

MAINE STATE LEGISLATURE

The following document is provided by the
LAW AND LEGISLATIVE DIGITAL LIBRARY
at the Maine State Law and Legislative Reference Library
<http://legislature.maine.gov/lawlib>



Reproduced from scanned originals with text recognition applied
(searchable text may contain some errors and/or omissions)

PUBLIC DOCUMENTS OF MAINE :

1907

BEING THE

ANNUAL REPORTS

OF THE VARIOUS

Departments and Institutions

FOR THE YEAR 1906.

VOLUME II.

AUGUSTA
KENNEBEC JOURNAL PRINT
1907

REPORT
OF
CATTLE COMMISSIONERS

ON
Contagious Diseases of Animals

*Under the Law of 1887, Chapter 19 of Public
Laws of Maine.*

HON. F. O. BEAL, Bangor, *President.*
JOHN M. DEERING, Saco, *Secretary.*
F. S. ADAMS, Bowdoinham, Maine.

AUGUSTA
KENNEBEC JOURNAL PRINT
1907

REPORT.

To His Excellency, the Governor of Maine.

We herewith submit the report of the Cattle Commissioners for the two years commencing Dec. 1, 1904 and ending Dec. 1, 1906, containing our accounts of cattle, horses and sheep condemned and destroyed under the provisions of the law of 1887, chapter 19, relating to contagious diseases among cattle, horses and sheep, and as amended in 1898 and also the new law, passed by the Legislature in 1905, relating to pure blood cattle.

BALANCE SHEET.

Cash on hand Dec. 1, 1904.....	33 71
Received from State Treasurer to pay 1904 deficiency	6349 91
Received from State Treasurer to pay 1905 business	15,000 00
Received from State Treasurer to pay 1906 business	17,500 00
Deposited by J. M. Deering to pay over draft	51 64
Cash received for hides and other sources.....	22 68
	<hr/>
	\$38,957 94
Paid on 1904 deficiency	\$6,292 36
Paid expenses 1905	5,376 40
Paid appraisals 1905	9,766 50
Paid appraisals 1906	10,962 27
Paid expenses 1906	6,382 85
Cash on hand	177 56
	<hr/>
	\$38,957 94

List of expenses and appraisals paid during the year, commencing December 1, 1904, and ending December 1, 1905.

1905	
March 4, John M. Deering.....	\$122 25
March 4, John M. Deering.....	96 45
March 4, John M. Deering.....	132 35
March 13, Lewis B. Harding.....	100 00
March 13, E. R. Fogg.....	33 00
March 13, W. B. Deering.....	60 00
March 13, J. W. Elding.....	15 00
March 13, C. A. Williston.....	25 00
March 13, E. R. Fogg.....	18 00
March 13, Charles E. Cobb.....	12 50
March 13, H. P. Whipple.....	62 50
March 13, E. F. Weymouth.....	20 00
March 13, C. F. Dutch.....	20 00
March 13, A. W. Chadbourne.....	30 00
March 13, Charles E. Cobb.....	216 00
March 13, Fred B. Shackford.....	37 50
March 13, Fred C. Wescott.....	17 50
March 13, Lewis J. Day.....	75 00
March 13, Alvah E. Poland.....	25 00
March 13, Roy Wright.....	22 50
March 13, R. J. Whitten.....	15 00
March 13, Geo. P. Thomas.....	10 00
March 13, J. T. Carvill.....	500 00
March 13, E. R. Fogg.....	38 00
March 13, Cole Bros.	45 00
March 13, C. J. Weymouth.....	23 00
March 13, G. E. L. Thomas.....	32 50
March 13, L. H. Strout.....	50 00
March 13, E. P. Turner.....	925 00
March 13, F. H. Morse.....	25 00
March 13, Howard Elwell.....	18 50
March 13, Randolph Jeffries.....	50 00
March 13, Chas. Holden.....	14 00
March 13, Irvin Ellis.....	50 00
March 13, W. A. Rand.....	32 50
March 13, James Clifford.....	25 00
March 13, M. H. White.....	17 50

March 13, E. N. Dexter.....	25 00
March 13, G. W. Maxim & Son.....	105 00
March 13, G. W. Rich.....	20 00
March 13, M. P. Ames.....	20 00
March 13, M. L. Fickett.....	100 00
March 13, N. E. Fickett.....	225 00
March 13, J. H. Grant.....	100 00
March 13, Peter Gouchey.....	25 00
March 13, R. W. Ellis.....	50 00
March 13, Leroy H. Peckham.....	20 00
March 13, Gideon Hallowell.....	25 00
March 13, B. H. Swift.....	20 00
March 13, J. H. Grant.....	45 00
March 13, Emery C. Purrington.....	20 00
March 13, Emery C. Purrington.....	50 00
March 13, E. R. Patterson.....	25 00
March 13, G. F. Wright.....	25 00
March 13, Sam'l C. Cain.....	9 00
March 13, W. B. Twambly.....	25 00
March 13, W. H. Purrington.....	10 00
March 13, Horatio A. Bickford.....	25 00
March 13, E. A. Taylor.....	20 00
March 13, Chas. W. Nelson.....	25 00
March 13, Howard J. Chandler.....	25 00
March 13, S. L. Bagley.....	45 00
March 13, Watts I. Robinson.....	50 00
March 13, James H. Black.....	50 00
March 13, L. L. Lewis.....	24 00
March 13, C. T. Workman.....	92 50
March 13, G. L. Lowell.....	45 00
March 13, Arthur W. King.....	70 00
March 13, Mrs. Martha Dudley.....	25 00
March 13, O. F. Bradford.....	15 00
March 13, A. P. Brown.....	25 00
March 13, Geo. W. Knowles.....	25 00
March 13, Harry Tasker.....	25 00
March 13, Frank C. Carrier.....	12 50
March 13, G. W. Marden.....	17 50
March 13, Wm. J. Stevenson.....	25 00
March 13, Geo. W. Donniss.....	50 00

March 13, E. J. Flemelling.....	17 50
March 13, B. R. Brackett.....	15 00
March 13, Great Northern Paper Co.....	75 00
March 13, M. B. V. Mitchell.....	120 00
March 13, F. E. Leslie.....	16 00
March 13, A. Joly.....	23 41
March 13, D. T. Moore.....	10 00
March 13, Edward C. Gowell.....	15 00
March 13, H. M. Moulton.....	15 50
March 13, C. W. Purcell.....	29 30
March 13, C. R. Smith.....	10 00
March 13, F. L. Sally.....	76 00
March 13, B. H. Swift.....	2 00
March 13, C. L. Wakefield.....	23 00
March 13, F. B. Darling.....	16 00
March 13, James Clifford.....	2 00
March 13, E. C. Walker.....	6 00
March 13, R. E. Freeman.....	30 00
March 13, F. S. Adams.....	262 64
March 13, W. E. Fairbanks.....	73 65
March 13, W. E. Fairbanks.....	225 00
March 13, W. E. Fairbanks.....	153 35
March 13, R. E. Freeman.....	9 00
March 13, Geo. H. Bailey.....	19 20
March 13, Geo. H. Bailey.....	48 60
March 13, G. W. Coulliard.....	5 00
March 13, F. C. Dwinell.....	2 00
March 13, D. D. Winslow.....	10 00
March 13, A. D. Howden.....	5 00
March 13, D. D. Winslow.....	7 00
March 13, A. L. Murch.....	109 10
March 13, James H. Black.....	68 00
March 13, E. A. Taylor.....	3 00
March 13, Chas. Nelson.....	5 00
March 13, F. O. Beal.....	202 60
March 25, Chas E. Atwood.....	10 00
March 20, John M. Deering.....	188 60
March 24, John M. Deering.....	122 60
March 31, C. W. Purcell.....	62 57
March 31, John A. Skillings.....	25 00

April 5, Andrew A. Sholes.....	20 00
April 12, H. M. Moulton.....	18 00
April 19, Herbert A. Goodwin.....	17 50
April 19, W. H. Emery.....	17 50
April 19, H. S. Johnnette.....	40 00
April 19, A. N. Edgecomb.....	37 50
June 19, John Randall.....	20 00
June 19, Edward A. Harding.....	25 00
June 19, J. W. Perry.....	9 00
June 19, F. B. Snow.....	22 50
June 19, Joseph Chadbourne.....	25 00
June 19, Albion Gerry.....	14 00
June 19, E. R. Fogg.....	15 00
June 19, B. M. Fernald.....	17 50
June 19, A. W. Harvey.....	10 00
June 19, Cole Bros.	40 00
June 19, Harry Magrath.....	17 50
June 19, D. W. Bragdon.....	22 50
June 19, C. J. Weymouth.....	18 00
June 19, E. H. Jordan.....	187 50
June 19, E. R. Fogg.....	20 00
June 19, Robert Merrill.....	20 00
June 19, John W. Clark.....	20 00
June 19, Abner Smith.....	20 00
June 19, C. J. Weymouth.....	26 00
June 19, C. A. Churchill.....	20 00
June 27, Orin Smith.....	20 00
June 27, C. F. Dutch	20 00
June 27, Joseph L. Robinson.....	570 00
June 27, E. R. Fogg.....	61 00
June 27, G. L. Thomas.....	10 00
June 27, A. W. Tucker.....	15 00
June 27, Mrs. S. A. Wilson.....	140 00
June 27, O. F. Percival.....	400 00
June 27, W. W. Webber.....	25 00
June 27, Lewis B. Harding.....	277 50
June 27, E. C. White.....	15 00
June 27, W. S. Lord	10 00
June 27, A. S. McDaniel.....	115 50
June 27, Geo. G. Weeks.....	5 00

June 27, Geo. R. Ingliss.....	21 60
June 27, E. C. Walker.....	10 00
June 27, D. D. Winslow.....	30 00
June 27, D. D. Winslow.....	22 00
June 27, Chas. V. Martin.....	25 00
June 27, Fred M. Taylor.....	25 00
June 27, A. Q. Miller.....	50 00
June 27, E. H. Sawyer.....	25 00
June 27, S. P. Sawyer.....	25 00
June 27, H. S. Marr.....	25 00
June 27, F. P. Scribner.....	25 00
June 27, W. H. Buck.....	15 00
June 27, A. P. Small.....	275 00
June 27, H. O. Humes.....	25 00
June 27, A. W. Minot.....	10 00
June 27, W. C. Libby.....	25 00
June 27, J. M. Freeman.....	7 50
June 27, Geo. H. Jones & Son.....	100 00
June 27, Sam'l C. Manley.....	50 00
June 27, R. A. Sturtevant.....	25 00
June 27, J. H. Grant.....	57 50
June 27, Asher Davis.....	25 00
June 27, J. H. Goodrich.....	10 00
June 27, E. J. Bowner.....	25 00
June 27, Dennis C. Small.....	20 00
June 27, E. C. Cobb.....	20 00
June 27, C. W. Farrar.....	17 50
June 27, E. W. Fairbanks.....	88 30
June 27, E. C. Walker.....	20 00
June 27, T. W. Skelton.....	14 75
June 27, W. S. Marr.....	7 00
June 27, J. A. Lyons.....	18 00
June 27, W. E. Fairbanks.....	29 80
June 27, A. P. Small.....	8 00
June 27, W. E. Fairbanks.....	35 25
June 27, F. S. Adams.....	189 10
June 27, R. E. Freeman.....	75 00
June 27, C. R. Nelson.....	15 00
June 27, J. E. Smith.....	40 00
June 27, Alonzo Lowe.....	302 50

