PUBLIC DOCUMENTS

OF THE

STATE OF MAINE

BEING THE

REPORTS

OF THE VARIOUS

PUBLIC OFFICERS DEPARTMENTS AND INSTITUTIONS

FOR THE YEAR 1918

VOLUME II

REPORT

OF THE

Live Stock Sanitary Commissioner

OF THE

State of Maine

ON

Contagious Diseases of Animals

1918

BOYDEN BEARCE, Commissioner

THE JOURNAL PRINTSHOP
LEWISTON, MAINE
1919

LETTER OF TRANSMITTAL

To His Excellency, Carl E. Milliken, Governor of the State of Maine:

In accordance with the provisions of the Revised Statutes Chapter 35, Sect. 20, I herewith submit my annual report as Live Stock Sanitary Commissioner for the year 1918.

BOYDEN BEARCE,

Commissioner.

FINANCIAL STATEMENT FOR THE YEAR 1918

RECEIPTS

Appropriation	$40,000 00
Bills in excess of appropriation paid from contingent fund	924 81
Total	$40,924 81

EXPENDITURES

Animals condemned, including disinfection of stables	$30,962 26	
Salary—Live Stock Sanitary Commissioner	1,500 00	
Salary—Clerk	500 00	
Salaries—Coöperative Inspectors	2,687 20	
Traveling expenses of Coöperative Inspectors	667 08	
Commissioner's traveling expenses	434 88	
Veterinary services and traveling expenses	2,311 82	
Hog cholera serum	436 23	
Miscellaneous—printing, telephone, express, postage, office supplies	1,201 59	
Railroad mileage	223 75	40,924 81

STATISTICS OF CONDEMNED ANIMALS, 1918

	No.	Amount	Average Per head
Pure blooded cattle condemned for tuberculosis	80	$7,563 00	$94 53
Grade cattle condemned for tuberculosis	315	19,041 00	61 87
Animals condemned at Brighton for tuberculosis	37	999 26	27 00
Cattle condemned for parasitic pneumonia	22	1,258 00	57 18
Animals slaughtered for beef and found tuberculous	26	260 00	10 00
Horses condemned for glanders	38	1,841 00	48 44
	518	$30,962 26	
Cattle condemned for tuberculosis at State Institutions with no appraisal	16		
Imported cattle condemned for tuberculosis without appraisal	7		

Amount paid State Treasurer for hides and carcasses $8,676 74

ANNUAL REPORT

I have the honor to present to the Governor of Maine the seventh annual report of this Department setting forth the financial standing and work accomplished for the fiscal year ending December 31, 1918.

While we believe that the animals of Maine are as free from infectious and contagious diseases as the animals of any other State in the Union we also believe that it is due to the impartial enforcement of the laws enacted by the Legislatures of Maine from time to time, and the ready willingness of the owners and breeders of domestic animals to acquaint themselves with the laws and abide by them.

It is a noteworthy fact that owners and breeders show an increased interest in having their herds healthy and free from contagious disease, their barns and tie-ups under better sanitary conditions. The efforts of the County Agents as they go from place to place are being realized. They are turning men to better agriculture, more and healthier cattle, sheep and swine.

The Federal Bureau of Animal Industry is awakening an interest by the coöperative or free tuberculin test, and the law enacted by the United States Congress October 15th, which allows the payment of $25 for grade cattle and $50 for pure bred cattle which have reacted and been condemned by the coöperative test, will stimulate among the farmers and breeders of cattle a greater desire to have tuberculous free herds.

Two diseases new to Maine but prevalent in many other States have made their appearance among the cattle this year. They are blackleg and parasitic pneumonia or lung worms. We give a more detailed account of them in another section of this report.

Glanders

During the year 1918 the same care and watchfulness has been exercised by the Inspectors of this Department as in former years. Local Boards of Health have been active and every suspicious case reported has been thoroughly investigated. During the year 38 horses have been destroyed at a total cost of

$1,841. In each case the Inspector has given adequate instructions for the disinfection of the stable and the disposal of the carcass and in some cases the Inspector has personally attended to the disposal of the carcass. In each case a liberal amount has been paid for disinfection.

Instructions from this Department require that when a case of glanders is found that all horses that have been associated with the diseased horse shall be tested with ophthalmic mallein, and we believe that these instructions, with a very few exceptions, have been carried out.

An invitation is extended to everybody that if you have good reasons for believing that a horse is diseased with glanders or farcy, to report the case to the Live Stock Sanitary Commissioner, or to a member of your Local Board of Health, and the case will be promptly looked after by an Inspector.

During the year 20 suspicious cases of glanders have been reported to this Department and investigated, and 9 of these cases proved to be glanders. In the remaining 11 cases the horses were suffering from catarrh or nasal gleet.

The following list shows the number of diseased horses destroyed and the towns where they were owned:

Appleton, 1; Bangor, 3; Belfast, 2; Easton, 1; Gardiner, 2; Hartland, 1; Hope, 1; Kenduskeag, 1; Kezar Falls, 1; Lewiston, 1; Lincoln, 2; Monmouth, 1; Plymouth, 1; Portland, 6; Readfield, 1; Sabattus, 1; Sebago, 2; South Windham, 1; Washburn, 2; Wellington, 1; West Scarboro, 3; Wiscasset, 1; Winn, 1; Yarmouth, 1.

Bovine Tuberculosis

Year after year we report the same until the subject of tuberculosis in our cattle and swine is fast becoming a hackneyed phrase to many but the disease itself is not, and it has received more attention and study by the scientist in the field and laboratory, and has been given more space in the press than any other single disease, and we must not lay down the armor but keep constantly at work, each farmer and breeder making sure that his own herd is free and clean until the disease is under control throughout the State. How thankful we would all feel to know that there was not a tuberculous animal in the good old State of Maine. Where there are tuberculous cattle

we are sure to find tuberculous swine and fowl. Make the cattle free from the disease and the swine and fowl will free themselves for the average life of swine is not over eight months and that of fowl over one year. With all of our animals free from tuberculosis what a great help it would be toward eradicating tuberculosis or the white plague from the human family.

We take from the "Veterinary Review" of the August 1917, issue, the following:

The Incidence of Bovine Infection of Tuberculosis in Edinburgh.

