. Upon application a list of inspectors indorsed by the live stock sanitary commissioner, will be furnished to any person wishing for the same.

RULE 5. The State will pay for any animal when condemned by an authorized agent, under the direction of the live stock sanitary commissioner but in no case will the State pay for an animal which has died of contagious or infectious disease.

RULE 6. When cattle shipped from Maine to Brighton, Mass., are condemned as tuberculous, the owner shall furnish the information where the animal originated, if required by the live stock sanitary commissioner.

RULE 7. Cattle slaughtered for beef, sheep and hogs, slaughtered for meat, which have been owned in the State of Maine for more than one year, if found tuberculous upon post mortem, by a graduate veterinarian, indorsed by the live stock sanitary commissioner, will be paid for when reported on the blanks furnished by the State, filled out in full and sworn to before a Justice of the Peace or Notary Public.

RULE 8. Inspectors applying the tuberculin or mallein test shall report to the live stock sanitary commissioner within forty-eight hours the result of the inspection, upon blanks furnished by the State.

RULE 9. No live stock (horses and cattle) shall be allowed to enter the State of Maine from any other State or Country

without a permit from the live stock sanitary commissioner, said permit to accompany the way-bill.

CHAPTER 195, PUBLIC LAWS OF 1911. Section 17. That no neat stock (calves, cows, steers, oxen or bulls), or stags of any age, shall be allowed to enter the State of Maine, from any other state or country, neither for dairying purposes, breeding purposes, nor for slaughter, (except cattle in transit under the control of the federal government) without a permit duly authorized by the Live Stock Sanitary Commissioner, said permit to accompany shipment. Such animals shall be tested with tuberculin within thirty days of arrival, regardless of any other test made, and shall be held in quarantine upon premises of the owner, until released, by the live stock sanitary commissioner. Whoever violates any provisions of this section shall be punished by a fine as provided in section sixteen.

CHAPTER 210—PUBLIC LAWS OF 1913. Section 9. Any person or persons bringing horses into the State of Maine, must have a permit and shall notify the Live Stock Sanitary Commissioner within forty-eight hours after their arrival, who shall at once cause the same to be examined either by a physical examination or to be tested with mallein, or the blood test used, at the expense of the owner, and if an animal is found to be glandered no compensation shall be allowed.

“No permit or examination will be required for horses used in circuses and to perform on the stage.”

“Whoever violates any of the provisions of this section shall be punished by a fine as provided in section sixteen.”

RULE 10. Upon the arrival of live stock (horses and cattle) at their destination, the transportation company (Express, Railroad or Steamships) shall notify the live stock sanitary commissioner.

RULE 11. Swine imported into the State, shall be kept in quarantine for 90 days, on the premises of the owner, who shall notify the live stock sanitary commissioner, upon their arrival, said quarantine may be sooner removed by said commissioner.

RULE 12. When hog cholera exists in a herd, the herd shall be placed in quarantine, and the owner shall not be allowed to sell or offer for sale said animals before the quarantine is raised by the live stock sanitary commissioner or by an authorized agent.

RULE 13. When contagious and infectious abortion of cattle exists in a herd, the owner shall notify the live stock sanitary commissioner, who shall quarantine such herd and shall not allow any animal to be sold, unless to be shipped or driven directly to the slaughter house.

RULE 14. It shall be the duty of inspectors to report to the live stock sanitary commissioner, within forty-eight hours when he has knowledge as to the existence of Tuberculosis, Contagious Pleuro Pneumonia, Foot and Mouth disease, Glanders, Hog Cholera, Contagious Abortion, Sheep Scab, Rabies and other infectious and contagious diseases, among horses, cattle, sheep and swine.

RULE 15. Railway cars used for the transportation of infected animals shall be disinfected by an agent in the employ of the live stock sanitary commissioner.

RULE 16. Cattle condemned and ordered by an inspector to be shipped to a slaughtering house under Federal inspection, should arrive at destination on Wednesday of each week if possible, that interested parties may visit such slaughtering house and see the work carried out.

APPRAISAL FOR GRADE ANIMALS.

RULE 17. Animals from four to six years old, of good size, in good flesh, without any deformities or imperfections in body, limbs, eyes or udder may be given the highest appraisal of Seventy Five Dollars (\$75.00), after July 3rd, 1915. Animals from four to six years old, undersized, poor in flesh and with imperfections shall be appraised proportionately less.

Perfect animals three years old and under four	\$60 00
Imperfect animals three years old and under four, less	
Perfect animals two years old and under three	45 00
Imperfect animals two years old and under three, less	
Perfect animals one year old and under two	25 00
Imperfect animals one year old and under two, less	
Perfect animals from six to eight years old	60 00
Imperfect animals from six to eight years old, less	
Perfect animals from eight to ten years old	50 00
Imperfect animals from eight to ten years old, less	
Perfect animals from ten to twelve years old	40 00

Imperfect animals from ten to twelve years old, less.	
Perfect animals over twelve years old	30 00
Imperfect animals over twelve years old, less.	

APPRAISAL FOR CATTLE WITH A PEDIGREE RECORDED OR
RECORDABLE.

RULE 18. Animals from four to six years old, of good size, in good flesh, without any deformities or imperfections in body, limbs, eyes, or udder may be given the highest appraisal of One Hundred Dollars, (\$100). Animals from four to six years old, undersized, poor in flesh and with imperfections shall be appraised proportionately less.

Perfect animals three years old and under four	\$85 00
Imperfect animals three years old and under, less.	
Perfect animals two years old and under three	60 00
Imperfect animals two years old and under three, less.	
Perfect animals one year old and under two	40 00
Imperfect animals one year old and under two, less.	
Perfect animals from six to eight years old	90 00
Imperfect animals from six to eight years old, less.	
Perfect animals from eight to ten years old	75 00
Imperfect animals from eight to ten years old, less.	
Perfect animals from ten to twelve years old	60 00
Imperfect animals from ten to twelve years old, less.	
Perfect animals over twelve years old	50 00
Imperfect animals over twelve years old, less.	

RULE 19. The above rules shall be published for three consecutive weeks in the official State newspaper.

Approved this the 23rd day of June, 1915.

OAKLEY C. CURTIS,

Governor of Maine.

BOYDEN BEARCE,

Live Stock Sanitary Commissioner.

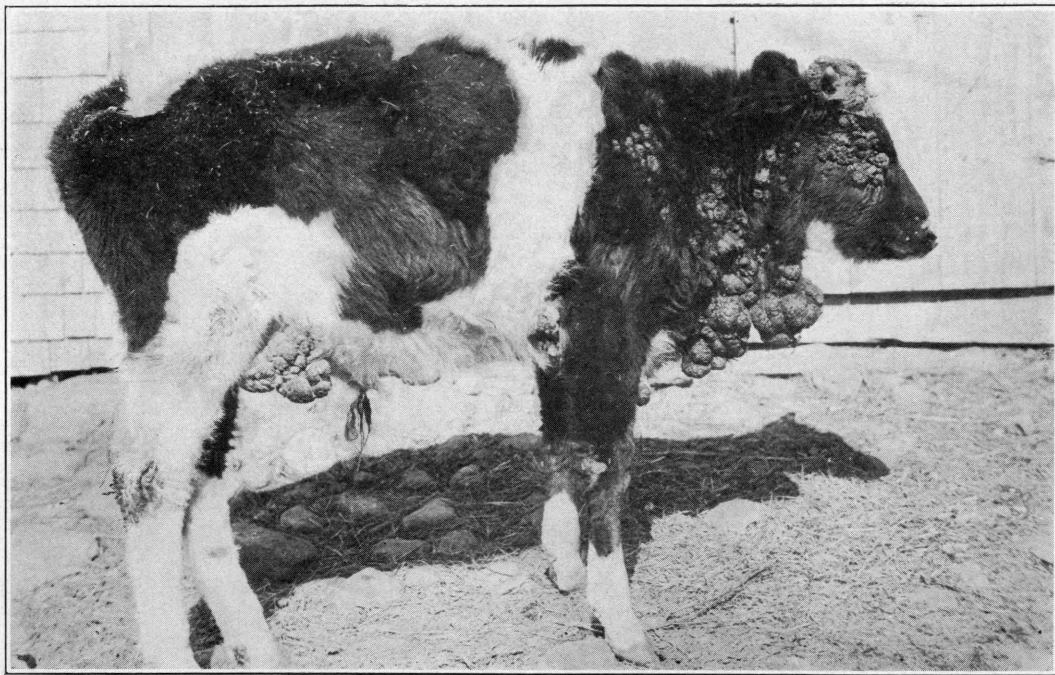
List of Inspectors registered by this office and authorized to inspect Horses and Cattle, under the direction of the Live Stock Sanitary Commissioner, September 1st, 1915.