June 27, W. D. Clark, Estate.....	20 00
June 27, A. B. Sabin.....	15 00
June 27, C. E. Gilbert.....	75 00
June 27, Great Northern Paper Co.....	175 00
June 27, Chas. A. Chase.....	25 00
June 27, Great Northern Paper Co.....	25 00
June 27, H. R. Bradley.....	50 00
June 27, C. L. Jackson.....	100 00
June 27, H. S. Johnnette.....	150 00
June 27, Walter A. Bragg.....	165 00
June 27, E. J. Beal.....	65 00
June 27, M. M. Tozier.....	25 00
June 27, Wm. H. Norton.....	20 00
June 27, Harvey C. Norton.....	35 00
June 27, G. G. Donniss.....	50 00
June 27, D. D. Winslow.....	10 30
June 27, F. O. Beal.....	124 30
June 27, Geo. Ball.....	6 00
June 27, A. L. Murch.....	35 20
June 27, A. L. Murch.....	37 10
June 27, A. L. Murch.....	67 20
June 27, F. C. Dwinell.....	15 00
June 27, F. C. Dwinell.....	67 00
June 27, Chas. A. Chase.....	3 00
June 27, Alonzo Lowe.....	45 00
June 27, F. E. Cross.....	25 00
June 27, Warren A. Bragg.....	10 00
June 27, H. S. Johnnette.....	5 00
June 27, W. J. Stevenson.....	8 00
June 27, D. V. Deering.....	8 00
June 27, Geo. R. Ingliss.....	106 00
June 27, Geo. H. Bailey.....	80 95
June 24, John M. Deering.....	109 25
July 20, C. L. Southard.....	17 50
July 25, John M. Deering.....	96 55
August 16, E. R. Fogg.....	36 50
August 16, Cole Bros.....	22 50
August 16, Herbert A. Goodwin.....	35 00
August 16, W. S. Gray.....	21 00
August 16, E. R. Fogg.....	25 00

August 16, Cole Bros.	42 50
August 16, Roscoe Libby.....	25 00
August 16, John Buck.....	20 00
August 16, Cole Bros.	17 50
August 16, Percival Baxter.....	50 00
August 16, D. W. Bragdon.....	42 50
August 16, E. R. Fogg.....	20 00
August 16, A. W. Cleaves.....	16 45
August 16, C. W. Purcell.....	43 55
August 16, Portland Rendering Co.....	3 00
August 16, F. L. Bodwell.....	10 00
August 16, W. S. Lord.....	19 20
August 16, O. F. Percival.....	7 00
August 16, W. H. Watson.....	5 00
August 16, Geo. W. Tobey.....	22 50
August 16, Chas. W. Newell.....	40 00
August 16, Mrs. Ellen E. Robinson.....	22 50
August 16, Oliver Wincapon.....	22 50
August 16, Stephen Folsom.....	25 00
August 16, Geo. A. Sanford.....	20 00
August 16, J. H. Beckett.....	20 00
August 16, J. L. Sally.....	48 30
August 16, G. H. McGillicuddy.....	5 00
August 16, G. R. Ingliss.....	57 00
August 16, C. L. Blakeley.....	33 00
August 16, W. S. Fuller.....	5 00
August 16, R. E. Freeman.....	49 00
August 16, E. C. Walker.....	10 00
August 16, F. S. Hopkins.....	3 00
August 16, E. M. Cunningham.....	15 30
August 16, E. M. Cunningham.....	10 38
August 16, F. S. Adams.....	159 05
August 16, W. C. Walty.....	8 00
August 16, Adelbert Benner.....	5 00
August 16, J. H. Black.....	157 00
August 16, A. L. Murch.....	57 20
August 16, F. C. Dwinell.....	71 15
August 16, F. C. Dwinell.....	136 90
August 16, J. H. Craven.....	22 50
August 16, John M. Deering.....	218 35

August 16, Frank E. Whitehead.....	17 50
August 16, Andrew Brainard.....	70 00
August 16, Edgar Wills.....	140 00
August 16, John M. Deering.....	150 25
August 16, C. W. Purcell.....	25 00
August 16, John M. Deering.....	160 00

\$15,142 90

List of expenses and appraisals paid during the year commencing December 1, 1905, ending December 1, 1906.

1906

July 16, Julian S. Cole.....	\$15 00
July 16, E. B. Osgood.....	15 00
August 16, W. E. Marsh.....	12 50
August 16, W. & C. L. Waugh.....	50 00
August 16, Freeman Fairbanks.....	25 00
August 16, Arthur T. Guptill.....	17 50
August 16, O. B. Merrow.....	25 00
August 16, Lewis F. Foster.....	25 00
August 16, C. H. Thomas.....	25 00
August 16, J. A. Oxtan.....	25 00
August 16, Hastings & Smith.....	25 00
August 16, Ernest Lewis.....	25 00
August 16, Hugh Sullivan.....	15 00
August 16, F. E. Wilder.....	15 00
August 16, Frank C. Dwinell.....	25 00
August 16, Mrs. C. H. Lunt.....	22 50
August 16, F. H. Gilbert.....	25 00
August 16, F. F. Rich.....	25 00
August 16, Daniel L. Cole.....	25 00
January 23, Joseph Peabody.....	21 00
January 23, Daniel Cobb.....	20 00
January 23, Geo. Parsons.....	25 00
January 23, Joseph L. Cobb.....	25 00
January 23, Isaac C. Carney.....	17 50
January 23, E. P. Turner.....	25 00
January 23, S. E. Briggs.....	20 00
January 23, Wm. W. Vinal.....	22 50
January 23, John A. Hunniwell.....	50 00
January 23, D. H. Mudgett.....	25 00

January 23, Fred H. Wise.....	25 00
January 23, A. B. Parker.....	20 00
January 23, J. C. Clarey.....	20 00
January 23, A. P. Small.....	27 00
January 23, A. C. Frank.....	75 00
January 23, C. H. Sinclair.....	22 50
January 23, F. O. Beal.....	20 00
January 23, C. B. Jewett.....	20 00
January 23, Geo. S. Lowell.....	65 00
January 23, Chas. E. Fogg.....	60 00
January 23, Willis J. Carlton.....	24 00
January 23, Geo. E. Smith.....	20 00
January 23, L. H. Plaisted.....	15 00
January 23, Rufas Francis.....	15 00
January 23, Nellie Sawyer.....	23 50
January 23, Madison Tripp.....	25 00
January 23, Thomas L. Sargent.....	20 00
January 23, Wm. E. True.....	15 00
January 23, E. E. Peacock.....	25 00
January 23, O. P. Merrill.....	15 00
January 23, C. D. Hasty.....	25 00
January 23, J. B. Oliver.....	62 50
January 23, Cole Bros.	20 00
January 23, D. W. Bragdon.....	20 00
January 23, Cole Bros.	17 50
January 23, J. D. Eaton.....	21 00
January 23, Wint. V. Eaton.....	22 50
January 23, E. J. Littlefield.....	20 00
January 23, Mrs. Ella L. Stevens.....	80 00
January 23, Mrs. C. H. Stevens.....	12 50
January 23, D. W. Bragdon.....	20 00
January 23, Almon J. Johnson.....	25 00
January 23, H. M. Moulton.....	50 00
January 23, Charles I. Weymouth.....	15 00
January 23, Cole Bros.	20 00
January 23, E. R. Fogg.....	78 00
January 23, C. H. Doran.....	22 50
January 23, Geo. M. Ferguson.....	15 00
January 23, Chas. E. Clark.....	19 00
January 23, Frank E. Rollins.....	25 00

January 23, A. F. Hilton.....	15 00
January 23, Richard M. McKenney.....	16 00
January 23, James Bent.....	17 50
January 23, Roy H. Carll.....	20 00
January 23, Chester Hayes.....	15 00
January 23, A. J. McIntire.....	35 00
January 23, G. M. Ferguson.....	20 00
January 23, Frank Robbins.....	15 00
January 23, Chas. I. Weymouth.....	27 50
January 23, C. W. Purcell.....	89 37
January 23, Almon W. Johnson.....	5 00
January 23, A. Joly.....	7 00
January 23, F. L. Bodwell.....	10 00
January 23, John A. Ness.....	7 50
January 23, C. E. Chesley.....	5 00
January 23, W. S. Lord.....	5 00
January 23, J. M. Deering.....	138 39
January 23, S. A. McDaniel.....	60 00
January 23, C. B. Preble.....	125 00
January 23, Oliver N. Rose.....	50 00
January 23, L. C. Shepherd.....	22 50
January 23, John W. Oster.....	15 00
January 23, N. W. Powell.....	25 00
January 23, T. T. Whitney.....	25 00
January 23, Oliver N. Rose.....	450 00
January 23, Warren B. Gardner.....	25 00
January 23, Foster Alexander.....	15 00
January 23, Chas. A. Gammon.....	25 00
January 23, Ernest Howard.....	20 00
January 23, Mrs. Effie Arno.....	25 00
January 23, Mrs. Mary Robbins.....	20 00
January 23, Ernest Graves.....	20 00
January 23, C. C. Giddings.....	20 00
January 23, E. S. Holliss.....	25 00
January 23, Herbert M. Tucker.....	50 00
January 23, W. W. Sewall.....	25 00
January 23, Abner Snepherd.....	17 50
January 23, S. R. Sylvester.....	125 00
January 23, J. R. Lampson.....	15 00
January 23, J. L. Robinson.....	50 00

January 23, Wm. L. Bickford.....	15 00
January 23, J. D. Merrill.....	15 00
January 23, H. C. Butler.....	20 00
January 23, John N. Gladden.....	22 50
January 23, E. K. Hall.....	25 00
January 23, A. S. Hilton.....	50 00
January 23, C. W. Ayer.....	20 00
January 23, A. B. Hanson.....	20 00
January 23, Benj. C. Perry.....	25 00
January 23, G. L. Quint.....	25 00
January 23, J. P. Buswell.....	17 50
January 23, S. R. Sylvester.....	25 00
January 23, Ella M. Eaton.....	100 00
January 23, H. H. Bachelder.....	25 00
January 23, A. Thomas.....	15 00
January 23, G. A. Holt.....	35 00
January 23, Herbert C. Dyer.....	10 00
January 23, John Currier.....	63 75
January 23, Vernon W. Jewett.....	20 00
January 23, Enoch H. Tomlinson.....	20 00
January 23, D. B. Cornish.....	75 00
January 23, James A. Pike.....	25 00
January 23, C. P. Norton.....	25 00
January 23, E. S. Paul.....	25 00
January 23, Felix Hamel.....	25 00
January 23, Cole Bros.	75 00
January 23, E. R. Fogg.....	16 00
January 23, G. H. Hall.....	12 50
January 23, F. B. Snow.....	22 50
January 23, E. R. Fogg.....	40 00
January 23, D. W. Bragdon.....	17 50
January 23, Henry W. Weare.....	12 50
January 23, Frank E. Rollins.....	12 00
January 23, D. Kimball.....	12 50
January 23, G. M. Ferguson.....	20 00
January 23, Cole Bros.	17 50
January 23, Cole Bros.	22 50
January 23, E. R. Fogg.....	20 00
January 23, C. F. Mabery.....	225 00
January 23, Hooper Bros.	50 00