The material for this study was obtained from the Royal Hospital for Sick Children and the Royal Infirmary, Edinburgh, and consisted of post mortem material from twenty children, ranging from one to fifteen years of age. When the investigations of previous workers are included, the bacteriological examinations of 281 cases of various clinical forms of tuberculosis in Edinburgh resulted in the isolation of the bovine tubercle bacillus in 78.4 per cent of cases under the age of sixteen years. Abdominal tuberculosis and tubercular meningitis are together responsible for about 90 per cent of the summed mortality from tuberculosis in children under one year, and about 75 per cent in children between one and five years. The material from nine children dead from these two diseases was examined bacteriologically, and from six the bovine type of tubercle bacillus was isolated.

From the prophylactic point of view any measure resorted to in combating the disease should be directed not only against the human spread of infection, but also, and more particularly in the case of children, against the bovine source of infection.

It should be stated that the material used in the investigation was from children of the poorer classes. The results, therefore, should not be held as strictly applicable to the community in general, or as representing the conditions prevailing in other localities where the environment may be widely different.

Summary of Testing By Counties for the Year 1918 Both Co-operative and State Tests

	Cattle in State April 1, 1917	No. tested by State test	No. condemned.	No. tested by co-operative test.	No. condemned.
Androscoggin	14,537	1,172	15	560	14
Aroostook	29,499	1,135	35	201	3
Cumberland	18,950	995	60	109	24
Franklin	14,547	409	17	185	3
Hancock	8,986	32	7	886	28
Kennebec	24,105	534	25	763	18
Knox	7,379	23	0	339	0
Lincoln	9,427	132	4	11	0
Oxford	24,263	801	16	502	7
Penobscot	31,203	899	13	1,323	50
Piscataquis	8,491	192	2	0	0
Sagadahoc	4,688	143	7	143	5
Somerset	22,375	439	1	162	3
Waldo	16,528	52	2	130	1
Washington	10,375	8	1	45	2
York	17,126	850	56	143	21
Total		7,816	261	5,502	17

Cooperative or Free Test

Since the Creamery Companies declined to pay an extra one cent per pound for butter fat from a tuberculin tested herd a large part of the testing has been done by inspectors engaged in the free coöperative test carried on between the State of Maine and the United States Bureau of Animal Industry for the eradication of bovine tuberculosis. At the present time there are four veterinarians engaged in the coöperative test and each veterinary has been assigned four counties as follows: Dr. C. W. Purcell, employed by the State of Maine has York, Oxford, Somerset and Franklin Counties. Dr. P. J. Flagg, employed by the State of Maine, has Hancock, Washington, Waldo and Knox Counties. Dr. F. L. Stevens, employed by the B. A. I. has Cumberland, Androscoggin, Sagadahoc and Lincoln Counties. Dr. D. K. Eastman, employed by the B. A. I., has Kennebec, Penobscot, Piscataquis and Aroostook Counties. We believe that the number of inspectors engaged in this coöpera- the work should be increased to a number sufficiently large to do thorough work in each County. As it is at the present time only a small percentage of the cattle are being tested.

The free area method is being advocated by some and especially the Bureau of Animal Industry, as the best way to thoroughly eradicate bovine tuberculosis. This means to place

the full force into one or two counties, apply the test to every animal in that area, and after a lapse of six months again apply the test taking in the animals that were not old enough at the first test. To do this would require some new legislation in the State for there are a great many owners and breeders of cattle in the several counties who do not believe in the tuberculin test and would object to having their cattle tested unless they were obliged to by the laws of the State. Again cattle from infected areas could not be sold or traded to go into the free area unless upon an approved test or from an accredited herd. This would require new rules and regulations.

List of Herds Officially Accredited As Free From Tuberculosis, And of Herds That Have Passed Successfully One Test with a View to Certification In the State of Maine

The herds under the heading "Accredited" are those accredited by the State officials and the United States Department of Agriculture free from tuberculosis. Those under the heading "Once tested without reactors" have passed successfully one official tuberculin test. A large number of other herds have been tested officially, but as one or more reacting or suspected animals were found in each of them, such herds do not appear in the list. If upon later tests the herds are found to be free from tuberculosis they will appear in subsequent lists.

The following is List No. 1, published July 1, 1918. Other lists will follow as the work advances.

NAME	ADDRESS	Once tested without reactors		Accredited	
		Pure bred	Grade	Pure bred	Grade
Ayrshire					
Dean, Alvin F.	Portland, Me.	15			
Files, E. W.	Portland, Me.			21	2
Prince, J. M.	Walnut Hill, Me.	10	1		
Guernsey					
Brown, Herbert J.	Portland, Me.			10	
Drummond, A. T.	Waterville, Me.	17	2		
Dunning, James A.	Bangor, Me.	7			
Norton, Ralph C.	Portland, Me.	7			
Payson, Herbert	Portland, Me.	2			
Spaulding, F. L.	Augusta, Me.	9	2		
True, Nathan C.	Litchfield, Me.	14			
Hereford					
Brown, E. O.	Augusta, Me.	16	6		
Thomes, Robert S.	Portland, Me.	6			
Holstein-Friesian					
Adams, Silas B.	Portland, Me.	3	2		
Brown, H. J.	Portland, Me.	1			
Cummings, A. D.	South Paris, Me.	26			
Davis, Peter H.	Bangor, Me.	19			
Frank, A. C.	Auburn, Me	3	3		
Gilpatrick, A. W.	Danforth, Me.	16	10		
Hawes, S. H.	West Brooksville, Me.	1	6		
Hobbs, E. T.	Norway, Me.	11			
Knightly, H. A.	Norway, Me.	4	3		
Lyons, M. S.	Calais, Me.	22			
McIntire, L. E. & Son	East Waterford, Me.	32			
Payson, Herbert	Portland, Me.	3			
Tucker, Benj.	Norway, Me.	15	1		
Walker, C. W.	Canton, Me.	2			
Weymouth, Samuel	Gray, Me.	14	9		
Jersey					
Ames, Mrs. J. B.	Castine, Me.	1	19		
Ames, Leslie	Waterville, Me.	4	8		
Blanchard, Fred S.	Cumberland Center, Me.	5	20		
Blanchard, George	Cumberland Center, Me.	31			
Clement & Taylor	Winthrop, Me.	4	7		
Cobb, C. F.	Lisbon Falls, Me.	14			
Gifford, E. S.	Auburn, Me.	18			
Hackett, L. L.	Canton, Me.	18			
Innes, Duncan	Buxton, Me.	14			
Kelley & Cossa	Winn, Me.	31	2		
Lowell, H. P.	North Castine, Me.	2	1		
Miller, M. R.	Union, Me.	2	5		
Moors, Veral	Lee, Me.	1	15		
Moulton, David	Portland, Me.	33			
Page, E. D.	Bangor, Me.	22			
Payson, Herbert	Portland, Me.	1	17		
Perkins, C. V.	Penobscot, Me.	1	5		
Randall, C. S.	Portland, Me.			7	
Robbins, Maurice	Augusta, Me.	1	9		
Smith, Dr. Owen	Portalnd, Me.	18			
Smith, R. W.	East Corinth,	17	10		
Thomes, Robert	Portland, Me.	19			
Thompson, J. F.	Portland, Me.	4	3		
Turner, Mrs. S. M.	Buckfield, Me.	2			
Walker, J. W. G.	Brownfield, Me.	14	9		
Whitehead, Frank	Biddeford, Me.	1			
Wilson, Henry M.	Cumberland Center, Me.	1	9		
Wilson, Willard	Cumberland Center, Me.	9	8		
Milking Shorthorn					
Whitney, H. J.	Bowdoinham, Me.	9	3		