Dr. P. R. Baird, Waterville, Maine.

Dr. C. L. Blakely, Augusta, Me.

- Dr. E. F. Brackett, Lewiston, Me.
Dr. E. M. Bradley, Boothbay Harbor, Me.
Dr. J. Norman Brown, Pittsfield, Me.
Dr. Chas. W. Boothby, Standish, Me.
Dr. Ernest E. Bubier, North Jay, Me.
Dr. J. T. Butler, Bath, Me.
Dr. J. J. Callahan, Island Falls, Me.
Dr. Fred T. Cheney, Houlton, Me.
Dr. A. W. Chadwick, Damariscotta, Me.
Dr. A. B. Chase, Dover, Me.
Dr. A. W. Cleaves, Bar Harbor, Me.
Dr. W. H. Corey, Newport, Me.
Dr. E. E. Crockett, East Harpswell, Me.
Dr. John B. Darling, Belfast, Me.
Dr. C. H. Day, North Fryeburg, Me.
Dr. Carl Fremont Davis, Rumford, Me.
Dr. G. G. Downs, Mount Vernon, Me.
Dr. S. W. Durfee, Jefferson, Me.
Dr. C. F. Dwinal, Bangor, Me.
Dr. A. A. Dyer, Cornish, Me.
Dr. Harold N. Eames, Sanford, Me.
Dr. E. V. Estes, Portland, Me.
Dr. W. E. Fairbanks, Lewiston, Me.
Dr. F. H. Farnum, Pittsfield, Me.
Dr. P. J. Flagg, West Brooksville, Me.
Dr. C. I. Fogg, Norway, Me.
Dr. R. E. Freeman, Bangor, Me.
Dr. C. F. French, Rockland, Me.
Dr. G. C. Fuller, Kennebunk, Me.
Dr. E. E. Gibbs, Saco, Me.
Dr. James H. Glover, Oxford, Me.
Dr. Chas. L. Gove, Dexter, Me.
Dr. Arthur D. Howden, Presque Isle, Me.
Dr. Archibald D. Howden, Caribou, Me.
Dr. G. R. Inglis, Auburn, Me.
Dr. H. S. Irish, South Windham, Me.
Dr. W. R. Jackson, Sanford, Me.
Dr. J. M. Johnson, Lewiston, Me.
Dr. Archilles Joly, Waterville, Me.
Dr. T. J. Judkins, Norway, Me.

- Dr. C. F. Kirk, Lewiston, Me.
Dr. C. V. Knight, Turner Centre, Me.
Dr. A. C. Leighton, Limestone, Me.
Dr. C. H. Leighton, Cumberland Mills, Me.
Dr. W. S. Leighton, Biddeford, Me.
Dr. W. S. Lord, West Baldwin, Me.
Dr. M. E. Maddocks, Augusta, Me.
Dr. S. A. McDaniel, Kezar Falls, Me.
Dr. W. L. Mebane, Rockwood, Me.
Dr. C. M. Merrill, South Paris, Me.
Dr. A. L. Murch, Bangor, Me.
Dr. N. W. McCaughey, Presque Isle, Me.
Dr. John A. Ness, Auburn, Me.
Dr. C. H. Newton, Foxcroft, Me.
Dr. A. J. Oakes, Sangerville, Me.
Dr. J. L. Parks, Fort Fairfield, Me.
Dr. A. N. Peabody, Thomaston, Me.
Dr. C. W. Purcell, Biddeford, Me.
Dr. B. L. Pratt, Caribou, Me.
Dr. C. H. Robinson, Livermore Falls, Me.
Dr. E. E. Russell, Farmington, Me.
Dr. Amos Ruther, Guilford, Me.
Dr. C. L. Ryan, Dexter, Me.
Dr. I. L. Salley, Skowhegan, Me.
Dr. W. B. Sherman, Rockland, Me.
Dr. H. L. Stevens, Rockland, Me.
Dr. J. W. Stewart, Waterville, Me.
Dr. M. E. Strout, Bangor, Me.
Dr. I. P. Symonds, Norway, Me.
Dr. R. B. Stanhope, Livermore Falls, Me.
Dr. D. A. Tuttle, North Yarmouth, Me.
Dr. H. S. Usher, Bonny Eagle, Me.
Dr. C. L. Wakefield, Augusta, Me.
Dr. C. W. Watson, Brunswick, Me.
Dr. E. C. Walker, South Paris, Me.
Dr. H. B. Wescott, Portland, Me.
Dr. G. F. Wescott, Portland, Me.
Dr. S. C. Wheeler, Easton, Me.



One of four Holstein calves six months old affected with contagious warts. Two of the calves were killed, and two were operated upon successfully by Dr. W. S. Lovejoy.

Issued December 11, 1915.

U. S. DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY.

A. D. MELVIN, CHIEF OF BUREAU.

STATE SANITARY REQUIREMENTS GOVERNING
ADMISSION OF LIVE STOCK.

ALABAMA.

Horses, mules, and asses.—Health certificate and, if exposed to glanders, mallein test chart must accompany same. Designate each animal as mare, gelding, stallion, jack, jennet, horse mule, or mare mule.

Cattle.—Health certificate, including tuberculin test, for breeding and dairy cattle over 6 months of age and feeding and grazing cattle over 2 years of age. Calves from tuberculous mothers not admitted. Cattle for feeding under 2 years of age require affidavit of owner that he will keep them separate from other cattle during feeding period.

No ticky cattle, horses, or mules shall be brought into Alabama. Cattle from the area quarantined for splenic fever shall be accompanied by certificate of inspection or dipping.

Dogs.—Health certificate, stating no exposure to disease.

Hogs.—Health certificate, stating no exposure to cholera or other contagious disease.

Sheep.—Health certificate.

Who may inspect.—Any legally qualified veterinarian who is indorsed by his State veterinarian or by the United States Bureau of Animal Industry.

Official.—State veterinarian, Auburn, Ala., to whom copy of all certificates must be sent.

ARIZONA.

Horses, mules, and asses.—Health certificate, preferably including mallein test.

Cattle.—Health certificate. Tuberculin test for dairy or breeding cattle.

Hogs.—Health certificate and isolation at destination two weeks or until released by State veterinarian.

Sheep.—Health certificate for all. Certificate of dipping under official supervision when from any territory classed by the Government as infected.

Who may inspect.—Horses, cattle, and hogs: Any State, Federal, or county veterinarian, or other veterinarian when his certificate is approved by the State veterinarian or State sanitary board at point of origin. Sheep: Federal veterinarian.