January 23, D. W. Bragdon.....	17 50
January 23, D. W. Bragdon.....	40 00
January 23, Ernest Lewis.....	25 00
January 23, F. S. Sally.....	11 00
January 23, F. E. Freeman.....	83 00
January 23, W. E. Fairbanks.....	14 50
January 23, A. Joly.....	85 00
January 23, J. N. Black.....	10 00
January 23, R. E. Freeman.....	13 00
January 23, John W. Chadbourne.....	6 50
January 23, E. C. Walker.....	3 00
January 23, C. H. McGillicuddy.....	5 00
January 23, C. H. Blakely.....	83 75
January 23, J. M. Sukeforth.....	3 00
January 23, H. L. Stevens.....	11 20
January 23, R. E. Freeman.....	6 50
January 23, R. E. Freeman.....	10 00
January 23, H. L. Stevens.....	11 90
January 23, C. H. McGillicuddy.....	5 00
January 23, J. B. Darling.....	24 00
January 23, F. S. Adams.....	392 65
January 23, R. E. Freeman.....	6 00
January 23, G. R. Ingliss.....	130 00
January 23, S. R. Holway.....	25 00
January 23, Edgar Wills.....	200 00
January 23, J. M. Patten.....	50 00
January 23, J. C. Rackliff.....	10 00
January 23, Gr. North Paper Co.....	50 00
January 23, E. S. Smith.....	25 00
January 23, H. L. Weymouth.....	25 00
January 23, F. T. Bowden.....	25 00
January 23, Thatcher B. Friend.....	25 00
January 23, Frank Ireland.....	23 00
January 23, C. B. Jewett.....	22 50
January 23, C. G. Stearns.....	55 00
January 23, James Coffey.....	25 00
January 23, Harry Hall.....	50 00
January 23, A. A. Knights.....	25 00
January 23, Clara E. Dearborn.....	22 50
January 23, J. D. Wilson.....	25 00

January 23, H. L. Smith	17 00
January 23, Franklin Lawry	25 00
January 23, F. O. Beal	25 00
January 23, H. A. Buck	20 00
January 23, David Marshall	25 00
January 23, Niles B. Jorgenson	20 00
January 23, W. G. Emery	25 00
January 23, H. B. Phillips	25 00
January 23, Geo. E. Lowell	50 00
January 23, P. H. S. Vaughn	20 00
January 23, Joseph Hardy	25 00
January 23, G. W. Hussey	37 50
January 23, Eben B. Moore	25 00
January 23, D. F. Colbey	25 00
January 23, J. P. Grant	37 50
January 23, Mrs. Minnie Buzzell	5 00
January 23, R. Johnson	25 00
January 23, Robert McKeary	15 00
January 23, Willis J. Carleton	37 50
January 23, A. J. Chase	25 00
January 23, W. A. Thompson	15 00
January 23, C. B. Jewett	265 00
January 23, John A. McDonald	15 00
January 23, H. R. Hinton	7 00
January 23, D. O. French	5 00
January 23, C. E. Starks	5 00
January 23, Clara E. Dearborn	3 00
January 23, A. D. Howden	7 00
January 23, C. Frank Dwinell	87 35
January 23, A. L. Murch	188 32
January 23, J. H. Black	128 95
January 23, D. D. Winslow	41 79
January 23, John A. Ness	15 00
January 23, F. O. Beal	288 70
January 23, F. P. Ayer	22 50
January 23, John W. Dowling	25 00
January 23, Jesse R. Atwood	25 00
January 23, Carl R. Harriman	25 00
January 23, Albert Barker	205 00
January 23, Franklin Lawry	20 00
January 23, F. S. Ayer	22 50

January 23, F. P. Ayer	22 50
January 23, Edgar Willis	6 00
January 23, John M. Deering	51 64
January 23, W. E. Fairbanks	200 00
February 5, D. T. Moore.....	25 00
February 5, John M. Deering	148 90
February 18, H. M. Moulton.....	100 00
February 28, John A. Ness	19 20
February 28, James H. Black	15 20
February 28, Thomas Daggett	18 00
February 28, Albert Barker	10 00
February 28, E. W. Fairbanks	285 45
March 8, D. W. Bragdon	15 00
March 13, G. H. Hall	2 50
March 13, Wm. E. True	2 50
March 16, Niles G. Jerguson.....	2 00
March 16, F. C. Dwinal.....	5 00
March 16, J. M. Deering.....	129 59
April 6, C. W. Purcell	104 72
April 6, M. B. V. Mitchell	52 00
April 6, G. F. Wescott	32 50
April 6, G. E. Chesley	5 00
April 6, J. F. Butler	5 00
April 6, A. S. McDaniel	40 90
April 6, F. L. Russell	6 00
April 6, Lewis Fish	7 00
April 6, W. S. Lord	15 00
April 6, Geo. S. Downs	10 00
April 6, A. S. McDonald	5 00
April 6, John M. Deering	117 10
April 6, J. L. Sally	23 00
April 6, C. H. McGillicudy	44 50
April 6, W. E. Fairbanks	108 30
April 6, E. E. Crockett	15 00
April 6, R. E. Freeman	37 50
April 6, E. C. Walker	25 00
April 6, E. C. Walker	9 00
April 6, F. S. Adams	299 90
April 6, L. E. Hollis	3 00
April 6, Town of Readfield	5 00

April 6, F. M. Whitten	4 75
April 6, James Cole	10 00
April 6, J. A. McDonald	20 00
April 6, F. M. Perry	12 00
April 6, F. O. Beal	81 60
April 6, A. L. Murch	73 40
April 6, Lewis Fiske	2 12
April 6, Alfred Murch	24 10
April 6, F. C. Dwinell	18 00
April 6, Thomas Daggett	27 30
April 6, F. A. Merrill	10 00
April 6, R. M. McKeary	2 00
April 9, T. B. Friend	3 00
April 9, D. F. Colby	4 00
April 9, J. P. Grant	5 00
April 9, C. B. Jewett	10 00
April 9, Geo. M. Ferguson	20 00
April 9, Chas I. Weymouth	41 50
April 9, Nellie Sawyer	18 00
April 9, Frank E. Kernard	25 00
April 9, Edwin J. Pinkham	21 00
April 9, Francis Cushing	25 00
April 9, Orin Sands	15 00
April 9, W. H. Pulsifer	12 50
April 9, H. A. Rollins	15 00
April 9, E. S. Paul	25 00
April 6, Wm. D. Sewall	25 00
April 9, Walter A. Gleason	20 00
April 9, Mary E. Stevens	25 00
April 9, C. R. Crockett	125 00
April 9, F. M. Vittum	25 00
April 9, Henry Young	60 00
April 9, Edgar Wills	135 00
April 9, John A. Pape	15 00
April 9, Mrs. C. T. Payne	17 50
April 9, L. B. Wheeler	20 00
April 9, C. A. Staples	22 50
April 9, Grace F. Staples	25 00
April 9, Jasper Hardy	20 00
April 9, Geo. T. Fowler	25 00
April 9, Neil E. Newman	72 50

April 9, Frank Clark	10 00
April 9, J. H. McAloon	151 52
April 9, E. S. Everett	40 00
April 9, E. W. Farrar	20 00
April 26, John A. McDonald	160 00
May 21, Morey & Co.	325 00
May 21, F. E. Rollins	18 00
May 21, W. V. Eaton	20 00
May 21, Cole Bros.	30 00
May 21, Thomas Leland	8 00
May 21, E. R. Fogg	35 00
May 21, G. M. Libby	20 00
May 21, Mrs. T. Wickett	30 00
May 21, Sam C. Hall	70 00
May 21, E. R. Fogg	55 00
May 21, Percy E. Moore	10 00
May 21, Chas. L. Dunn	25 00
May 21, Lewis Kloepfel	20 00
May 21, E. Kelley	15 00
May 21, Chas. H. Brackett	50 00
May 21, Cole Bros.	75 00
May 21, H. J. Libby	25 00
May 21, L. A. Emery	25 00
May 21, D. A. Hurd	25 00
May 21, J. K. Viets	25 00
May 21, Sam'l. C. Starrett	15 00
May 21, J. F. Jennings	22 50
May 21, W. L. Wilkins	12 50
May 21, S. R. Sylvester	25 00
May 21, D. W. Gilbert	235 00
May 21, Harry W. Bowden	30 00
May 21, L. C. Hollis	75 00
May 21, Edward J. Miller	100 00
May 21, Herbert J. Haskell	15 00
May 21, J. T. Carvill	187 00
May 21, W. D. Partridge	15 00
May 21, Geo. Arnold	17 50
May 21, Sam'l. Starrett	60 00
May 21, Daniel Hewinis	17 60
May 21, Otis E. Wells	25 00
May 21, A. E. Eaton	25 00

May 21, C. O. Dickey	175 00
May 21, James Cole	105 00
May 21, G. W. Couillard	20 00
May 21, A. E. Stevens	32 50
May 21, F. A. Thurbough	22 50
May 21, F. A. Merrill	155 00
May 29, John M. Deering	168 85
June 26, Hanson P. Peterson	100 00
June 26, C. W. Purcell	150 00
June 27, Geo. F. Wescott	162 15
June 28, C. F. Traynor & Co.	4 15
July 5, John M. Deering	146 95
July 9, F. S. Adams	134 90
July 9, F. P. Beal	182 85
July 9, Wilcox & Harvey	16 25
July 9, Wm. H. Spear	101 50
July 9, W. S. Lord	182 80
July 9, W. H. Watson	6 50
July 17, W. S. Moore	25 00
July 27, John M. Deering	245 50
August 17, F. S. Adams	133 75
August 17, C. W. Witham	200 00
August 17, J. R. Sawyer	100 00
August 17, J. M. Deering	261 25
August 19, C. H. McGillicudy	56 60
August 21, C. W. Purcell	148 15
September 7, John A. McDonald	330 00
September 26, Portland Rendering Co.	3 00
September 30, E. L. Dyer J. M. D.	23 00
October 12, John M. Deering	141 95
December 17, C. W. Purcell	2 31

\$17,345 12

List of expenses incurred during 1906 that are unpaid, amounting to \$6001.00

A. S. Dyer	14 80
F. W. Brown	13 00
N. H. Hunton	15 00
J. F. Butler	45 00
F. L. Bodwell	10 00
A. L. McDaniel	24 50
B. F. Benner	5 00
A. L. McDaniel	13 50
E. C. Crockett	29 00
E. C. Walker	16 00
John A. Nurse	11 50
R. E. Freeman	10 50
Dr. Brackett	10 60
M. H. White	9 37
F. S. Adams	122 92
Jacon Eastman	15 00
C. M. Knowlton	3 00
Alfred Murch	69 70
F. C. Dwinell	47 00
D. Winslow	15 00
Leland J. Adams	4 00
J. B. Darling	20 00
J. H. Black	153 95
Henry H. Evans	13 00
E. G. Mayes	10 00
C. M. Witham	10 00
C. W. Purcell	36 85
F. R. Sawyer	10 00
G. F. Wescott	110 18
O. S. Higgins	27 00
C. W. Purcell	81 58
A. Joly	147 15
J. T. Carvill	7 00
Lewis Fish	16 25
J. B. Darling	64 50
E. B. Estes	18 00
F. S. Adams	168 57
C. W. Purcell	134 90

S. McDaniel	8 50
M. H. Spear	29 70
Lewis Fish	17 50
C. F. Traynor	8 15
B. B. Hovey	3 00
J. F. Savage	3 00
E. C. Walker	27 75
J. A. Ness	23 60
J. B. Darling	13 00
H. L. Stevens	24 20
E. E. Crockett	17 00
Geo. Robbins	35 60
A. T. Bryant	2 00
J. A. Ness	28 15
W. E. Fairbanks	968 31
F. S. Adams	83 55
I. L. Sally	212 00
A. Joly	212 00
H. S. Stevens	23 70
F. S. Adams	297 02
C. L. Blakeley	149 50
F. L. Russell	180 15
C. W. Purcell	109 66
John M. Deering	627 65
J. F. Gervy	10 00
F. L. Knightly	15 00
J. B. Dowling	135 00
F. O. Beal	606 75
Dr. Jarvis	21 50
H. T. Potter	24 00
F. C. Dwinell	51 00
F. T. Cheney	5 00
Geo. B. York	10 00
Alfred L. Murch	66 32
F. M. Perry	5 00
D. D. Winslow	31 70
A. W. Cleaves	7 00
Alfred Murch	32 90
J. H. Black	103 45
J. H. Black	154 40
Geo. O. Black	8 00

F. M. Perry	3 00
C. F. Stark	3 00
Lewis Daggett	5 00
J. Grant	5 00
E. A. Taylor	10 00
Wm. R. Burleigh	3 00
W. L. Packard	2 00
O. H. Fall	2 00
C. Prescott	3 00
H. Usher	12 00
C. W. Purcell	23 96
Geo. E. Chesley	10 00
Paul Howe	15 00
F. E. Freeman	111 00
A. P. Small	3 00
	<hr/>
	\$6001 00

List of cattle, herds and sheep destroyed during 1906 and remaining unpaid for, \$22,813.75.