UNITED STATES DEPARTMENT OF AGRICULTURE,
BUREAU OF ANIMAL INDUSTRY

REGULATIONS GOVERNING THE APPRAISEMENT OF TUBERCULOUS CATTLE AND EXPENDITURES ON ACCOUNT OF THE CONTROL AND ERADICATION OF TUBERCULOSIS OF ANIMALS

Effective on and after October 15, 1918.

UNITED STATES DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
WASHINGTON, D. C.

October 11, 1918.

Under the authority conferred by law upon the Secretary of Agriculture the following regulations are hereby prescribed, to govern the slaughter of animals and expenditures on account of the control and eradication of tuberculosis of animals, which, for purposes of identification are designated as B. A. I. Order 260.

These regulations shall become and be effective on and after October 15, 1918.

Secretary.

Regulation 1. Definitions.

For the purposes of these regulations the following words, names and terms shall be construed respectively to mean:

Section 1. The Department: The United States Department of Agriculture.

Section 2. The Secretary: The Secretary of Agriculture of the United States.

Section 3. The Bureau: The Bureau of Animal Industry of the United States Department of Agriculture.

Section 4. Disease: Tuberculosis of cattle.

Section 5. Bureau employees: Inspectors and all other individuals employed in the Bureau who are authorized by the Chief of Bureau to do any work or perform any duty in connection with the arrest and eradication of diseases of cattle.

Regulation 2.—Cooperation with States, Counties and Municipalities.

Upon determination by the Secretary of Agriculture of the existence of tuberculosis in any State, county or municipality, the Chief of Bureau will invite the proper authorities of such State, county or municipality to coöperate with the Department in the control and eradication of such diseases.

Regulation 3.—Cooperative Agreements.

Section 1. If it appears to be necessary for the control or eradication of tuberculosis of animals, to destroy animals affected by that disease and to compensate owner for loss thereof, the Chief of Bureau is authorized within his discretion to agree, on the part of the Department, with the State, county or municipality, to pay one-third of the difference between the appraised value of each animal so destroyed and the value of the salvage thereof, provided, however, that in no case shall any payment by the Department be more than $25.00 for any grade animal, or more than $50.00 for any pure-bred animal.

Section 2. No payment by the Department shall exceed the amount paid or to be paid by the State, county or municipality, where the animal shall be destroyed.

Regulation 4.—Appraisal of Animals.

Section 1. Animals affected with tuberculosis shall be appraised by a representative of the Bureau and a representative of the State, county or municipality, jointly. If the representative of the Department and the representative of the State, county or municipality shall disagree as to the amount of the appraisal or if the owner refuses to accept the appraised value, the animal shall be appraised in accordance with the laws and regulations of the State in which the animals are destroyed.

Section 2. Bureau inspectors in charge of the work of eradication of tuberculosis in any State or in any part thereof may

act as appraisers of animals and may detail competent Bureau employees under their direction to act as appraisers.

Section 3. In the appraisal of tuberculosis cattle due consideration shall be given to their breeding value as well as to their dairy or meat value.

Section 4. Appraisals of animals shall be reported on forms furnished by the Bureau (T. E. Form 23). Reports of appraisals shall show the number of animals, the value of each per head, or the weight and value per pound, and shall be signed by the owner and the appraiser or appraisers and approved by the Bureau representative.

Section 5. Each owner of tuberculosis cattle which have been appraised shall market the cattle within thirty days, and shall obtain from the purchaser a report in triplicate (T. E. Form 24), certifying as to the amount of money actually paid for the animals.

Section 6. When the appraised cattle have been slaughtered and the amount of salvage ascertained (as shown by T. E. Form 24), a report in triplicate (T. E. Form 26), shall be made, signed by the owner and the Bureau inspector in the State, county and municipality in which the animals were appraised and destroyed, showing the difference between the appraised value and the salvage, the amount of money paid or to be paid by the State, county, or municipality, and the amount of money to be paid by the Department; one copy to be attached to the voucher in which compensation is claimed; one copy to be furnished to the proper State, county or municipal authorities, and one copy to be furnished to the owner of the cattle.

Section 7. The representative of the State, county or municipality must furnish a certificate showing the sum or sums to be paid or will be paid by the State, county or municipality to the owner of the animals, as provided for in Bureau Form T. E. 25. Bureau Form T. E. 25 may be used for this purpose, or the information may be furnished on the forms of the State, county or municipality.

Section 8. When the owner of the animals presents his claim to the Department he shall support the same with the original report of the appraisers, Form T. E. 29, the original

report of the sale of the animals (Form T. E. 24), the certificate from the representative of the State, county or municipality, (Form T. E. 25), and a summary of his claim (Form T. E. 26). These four reports shall be attached to the voucher on which claim is made and shall form a part of said claim.

Regulation 5.—Mortgage and Other Liens.

When animals have been destroyed pursuant to these regulations, the inspector in charge shall take reasonable precautions to determine prior to his approval of Vouchers in which compensation therefor is claimed, who is the owner of, and whether there are any mortgage or other liens outstanding against the animals. If it appears that there are outstanding liens a full report regarding same shall be made and shall accompany the voucher. Every such report shall include a description of the liens, the name of the person or persons having possession of the documentary evidence thereof, and a statement showing what arrangements, if any, have been made to discharge the liens, outstanding against the animals destroyed, of which the inspector in charge may have knowledge.

Regulation 6.—Disinfection.

Whenever necessary, in order to prevent the spread of tuberculosis, materials contaminated by, or exposed to the disease, including barns, stables, sheds, barnyards, lots, and other inclosures where diseased cattle were previously confined, shall be disinfected under supervision of a Bureau or State employee.