Official.—State veterinarian, Phoenix, Ariz., to whom duplicate certificate should be sent in advance.

ARKANSAS.

Horses, mules, and asses.—Health certificate, stating particularly that stock is free from ticks.

Cattle.—Health certificate for dairy or breeding cattle, including tuberculin test by official veterinarians.

Hogs.—Must be free from and not exposed to contagious or infectious disease. Swine for exhibition at fairs must be immunized by the Dorset-McBride-Niles serum method and be accompanied by certificate showing same.

Sheep.—Must be free from and not exposed to contagious or infectious disease.

Who may inspect.—Veterinary inspectors of the Bureau of Animal Industry or official veterinarians of the State of origin.

Official.—State veterinarian, Old State House, Little Rock, Ark.

CALIFORNIA.

Horses, mules, and asses.—Health certificate. In lieu of health certificate horses, mules, and asses may be brought into California when accompanied by signed statement of State veterinarian or other livestock sanitary authority stating each animal in shipment is free from and has not recently been exposed to any communicable disease.

Cattle.—Dairy cattle and breeding bulls over 6 months of age, health certificate, including tuberculin test. In lieu of health certificate and tuberculin test record dairy cattle and breeding bulls may be brought into California when accompanied by

signed statement of State veterinarian or other live-stock sanitary authority stating animals originated in herds free from tuberculosis and other communicable diseases.

Sheep.—In accordance with Federal regulations.

Hogs.—Health certificate.

Exemptions.—Animals accompanying emigrant outfits are exempt from all inspection requirements. Animals for theatrical and exhibition purposes are exempt from all inspection requirements provided they do not remain in California.

Note.—Transportation companies should ascertain if California has any special regulations in effect covering the State in which the shipments originate before accepting animals for shipment.

Who may inspect.—Any qualified veterinarian who is a graduate of a duly recognized and accredited veterinary college.

Official.—State veterinarian, Sacramento, Cal.

COLORADO.

Horses, mules, and asses.—Health certificate.

Cattle.—Health certificate and tuberculin-test chart for bulls for breeding purposes and female cattle over 6 months old intended for dairy purposes.

Hogs.—Hogs for breeding purposes must be accompanied by affidavit from owner or seller showing them to be free from hog cholera or exposure thereto and a copy of same be sent to the State veterinarian of Colorado. Cars carrying hogs destined to Colorado for purposes other than immediate slaughter must, before loading, be properly disinfected as required by the United States Bureau of Animal Industry.

Sheep.—In compliance with regulations issued by the United States Department of Agriculture.

Who may inspect.—Official veterinarians, State or Federal, or a licensed veterinarian whose certificate is approved by the State veterinarian or like officer.

Official.—State veterinarian, Denver, Colo.

CONNECTICUT.

Horses, mules, and asses.—Permit and ophthalmic mallein test.

Cattle.—For neat cattle over 6 months of age, permit from commissioner on domestic animals, health certificate, including tuberculin-test chart, properly filled out and certified to by a qualified veterinarian in any other State who is approved by the authority having jurisdiction of diseases of domestic animals in that State. This certificate must contain a description of each animal, including age, breed, sex, and color, or numbered ear tags, so that animals may be easily identified. When certificate as above described is not provided neat cattle may be taken into the State under a permit from the commissioner on domestic animals and held in quarantine at the place designated until examined and released by the commissioner or his agent.

Hogs.—None.

Sheep.—None.

Who may inspect.—Commissioner or his agent.

Official.—Commissioner on domestic animals, State Capitol, Hartford, Conn.

IDAHO.

Horses, mules, and asses.—Health certificate, including mallein-test chart.

Cattle.—Health certificate including tuberculin-test chart.

Hogs.—Health certificate showing hogs to have been immunized by the Dorset-McBride-Niles serum method within 15 days from date of shipment into State. Said certificate must also state that cholera has not existed on the premises from which the hogs were shipped for a period of at least 6 months prior to date of shipment.

Sheep.—Bucks must be dipped under State supervision upon arrival. Sheep can not come farther than 2 miles within the State line until inspected by live-stock inspector in this State.

Who may inspect.—Federal, State, and properly qualified assistant State veterinarians.

Official.—State veterinarian, Boise, Idaho.

ILLINOIS.

Horses, mules, and asses.—Certificate of health, showing the animals to be free from contagious or communicable diseases.

Cattle.—All importations of bulls, cows, or heifers exceeding the age of 9 months must be covered by a certificate of health, including the tuberculin test administered within 30 days prior to date of shipment or by a permit for their consignment in quarantine for feeding purposes only. Bulls, cows, or heifers less than 9 months of age and steers or spayed heifers must be covered by an affidavit certifying to their classification.

Hogs.—Certificate of health showing the animals to be free from cholera or exposure thereto by being removed from cholera-infected premises.

Note.—Regulations which apply to cattle and swine shall not be interpreted as covering shipments consigned to public stock yards at Chicago, Peoria, or East St. Louis, Ill.

Who may inspect.—State veterinarian and his assistants; inspectors of the United States Bureau of Animal Industry.

Officials.—State veterinarian, Springfield, Ill.; secretary State board of live-stock commissioners, Springfield, Ill.

INDIANA.

Horses, mules, and asses.—Health certificate, including certificate of soundness for stallions and jacks, together with affidavit that they are free from any contagious, infectious, or communicable disease.

Cattle.—Health certificate, including tuberculin test for dairy or breeding cattle indorsed by State or Federal authorities; calves under 6 months of age, health certificate showing that they are from tuberculin-tested and free-from-tuberculosis mothers. Affidavit for cattle intended for feeding purposes.

Sheep.—Health certificate showing that they have been dipped if passing through public stock yards.

Hogs.—For breeding purposes must have health certificate issued in triplicate showing them to be free from disease and that they have not been exposed to disease. For feeding or stocker purposes a permit must be obtained to bring them in, subject to vaccination and quarantine for 30 days on premises of the owner at destination.

Who may inspect.—Veterinary inspectors of the United States Bureau of Animal Industry or authorized State or deputy State veterinarians.

Official.—State veterinarian, Indianapolis, Ind.

IOWA.

Horses, mules, and asses.—Health certificate, including mallein test.

Cattle.—For dairy and breeding purposes, health certificate, including tuberculin test.

Cattle other than dairy and breeding cattle, except steers and cattle for immediate slaughter, shall be accompanied by a certificate of health and an affidavit certifying that the title of such cattle will not be transferred and that they will not be used for other purposes than feeding or slaughter without first notifying the State veterinarian and having them subjected to the tuberculin test.

Hogs.—Except for immediate slaughter, must be accompanied by a certificate of health certifying that they have been immunized with Dorset-McBride-Niles anti-hog-cholera serum not more than 30 days prior to date of importation when the serum alone is used and not less than 30 days prior to date of importation when the simultaneous method is used.

Sheep.—Health certificate.

Who may inspect.—Federal, State, or assistant State veterinarians or any graduate veterinarian whose certificate is indorsed by the parties having charge of live-stock sanitation in the State where shipment originates.

Official.—State veterinarians, Des Moines, Iowa.

KANSAS.

Horses, mules, and asses.—Health certificate.

Cattle.—Tuberculin-test certificate for dairy and breeding cattle. All other classes of cattle admitted by complying with Bureau of Animal Industry's requirements to move interstate.

Hogs.—Special permits required on hogs entering the State or moving from point to point within the State for any purpose other than immediate slaughter.

Sheep.—No restrictions.

Who may inspect.—Inspectors of the United States Bureau of Animal Industry, veterinarians and inspectors having a commission from the State live-stock sanitary commissioner.