1905	
March 4, W. H. Innes	320 00
May 3, W. H. Innes	122 50
1906	
February 9, Frank Parsons	200 00
February 14, Cole Bros.	20 00
February 19, E. R. Fogg	20 00
February 20, Joshua Clark	100 00
February 20, Gilman Deering	25 00
February 20, M. H. Kelley	22 50
February 16, E. R. Fogg	25 00
February 22, Geo. Wormwood	15 00
February 26, E. R. Fogg	25 00
March 11, James T. Williams	25 00
March 12, J. H. Jones	25 00
March 12, Byron Hill	15 00
March 17, E. R. Fogg	20 00
March 30, Mary A. Cole	19 00
March 13, A. F. Hilton	15 00
March 22, Horace Goodwin	25 00

March 22, Clarence P. Chase	17 50
March 15, A. R. Rivers	12 50
March 22, K. M. & A. H. Pillsbury	35 00
March 22, J. Q. A. Jordan	25 00
March 22, R. D. Fickett	25 00
March 29, Andrew J. Guptil	245 50
March 28, Ernest G. Getchell	12 50
March 13, P. C. Whittier	17 50
March 7, Walter Heald	18 00
April 3, Edwin F. Tobes	15 00
April 6, Albert V. Wakefield	12 50
April 6, Wood Chadbourne	15 00
April 6, Charles Clark	21 00
April 13, D. W. Bragdon	40 00
April 13, F. E. Lovejoy	245 00
April 18, Cole Bros.	25 00
April 17, Orrin Sands	40 00
April 19, C. V. Bailey	1230 00
April 25, John Bushey	112 50
April 25, F. A. Skillings	50 00
April 4, Herman Johnscott	20 00
April 24, Roy E. Leighton	25 00
April 5, Wm. G. Colby	20 00
April 5, H. V. Noyes	25 00
April 5, Andrew J. Guptil	20 00
April 5, Chas. E. Clark	20 00
January 30, J. C. Rumrill	25 00
February 8, W. T. Tozier	25 00
February 16, B. F. Brown	20 00
February 19, D. B. Cornish	37 50
February 19, M. H. White	295 00
February 28, J. H. & C. H. Keene	25 00
February 28, E. A. Stover	37 50
March 8, B. L. Tenney	20 00
March 8, N. Young	15 00
March 5, Ernest Bubier	15 00
March 4, Sam'l. Hawkins	25 00
March 4, A. Alton Perkins	17 50
April 13, B. F. Benner	25 00
April 13, J. M. Sturtevant	25 00
April 19, C. V. Bailey	590 00

January 16, John White	15 00
January 15, Jacob Eastman	50 00
December 5, E. L. Ham	20 00
January 26, Joshua Rackliff	10 00
February 15, Charles Pillsbury	25 00
February 16, Luther Hall	25 00
February 21, John H. Perry	45 00
March 1, Frank E. Clark	25 00
March 11, E. F. Tibbetts	20 00
March 16, George O. Black	85 00
March 20, Charles H. King	20 00
April 29, C. M. Knowlton	102 50
March 29, Southworth Bros.	20 00
March 30, J. E. Littlefield	25 00
March 30, Wm. Maxim	25 00
April 22, T. H. Parsons	17 50
April 23, E. M. Merrill	250 00
April 23, C. R. Caswell	25 00
April 21, A. C. Sprague	25 00
April 23, John Jones	25 00
April 30, A. A. Cilley	25 00
April 27, T. A. Skillings	25 00
May 1, Josiah H. Johnson	50 00
May 3, Ira C. Foss	25 00
May 3, H. Maxfield	25 00
May 4, Harvey Merrill	100 00
May 3, E. M. Jacobs	325 00
May 4, W. T. Babb & Son.....	25 00
May 9, E. M. Jacobs	50 00
May 8, Frank P. Cummings	75 00
May 9, A. Lowell	50 00
May 9, C. O. Thomas	25 00
May 11, C. N. Witham	25 00
May 10, Rasmus Jensen	15 00
May 7, Johnson & Doughty	25 00
May 11, Edward Jahanson	22 50
May 12, Wm. T. Lombard	25 00
May 12, Geo. E. Merrill	225 00
May 4, Heard Bros.	70 00
May 4, Chas. H. Chapel	12 50

May 6, L. H. Strout	25 00
May 6, Albert Hall	70 00
May 6, J. E. Harmon	15 00
May 7, Walter H. Rowe	7 50
May 11, C. A. Collins	50 00
May 11, E. R. Fogg	15 00
May 15, Frank Titcomb	25 00
May 15, E. G. Hayes	150 00
May 16, M. H. Shewault	50 00
May 16, C. W. Boothby	15 00
May 16, Almer J. Leighton	25 00
May 15, Geo. H. Chase	25 00
May 16, E. J. Hayes	25 00
May 16, E. G. Hatch	50 00
May 16, R. D. Sawyer	50 00
May 18, Cole Bros.	52 50
May 18, E. R. Fogg	15 00
May 18, E. R. Fogg	60 00
May 15, Howard Cole	20 00
May 15, Percy E. Moore	10 00
May 5, E. B. Osgood	12 50
May 5, Chas. N. Lewis	25 00
May 15, C. W. Lombard	25 00
May 16, Wm. F. Lombard	25 00
May 16, Alphues L. Hanscom	25 00
May 17, Herman B. Billings	25 00
May 18, Wilson S. Roberts	25 00
May 1, John R. Staples	12 50
May 12, B. N. Newcomb	50 00
May 30, W. F. Kuck	25 00
May 16 M. F. Lovell	22 50
May 25, V. W. Carll	25 00
May 21, W. R. Fogg	20 00
May 25, C. Eugene Knights	125 00
May 29, Reuben Westcott	75 00
May 26, Levi W. Sawyer	50 00
May 21, Thomas Foley	20 00
June 11, Thomas Henniges	25 00
May 31, Mather Flaherty	25 00
June 1, Haas Peter Peterson	375 00

June 1, A. S. Doughty	25 00
June 1, C. E. Knights	50 00
June 2, Lewis C. Bates	25 00
June 2, C. M. Jordan	25 00
June 2, J. G. Davis	25 00
June 2, Mrs. A. M. Locke	25 00
June 2, Carl O. Lund	50 00
June 2, Roland Leighton	100 00
June 2, Hans J. Smith	50 00
June 2, A. K. Damon	100 00
June 5, F. H. Gray	25 00
June 6, Van W. Carll	25 00
June 7, C. O. Blackman	25 00
June 8, C. C. Rowe	25 00
June 8, F. P. Waterhouse	175 00
June 13, J. F. Mountford	25 00
June 12, Alvin F. Moulton	75 00
June 12, F. H. Peabody	20 00
May 25, Clarence A. McMakin	50 00
June 15, P. S. Durgin	17 50
June 20, Henry Plaisted	17 50
June 23, Mary Dowe	25 00
February 5, Alvey F. Smith	75 00
June 22, James Campbell	15 00
June 25, Joshua Clark	25 00
June 26, C. M. Sylvester	25 00
June 30, Carrol C. Carter	15 00
June 29, Fred N. Dow	25 00
June 30, Frank E. Rollins	10 00
February 3, Chas. Nelson	25 00
February 3, E. T. Gasson	25 00
February 3, Gibbs Y. Benson	25 00
June 25, Sam'l D. Plummer	25 00
June 1, Cole Bros.	30 00
July 4, Cole Bros.	25 00
July 6, E. R. Fogg	23 00
June 2, Great Northern Paper Co.	25 00
June 14, E. F. Bickford	35 00
July 4, E. J. Willer	25 00
July 14, E. H. Macomber	50 00

July 5, Octave Ayer	25 00
July 6, chas H. Dunn	25 00
July 9, John McThee	25 00
July 10, D. E. Mills	25 00
July 10, Geo. S. Westleigh	25 00
July 10, F. D. Knightly	125 00
July 10, Paul H. Howe	225 00
July 13, Ryerson & Howe	25 00
July 16, G. B. Crockett	25 00
July 21, Arthur H. Savage	10 00
July 24, F. H. DeCosta	25 00
July 21, Chester Casey	25 00
July 24, F. L. Carleton	25 00
July 24, Chas. Edwards	25 00
July 26, Percival Baxter	25 00
July 31, H. C. Edwards	25 00
August 3, O. S. Higgins	850 00
August 6, A. J. Viddetts	21 50
August 7, O. E. Smith	25 00
August 5, D. W. Bragdon	40 00
August 13, Cole Bros.	67 50
March 8, D. B. Willey	127 50
March 21, C. L. Brooks	17 50
March 31, Chas. D. Hasty	25 00
April 3, David G. Standish	25 00
April 12, Mrs. Jos. LaMontagne	15 00
April 14, Chas. Stanley & Sons	25 00
April 18, John Spiller	37 50
April 23, Mrs. Jos. Montagne	25 00
April 23, Wm. F. Hatch	20 00
April 23, James H. Ames	20 00
April 24, W. E. Damon	25 00
April 29, B. S. Clark	45 00
May 5, E. E. Crockett	20 00
May 7, J. R. Shovey	22 50
May 9, L. E. Nuite	74 00
May 12, G. L. Rowe	25 00
May 14, Ira L. Davis	20 00
May 15, N. L. Fickett	25 00
May 22, J. B. Tardill	25 00

May 26, J. Frank Carll	22 50
May 25, Andrew Quint	17 50
May 29, B. F. Moulton	20 00
June 4, Thomas Gauntier	25 00
June 11, Geo. H. Cooley	42 50
June 14, E. E. Young	20 00
June 16, Carroll R. Brown	17 50
June 21, Geo. W. Neil	20 00
April 6, Witherell & Goding	37 50
April 6, Frank E. Clark	25 00
May 17, Chas. T. Oxtan	12 50
June 26, C. A. Dolliver	16 00
June 9, Henry W. Snip	20 00
July 11, James Trickey	20 00
May 11, J. H. Johnson	25 00
June 21, Geo. W. Neil	15 00
June 21, Geo. W. Neil	22 50
June 7, C. S. Pike	37 50
July 17, C. J. Pierce	25 00
July 18, Mrs. Henry Barron	22 50
July 17, Charles F. Tureau	40 00
July 16, H. B. Ellis	50 00
July 17, C. Marshall	22 50
July 17, W. E. Hilton	50 00
July 17, C. Pellis	20 00
July 17, F. Durry	25 00
August 13, Geo. H. Hall	15 00
June 1, Joseph L. Robinson	100 00
August 1, E. R. Fogg	18 00
August 16, R. E. Farnum	25 00
August 16, A. W. Farnum	87 50
August 17, C. H. & S. O. Colby	150 00
August 18, N. Howard	10 00
August 24, Cole Bros.	20 00
August 25, Cole Bros.	25 00
August 28, E. R. Ridlon	20 00
August 29, W. W. Crockett	15 00
August 30, C. N. Witham	25 00
September 2, Fred B. Snow	32 50
September 2, Jas. H. Cote	25 00