Regulation 7.—Care and Feeding of Animals Pending Slaughter.

Expense for the care and feeding of animals held for slaughter will not be paid by the Department.

Regulation 8.—Expense of Disinfection of Premises and Conveyances.

Stock yards, pens, cars, vessels and other premises and conveyances will be disinfected, whenever necessary for the eradication of tuberculosis, by the owners thereof at their expense, under the supervision of Bureau or State employees.

Regulation 9.—Claims Not Allowed.

Section 1. No payment shall be made for any animals destroyed on account of tuberculosis unless the owner has complied with all lawful quarantine regulations, and unless the owner shall have executed the forms required by these regulations.

Section 2. The Department will not allow claims arising out of the condemnation of cattle for tuberculosis on a tuberculin test applied by other than a Bureau inspector, or a coöperating regularly employed State, county or municipal inspector.

Section 3. No compensation will be paid to owners of tuberculous animals except for animals in States, counties or municipalities in which coöperative tuberculosis eradication work is being conducted.

Section 4. No compensation will be paid to any owner of tuberculous cattle whose entire herd is not under Federal and State supervision for the eradication of tuberculosis.

Section 5. No compensation will be paid to any owner for tuberculous cattle destroyed in any State, county or municicpality which does not by law, or by suitable action in keeping with its authority in the matter and by rules and regulations adopted and enforced in pursuance thereof, provide inspection of tuberculous animals and for compensation to owners of animals so destroyed.

Section 6. No payment shall be made for any animal or animals destroyed on account of tuberculosis except in coöperation with and supplementary to payments to be made by the State, county or municipality, and unless the destruction of the animal or animals shall take place within the jurisdiction of the coöperating State, county or municipality.

Section 7. No claim for compensation for the destruction of cattle on account of tuberculosis shall hereafter be paid or allowed under the regulations contained in B. A. I. Order 237, dated March 19, 1915, but all such claims shall be presented and paid pursuant to and in compliance with the regulations contained in this order.

Extract from "An Act making appropriations for the Department of Agriculture for the fiscal year ending June thirtieth, nineteen hundred nineteen."

Approved , 1918 (Public, No. .)

"For investigating the disease of tuberculosis of animals, for its control and eradication, for the tuberculin testing of animals, and for researches concerning the cause of the disease, its modes of spread, and methods of treatment and prevention, including demonstrations, the formation of organizations, and such other means as may be necessary, either independently or in coöperation with farmers, associations, State or county authorities, $500,000. Provided, however, that in carrying out the purpose of this appropriation, if in the opinion of the Secretary of Agriculture, it shall be necessary to destroy tuberculous animals and to compensate owners for loss thereof, he may, in his discretion, expend in the city of Washington or elsewhere out of the moneys of this appropriation, such sums as he shall determine to be necessary for the reimbursement of owners of animals so destroyed, in coöperation with such State, counties, or municipaltiies, as shall by law or by suitable action in keeping with its authority in the matter, and by rules and regulations adopted and enforced in pursuance thereof, provide inspection of tuberculous animals and for compensation to owners of animals so destroyed, but no part of the money hereby appropriated shall be used in compensating owners of such animals except in coöperation with and supplementary to payments to be made by State, county, or municipality, where destruction of such animals shall take place; nor shall any payment be made hereunder as compensation for or on account of any such animal destroyed if at the time of inspection or test of such animal or at the time of destruction thereof, it shall belong to or be upon the premises of any person, firm, or corporation, to which it has been sold, shipped or delivered for the purpose of being slaughtered: Provided further, that out of the money hereby appropriated, no payment as compensation for any tuberculous animal destroyed shall exceed one-third of the difference between the appraised value of such animal and the value of the salvage thereof; that no payment hereunder shall exceed the amount paid or to be paid by the State, county, or municipality, where the animals shall be destroyed; and that in no case shall any payment hereunder be more than $25 for any grade animal or more than $50 for any pure-bred animal, and no payment shall be made unless the owner has complied with all lawful quarantine regulations."

Contagious Abortion.

Veterinarians in their general practice during the year 1918 have found and reported many cases of contagious abortion and we realize that there are hundreds of cases in the State that have never been reported. Different treatments have been adminis-

tered by the veterinarians; a few have reported good success with the vaccine treatment, others no success. Carbolic acid, methylene blue and other advertised remedies have been used, but in most cases the contagion has gone through the herd before any halt was made. We are informed that whenever treatment has been successful a change in sanitary conditions, disinfectants, douches, and a better care and cleanliness were the requirements. Sanitary conditions and disinfection are many times more than drugs and medicines.

During my administration the disease of contagious and infectious abortion in cows and heifers has caused me more study and investigation than any other disease among animals, knowing well that from a financial standpoint it has caused more direct and indirect loss to Maine dairymen than all other diseases combined. True, an animal seldom dies with the disease, but when once a herd becomes infected it will remain two or perhaps three years and the owner is without a profit, and many times leaves his best cows only fit subjects for the butcher. The dairymen knowing this will sometimes sell or trade a suspect to a fellow dairyman which is very wrong to do, as it causes others to suffer beside himself.

Early in the year a four-leaved bulletin was issued from this Department on contagious abortion, compiled by six well-known Maine Veterinarians in accordance with their best knowledge and belief. This bulletin is being sent out every day through the mail on its mission and we hope it may prove of value to someone. It is printed in full below.

The idea was conceived in this Department and the consent of the Executive Department was obtained, to hire a competent man on a salary paid from the appropriation of the Live Stock Sanitary Commissioner, to go out among the herds affected with abortion and teach and assist the dairymen in carrying out the principle of disinfection and sanitation as set forth in the bulletin. Owing to the great call for men, and especially veterinarians, to war service, such a man as was needed was not available, but with our Country's return to normal conditions and men returning to their accustomed places, I most sincerely recommend that such a man be placed in the field. I believe this to be the most feasible plan for the benefit and help of the dairymen whose herds are affected with contagious abortion.

BULLETIN ON CONTAGIOUS ABORTION

Contagious Abortion

This is no new dissertation on the disease, but the hope is expressed that it will help some one person to deal with the trouble, and if it does, it will repay the writers.

The chief and best known symptom of the disease is the death and expulsion of undeveloped fetus. Nearly all cases of premature birth in the cow are due to contagion. There is no use in being led into the belief that in our individual case it is due to some accident. Better get right down to the solemn fact that we have contagious abortion to deal with in every case and we will save time and money.