Official.—State live-stock sanitary commissioner, Topeka, Kans.

KENTUCKY.

Horses, mules, and asses.—Health certificate. If originating in an area quarantined on account of Texas fever, they shall be disinfected and loaded in a cleaned and disinfected car.

Cattle.—Health certificate, including the tuberculin test for breeding and dairy cattle over 6 months of age.

Health certificate only for stockers and feeders.

Health certificate and tuberculin test not required when cattle are consigned to the Bourbon Stock Yards, Louisville, Ky.

All cattle shall be loaded in cleaned and disinfected cars or crates.

Hogs.—Health certificate stating that hogs have been immunized against cholera by the serum-virus method at least 21 days before shipment or the serum-alone method within 5 days of shipment and sprayed or washed in a disinfectant solution before loaded.

Hogs from public stockyards accepted for immediate slaughter only. All hogs shall be loaded in cleaned and disinfected cars or crates.

Sheep.—Health certificate for pure-bred sheep. Dipping certificate also for stock sheep, except when consigned to points where vats are available for dipping immediately after arrival.

All sheep must be loaded in cleaned and disinfected cars or crates.

Who may inspect.—State or Federal inspectors or veterinarians whose certificates are indorsed by live-stock sanitary officials of the State in which shipment originates.

Official.—State veterinarian, Frankfort, Ky.

LOUISIANA.

Horses, mules, and asses.—Health certificate showing freedom from all contagious, infectious, and communicable diseases.

Cattle.—Dairy and breeding cattle shall be free from tuberculosis and must be tested with tuberculin before entering the State. Railroad agents or owner of cattle must mail certificate to secretary and executive officer of State live-stock sanitary board immediately following arrival of cattle at destination. No

tuberculin test is required for cattle under 6 months old. Calves from tuberculous cows shall be rejected.

Hogs.—All swine shipped into the State of Louisiana must be accompanied by a certificate of health showing their freedom from contagious, infectious, or communicable diseases or exposure thereto, certifying that no infectious swine disease has existed in the locality from which shipment originates within a period of 6 months; otherwise certificates must show that such swine have been immunized by the Dorset-McBride-Niles serum-alone method not more than 20 days prior to date of shipment. Railroad stockyards are considered infectious, and no hogs yarded or loaded through them will be accepted in the State of Louisiana for any purpose other than immediate slaughter (48 hours).

Hog-cholera virus or virulent blood should not be shipped by serum manufacturers into the State except by written permission issued by the secretary and executive officer.

Sheep.—Health certificate from qualified veterinarians 24 hours before shipping showing freedom from infectious, contagious, or communicable disease.

Who may inspect.—Federal veterinarians, State veterinarians, deputy State veterinarians, assistant State veterinarians, and other veterinarians provided they are graduates of veterinary schools or colleges recognized by the United States Department of Agriculture and their competency and reliability certified to by authorities in charge of live-stock sanitary control work in the State where shipment originates.

All health certificates and test charts must be made in triplicate on official uniform blanks. The original must be attached to waybill of shipment. Duplicate must be sent to secretary and executive officer in ample time to reach him before arrival of stock. Triplicate should be sent to the proper State official in the State where inspection is made and where shipment originates. Tuberculin-test charts must show at least 3 temperatures were taken before injection 2 or 3 hours apart and 5 temperatures after injection 2 hours apart, beginning 10 hours after infection of tuberculin.

Official.—Secretary and executive officer of State live-stock sanitary board, Baton Rouge, La.

MAINE.

Horses, mules, and asses.—Any person or persons bringing horses into the State of Maine must have a permit and shall notify the live-stock sanitary commissioner within 48 hours after their arrival, who shall at once cause the same to be examined either by a physical examination or to be tested with mallein, or the blood test used, at the expense of the owner, and if an animal is found to be glandered no compensation shall be allowed. No permit or examination will be required for horses used in circuses or to perform on the stage.

Cattle—That no neat stock (calves, cows, steers, oxen, or bulls) or stags of any age shall be allowed to enter the State from any other State or country, either for dairy purposes or for slaughter (except cattle in transit under the control of the Federal Government), without a permit duly authorized by the live-stock sanitary commissioner, said permit to accompany the shipment. Such animals shall be tested with tuberculin within 30 days of arrival, regardless of any other test made, and shall be held in quarantine upon the premises of the owner until released by the live-stock sanitary commissioner.

Hogs.—Swine imported into Maine shall be kept in quarantine for 90 days on the premises of the owner, who shall notify the live-stock sanitary commissioner upon the arrival; said quarantine may be sooner removed by said commissioner.

Sheep.—None.

Transportation companies (express, railroad, or steamship) shall notify the live-stock sanitary commissioner of the arrival of live stock at their destination.

Who may inspect.—Qualified veterinarians authorized by the live-stock sanitary commissioner.

Official.—Live-stock sanitary commissioner, Augusta, Me.

MARYLAND.

Horses, mules, and asses.—None.

Cattle.—Health certificate for feeding cattle and tuberculin test for dairy and breeding cattle accompanied by test chart.

Hogs.—Health certificate.

Sheep.—None.

Who may inspect.—State veterinarian, deputies, and inspectors of the United States Bureau of Animal Industry.

Official.—Chief veterinary inspector, 120 North High Street, Baltimore, Md.

MASSACHUSETTS.

Horses, mules, and asses.—Permit required on shipments from New York, Rhode Island, and Connecticut only. Examination on arrival.

Cattle.—Neat cattle for dairy or breeding purposes unless consigned to quarantine station in Brighton stock yards, must be accompanied by a permit of Massachusetts department of animal industry. Tuberculin test required if over 6 months of age, made either by a veterinarian approved by proper official of State where shipment originates or by agent of Massachusetts department on arrival at destination. Quarantined until released by department. Permit not required if for immediate slaughter consigned to abattoir under Federal inspection.

Hogs.—None.

Sheep.—None.

Who may inspect.—Qualified veterinarians whose record of inspection and test is approved by the officials in charge of live-stock interests in the State where the shipment originates. The tests of United States inspectors of the Department of Agriculture are accepted at all times.

Official.—Commissioner of animal industry, room 138, State House, Boston, Mass.

MICHIGAN.

Horses, mules, and asses.—Health certificate, including mallein test.

Cattle.—Health certificate for dairy and breeding cattle, including tuberculin test.

Hogs.—None.

Sheep.—None.

Who may inspect.—Veterinarians graduated from an accredited veterinary college and authorized by State officials.

Officials.—State veterinarian, Lansing, Mich.; president live-stock sanitary commission, Lansing, Mich.

MINNESOTA.

Horses, mules, and asses.—All branded horses, mules, or asses imported into Minnesota must be accompanied by a health certificate, including mallein test, certifying that animals have been examined and mallein tested within 30 days prior to date of shipment and found free from glanders.

Cattle.—Cattle for breeding or dairy purposes must be tuberculin tested.

Cattle of New York State must show certificate of health and tuberculin test issued and made by an inspector of the United States Bureau of Animal Industry or the chief veterinarian of the New York department of health.

Hogs.—Health certificate.

Sheep.—Health certificate.

Who may inspect.—State veterinarians or assistants, Federal veterinarians, and veterinarians acting under authority of State live-stock sanitary board.

Official.—Secretary and executive officer, live-stock sanitary board, Old Capitol, St. Paul, Minn.

MISSISSIPPI.

Horses, mules, and asses.—Health certificate.

Cattle.—Health certificate. Tuberculin test for dairy and breeding cattle.

Hogs.—Health certificate.

Sheep.—Health certificate.

Who may inspect.—State veterinarian, assistant State veterinarians, inspectors of the Bureau of Animal Industry.