September 7, A. A. Strout	25 00
September 7, Jos. L. Robinson	100 00
September 8, Ives H. Iverson	50 00
September 8, J. H. Murch	32 50
September 11, W. T. Hamilton	25 00
September 12, J. N. Murch	15 00
September 15, J. P. Prince	25 00
September 18, Eugene Mills	15 00
September 19, C. S. Lowe	25 00
September 24, Cole Bros.	20 00
October 1, Cole Bros.	35 00
October 18, Cole Bros.	35 00
October 25, Cole Bros.	17 50
September 24, W. H. Dow	15 00
September 26, Augustus Strout	70 00
October 1, Arthur S. Hamilton	25 00
October 4, James F. Gerry	225 00
October 4, F. A. Gerry	75 00
October 4, Fred A. Edwards	25 00
October 17, Johnson Bros.	35 00
October 17, Almon W. Johnson	24 00
October 6, Josiah Littlefield	25 00
June 21, Cyrus K. Spiller	25 00
October 30, B. G. Keene	25 00
November 7, W. H. Hooper	15 00
November 7, Cole Bros.	17 50
November 2, D. W. Bragdon	110 10
November 2, Owen Higgins	100 10
November 2, Cole Bros.	25 00
July 17, Thomas Kelley	17 50
July 17, P. K. Morris	20 00
July 9, E. S. Blodgett	25 00
July 18, Geo. N. Henderson	25 00
July 16, J. H. Elis	50 00
July 18, Ansel Stevens	27 50
July 16, Amber Shepherd	20 00
July 16, Micheal Piel	37 50
July 8, Gilman L. Blake	17 50
August 31, Oliver S. Nater	127 50
August 23, C. B. Bailey	300 00

August 10, John D. Ridlon	25 00
August 22, O. Swanion	25 00
August 9, W. N. Judkins	20 00
September 18, S. E. Fuller	25 00
September 21, B. B. Hovey	25 00
September 20, S. H. Niles	25 00
September 20, Roy R. Hall	50 00
September 17, Geo. A. Sanford	25 00
September 14, D. H. Mudgett	50 00
September 6, A. D. Kelley	25 00
September 3, Noah Bruce	10 00
September 21, John F. Savage	70 00
September 17, R. R. Avery	22 50
October 17, H. H. Bachelder	25 00
October 17, W. S. Stinsen	25 00
October 20, Isaac Cole	27 50
October 22, Henry A. Reed	17 50
October 30, A. D. Knight	325 00
November 2, G. Otis, agent of Elm Hill Dairy Farm	425 00
November 3, John P. Barron	175 00
October 25, G. A. Livery	20 00
November 13, H. P. Richardson	25 00
November 13, W. F. Dunton	800 00
November 16, John P. Hooper	20 00
November 1, A. C. Walker	25 00
November 8, Joseph Bridge Jr.	17 50
November 15, E. W. Hill	50 00
November 19, O. B. Mellow	25 00
November 23, Chas. P. Hamlin	45 00
November 23, C. C. Dorins	75 00
November 24, Elmer Clukey	25 00
November 27, S. V. Harlow	10 00
November 27, F. W. Morrison	300 00
November 30, S. S. George	22 50
November 30, C. E. Dowcott	50 00
November 30, S. H. Whitcomb	122 50
November 2, Wallace Emerson	15 00
November 10, Herbert A. Libby	17 50
November 10, Fred A. Russell	34 00

November 3, Geo. F. Dixon	20 00
November 3, Johnson Bros.	15 00
November 3, Wilbur Dresser	40 00
November 13, Fred A. Small	32 50
November 13, Cole Bros.	10 00
November 25, Jos. L. Robinson	650 00
November 6, A. D. Kilby	24 00
November 26, A. D. Littlefield	25 00
November 20, Jesse Holden	20 00
November 21, Everett Nutting	23 00
November 13, L. Howard Randall	20 00
November 13, E. F. Bickford	21 00
November 14, William M. Edson	17 50
November 12, A. D. Kilby	45 00
November 12, G. H. Hall	12 50
May 17, G. S. Lowell	40 00
May 19, A. V. McLaughlin	20 00
May 23, F. S. Graves	25 00
June 2, Gt. Northern Paper Co.	25 00
June 11, Daniel T. Orr	25 00
June 11, M. B. Whiting	22 50
June 14, Hills Bros.	25 00
June 15, A. Histcock	45 00
June 18, Laura S. Grant	75 00
June 25, F. E. Gunnson	509 00
June 7, Great Northern Paper Co.	25 00
July 2, C. H. Staples	25 00
July 11, J. A. S. Trickey	17 50
July 13, Jas. P. Grant	25 00
July 22, Henry S. Howe	175 00
July 22, Lewis O. Daggett	50 00
July 29, M. R. Trimm	25 00
July 30, Frank Boweden	20 00
July 31, H. E. Ellinwood	24 00
August 10, C. A. Thayer	20 00
August 11, W. A. Banks	25 00
August 15, M. W. Swett	17 50
August 26, Geo. S. Lowell	80 00
August 28, F. P. Ayer	100 00
September 5, E. R. Wentworth	20 00

September 7, E. H. Nickerson	25 00
September 8, E. K. Nickerson	22 50
September 11, H. P. Knights	25 00
September 14, W. H. Haley	50 00
September 18, Arthur W. Shaw	70 00
September 18, F. E. Foster	22 50
September 19, Jas. W. White	25 00
September 30, C. K. Nickerson	42 50
September 30, Fred I. Littlefield	22 50
October 10, John E. Winslow	18 50
October 20, W. S. Dritch	25 00
October 22, Robert Armstrong	22 50
October 23, F. B. Ryans	20 00
October 23, Edward Taylor	75 00
October 6, Jacob Eldridge	25 00
October 11, Fred C. Hanson	25 00
October 5, C. W. Ayer	22 50
October 9, William R. Burleigh	20 00
October 9, C. S. Ward	20 00
October 10, F. S. Rich	290 00
October 10, F. D. Kimball	17 50
October 16, W. L. Packard	47 50
October 20, C. F. Stain	25 00
October 25, N. E. Newman	25 00
October 28, F. H. King	22 50
October 28, Geo. Black	50 00
October 29, Ralph S. French	20 00
October 3, O. H. Fall	20 00
August 15, B. L. Bachelder	440 50
October 22, L. L. Lewis	20 00
September 30, C. L. Thayer	37 50
October 8, Clarence Prescott	25 00
October 11, H. E. Ellingwood	20 00
November 29, Johnson Bros.	10 00
November 30, H. A. McDonald	21 25
December 3, Isaac Hanscom	25 00
December 4, W. F. Durgin	60 00
December 5, S. C. Hall	20 00
December 1, C. W. Boothby	25 00

December 1, A. J. Harmon	15 00
December 1, A. O. Marean	15 00
September 5, A. M. Pilly & Son	25 00
December 11, Walter Howard	12 50
November 29, John Upham	25 00

\$22,813 75

During the two years there have been condemned and destroyed by your commission as follows:

	Cattle.	Horses.	Totals.	Sheep.
1905	626	81	707	
1906	970	47	1,017	381
Totals	1,596	128	1,724	381

AVERAGE COST FOR THE YEAR 1905.

Cattle and horses including all expenses, \$35.25; condemning and destroying including all expenses, \$12.07; owner received per animal, \$23.18.

AVERAGE COST FOR THE YEAR 1906.

Cattle and horses, including all expenses, \$35.77; condemning and destroying, including all expenses, \$12.17; owner received per animal, \$23.60; amount of business done during the two years, paid for \$32,488.02; amount of business done during the two years, not paid for, \$28,814.77.

Total amount of business done during the two years, \$61,302.77.

List of items for the deficiency of 1904 can be found in the 1904 report.

During the years 1903 and 1904 the cattle cost the state an average of \$33.98 including all expenses. It cost an average to condemn and destroy including all expenses \$11.91, the owners received an average of \$22.07.

During the years of 1905 and 1906 under the same conditions, cattle cost \$35.48 each. It cost to condemn and destroy including all expenses of testing 935 pure blood cattle under the

new law and all other expenses pertaining to the business an average of \$12.14; the owners received upon an average, for each animal \$23.34.

More work has been done by the commissioners and more money expended during the last two years than any other two years within the history of the board. And it is the duty of the commissioners to show why more work has been done and more money expended.

The custom previous to 1904 in relation to pure blood cattle being brought into the state for breeding purposes, was for the commissioners to grant permits upon the tests made by the veterinarians in the state where the cattle were bought. The commissioners discovered by destroying several large herds that the disease was traced back to some animal that had been brought in from another state, and used in the herd for breeding purposes; sometimes it would be a male and sometimes a female. This condition of things was reported by the commissioners to the agricultural committee two years ago, and they thought advisable to pass a law whereby all pure blood cattle brought into Maine from another state should be tested by order of the Maine commissioners within thirty days after arrival, and also all pure blood cattle sold within the state should be tested before delivery.

The commissioners had no way of knowing what the expense of this new law would be, but the legislature appropriated about three thousand dollars more, than the commissioners expended in the two years previous, which brought the appropriation up to thirty thousand dollars, for the two succeeding years, 1905 and 1906. The first year the law was in force we condemned twenty-three cattle and the last year, seven, that were brought into the state for breeding purposes. These cattle were destroyed without an appraisal, being a total loss to the owners, on account of the law prohibiting an appraisal upon any animal until it had been owned in the state three years. The record shows that this law has put a check upon diseased animals being shipped into the state for breeding purposes, and in the commission's opinion has made a decided improvement in this line.

And the records show that before the new law was passed, the commissioners' work was confined practically to grade herds

where only about six per cent were found diseased and practically leaving the pure blood herd investigated, where twenty per cent. have been found diseased by enforcing the new law. Now it would not be fair to claim that the new law is responsible for the total number of one hundred and ninety cattle condemned since its enactment, because there probably would have been some found had it not been for the new law, just how many we cannot tell, but it would be a fair estimate to claim that it has caused the condemning of at least one hundred and thirty that we would not have had to pay for had there been no new law. These cattle cost the state nearly fifty dollars each, which will account for sixty-five hundred dollars (\$6500.00) and the estimated extra expense will be at least thirty-five hundred dollars (\$3500.00) making a total of ten thousand dollars (10,000.00) and this will account for so much of the extra amount expended by the commissioners this last year.

The next section of the new law has brought us in contact with nearly all of the pure blood herds in the state, which provided that all pure blood cattle shall be tested when a sale is made, before delivery. When the law was first put into operation we would send out veterinarians to test just the animal that had been sold, and often would be obliged to send veterinarians to the same herd once and often twice in the same month. This we found to be very expensive and we commenced to explain to the owners of the herd whenever they applied to have one or two tested, that we could test the whole herd for nearly the same expense that we could test one for and advised them to have their whole herd tested, as it would be far less trouble to them, as we could guarantee to them that they could sell at any time up to the time limit of the law, by simply sending to us the certificate of the sale. This rule worked satisfactorily to both the commissioners and the owners and has caused the testing of nine hundred and thirty-five pure blood cattle out of which one hundred and sixty have been found diseased and destroyed out of one hundred and thirty-six Maine herds and thirty out of foreign herds. Total one hundred and ninety.