There are many cows that harbor the germ of abortion that deliver live calves. Many of these calves are weaklings that succumb to calf ailments like white scours, calf pneumonia, etc.

An animal may have acquired the infection and not abort, yet spread the disease, so we may have a many sided trouble to deal with.

Some of the sequelae of contagious abortion are retained afterbirth, diseased ovaries, blood poisoning, sterility, etc.

If abortion is not complicated by retained afterbirth, or sterility, it does not markedly affect the health of the individual animal. The act of abortion is not accompanied by any disturbance in condition, more than is seen in normal calving. Consequently the tendency among owners has been to assign other reason than contagion for the first few abortions, because they were loth to believe that it had gained a foothold in the herd.

If the owner, knowing the danger, had taken proper precautions with the first cases, an outbreak might have been avoided.

It has been the practice of some herd owners to sell aborting cows; but this practice is not only morally and economically wrong, but does not serve to eradicate the disease. There is always a tendency towards immunity and more than half the infected cows do not abort a second time. Such a cow would be more valuable in an infected herd than a new but susceptible animal, which in turn would abort and further continue disease in the herd.

The bacilli of contagious abortion disappear from the uterus in from 20 to 40 days and until this time elapses, there is no use

in trying to breed the animal. This period seems to be coexistent with the period of discharge from the animal, consequently we say until the discharge ceases do not try to breed the cow.

This discharge comes from broken down tissue that has been injured by the accident, together with shreds of the afterbirth not fully evacuated or removed, and constitutes a putrid material which if allowed to remain until the mouth of the womb closes and is retained in the uterus, sets up a septic infection of the organ, (septic-metritis, endo-metritis, etc.) which is reflected backwards into the uterine horns and thence to the ovaries, setting up inflammatory action there, (cystic ovaries, degenerated yellow bodies, etc.) and causing sterility.

If you want a sterile cow simply neglect flushing, and ten chances to one you will have her; if you want a breeder flush out this irritating material as fast as it forms (plain boiled lukewarm water, or weak saleratus water), and flush as long as the discharge continues, and ten chances to one you will have a breeder.

As a matter of fact, every cow calving normally ought to be flushed out more or less as a matter of common decency. Not one breeder in fifty attends to this matter as he should and the result is more or less contamination of milk from dirty udders, tails and sides as is well known to all.

Knowing that the milk of an aborting cow contains the bacilli of the disease, it would seem to be inviting trouble to suckle a calf on such an animal if one wants to raise the calf. How much the bacilli of abortion has to do with white scours, etc., is still an open question; how the bacilli get into the udders of virgin heifers (which is well known), and many other questions of similar nature, are still debatable. Sensible it is then not to suckle calves on aborting cows if the calf is worth raising.

Never use a pump to flush the uterus as the membranes will only withstand 2 or 3 pounds pressure without rupturing; use a rubber tube and funnel or douch bag or similar arrangement, and plenty of tepid boiled water. Strong disinfectants do more harm than good setting up straining and irritating the tender tissues, retarding healing, etc. Better clear boiled water than such. On these questions there are as many different opinions

as there are men to ask them, even first class scientists are not wholly agreed upon them all, so use your common sense. Use all your strong disinfectants on the outside and plenty of them, there is no limit.

Common Sense Treatment of Contagious Abortion

Some points that seem to be fairly well settled as to Contagious Abortion are as follows:

That it is very contagious from cow to cow.

That it is contagious from the bull to the cow.

That the mode of entrance is through the teats and from thence to the uterus, as often as any other way. This infection through the teats coming from contaminated floors.

That once the udder is infected that the infection continues for a long time, or year after year, in many cases. In one case (a cow that remained under observation for seven years) periodic tests proved the milk to be infected continuously.

That the milk of infected udders contains the baccilli of abortion.

Farmers' Bulletin No. 790 issued by the U. S. Bureau of Animal industry. page 7, says, "It may be said with safety that at present no reliable cure for abortion is known."

Starting from this standpoint it may be said that there are many means of warding off the contagion from the rest of the herd after one case has taken place, and the most important of these are, removal of the infected cow; disinfecting of the floors; flushing the uterus of the animal; burning or burying the fetus, membranes and discharges; removal of all accumulations of filth by scraping, and the disinfection of the remaining cows and premises.

An aborting cow should be removed to separate quarters where she can receive appropriate treatment. The uterus should be irrigated daily with some mild antiseptic solution, like boracic acid solution made by using 1 ounce of boracic acid to a gallon of water; a solution of bicarbonate of soda (saleratus), 1 ounce to the gallon; or 1 ounce of common salt to the gallon. While it is desirable to irrigate the uterus, it should be done with solutions that are healing rather than germicidal; soothing, and not irritating. Solutions strong enough to kill

bacteria are strong enough to irritate the membranes and do more harm than good, interfering with the proper healing of the uterus after it has been damaged by an abortion or a retained afterbirth, and pave the way for blood poisoning and sterility.

The afterbirth should be removed if it can be skillfully done without injury to the lining membrancs of the uterus, this requiring a competent veterinarian in most cases. If not available, the best plan is to flush daily and let the membranes come away of themselves.

The external genitals, the root of the tail, the escutcheon, etc., should be sponged daily with a good antiseptic and this latter treatment should be given to all nonaborters as well.

The bull should receive attention both before and after every service. The only apparatus necessary for the disinfecting is a soft rubber tube, half an inch in diameter and five feet long, with a funnel at one end or an ordinary fountain syringe and tube would serve the purpose. The tube should be introduced into the sheath and held in position by grasping the sheath with the hand, and the solution allowed to run in by gravity, when it can be distributed by massage.

The floors of the tieup, also the gutters, should be disinfected with blue vitrol (sulphate of copper), 5 ounces to a gallon of water and liberally applied, at least three times a week, remembering that the teats, through contact with the floors, carry the infection to the udder and thence to the uterus fully as much as the bull, or any other known way.

Whitewash all walls and ceilings using a solution to which a good disinfectant has been added.

Many practical breeders are of the belief that carbolic acid is a help towards relieving the other cows in the herd from the risk of the contagion. It is fed in the grain ration to pregnant cows and to non-pregnant as well. One ounce of carbolic acid (crystals) to 16 ounces of water, and fed from 1 to 2 ounces of this solution three times a week constitutes the treatment. It is a great tonic whether it has any other properties or not, but it has many firm believers as to efficiency in overcoming the contagion of abortion and will well repay a trial.

Methylene blue has been proven of little or no account.

Proprietary remedies and other substances have been hailed as specific but many have been discarded as ineffective. Some veterinarians are using the vaccine treatment with good success.