Official.—State veterinarian, Agricultural College, Miss.

MISSOURI.

Horses, mules, and asses.—None specifically required. The statutes of the State forbid the importation of animals affected with glanders, farcy, or nasal gleet.

Cattle.—Health certificate for dairy and breeding cattle, including tuberculin test. If any animal in a lot inspected is found tuberculous, the words "exposed to tuberculosis on day of inspection" shall be written on the certificate of health of such

animals as pass. Cattle for pasturing, feeding, or immediate slaughter admitted on permit from State veterinarian without tuberculin test. Regulations do not apply to cattle shipped to the public stockyards at Kansas City, St. Joseph, and St. Louis, or for exhibition at any fair or live-stock show.

Hogs.—None, except to Pettis County. Hogs to Pettis County must be immunized by a graduate veterinarian.

Sheep.—None specifically required. The statutes of the State forbid the importation of sheep affected with any contagious disease.

Who may inspect.—Official veterinarian, State or Federal, or graduate veterinarian, whose certificate shall be approved in writing by State veterinarian or like officer.

Official.—State veterinarian, Columbia, Mo.

MONTANA.

Horses, mules, and asses.—Health certificate, including mallein test. Horses, mules, and asses may be shipped without inspection to quarantine yards at Miles City, Billings, or Dillon, providing the waybills bear the notation "Consigned to quarantine yards at ——, Montana." Animals so shipped will be tested and inspected at owner's expense by a representative of the Montana live-stock sanitary board before being released from quarantine yards. Wild, unbroken, range (but not pasture) horses, mules, or asses may be shipped into Montana on a clinical health certificate, providing each individual animal is given a clinical chute inspection.

Animals for temporary racing, exhibition, or speed purposes may be shipped in on a clinical health certificate.

Stallions or jacks.—In addition to mallein test a certificate of soundness, original of which must accompany shipment and copy mailed to the stallion registration board at Bozeman, Mont., at least 10 days before the importation of stallion or jack into the State. No stallion or jack which is neither pure bred nor grade shall be imported into the State of Montana for breeding purposes. A "grade" is defined as an animal whose sire or dam, but not both, is a registered pure-bred animal.

Cattle.—Cattle for dairying, strictly pasture breeding, all pure breds and all bulls over 6 months of age must be accompanied by

a tuberculin-test chart. Cattle for feeding purposes or for slaughter where no inspection is maintained must be accompanied by a clinical health certificate. Cattle for slaughter where an inspection is maintained do not require a health certificate, but the waybill must be marked "For immediate slaughter," giving the name of the abattoir.

All cattle of any class originating in the State of Wisconsin or New York destined to the State of Montana must be accompanied by a certificate of health issued by a veterinary inspector of the United States Bureau of Animal Industry, the inspection to be made in accordance with the regulations of the live-stock sanitary board and the laws of Montana. Health certificates and test charts are good for 30 days. The original certificate must accompany the shipment to its destination and a duplicate immediately forwarded by the veterinarian making the inspection or test to the State veterinary surgeon, Helena, Mont.

Hogs.—Hogs for feeding or breeding purposes must be accompanied by a clinical health certificate stating the animals do not come from a public stockyard or a district in which hog cholera has existed during the past 6 months, and providing the animals have not been double vaccinated, or at least 90 days have elapsed since they were double vaccinated. Hogs may be shipped from a district where hog cholera has existed during the past 6 months provided they are shipped not earlier than 30 days and not later than 60 days after receiving the single vaccination and, provided further, that they have been kept since vaccination on premises on which hog cholera has not existed during the past 6 months.

Hogs for slaughter.—Same as for breeding and feeding.

Hogs for exhibition.—All swine to be exhibited in Montana at State or county fairs must be accompanied by a certificate showing they have been immunized by the single vaccination not less than 15 days and not more than 60 days prior to their shipment.

All hogs must be loaded through clean and disinfected pens and chutes into disinfected cars, and must not be unloaded en route in any public stockyard unless the stockyard has been specially disinfected for that purpose.

Sheep.—Health certificate and shipped in disinfected cars. Sheep for grazing or feeding purposes must be inspected upon their arrival at railroad destination in Montana by a Montana inspector, at owner's expense, and quarantined for 90 days on land owned, leased, or controlled by owner of the sheep. Bucks and ewes for dissemination to other bands for breeding purposes shall be dipped twice, with an interval of 10 days, under the supervision of a Montana inspector at the owner's expense and quarantined for at least 90 days on land owned, leased, or controlled by the owner. In all sheep shipments 5 days' notice must be given the State veterinary surgeon's office at Helena before the arrival of the sheep in Montana.

Disinfection of cars.—Disinfection of cars does not apply to box cars which have not been previously used for stock shipments.

Dogs.—Until further notice no dogs or any animals of the canine species will be permitted to enter the State of Montana from the States of Oregon and Minnesota and the counties of Asotin, Garfield, Columbia, Walla Walla, and Benton, in the State of Washington, and the counties of Nez Perce, Idaho, Washington, Canyon, Owyhee, and Latah, in the State of Idaho, unless accompanied by a permit issued by the State veterinary surgeon at Helena Mont., and an official health certificate from a recognized veterinarian at point of origin stating animals are free from rabies and have not been exposed to rabies during the past 6 months.

Who may inspect.—Federal, State, graduate deputy State veterinarians, or graduate veterinarians whose certificates are indorsed by their State veterinarian or live-stock sanitary board.

Official.—State veterinary surgeon, Helena, Mont.

NEBRASKA.

Horses, mules, and asses.—Health certificate.

Cattle.—For dairy or breeding purposes over 6 months old, health certificate, including tuberculin test. For feeding, grazing or range purposes, permit from the deputy State veterinarian of Nebraska without tuberculin test. If not accompanied by a health certificate, cattle will be inspected at destination at owner's expense. For exhibition purposes, permit from deputy

State veterinarian without tuberculin test, provided accompanied by proper health certificate. Exhibition cattle remaining in the State three months or more shall be subject to tuberculin test at owner's expense. Cattle for immediate slaughter admitted without inspection. Cattle originating in the States of Illinois and New York shall not be transported, trailed, or driven into the State of Nebraska unless accompanied by certificate of health and tuberculin test issued by an inspector of the United States Bureau of Animal Industry.

Hogs.—Certificate of health showing freedom from all contagious and infectious diseases and that no contagious disease has existed in the locality in which the shipment originated for a period of six months previous to the time of shipment. Railroad cars used for such shipments must be thoroughly disinfected with a 5 per cent solution of carbolic acid before hogs are loaded. Such hogs shall not be unloaded while in transit into any public stockyard. If feeding and watering are necessary, it must be done in the car. No hogs intended for shipment into the State of Nebraska shall be loaded from or unloaded into any public stockyards or ordinary chutes, but must be loaded from wagons and unloaded in the same manner. Hogs shipped to public stockyards for immediate slaughter where Government inspection is maintained need no inspection.

Sheep.—Health certificate stating that they are free from all contagious and infectious diseases. When such shipments originate in a territory where lip-and-leg ulceration or scabies exists, the certificate must show freedom from these diseases.

All shipments of any live stock coming into Nebraska without a proper health certificate as above indicated shall be reported to the deputy State veterinarian by railroad agent at destination. Such live stock will be allowed to be taken to the final destination, but will be quarantined on the premises of the owner for inspection and test by an authorized agent of the State at owner's expense. All animals found to be diseased will be disposed of as directed by the deputy State veterinarian.

Who may inspect.—Federal or State veterinarians or graduate veterinarians authorized by the deputy State veterinarian.