About March first of this year the Portland Board of Health called the attention of the commissioners to the health of the herds then supplying Portland with milk and cream. They com-

plained somewhat, by saying they did not think the herds supplying Portland with milk had received the attention they should have received within the last few years. They were told by the commissioners that Portland had been treated the same as all the other sections of the State, always answering to all applications made and taking care of all animals found diseased, but had never used arbitrary methods and had never ordered the testing of any herds furnishing milk to Portland or any other city in the State, and that the appropriation made by the last legislature was entirely exhausted and it would be a hardship to the farmers if any amount of cattle were found to be diseased to wait until the next legislative meeting for their pay. The Board seemed to be fair in the matter, yet they were persistent and claimed that they had good reasons to believe that there was more or less milk sold that was produced from tuberculous cows. And in order to justify their claim we take the liberty to publish that part of their 1906 report relating to the Bureau of Milk Inspection.

"It is well recognized that milk is a universal article of food, the chief and most necessary and most perfect food for children. It is often the dirtiest of foods, and when it comes from diseased animals, contaminated by barnyard filth and street dust, and distributed in unclean cans or bottles, no process of filtration, pasteurization or sterilization can possibly make a fit food for infants or sick persons. There is no sanitary problem of greater magnitude than the proper control and improvements of the production and sale of milk.

"In January, 1906, the Board of Health took entire charge of the Bureau of Milk Inspection and elected Edgar F. Sweet milk inspector.

"The work of this department had not been very satisfactory. It was found that there was no system in use which would adequately show the work of this department, or by which the progress made in improving the milk supply could be demonstrated. A new system was inaugurated, the milk inspector's office was equipped with apparatus approved by the State Dairy Inspector, and all of the tubes and testing apparatus duly inspected by the State experts and put in first-class condition.

"On making a careful analysis of the situation the Board decided to begin its work in attempting to improve the milk

sold in this city by getting at the source of supply and making a thorough inspection of all cows and dairies. As a preliminary step the Board secured the consent of the owners of three herds of cattle in the vicinity of Portland and had these cattle tested with tuberculin applied by a veterinarian recommended by the Board of Cattle Commissioners.

"There were twenty-seven cows in these three herds, and of this number five were reported diseased. On being killed these animals were found to be badly affected with tuberculosis. The situation seemed to warrant a further investigation, and with the consent of the owners, the Board continued testing cows for tuberculosis. The percentage of diseased cows rapidly increased as the work went on, until it reached sixteen and a half per cent. The Board then decided to require all dealers in milk to show a clean bill of health for their animals before they were given a license or allowed to continue the sale of milk in Portland. The following notice was ordered sent to all milk dealers in Portland:

"Notice is hereby given to the dealers in milk in the city of Portland that the Board of Health of said city requires (in compliance with the rules and regulations relating to the sale of milk within the city of Portland, Maine, approved by Thomas H. Haskell, Associate Justice of the Supreme Judicial Court, June 29, 1897,) that all milk and cream sold or offered for sale within the city limits on and after June 10, A. D. 1906, shall come from cows which have been examined by tuberculin test for tuberculosis, applied by some veterinarian, approved by said Board, and a certificate of such examination, giving the name and residence of the owner or keeper of the cow or cows, and a description sufficient for identification, and the place and conditions as to the food and drink furnished such cow, and showing that such cow is healthy and free from disease, shall have been filed with the Secretary of the Board.

"And notice is further given that the license of all milk dealers in the city of Portland having expired by limitation on the first day of May, A. D. 1906, no license will be recommended by said Board of Health to any dealer in milk in said city who has not complied with the above regulations.

"Attention is called to the provisions of the by-laws of the Board of Health relating to the sale of milk which provides

that any violation of said by-laws by any person or corporation shall be deemed a misdemeanor, and upon conviction thereof such person or corporation shall be punished by a fine of not more than fifty dollars.

“Attention is further called to Section 4 of the “Ordinance Relating to Milk,” which provides that any man who has in his possession milk intended for sale, and who attempts to sell this milk without having been licensed to do so, shall for the first offense be punished by a fine not exceeding twenty dollars and for a subsequent offense, by a fine not exceeding fifty dollars.

“On June tenth, those milk dealers who have complied with the requirements of the Board of Health will be recommended for a license and granted a clean bill of health, and until that date no certificate of health, in addition to those already issued, will be issued any milk dealer in the city.

“CHARLES M. LEIGHTON, M. D.,

“WALTER E. TOBIE, M. D.,

“HARRY M. BIGELOW,

“*Board of Health.*”

The report shows the authority vested in the Board of Health, not only of the city of Portland, but all other municipalities of the State, and it would make no difference with their law or their duties whether there was a cattle commissioner or not, or whether the State appropriated money to pay for animals found to be diseased or not. They have a right by law to demand that all food products shall be above suspicion as far as healthfulness and purity is concerned.

Portland is the largest city in the State, claiming nearly sixty thousand population, and it requires at least six thousand cows to supply the market with milk and cream, supplied principally from three counties, namely, Cumberland, York and Oxford; a small amount comes in from New Hampshire over the Boston & Maine Railroad and quite a good cream supply from the Solon Creamery, Somerset county. There was no general complaint made by the farmers against the test. They did complain, however, to wait so long for their pay and the extra expense paying for testing the healthy animals, claiming that they did not receive enough for their milk and cream to justify

it. The commissioners were satisfied of the fact and set themselves to work among the dealers and producers to raise the price, and succeeded in raising the price of milk one cent per quart and butter fat two cents per pound. It requires at least twenty thousand quarts of milk per day to supply the market, which would make two hundred dollars per day more to the farmers and seventy-three thousand dollars per year. Now this is a large sum of money for the consumers to pay for the purpose of having pure and healthy milk, yet we have no complaint and good feeling seems to prevail among the dealers, consumers and producers. The records show that five thousand one hundred and thirty cows have been tested for the Portland milk and cream supply, and up to date there have been three hundred and ten cows condemned and destroyed, or about six per cent, costing the State approximately seven thousand and seven hundred dollars, making the total expense for the investigation very nearly ten thousand two hundred dollars. Now when we take into account the seventy-three thousand dollars per year rise on the products, it does not seem to be a very bad investment.

Then again it is a good advertisement for our Maine dairy producers. In the early spring Mr. Keating, the British consul, was making inquiry in regard to the healthfulness of our Maine dairy herds and remarked to one of the members of the Board of Health that it would be very gratifying to him to be able to report to his government that Maine was making every effort to keep her dairy herds free from tuberculosis and her dairy products were yet free from suspicion.

Your commissioners have received from the Bureau of Animal Industry at Washington twenty-seven hundred doses of tuberculin free, on condition that a duplicate test shall be sent back to the department in order that our government may know what action Maine is taking in suppressing tuberculosis, and we indirectly understand that the work that has been done at Portland is very satisfactory to the Bureau of Animal Industry at Washington and this will have an influence in holding if not raising the reputation of Maine dairy products. We should always bear in mind that a good price for a good article is far more profitable than a low price for a poor article.

Tuberculous cattle are not all sick, and it should not be understood that way, and there is no doubt that a certain per cent will apparently recover. This fact was practically demonstrated by our work the last year. There were thirty fine and healthy looking cows out of several different herds that showed a characteristic reaction in the spring that were quarantined and dried off and turned to pasture and after running out in the open air two or three months were all taken up and retested by different veterinarians, and out of the thirty five stood the test and were released. They are all on record and all under the observation of the commissioners and will be closely watched and will be retested some time in the future in order to carry out the experiment.

We hear it said occasionally that the commissioners are not getting ahead in the work and that tuberculosis is increasing instead of growing less. And it seemed that way to the commissioners until within the last year, and we wish to call attention to a few facts we have on record and we will take the Solon Creamery section for an example. Within the last few years the commissioners have had considerable trouble in Somerset county, especially around Solon, Embden, Bingham and North Anson, and have destroyed several large herds, and when the commissioners were notified that the patrons of the Solon Creamery were to test their herds, we felt fearful that there would be a large per cent diseased, but after the work was finished it was very gratifying to the commissioners to find, out of over eight hundred cows tested, only two and one-half per cent were found diseased. And still another section where the commissioners have been doing a large amount of work within the last few years, that is located in Oxford county, in the vicinity of the Oxford Creamery at South Paris. By the work that has been done in the past it would seem to be a badly infected section, and yet out of eight hundred cows tested only twenty-six were found to be diseased, or about three per cent. So these two cases and others we might mention seem to be fairly good evidence that wherever we have worked we have made the disease much less. There are sections where there is practically no disease. There were three hundred cows tested around Bryant's Pond and only five found, and in nearly all of the northern towns where farmers raise

their cows, tuberculosis is almost an unknown disease, but in the southern part of the State and along the railroads, in the pure blood section and around the cities and trading centers where cows are kept for milk supply, where they are kept closer and fed higher, in those sections we have yet more work to do, and yet we notice a decided improvement along the line of better ventilation and more exercise, and that the farmers are taking more interest and looking after their herds as far as healthfulness is concerned. Many have an idea that the commissioners believe that the tuberculin test is infallible. This is a wrong impression. We do not, yet it is the best thing to diagnose a case and is used in all countries where tuberculosis exists. Out of the three hundred and ten cattle destroyed at the Portland investigation there were twelve that showed no sign of tuberculosis with the naked eye on the post mortem examination, yet this could not be called a scientific post mortem. Possibly by going farther with a microscope tuberculosis might have been found in nearly all of these cases, yet we record it as four per cent not showing any traces of tuberculosis. Then upon the other hand there were five that did not respond to the test. These cows were wrecks and condemned upon a physical examination and were all found to be very bad cases. And every one who has his herd tested must expect occasionally to find this condition of things, yet the per cent is very small.

Does the tuberculin test injure the animal? This sentiment exists among some farmers who have never had any experience with tuberculosis, that the test injures all animals injected. This is entirely wrong. And it should be understood that tuberculin has no effect only upon tuberculous animals; for instance, if an animal is injected with tuberculin and after twelve or fourteen hours her temperature rises from three to five degrees, then the animal is affected by the test, but if the temperature does not rise, then it has no effect whatever and the animal stands as sound and healthy in every respect as before injection, and it is a settled question by the best authority that the test does not injure sound animals. And the most important question for the Maine dairymen to consider is, whether they will continue to destroy animals by the tuberculin test whenever it is practical or whether they will condemn in the future only by physical examination. While it seems

hard to destroy an animal that has no physical signs of tuberculosis, yet it is a fact, if the same animal is allowed to remain in the herd until she shows the disease sufficiently to make out a case, the chances are ten to one that she has communicated it to the other animals in the herd and in almost every instance this is the way whole herds become tuberculous. Now with the small amount we have in the state as compared with other states, the least of any in the New England states, can the dairymen of Maine afford to allow tuberculosis to increase in their herds by stopping destroying animals that react by the tuberculin test?

The disinfecting of premises is an important factor in our work and requires quite an expense and quite a portion of the commissioners' time in looking after it. It is our intention to have every crib and stall wherever a diseased animal has stood disinfected. We gauge the expense generally by the condition of the animal; for instance, if an animal is found to be only slightly affected not as much is done as when the animal is found to be badly diseased. The expense causes us to use our judgment as to how much shall be done to be safe. There are cases where fifteen to twenty-five dollars have been expended on a single stable. Generally we divide the expense by agreeing for the owner to do the work and the State pay for the disinfectants. We are expending more money and giving more attention to this part of the work than formerly.

Number of cattle tested in Portland investigation, 5,130; number condemned, 310; per cent diseased, 6 of the number tested.

1905 and 1906—Number of pure blood cattle tested, 935; number condemned, 160; number condemned in foreign herds, 30; per cent diseased, 20 of the number tested.

Extra expense incurred by new law, \$10,000.00; cost of Portland investigation, \$10,200.00.

HOG CHOLERA.