DISINFECTION first, last and all the time will overcome the trouble.

If you own a valuable cow that has become sterile by abortion or any other cause, write the Live Stock Sanitary Commissioner. He may be able to assist you in saving the cow from the butcher.

Blackleg

For the first time for many years, if ever before, our State has been visited with a small outbreak of blackleg. It was discovered in the town of Bancroft, Aroostook County, on the farm of Thomas Fitzpatrick and also on two or three adjoining farms. Dr. E. P. Henderson, the Federal Inspector in Houlton, and one who has had much experience in handling this disease in the West, together with Dr. C. L. Blakely of Davidson, were given charge of the case.

For several years in succession several young cattle have died in the pastures on the above mentioned farms and the cause was attributed to pasture poisoning. On July 1st Dr. Henderson's attention was called to the death of a young heifer and by post mortem decided it to be blackleg, and so reported it to this Department. Vaccines were quickly dispatched to Dr. Henderson and Dr. Blakely, and 31 young cattle were vaccinated on the adjoining farms and all cattle placed in quarantine for three weeks; only one small calf died after the vaccination. Eleven cattle in all died from the disease.

Later specimens from the deceased animals were sent to the Bureau of Animal Industry at Washington and the report confirmed the opinion of Doctors Henderson and Blakely.

It is a critical situation and this disease must be kept under control. Before the cattle go to pasture in the spring of 1919 all cattle in the immediate vicinity of the infected farms should be vaccinated by a competent veterinarian.

Symptoms of blackleg as taken from Circular No. 31, B. A. I. The general symptoms are high fever, loss of appetite, suspension of rumination, followed by great depression. Respiration becomes accelerated, the animal moves around with difficulty,

frequently lies down, and when water is near at hand, drinks at short intervals and but little at a time.

The most important diagnostic feature is the development of a tumor or swelling under the skin. The swelling may appear on any part of the body and limbs, except below the knee or hock joint, or on the tail. It is frequently seen on the thigh or shoulder, and owing to the extensive discoloration of the swollen parts as observed after the animal has been skinned the disease has been properly named "Blackleg."

Tumors may also appear on the neck, the chest, the flank or the rump. At first they are small and very painful but increase rapidly in size and in a few hours cover a large portion of the body. If a slight pressure is made on the tumor a crackling sound is heard, due to the collection of gas in the affected tissue. The tumor is cool to the touch and painless in the center; the skin over it is dry and parchment like.

The swellings usually appear before the general symptoms, and they may even reach such extent as to cause complete paralysis of the affected parts while the animal still looks bright and has a good appetite. This condition is, however, of short duration. As the swellings increase in size the general symptoms become more intense.

The temperature may reach 107° F. while the respiration may exceed 140 per minute. The animal is unable to rise; the extremities become cold and sometime before death the temperature falls and may become subnormal. There is a trembling of the muscles, which as death approaches may develop into violent convulsions.

With very few exceptions the disease terminates fatally, death generally occurring from 12 to 36 hours after the first appearance of the symptoms. A few cases linger from three to four days, and the disease may sometimes terminate in recovery.

Parasitic Pneumonia

Parasitic pneumonia, verminous bronchitis or lung worm is considered by veterinarians as practically the same disease. It is but little known in the State of Maine or at least only two cases have come to the notice of this Department at this writing, yet it is the belief of some veterinarians that the disease prevails to some extent in the State.

The first discovery was made by Dr. DK. Eastman, a Federal Inspector, who was called to apply the tuberculin test to a herd of 19 cattle owned by Nathan Ash of Trenton, Hancock County. Upon a physical examination Dr. Eastman felt sure he had found a herd badly diseased with tuberculosis as several in the herd were emaciated and coughing and breathing heavily. The tuberculin test showed no reactors and the herd was pronounced free from tuberculosis, but Dr. Eastman was positive that some contagious disease was troubling the cattle, but could make no diagnosis satisfactory to himself, and so reported to the Live Stock Sanitary Commissioner. Dr. A. W. Cleaves of Bar Harbor was sent to see the herd and his diagnosis was that it was some contagious disease unknown to him. Arrangements were made and four of the herd were purchased of Mr. Ash and shipped to Auburn for slaughter. The post mortem examination was made by Dr. L. K. Green, the Federal Meat Inspector, in the presence of five prominent veterinaries and myself, and showed the air passages of the lungs of each animal filled with white worms of various lengths and very much resembling coarse white thread. Dr. Green pronounced the disease parasitic pneumonia. Not only is this disease rare among animals but so far as has been learned there is no successful treatment for it. It is regarded as contagious among cattle and is spread by their sneezing and coughing. The remainder of this herd was purchased and slaughtered and the post mortems showed like infection.

The second case of this disease was found by Dr. DK. Eastman in the town of Ludlow, Aroostook County. Three cattle were purchased and slaughtered and post mortem made by Dr. E. P. Henderson, the Federal Meat Inspector at Houlton, who pronounced it verminous bronchitis. Several heifers from this herd are being treated by the owner under directions of a competent veterinary for experimental purposes.

Hog Cholera

Losses from hog cholera during the past year are not unusually heavy but we believe have increased slightly over previous years. Many of the cases are not reported to this Department but where we have been informed of an outbreak the State has

furnished anti hog cholera serum to vaccinate all well hogs of the herd free, and in some cases saved many hogs which otherwise would have died.

The double, or simultaneous treatment, which claims to immune the well hog for life from this disease has been used in a number of herds and with good success. We are not encouraging the use of this treatment to any great extent for the reason that virus is very dangerous when placed in the hands of incompetent persons, while serum alone immunes the pig or hog for from six weeks to three months and is a good promoter to the health of the growing pig.

The Maine Agricultural and Industrial League have brought into Maine 10 carloads of pigs from four to eight weeks old, and distributed them to the Boys' and Girls' Clubs of the State and to the farmers who expressed a desire to keep them for breeding. All of these pigs were examined by an agent from this Department and vaccinated with serum as fast as they were shipped into the State. This was to guard against any disease which swine are subject to.

Nodular Disease

This disease in sheep prevails to an alarming extent throughout the State. We believe it to be one cause why the number and flocks have diminished in the last decade. Good sheep men who in years past have had unlimited success with sheep have lost the knack, become discouraged and sold their flocks without knowing the real cause of their failure.

We are glad to note and to spread the good news that two men are already at work in the State trying to promote the sheep industry; one of these men is a farmer and expert sheep raiser employed by the Maine Department of Agriculture, the other a veterinarian and employed at the University of Maine. The results of their good work are already beginning to be felt.