Official.—Deputy State veterinarian, Lincoln, Nebr.

NEVADA.

Horses, mules, and asses.—Health certificate, including mallein-test certificate. Physical examination of stallions and jacks for dourine. Certificate and records of mallein test mailed to State quarantine board, veterinary division, University of Nevada, Reno, Nev., on day of shipment.

Cattle.—Health certificate, including tuberculin-test certificate for dairy and breeding cattle. Exception made in case of range cattle transferred from the ranges of other States to the ranges of Nevada. In lieu of certificate of inspection owner must mail a statement giving the origin and destination of shipment and the number of bulls, cows, steers, and calves included in same.

Hogs.—None.

Sheep.—Before entrance into State for grazing must notify board (State sheep commission) or any inspector in writing. Notice not required for sheep in transit unless they remain in State or are unloaded to feed and rest for a longer period than 48 hours.

Who may inspect.—State veterinarians, veterinarians of agricultural colleges and experiment stations, Federal veterinary quarantine officers, or graduate veterinarians certified to by State veterinarians or live-stock sanitary officials.

Officials.—State quarantine board, veterinary division, University of Nevada, Reno, Nev.; executive officer, State sheep commissioners, Lovelace, Nev., or secretary State sheep commission, Reno, Nev.

NEW HAMPSHIRE.

Horses, mules, and asses.—None.

Cattle.—Health certificate, including the tuberculin test for all cattle except calves under 6 months old. Permits allowing shipment will be issued upon receipt of test charts approved by proper live-stock sanitary officials of the State in which shipment originates.

Hogs.—None.

Sheep.—None.

Who may inspect.—Veterinarians approved by proper live-stock sanitary officials of State of origin.

Official.—Commissioner of agriculture (division of animal industry), Concord, N. H.

NEW JERSEY.

Horses, mules, and asses.—None.

Cattle.—Health certificate for dairy and breeding cattle, including tuberculin test.

Hogs.—None.

Sheep.—None.

Who may inspect.—Official veterinarians of the State or competent veterinarians whose health certificate is approved in writing by State officials.

Official.—Secretary State board of health, Trenton, N. J.; secretary commission on tuberculosis in animals, Trenton, N. J.

NEW MEXICO.

Hoses, mules, and asses.—Health certificate.

Cattle.—Health certificate, including tuberculin test, for dairy cattle or cattle intended for the breeding of dairy cattle.

Hogs.—Subject to hog laws of 1915. Details obtained from the cattle sanitary board, Albuquerque, N. Mex.

Sheep.—Health certificate. Bucks must be dipped at unloading point.

Who may inspect.—Official veterinarian, State or Federal, for cattle. Sheep must be inspected by a Federal veterinarian before shipment and by State inspector at destination.

Officials.—Secretary cattle sanitary board, Albuquerque, N. Mex.; secretary sheep sanitary board, Albuquerque, N. Mex.

NEW YORK.

The movement into the State of New York of domestic animals suffering from any contagious or infectious disease is prohibited, and persons bringing such animals into the State are held responsible.

Horses, mules, and asses.—Must be free from contagious or infectious disease. Such animals from States bordering on New York are required to be shipped subject to health certificate either before or after entrance into the State. Ophthalmic test is accepted as an official test.

Cattle.—Neat cattle for dairy or breeding purposes must be accompanied by certificate of health showing satisfactory tuberculin-test record, such test to be made by a veterinarian approved by proper official of his State, or if not so accompanied must be held in quarantine at destination within State until duly examined by a representative of the State department of agriculture and released.

Hogs.—Must be free from contagious or infectious disease.

Sheep.—Must be free from contagious or infectious disease.

Who may inspect.—Federal inspectors, inspectors indorsed by the proper official of the State from which the shipment comes, and the commissioner of agriculture, or duly authorized representatives.

Official.—Chief veterinarian, Albany, N. Y.

NORTH CAROLINA.

Horses and asses.—Health certificate when for breeding purposes.

Cattle.—Health certificate, including certificate of tuberculin test when for breeding or dairy purposes.

Hogs.—Health certificate for breeding purposes.

Sheep.—Health certificate for breeding purposes.

Who may inspect.—State veterinarians or any veterinarian whose certificate he will indorse; also United States inspectors.

Official.—State veterinarian, Raleigh, N. C.

NORTH DAKOTA.

Horses, mules, and asses.—Health certificate, including mallein test made within 30 days prior to entry into State. Certificate for stallions should, in addition, show the animals to be free from infectious, contagious, or transmissible disease or unsoundness.

Cattle.—Health certificate for all cattle. Cattle over 6 months of age that can be used for breeding or dairying purposes must be accompanied by tuberculin-test chart health certificate.

Cattle that originate or are shipped from the States of New York and Wisconsin and South St. Paul, Minn., must be accompanied by certificate issued by a veterinary inspector of the

United States Bureau of Animal Industry. Test and inspection must be made within 30 days of shipment.

Swine.—Health certificate stating that no infectious swine disease exists or has existed in locality from which the shipment originated within 6 months prior to date of shipment, unless the swine are certified by a duly accredited Federal or State veterinarian as having been immunized by the Dorset-McBride-Niles hog-cholera immune serum. Swine brought into State for exhibition purposes at State and county fairs must be accompanied by a certificate stating that such swine have been immunized by the Dorset-McBride-Niles hog-cholera serum.

Sheep.—Health certificate showing them to be free from scabies, lip-and-leg ulceration, or exposure thereto within 30 days prior to date of shipment.

All live stock of any class originating in the State of South Dakota destined to the State of North Dakota must be accompanied by a certificate of health issued by a veterinary inspector of the United States Bureau of Animal Industry or by a veterinarian registered by the United States Bureau of Animal Industry to test horses going to Canada.

Who may inspect.—Federal, State, or deputy state veterinarian or graduate veterinarian whose inspections are indorsed by officials in charge of live-stock sanitary work in the State where inspection is made.

Duplicates of all certificates must be forwarded to the live-stock sanitary board, Bismarck, N. Dak. Certificates issued by veterinarians failing to do this will be refused recognition.

All tests and inspections must be made within 30 days of shipment of stock.

Officials.—State veterinarian, Bismarck, N. Dak.; bacteriologist, Agricultural College, North Dakota; State live-stock sanitary board, Bismarck, N. Dak.

OHIO.

Horses, mules, and asses.—None.

Cattle.—Health certificate, including tuberculin test for dairy and breeding cattle 6 months of age and over. Tuberculin test must be made within 6 weeks prior to the importation of cattle into this State.

Hogs.—None.

Sheep.—None.

Who may inspect.—Inspectors of the United States Bureau of Animal Industry, veterinarians in the employ of the State board of agriculture, and veterinarians whose competency, trustworthiness, and reliability are vouched for by the authority in charge of the control of animal diseases in the State from which the animals are shipped.

Official.—State veterinarian, Columbus, Ohio.

OKLAHOMA.

Horses, mules, and asses.—Health certificate showing mallein test and stating particularly that stock is free from ticks.

Cattle.—Health certificate, including tuberculin test for dairy or breeding cattle.

Hogs.—For purposes other than immediate slaughter, certificate showing that they have not been exposed to hog cholera for at least 6 months previous to time of shipment and that cars containing them were cleaned and disinfected; that they were not loaded or unloaded en route into public stockyards or stock pens.

Sheep.—None, other than compliance with Federal regulations when shipped from areas under quarantine for scabies.

Who may inspect.—State veterinarians or graduate veterinarians from a school recognized by the United States Bureau of Animal Industry.

Official.—President, Oklahoma State board of agriculture, Oklahoma City, Okla.

OREGON.