In the later part of 1905 it was reported that quite a large number of hogs and pigs were dying in and around the city of Waterville. At first the Commissioners thought, as the law did not provide for an appraisal upon hogs, that we had no jurisdiction over the matter. The disease first broke out upon

the farm of Mr. G. F. Terry and he called Dr. A. Joly of Waterville to diagnose and treat the case. Dr. Joly thought the disease might be cholera and in order to make certain he sent some of the fecal matter and some of the blood to Mr. H. F. Quinn, the State Bacteriologist, who found the bacilli of hog cholera. At this time Mr. Terry called upon the Commissioners and insisted that they ought to do something in the matter, while it was a contagious disease and spreading rapidly and causing a heavy loss upon the farmers in that vicinity. Under these circumstances we felt it our duty under the law to do what we could to stop the spreading of the disease if possible, and suggested to Dr. Joly that he confer with the Bureau of Animal Industry at Washington in order for him to get what information he could upon the matter. He did so and we submit his report upon the results obtained:

Hon. Cattle Commissioners of the State of Maine:

GENTLEMEN: I hereby submit my report of the investigation and work done, during an outbreak of hog cholera, which prevailed in Kennebec and Somerset counties. I was called to G. F. Terry's farm on January 4th, 1906, and was told that the disease appeared sometime in November, 1905, and that about 40 hogs had died. By the symptoms found and history of the disease related, I had reason to believe and suspect hog cholera, so one hog was killed on the premises that day, and post mortem showed ulcers of the bowels, extravasation of blood into the tissues, the spleen enlarged and ulcers present. Some of the fecal matter and some of the blood was sent to the State Bacteriologist, H. F. Quinn, who succeeded in isolating the bacillus of hog cholera.

The Bureau of Animal Industry was asked for instructions; what could be done? if any serum could be used with benefit? Dr. Melvin answered that the Bureau had no serum to recommend and did not believe it to be a practical form of treatment for general use. During this time twenty more pigs died at Terry's farm and two other herds became infected in the neighborhood. After consulting with your board, you authorized me to use the serum treatment and make the necessary investigation and stamp out the outbreak if possible. I sent for a supply of Dr. Vaux's cholera anti-toxin and at the same time I investigated cases which were reported to me. Charles Fuller,

North Fairfield, lost one pig bought at Terry's farm, in December, 1905; A. B. Jenkins of Fairfield Centre lost four, also bought at Terry's farm in December, 1905. Silas Small lost 4, Wm. Hersom lost 3, Fred Pullen lost 2, Maurice McNally lost 7, and Oscar Carroll 12; no connection with Terry's farm could be detected. January 26th, 1906, I began the serum treatment, which requires four injections, one injection on 1st, 2nd, 5th and 21st day. Thirteen head were treated at Terry's farm; all recovered. It might be suggested that the remaining 13 were immune, to which suggestion I will answer that 7 head of those 13 showed temperature over 104, which proved that the disease existed at that time, and furthermore the same day before the inoculation one dead pig was found.

At Oscar Carroll's, who lost 12 head, 9 were bought and placed in the same infected stable. They were inoculated, and all escaped the disease. Fifteen head were treated at P. Rheaume's, where six of them appeared very sick, but only one died.

No other cases have been reported, and I believe the outbreak to be stamped out, and I believe the serum treatment to be a rational one and practical.

In reading the report of the Bureau of Animal Industry one can see that many outbreaks of supposed hog cholera had been successfully treated with cholera anti-toxin; but the Bureau claimed that the diagnosis of the disease was doubtful and it was not advisable to give too much credit to the serum treatment.

There can be no question in the diagnosis of this present outbreak, as the bacteriological findings has proved to be true.

Respectfully submitted,

A. JOLY, D. V. S.

GLANDERS.

We note no increase in glanders this last two years; 128 horses were destroyed during 1905 and 1906, and 128 during the year of 1903 and 1904. The disease seems to prevail mostly among team horses in the eastern part of the State. It is very necessary that every precaution be taken to guard against the spreading of this most insidious disease and in cities or wherever public watering troughs are located it should be the duty of some one to see to it that the troughs are cleaned out and thoroughly scrubbed at least once a week, and veterinarians should be prompt in reporting suspicious cases.

TUBERCULOSIS IN SHEEP.

Tuberculosis among sheep is a very rare disease and within the last ten years we have had but very little trouble in this line. It appears in the Maine Cattle Commissioners' Report for 1896, that trouble was reported with a flock of sheep in the town of Belfast; three of the sheep were killed and their lungs were sent to Dr. Charles D. Smith, who was at that time pathological examiner for the Board. And his report was that "I find masses from the size of a split pea to a marble, which upon examination proved to be tubercular." Since that time we have had no trouble with sheep until this last year, when one case was reported in the town of Belfast and two in the town of Dexter. The two Dexter flocks contained some 350 sheep and lambs and a large proportion of these were pure blooded and very valuable. And at the time they were reported to the Board the disease had advanced to such a stage that they were dying off very fast and after a careful examination it was decided by good authority that the trouble was tuberculosis and the entire flocks were destroyed. We were unable to give the cause of the disease in these two flocks. Yet they were all in one neighborhood and the farms upon which they were owned joined, and as we have had no more trouble we are led to believe that there is no more disease in that section.

There is no question but what the disease was *first brought into Maine by buying it in some way*. Now the pure blood buyers are protected by law, but the grade buyers as yet have no protection and during the Portland investigation the farmers

were continually asking the question, "How can we keep clean after we have cleaned up our herds, when we are obliged to buy others to replenish?"

This is an important question for consideration. It is a fact that where milk producers lose cows that are diseased and go out to buy they are liable to buy diseased cows unconsciously, not being able to detect any symptoms of disease at the time of buying, and possibly in infected sections they have bought a diseased cow, which they would not have bought had they known that the cow would not have stood the tuberculin test. This seemed to be the only complaint made by the farmers against the test in the Portland investigation. There is not a farmer in the State of Maine that wants a tubercular cow in his herd. Yet under the present law he has no protection; he can say to the seller in making the trade, "If you will warrant this cow to stand the tuberculin test I will buy her." This generally ends the trade, for only occasionally will the seller agree to such a proposition. Hence the buyer has to take his chances, and the chances are in some sections of the State that he has bought a tuberculous cow. Now there are two ways to get out of this difficulty; one is by the buyer after he has had his herd cleaned up, to have all animals bought tested; the other is to have a general test by the State, and this would require a change in the law, or an amendment. And while we do not at the present advocate a general test, yet we believe that the time is not far distant when every animal, whether it be pure blood or grade, will be sold under a certificate, certifying that the animal is free from tuberculosis.

The Commissioners are aware that they have expended a large amount of money the last two years and are responsible for many things, but did not take the responsibility of expending one dollar over the appropriation until after consulting the Governor and Council pertaining to the business. And while they are servants of the State, if they have performed their duties honestly and faithfully and in accordance with the law, treating all parties fairly, without fear or favor, then the Commissioners are clear, and the responsibility falls upon the people. And it is only fair and the line of business principles, so long as the people demand the work to be done, that they should see to it through their representatives in the Legislature

that sufficient funds be provided, or in other words the Governor and Council be authorized to pay out of any moneys not otherwise appropriated, whenever the appropriation is not sufficient to meet the demands made upon the Commissioners, as the Commissioners under the present laws are obliged to act whether there is sufficient funds available to pay or not.

And it will make no difference whether there are Cattle Commissioners or not, or whether the State appropriates money to pay for diseased animals or not, the producers of dairy products will find in the future that it will be of great financial advantage to them, to guarantee to the consumers of their products that they are produced from healthy herds. And those who do not look out after this end of the business will be obliged to accept the low price for their products. And in order to bring about a still stronger sentiment among the consumers of dairy products, that the producers are doing all in their power to satisfy them that their products are pure and healthy. We appeal to all educational and scientific sources and especially the agricultural press, to inform the people of all preventives and practical experiments and up-to-date methods in order that they be educated to the latest and most important issues relative to tuberculosis among our herds.

HON. F. O. BEAL, *Pres.*, Bangor.

JOHN M. DEERING, *Secy.*, Saco.

F. S. ADAMS, Bowdoinham.

We have recently received from the U. S. government department of Agriculture, bureau of Animal Industry, Bulletin No. 38, treating upon tuberculosis of the food producing animals, written by D. E. Salmon, late chief of this bureau. The author is a recognized authority upon the subject and is familiar with all of the latest scientific experiments now being carried on, not only in this country but in all other countries in the world wherever tuberculosis exists. It is our opinion that every stock owner and raiser should read and study the contents of this bulletin, and as it is more or less trouble and expense for the farmers to obtain one of these books, and there is so much reliable information in it, we think the farmers of our State should have the benefit of it, therefore we cause a part of it to be published in our report.

TUBERCULOSIS OF THE FOOD-PRODUCING ANIMALS.

INTRODUCTION.

There are few if any subjects connected with animal husbandry upon which more has been written and published within recent years than tuberculosis. It has been discussed in the publications of the bureau of Animal Industry, in the bulletins of many experiment stations, in the reports of live-stock sanitary boards and State veterinarians, and in the columns of the agricultural press. The scientific investigations in relation to it have been extremely numerous and important in their result. Notwithstanding this activity in the discussion and investigation of the disease, however, there is probably no subject upon which there is a greater difference of opinion among the owners of live stock, and none of which the importance is so inadequately appreciated.

It is unfortunate that in the first attempts to control this disease in the United States measures were adopted by some of the State authorities which were so radical and harsh that they aroused the antagonism of the cattle owners, the men who above all others should have been aided and benefited, and that a spirit was developed in the contests that followed which has made it extremely difficult to obtain a dispassionate and impartial consideration of the measures that are required to relieve our farmers from the losses which they are now suffering because of the existence of this disease and to remove the danger of the far greater losses with which they are menaced. A disease so widespread can not be controlled unless those most interested in the live-stock country give their active support to the undertaking. It is therefore wise to examine the subject in an unbiased manner, to study carefully the nature of the disease, to learn as nearly as possible what the losses are, to what extent these losses are liable to increase, and whether measures of

repression are or are not advisable. It is not a question of sentiment, but one of fact, and it should be examined as a business proposition.

The object of this bulletin is to present the facts in as clear and concise a manner as possible, giving the observations and views of the best authorities, and of those who have studied the problem longest and are most competent to express an opinion. These facts should be known and considered, and if it appears that the prosperity of the live-stock industry is threatened, or that serious losses are occurring, appropriate action may be taken to check the losses and to remove their cause. Although tuberculosis is an extremely insidious disease, which may enter the herd by an unsuspected channel and develop to alarming proportions before its presence is suspected, it is nevertheless a preventable and one the control of which may now be undertaken with every prospect of success. But to control or eradicate tuberculosis it is necessary to have a clear comprehension of the peculiarities of the disease, of its cause, of its nature, of its mode of extension, of its detection. It is one of the problems which could not be handled without the aid of science; but now that science has come to the relief of the owner of live stock and has shown him how this plague may be managed successfully, he is in a position to avail himself of this knowledge and to adopt such measures as may be required both to stop the losses which it is now causing and to guard against its reappearance in the future.

It is difficult to imagine anything more discouraging or disastrous to the plans of the young breeder than to discover that in bringing together the foundation elements of his herd he has introduced the infection of this disease, which counteracts his efforts to build up a great herd and gradually exhausts his capital. Nor is the case any the less serious when the infection is introduced into a herd already established and developed by the labor and the study of the best years of the breeder's life. How many breeders have been rendered penniless by the ravages of the tuberculosis bacillus; how many priceless animals have been destroyed by it; how many precious strains of blood has it weakened or annihilated!