The rotation of pastures for nodular disease is being experimented with, demonstrations, post mortems and discussions are being held and the results cannot but awaken a greater desire and interest for better and larger flocks of sheep throughout the State.

Disinfection

The disinfection of stables, tieups and places where condemned horses and cattle are taken from is a serious problem. Many do not realize the importance of thoroughly cleaning and disinfecting the stable after the diseased animals have been removed.

When horses and cattle are condemned the inspector is instructed to recommend the best method for destroying the germs that are left in the stable after the animal has been removed, for unless the germs are destroyed it would be useless to remove and slaughter the diseased animals.

The following formula is recommended for wooden cow stables and tieups: First should be a thorough cleaning with brooms to remove all dust and litter, not only from the floor, but from the walls, the ceiling and projections where dust may lodge, and burn the sweepings. All loose boards and decayed woodwork should be removed and burned. In most tieups of the ordinary stable a complete removal of all partitions, both in front and between the cows, and the putting in of new work is the surest way, and where extensive disease has been found, the only way of treating the matter safely. If this is not advisable all the partitions and floors should be washed and scrubbed with a solution of hot lye. In fact the whole interior of the stable should be sprayed with a disinfecting solution. The woodwork should then be whitewashed with a lime wash made from freshly burned lime, adding four ounces of formaldehyde to each gallon of whitewash. When possible the whitewash should be put on with a power sprayer thus driving it into every crack and crevice. No work can be done too thoroughly, and nothing short of thorough work will do.

Pure Bred Stock

The letter which this Department sent out to the pure bred stock breeders on November 21, 1917, calling their attention to the law in regard to selling and transferring pure bred stock without first having them tuberculin tested, has resulted in our issuing this year 294 certificates of sale for pure bred cattle. This includes 161 Jerseys, 93 Holsteins, 17 Ayrshires, 11 Guernseys, 5 Shorthorns, 3 Brown Swiss, 3 Herefords, 1 Dutch

Belted. These were sold and transferred through the Live Stock Sanitary Commissioner's Department to purchasers within the State, and each purchaser now holds a "certificate of sale" showing that the cattle they have purchased have been tuberculin tested, giving the date of test and the name of the inspector who applied the test.

We believe that purchasers and breeders are becoming better acquainted with this law and realizing the importance of its enforcement. Many breeders of pure bred stock object to the law claiming that cattle sold from grade herds for breeding purposes should come under the same requirements. I most assuredly agree for I believe that all cattle in the State should be subjected to the tuberculin test and the day is not far distant when the people themselves will demand it.

The law requiring that pure bred cattle be tested when sold to farmers and breeders is a good law and should be strictly adhered to. Below we print the law in full.

REVISED STATUTES 1916, CHAPTER 35.

Section 17. [P. L. 1917, Chap. 235.] 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 him 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 directions within one year; but this provision shall not apply to calves less than six months old. 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 or more than fifty dollars for each offense.

Hemorrhagic Septicemia

Several sections in eastern Maine have been infected with a disease which has been puzzling some of our best veterinaries. Calves and yearlings that have been in pasture the past season are the ones the disease seems to affect the most. Twenty or more young cattle have died, and probably as many more that have not been reported. Young cattle that have run in the pasture until late in the season, in some instances until the mid-

dle of November, and by eating the dried and frozen forage have reduced their vitality and become more liable to succumb to the disease.

Diagnosis and symptoms of the disease received at this Department would indicate hemorrhagic septicemia, yet anthrax, enteritis and other diseases have been suggested. Measures are being taken and specimens are en route to the Bureau of Animal Industry at Washington for a pathological analysis that we hope may be beneficial in combating the disease.

We draw from Farmers' Bulletin 1018, United States Department of Agriculture, data on hemorrhagic septicemia that may be of aid to some one in diagnosing the disease of some sick animal.

Hemorrhagic Septicemia is an infectious disease, attended with a very high mortality, which attacks various species of animals, especially cattle, sheep and swine. The losses are greatest among young animals, especially those that are thin in flesh and poorly nourished. The disease is a septicemia or poisoning of the blood, wherefore it often runs a short course and the animal dies quickly.

The spread of the disease seems to depend nearly as much upon the condition and susceptibility of the animal as upon the contagious nature of the disease, as thin, poorly nourished young stock most frequently become infected and die.

In cattle the disease develops very rapidly, lasting from 1 to 8 days. There is usually a steady elevation of body temperature until from 104° to 107° F. is reached. The animal refuses its feed. Swelling may appear beneath the skin of the head, throat, or dewlap. These enlargements are somewhat soft and pit on pressure. The tongue is often extensively swollen, and the animal drools and slobbers because of the irration to its tongue and throat. There may be difficulty in breathing, depending on the degree of involvement of the air passages and of the lungs. Occasional coughing may occur. Muscular trembling may be evident. There may be a blood-stained discharge from the nostrils, and strings of mucous may hang from the mouth. Examination of the nostrils often reveals presence of many small hemorrhages, or blood spots, just beneath their lining membranes. The eyelids become highly inflamed and tears flow.

There is an intestinal form in which the changes are found chiefly in the abdominal cavity, or the intestinal form may develop after the disease has appeared in the lungs. The stomach, intestines, and kidneys and the lymph glands belonging to them become studded with hemorrhages of various sizes, and the intestines become intensely inflamed. The consequence is that diarrhoea sets in, and shreds of mucous and bloody droppings are passed. The intestinal form is rare, as most cases show severe involvment of the lungs and the symptoms of croupous pneumonia. The animals may stand with their forelegs wide apart in order to breath more freely. They lose flesh very rapidly, their abdomens become "tucked up," and the eyes quickly become sunken. A staggering gait, caused by extreme weakness sometimes is noticed.

Treatment

Through the use of bacterins animals may be protected experimentally from contracting hemorrhagic septicemia, but in most cases treatment of a fully established case in an animal of any species is quite useless. All apparently well animals should be removed from sick ones by placing them in separate, non-infected quarters. If new cases develop among them in a few days after their removal, the healthy ones remaining should be removed again to another locality. In that way the unaffected animals soon will be out of danger of further contamination, especially if their strength has been supported by an abundance of good feed and water during the separation.