Horses, mules, and asses.—Health certificate, including mallein, complement-fixation, or other officially accepted test. Imported stallions and mares coming direct from European ports need not be mallein tested.

Cattle.—Health certificate, except for immediate slaughter, including tuberculin test for all dairy and breeding cattle. All cattle excepting settlers' and homesteaders' effects, imported into the State of Oregon from that territory east of the Mississippi River and north of the Tennessee-North Carolina north-

boundary line must first receive a written permit from the State veterinarian to be moved into the State of Oregon before such movement can be made. All cattle originating in the States of New York, Wisconsin, or South Dakota must be tuberculin tested by a Federal veterinarian unless otherwise ordered. All cattle from Illinois to be tuberculin tested by Federal veterinarian or veterinarian approved in writing by State veterinarian of Illinois.

Hogs.—Health certificate, except for immediate slaughter, stating that no infectious disease exists or has existed in the locality from which said shipment originated within a period of 6 months prior to shipment. In instances where a veterinarian is so far remote as to prevent examination an affidavit from the owner certifying the animals to be free from exposure to cholera for past 6 months will be accepted in lieu of health certificate. Certificate showing animals to have been immunized by the Dorset-McBride-Niles hog-cholera immune serum is desired where this treatment has been given, stating whether single or double treatment has been given, amount of serum injected, time of injection, and brand of serum used; also, animals must be dipped in a 2 per cent standard disinfecting solution prior to shipment if double treatment has been given; also, animals must be held 30 days after immunization if double treatment has been administered. Disinfected cars, crates, and yards to be used in moving all hogs into or within the State, except those for immediate slaughter.

Sheep.—Health certificate from States in quarantine. Animals must be free from disease. Notice must be given State veterinarian or nearest deputy, stating, by telegraph, telephone, registered letter, or in person, time and place when and where sheep crossed State line, locality from which they came, name and residence of owner or owners and person in control of same, and numbers, brands, and character of the animals. Sheep from quarantined States must be dipped once. Range bucks must be dipped twice after arrival.

Duplicate certificate of inspection to be forwarded this office by veterinarian making inspection, and railroad agent at port of entry into Oregon to forward shipping; also inspection data.

Who may inspect.—Official veterinarians, State or Federal, graduate veterinarians when approved in writing by State veter-

inarian or like officer for animals, excepting sheep. Sheep to be inspected by official veterinarians, if possible, State or Federal.

Officials.—State veterinarian and secretary, State live-stock sanitary board, Salen, Oreg.

PENNSYLVANIA.

Horses, mules, and asses.—Must be free from transmissible diseases.

Cattle.—Apparently healthy calves under 6 months of age and those older for immediate slaughter can be admitted without a health certificate or tuberculin test. Southern cattle for immediate slaughter and those for temporary exhibition purposes can be admitted only on a special permit. All others are to be accompanied by health certificate and a satisfactory tuberculin test.

Hogs.—Must be free from transmissible diseases. Hogs for purposes other than immediate slaughter, if hauled, must be transported in cleaned and disinfected cars or other conveyances. Such swine must not be handled through public stock-yards or pens.

Sheep.—Must be free from transmissible diseases.

Who may inspect.—State veterinarian, officially certified inspectors in the State from which cattle originate, agents of the Pennsylvania State live-stock sanitary board, and inspectors of the United States Bureau of Animal Industry.

Official.—State veterinarian and secretary State live-stock sanitary board, Harrisburg, Pa.

RHODE ISLAND.

Horses, mules, and asses.—Ophthalmic mallein test, either before or after arrival.

Cattle.—Physical examination; if cattle suspicious, tuberculin test ordered by cattle commissioner.

Hogs.—None.

Sheep.—None.

Who may inspect.—Cattle commissioners of Rhode Island.

Official.—State veterinarian, Providence, R. I.

SOUTH CAROLINA.

Horses, mules, and asses.—Health certificate. Mallein test of any exposed animals.

Cattle.—Health certificate, except when intended for immediate slaughter. Tuberculin test for dairy and breeding cattle over 6 months old.

Hogs.—Health certificate, except when intended for immediate slaughter.

Sheep.—Health certificate, except when intended for immediate slaughter.

Who may inspect.—Official veterinarians, State or Federal.

Official.—State veterinarian, Clemson College, S. C.

SOUTH DAKOTA.

Horses, mules, and asses.—Health certificate, including mallein test, ophthalmic test being accepted.

Cattle.—Steers, health certificate; bulls and female cattle, health certificate and tuberculin test, except female cattle shipped direct from Mexico, the States of Texas, Arizona, New Mexico, Nevada, Colorado, Utah, Idaho, Wyoming, and Montana, which will be received on health certificate and affidavit of consignee that same will not be used, sold, or offered for sale for dairy or domestic purposes.

Shipments of female cattle from above points when not made direct must be tuberculin tested, the intradermal test being accepted.

All shipments originating in the State of New York, whether made direct or indirect, must be inspected and tested by an inspector of the United States Bureau of Animal Industry.

Hogs.—For immediate slaughter, health certificate; for breeding purposes, health certificate, and must be shipped in crates or cleaned and disinfected cars, and not loaded or unloaded through any public stockyards.

Sheep.—Health certificate. All bucks and pure-bred sheep for breeding purposes will be held in quarantine at State line or rail or boat destination for 60 days and dipped twice under State supervision. Live-stock sanitary board must be notified of probable time of arrival, that quarantine and dipping may be arranged for.

Who may inspect.—State veterinarian or one of his deputies of the State where shipment originates or an inspector of the United States Bureau of Animal Industry.

Official.—State live-stock sanitary board, Pierre, S. Dak.

TENNESSEE.

Horses, mules, and asses.—Health certificate. Horses, mules and asses originating in a quarantined area quarantined on account of the existence of southern, splenic, or Texas fever outside of the State of Tennessee shall not at any time be transported, driven, or allowed to drift therefrom into any portion of this State unless they are dipped in a standard arsenical solution either at point of origin, in transit, or on arrival at destination.

Cattle.—For breeding and dairy purposes, health certificate, including tuberculin test of all cattle over 6 months old.

Hogs.—Health certificate. Hogs from public stockyards accepted for immediate slaughter only.

Sheep.—Health certificate.

Who may inspect.—State and Federal inspectors or other qualified veterinarians who are approved by the live-stock sanitary control official of the State in which the shipment originates.

Official.—State veterinarian, State Capitol, Nashville, Tenn.

TEXAS.

Horses, mules, and asses.—Health certificate, including mallein test.

Cattle.—Dairy and breeding cattle over 6 months old and cattle for exhibition purposes at any fairs within the State must be accompanied by a certificate of inspection showing them to have been tuberculin tested within 60 days prior to time of entering the State.

Hogs.—Hogs for breeding and stocking purposes or hogs intended for exhibition at any fair within the State must be accompanied by a certificate of inspection showing them to have been immunized by the Dorset-McBride-Niles serum method and to have been dipped or otherwise disinfected in 3 per cent solution of cresol compound, U. S. P.

Sheep.—Health certificate, except when intended for immediate slaughter.

Who may inspect.—Federal, State, or other veterinarians whose certificates are indorsed by officials in charge of the live-stock sanitary control work in the State where inspections are made.

Officials.—Chairman live-stock sanitary commission, Fort Worth, Tex.; State veterinarian, Fort Worth, Tex.

UTAH.

Horses, mules, and asses.—No horses, mules, or asses shall be admitted into the State unless accompanied by health certificate, including mallein-test chart; and no stallions or jacks shall be admitted unless accompanied by certificate showing that they are not afflicted with dourine, and mares must be certified to as being free from contagious abortion, the tests to have been made not more than 20 days next prior to date of shipment from State of origin.