Disinfection of Premises

All stables, sheds or yards that have contained infected animals should be disinfected. The interior of the stables, especially the mangers and manure trenches, should be washed with with a disinfectant, such is liquor cresolis compositus or carbolic acid, 6 ounces to a gallon of water in either case. The yards may be disinfected by the application of a solution made of 5 ounces of copper sulphate to a gallon of water. The best way to apply disinfecting solutions is to use a spray pump such as is used in spraying orchard trees. All refuse and material from the stable and barnyard should be removed to a place not accessible to cattle, sheep, or hogs. The manure should be

spread on fields and plowed under. A plentiful supply of light and air should be provided for the contaminated stables. Open fields or pasture lands are cleansed rapidly by the action of sunlight.

Investigation as to the Existence of Contagious Disease

In the year 1918 more work has been done toward the investigation of contagious diseases than for several years past. Of the 37 cattle condemned at Brighton from Maine every one has been traced and the herds from which they originated, tested. By this investigation 21 tuberculous cattle were found and condemned and slaughtered.

The first of February, 1918, a new regulation was made and signed by the Governor, whereby it became a law, which allowed the payment of $10 for cattle found tuberculous by post mortem when slaughtered for meat, the same to be paid from the appropriation for this Department. The $10 was not offered to reimburse the owner for the animal but for information as to where the animal was purchased and in what herd it originated that the disease might be traced and eradicated. All the herds where these tuberculous cattle originated were tested and included 120 cattle and 11 condemned and slaughtered.

In every instance where sick horses, cattle or swine have been reported to this Department, investigation has been made. The reports of sick animals have come from Veterinaries, Local Boards of Health, Selectmen, County Agents and many times the owners themselves have reported them. From these reports 486 cattle have been tuberculin tested with 55 reactors found which have been destroyed and paid for by the State. Inspectors many times in investigating these suspicious herds have found the cattle suffering from diseases other than tuberculosis but which might be mistaken by the laymen as tuberculosis. Some of the disease found the past year are pyemia, traumatic pericarditis, heaves, pneumonia, forage poisoning and indigestion. By this thorough investigation many animals have been saved from an untimely death as all inspectors are instructed to render such aid and assistance as is possible for the recovery of the animals.

In several instances we have been called to see a cow seemingly in the last stages of tuberculosis, when the whole cause would be the improper feeding of musty or dusty hay. With the care and feeding of any animal a lot of common sense should be mixed thoroughly in as it "aids digestion."

We have had only two reports the past year of tuberculous hogs being found when slaughtered. One of these reports is being investigated at the present time. The other was traced and a herd of 20 cattle given the tuberculin test and four found diseased with tuberculosis. We urge that all cases of tuberculous hogs be reported to this Department as we are sure to find tuberculous cattle where there are tuberculous hogs.

We feel that this investigation is a very essential and important part of the work of this Department and should be continued as far as the appropriation will allow. Every tuberculous herd found and the diseased animals slaughtered may mean the saving of the life of some child from this dreadful disease.

Importation of Horses

There has been a decrease in the number of horses imported into Maine the past year as the following table shows:

	1915	1916	1917	1918
No. of horses	8,379	6,700	11,766	7,440

These figures ought to be entirely obliterated for with all the fine facilities offered in the State of Maine for horse raising, we should be able to produce all that are needed.

The law governing the importation of horses requires that all horses entering Maine shall be inspected on their arrival and this inspection has been carried out in practically all cases. Many of the imported horses were given the mallein test and we are glad to report that no cases of glanders have been found.

Of the 7,440 horses imported, 911 were from Canada, while the balance were about equally divided between second class horses from Massachusetts and vicinity and fresh horses direct from the West.

Importation of Cattle

The following table shows the number of cattle imported into Maine for the past four years:

	1915	1916	1917	1918
Imported from the States,	207	838	2,384	1,159
Imported from Canada,	—	6,876	4,286	4,555

Of the 1,159 imported in 1918, 357 were pure bred cattle and 802 were grade cattle. Of the 357 pure bred cattle there were 220 Holstein, 44 Polled Angus, 27 Guernsey, 16 Jersey, 16 Hereford, 11 Ayrshire, 11 Devon, 8 Shorthorn, 2 Aberdeen Angus, 1 Durham and 1 Dutch Belted. Of the 802 grade cattle, 120 were Hereford steers from Texas, and 201 were Durham and Hereford steers from Canada.

The law governing the importation of cattle requires that all cattle entering Maine shall be tuberculin tested within thirty days of their arrival unless a certificate of tuberculin test satisfactory to the Live Stock Sanitary Commissioner accompanies the cattle. All imported cattle over six months old have been tested on their arrival and four pure bred Holstein animals have been condemned and slaughtered without appraisal and 3 grade cattle, while three more pure bred Holstein cattle are being held under quarantine as suspicious.

It is a hard fight for this Department to get this section of the law enforced. We find a few importers of cattle anxious to comply with the law, others will comply with a little forcing, but there are many who will try all manner of schemes to smuggle cattle into Maine without the required inspection.

Recommendations

It seems fitting at this time to make mention of some changes or amendments in the law governing this Department that ought to be made by the coming Legislature.

The rewriting of the entire law would be in conformity with good judgment, for the reason that there is hardly one section but what contains some word or phrase which ought to be changed or eliminated. Re-writing would seem to be a shorter way to perfect the law than by amendments.

I would suggest that the Governor of the State, the Commissioner of Agriculture and the Secretary of the State Board of Health constitute an advisory board, without pay.

That the amount received from the sale of hides and carcasses become a part of the annual appropriation and to be used as such, and what unexpended balances accrue at the end of the year shall revert to the State Treasury.

That the salary of the Live Stock Sanitary Commissioner be raised from $1,500 to $2,000 per year, and the words in Section 1, "and five hundred dollars for clerk hire," be stricken out.

Conclusion

Public sentiment on any question is continuously changing. Methods that were once used are now laid upon the shelf and new methods, some better and some worse, have been adopted. Along agricultural lines there has been a marked change over previous methods. The Veterinary and Physician of to-day have discarded and laid aside many of the methods and treatments taught by their old teachers, yet the old saying "An ounce of prevention is worth a pound of cure," shines forth brighter than ever, and calls to my mind the following true story which is on file in this office. A wealthy gentleman of New York, who spends his summers at Wood's Hole, Massachusetts, had four children who were unusually strong, healthy and robust. Suddenly these children contracted tuberculosis and a thorough investigation was made. The source of the disease was traced to a Jersey cow which the gentleman had bought to provide what he thought would be good, rich, wholesome milk for his family.

The moral of this true story is, never use the milk of any cow until she has been proven by the tuberculin test to be free from tuberculosis. Many cases of this kind are happening every year.