Cattle.—For dairy or breeding purposes, health certificate stating that they are not affected with contagious abortion, and that they have been examined and subjected to the tuberculin test within 40 days prior to shipment and are free from tuberculosis or other contagious disease. In tuberculin and mallein tests at least 3 temperatures must be taken before the injection of tuberculin or mallein, and these not more than 3 hours apart, and 4 temperatures taken after injection not more than 2 hours apart, and beginning not earlier than 10 hours after injection.

Swine.—All swine shipped into the State must be accompanied by health certificate stating that they are free from any infectious or communicable diseases and that no such disease has existed on the premises from which the swine were shipped for a period of at least 6 months prior to shipment. Further, said certificate must show that the swine have been immunized by the Dorset-McBride-Niles hog-cholera serum within 10 days of the date of shipment.

Who may inspect.—Veterinary inspectors of the United States Bureau of Animal Industry, State or deputy State veterinarians of the State in which the shipment originated.

Official.—State inspector, Salt Lake City, Utah.

Sheep.—When any owner or person in charge of sheep desires to bring such sheep into the State from an adjoining State they shall notify the State board of sheep commissioners in writing of such intention at least 10 days before entering the State, indicating the time and place where such sheep shall enter. Provided, however, that no notice will be required when sheep are in transit through the State on railroad cars.

Officials.—President and secretary State board of sheep commissioners, Salt Lake City, Utah.

VERMONT.

Horses, mules, and asses.—Must be accompanied by one of the three documents enumerated below:

(a) Permit from Vermont live-stock commissioner as for cattle.

(b) Certificate of inspection and mallein test by a veterinarian whose competency and reliability are certified to by the authorities charged with the control of live-stock sanitary work in the State in which inspection has been made.

(c) Certificate of inspection and mallein test signed by an inspector in the employ of the United States Bureau of Animal Industry.

Cattle.—Must be accompanied by a permit from Vermont live-stock commissioner specifying the number of head and the State or country from which shipment is made and destination in Vermont.

Hogs.—None.

Sheep.—None.

Who may inspect.—Live-stock commissioner and his veterinarians. Tests made in another State for shipment into Vermont are accepted when approved by the proper official of that State.

Official.—Live-stock commissioner, White River Junction, Vt.

VIRGINIA.

Horses, mules, and asses.—None.

Cattle.—Health certificate for dairy and breeding cattle, including tuberculin test made within the preceding four months.

Hogs.—Brought into Virginia for purposes other than immediate slaughter to be accompanied by certificate of health by qualified veterinarian properly indorsed by officials of State of origin showing animals to be free from cholera or exposure thereto for period of 6 weeks prior to shipment. Said certificate of health must be presented to State veterinarian of Virginia and approved by him before the animals shall be received into State.

Sheep.—None.

Who may inspect.—Inspectors of the United States Bureau of Animal Industry, State veterinarians, and qualified veterinarians whose certificates are approved in writing by the State veterinarian or live-stock sanitary official of the State in which animals originate.

Official.—State veterinarian, Richmond, Va.

WASHINGTON.

Horses, mules, and asses.—Physical inspection.

Cattle.—Tuberculin test for dairy and breeding cattle and special permit from the commissioner of agriculture.

Hogs.—Physical inspection and immunization.

Sheep.—Physical inspection.

Who may inspect.—State veterinarian, assistant State veterinarians, and inspectors of the United States Bureau of Animal Industry.

Official.—Commissioner of agriculture, Olympia, Wash.

WEST VIRGINIA.

Horses, mules, and asses.—Certificate of good health from approved veterinarian.

Cattle.—Tuberculin test for dairy and breeding cattle over 6 months old; certificate of good health from approved veterinarian for feeding and grazing cattle.

Hogs.—Certificate of good health from approved veterinarian.

Sheep.—Certificate of good health from approved veterinarian.

Who may inspect.—State veterinarians or their assistants and inspectors of the United States Bureau of Animal Industry.

Official.—Commissioner of agriculture, Charleston, W. Va.

WISCONSIN.

Horses, mules, and asses.—Health certificate for native horses. If from localities where glanders is prevalent, all shall be mallein tested. Range horses, branded western, mallein tested.

Cattle.—For dairy, breeding, or when mingled with or intended to be mingled with breeding or dairy cattle after being shipped into the State of Wisconsin, tuberculin test prior to shipment if 6 months old or over. Shipments of calves less than 6 months old shall have statement filed with the bill of lading that the calves are from tuberculin tested dams and fed on milk from clean herds. The term “feeders,” “stockers,” or “stock cattle” shall be construed as applying to cattle to be shipped into Wisconsin intended or used for immediate feeding purposes, to be held on certain designated premises and not mingled with dairy or breeding cattle or cattle intended for dairy or breeding purposes. The owner or shipper or his agent who shall be in charge of such cattle shall file a certified statement with the State veterinarian that the cattle contained in such shipment will not be mingled with dairy or breeding cattle, and that he will in no manner dispose of same to anyone within the State of Wisconsin unless for immediate slaughter within 10 days; that such cattle will remain in his possession until so slaughtered or reshipped out of the State. Such cattle shall not at any time be tuberculin tested after being shipped into the State of Wisconsin unless application has been first filed with the State veterinarian, who will designate a qualified veterinary surgeon to make such test, which shall be at the expense of the owner.

Swine.—Swine shall have certificate of health certifying to one of the following:

1. None shall have been treated with the “double method” within 30 days of shipment. If so immunized, state date of treatment.
2. If from district within 5 miles of hog-cholera outbreak, must either be immune or have had a treatment of “serum alone” not less than 10 days nor more than 30 days before shipment.

From noninfected districts shipment may be made by owner filing a certificate with the carrier, and a copy must also be sent

to the State veterinarian at Madison certifying that such shipment originates from hog-cholera-free district.

Who may inspect.—Federal, State, assistant State, or veterinarians whose integrity and competency are vouched for by the official in charge in the State of origin.

Official.—State veterinarian, Madison, Wis.

WYOMING.

Horses, mules, and asses.—Health certificate.

Cattle.—Neat cattle, health certificate. All dairy cattle, bulls, and female cattle, registered or pure bred, over 6 months old, health certificate, including tuberculin test. All cattle originating in the States of New York and Wisconsin must be accompanied by Federal health certificate and test chart. Cattle originating in an area under Federal quarantine for any disease must be accompanied by a health certificate issued by an inspector of the United States Bureau of Animal Industry.

Hogs.—For purposes other than immediate slaughter, health certificate showing them free from all contagious, infectious, and communicable diseases and certifying that no infectious swine disease exists or has existed in the locality from which said shipment originated within the period of 6 months; otherwise certificate must show that they have been immunized by the Dorset-McBride-Niles hog-cholera serum not more than 30 days prior to date of shipment.

Live stock of any class originating in the State of Illinois will not be permitted to enter Wyoming.

Who may inspect.—Veterinary inspectors of the United States Bureau of Animal Industry, State veterinarians, or authorized deputies or assistants, or a graduate veterinarian whose reliability and competency are certified to by the proper State authorities in which the animals originate.

Official.—State veterinarian, Cheyenne, Wyo.

Sheep.—Send 10 days' notice to secretary State board of sheep commissioners, Cheyenne, Wyo., inclosing 3 cents for each sheep and 25 cents for each buck. All sheep to be dipped twice at destination within 15 days after arrival in a dip prescribed or recognized by the State board of sheep commissioners for scabies.

Who may inspect.—Federal or State inspectors.

Official.—Secretary-treasurer State board of sheep commissioners, Cheyenne, Wyo.