And finally there is the influence of the tuberculosis herd upon the community. A herd of animals is not bred simply for the entertainment and use of the breeder, but the primary object is

to produce and sell dairy products, meat, and breeding animals to other people. Is it right to sell a tuberculous animal to go into another breeder's herd when the disease is likely to be carried by that animal, to spread, and to damage or destroy that herd? Is it right to sell tuberculous cattle or hogs for slaughter when we know that many of these animals are slaughtered in establishments where there is no inspection and that the diseased carcasses may consequently be used for human food? Is it right to sell the milk from tuberculous herds knowing that it may be used for the nourishment of the most delicate children, when such milk frequently if not generally contains the tuberculosis bacillus which finds its way to it both through the udder of the diseased cow and the dust of the stable?

These questions, serious from both a moral and a financial point of view, confront the breeder of the present day. There can be no question that the great body of breeders desire to do what is right, and it would appear, therefore, that when a **practicable plan of handling tuberculosis** is demonstrated to them they will not hesitate in adopting it, but will rapidly suppress this disease and eradicate it from their herds.

RELATIONS OF CONTAGION AND ENVIRONMENT TO SPREAD OF THE DISEASE.

While bad sanitary conditions undoubtedly favor the spread of tuberculosis it is not preeminently a disease of poor, neglected, underfed scrub cattle, for the better class of cattle have suffered from it to an even greater degree. It has been constantly imported with pure-bred stock, and has consequently been introduced into the best herds and has extended from these to the dairy herds and common cattle.

The beef cattle coming to our markets are still remarkably free from tuberculosis, but the disease appears to be increasing among this class of animals, as is indicated by the percentage of condemnations in the meat-inspection service. There appears to be no climate and no method of handling cattle which entirely arrests the spread of the disease. This is shown by its existence upon the ranges of our Western States, and to an even **greater extent is the herds of Argentina, Australia, and New Zealand.** Considering that these cattle live in the open air and in climates that have been considered remarkably favorable for

people affected with tuberculosis, we can not but be impressed with the importance of avoiding the use of tubercular breeding stock and thus guarding against the dissemination of this contagion.

There are some portions of the world—as, for example, the northern parts of Norway and Sweden, the steppes of Russia, Iceland, and parts of Africa and South America—where tuberculosis is said to be quite rare. The cattle of the Island of Jersey appear to be free from it. This seems to have been true of the common or native cattle of many countries. In the United States there are numerous sections where the original stock of cattle has been bred without much admixture with the improved breeds and where few outside cattle have been introduced. These sections are generally free from tuberculosis.

It has also been observed in Argentina and other countries that this disease is unknown among the native cattle, but that it has been introduced with the improved breeds from Europe, and is now common with both pure breeds and grades. It is even held by Professor Bang that tuberculosis was brought to Denmark in the first half of the nineteenth century by cattle from Switzerland, Schleswig, and England, and that this method of distribution may now be seen in Sweden and Norway, particularly through the introduction of English cattle.

These facts confirm the conclusions from scientific observation and experimentation that tuberculosis develops only by infection from some existing case of the disease; and that it will be possible in the future, as it has been in the past, for a section of a State to raise cattle that are free from it.

Losses in the industry from tuberculosis have been enormous from decrease in milk and depreciation and death of animals. The dairy herds have been affected to a greater extent than any others, and the infection has as a rule spread through the cows of a herd until 50 to 80 per cent of the animals were affected. In the early stages of the disease the product of the cows is not visibly lessened, but as the tubercular process develops the animals often become feverish, their milk is diminished in quantity, and they lose flesh and are no longer profitable. The losses from shrinkage of the milk and from the destruction of so many cows must be tremendous, but it has never been definitely determined.

An extremely serious phase of this subject is the effect of the disease in destroying valuable families of cattle and blood lines which can never be renewed. In most of the breeds there are certain families or stains of blood which have been developed by long and skilful selection and which represent the one marked success in a breeder's life. The representative animals of such a strain are generally few in number and may all be in one herd. Under such circumstances the introduction of tuberculosis has often meant the annihilation of the strain and the blotting out of the achievements of a lifetime of toil and study. Such losses can scarcely be measured in dollars and cents, but they are no less real and no less serious as an obstacle to the development of the cattle industry.

The losses to the breeders of pure-bred beef cattle have also been and still are so great as to merit the most serious consideration. When the individual animals of a herd are worth hundreds or even thousands of dollars, the introduction of a fatal infectious disease may soon cause the loss of a fortune, and this is just what has occurred upon many a breeding farm. Such a danger, always present and always menacing an industry, must discourage individual efforts and do much to prevent the attainment of lasting prosperity.

The influence upon our export trade of regulations relative to tuberculosis is the most serious disease of animals with which the American farmer is confronted. It is the most prevalent disease of cattle, and is becoming very common with swine. It exists in all parts of the United States, even in the Rocky Mountain region, but is most frequently seen in dairy cattle and in hogs that have been raised in dairy districts. Unfortunately it has also been allowed to propagate itself extensively, in some of the most valuable beef breeds, as, for example, the Shorthorn and the Angus, and its frequency in other varieties of cattle appears to be increasing.

Wherever the disease is located, it is usually made manifest by the formation of a number of tubercles the size of a pin head or smaller. If the tubercles are numerous and situated near to each other, they may become joined together in varying numbers, forming tubercular masses. Both the individual tubercles and the tubercular masses undergo certain changes by which they may become soft, cheesy, or semi-liquid, and in other cases they may become gritty or hard through the depositing

of lime salts. By such changes a lymphatic gland may be greatly enlarged and filled with tubercular material, which, when cut across, is found to be calcified and hard or broken down and softened until it has acquired a cheesy or pasty consistency.

The tubercles which form in the lungs go through changes similar to those just described as occurring in the glands, but, owing to the different structure of these organs, there are complicating changes in the lungs which give the lesions a somewhat different appearance. The irritation caused by the tubercles usually leads to the development of bronchitis with an abundant catarrhal secretion which fills the smaller air tubes, shuts off the air supply causes the collapse of the lung tissue thus deprived of air, and leads to the depositing of yellowish cheesy matter in the air tubes and cells of this portion of the lung. This condition is known as tubercular broncho-pneumonia.

When a large number of tubercles develop on the surface of the lungs, and inflammation of the pleura may be caused, with the formation of much new tissue and the adhesion of the lungs to the ribs or the diaphragm. Sometimes the disease has a peculiar tendency to the development of tubercular growth upon the pleura and other serous membranes. The tubercular masses bud and branch, thus forming large wart-like growths; or groups of nodules may even hang from the surface suspended by delicate threads or fibres giving the appearance of a bunch of grapes. These collections of tubercles have often been called grapes, and this form of the disease is known as "pearly disease," on account of the pearly color and glistening appearance of the serous membrane covering the projecting buds and spherical masses. In many cases both the lungs and serous membranes are affected, but often there are extensive growths of this kind upon the surface of the lung, while, singularly enough, the tissue of the lung remains unattacked.

With extensive tubercular disease of the lungs and pleura the bronchial and mediastinal lymphatic glands generally become loaded with tubercular deposit and enormously enlarged. In some instances they constitute masses of tubercular material many pounds in weight. The organs in the abdominal cavity are also frequently the seat of tubercular disease.

The udder of cows is sometimes attacked by tuberculosis, in which case one of the quarters is found to be swollen, uniformly

firm or hard, and painless. In rare cases one-half of the udder may be affected. Tubercles are formed throughout the affected part of the organ, and there may be tubercles and tuberculous ulcerations upon the surface of the membranes lining the milk tubes. When such a condition is established the milk becomes thin and watery and contains innumerable tubercle bacilli. As the disease progresses larger nodules, such as have been described in other organs, form within the udder and undergo degeneration, softening, and liquefaction. If such a tuberculous mass opens into a milk duct as is often the case, the liquid or semi-liquid contents become mixed with the milk.

EFFECTS UPON A HERD OF CATTLE.

It is no less important to study the effects of tuberculosis upon a herd of cattle than to study its effect upon the individual animal. The experience of those who have had herds free from the disease but who have the misfortune to introduce it and have seen it develop among their animals must be of the greatest value to others who desire to guard against it. A number of such cases have been carefully studied at the experiment stations and elsewhere and the principal features of the outbreaks ascertained.

THE CAUSE OF TUBERCULOSIS.

THE TUBERCLE BACILLUS.

Tuberculosis is caused by a bacterial organism known as the *Bacillus tuberculosis* microbe, which, so far as is known, does not multiply outside of the animal body except under the artificial conditions supplied in laboratories. As we find the bacillus in the body of an animal it is very exacting in the conditions which it requires for its growth, and for a long time bacteriologists found it difficult to make it develop in their laboratory cultures. Careful study of its peculiarities has, however, resulted in the discovery of methods by which it is now easily isolated from the tissues of the affected animals and grown in pure cultures. The longer it is grown in the laboratory the more readily it is cultivated as it adapts itself gradually to the new conditions; but in acquiring this exalted power to live and multiply outside of the animal body it generally loses some of its disease-producing power and becomes less and less virulent until in the course of time it may not be able to cause disease in the most susceptible animals.

The tubercle bacillus produces tuberculosis in all species of domesticated animals and probably in most species of wild animals, though some species of animals are very much more susceptible to its effects than others. It is able to multiply in the bodies of birds whose temperature is considerably higher than that of mammals, and it is likewise able to multiply in the bodies of cold-blooded animals whose temperature is far below that of mammals. It therefore lives, propagates itself, and causes disease under a great variety of conditions—a variety which is truly surprising when we consider the delicacy of the germ and the difficulties which were encountered in cultivating it in the laboratory.

The tubercle bacillus as it is found in widely different species of animals is not always identical in its characteristics, although there are certain general features which it always retains. Its

peculiarities in regard to staining are the most striking of these. It does not take up the usual stains which are successful with other bacterial organisms, and consequently must be stained by special methods. Koch first succeeded in coloring it by leaving it for several hours in a solution of methylene blue, to which caustic potash had been added; but this method was soon superseded by a solution of gentian violet in water saturated with anilin oil, which was introduced by Ehrlich. Of late years carbol-fuchsin has been quite generally adopted for this purpose. Another peculiarity of the tubercle bacillus is that having once taken a stain, it fixes it very firmly, and it is, therefore, much more difficult to decolorize than other bacilli. The dilute mineral acids will remove these colors from animal substances and from other bacteria, but not from the tubercle bacilli. Advantage is taken of these peculiarities to make microscopic preparations in which the tubercle bacilli appear brightly stained while everything else is free from color, or to make these preparations so that the tubercle bacilli will appear red and all other microorganisms will be blue.

The tubercle bacillus obtained from human beings is able to grow between the temperature limits of 30 degrees and 40 degrees C.; that obtained from birds is able to grow between the limits of 25 degrees and 45 degrees C.; while a stock of tubercle bacilli obtained by Friedmann from a tuberculosis turtle was able to multiply at the freezing point and its temperature limits were placed by the discoverer at 0 degrees to 43 degrees C. The bacilli from these different sources have different habits of growth in cultures, and some under the microscope appear longer, thinner, and more beaded than others. There is also a great difference in the virulence of the various stocks for different species of animals. Human bacilli are only with difficulty made to produce disease in fowls or in cold-blooded animals, and the greater number of such stocks have little or no effect upon bovine animals. Various investigators have succeeded, however, in modifying the different stocks of bacilli, and have been able to infect successfully birds and cold-blooded animals with human and bovine bacilli, and have also infected mammals with the tubercle bacilli of birds.

It appears, therefore, that the tuberculosis bacillus is one which is able to adapt itself to a wide range of conditions, and

that the bacillus as found in the tuberculous lesions of birds, mammals, and cold-blooded animals is the same organism but modified somewhat by the conditions of environment.

MANNER OF INFECTION AND DEVELOPMENT OF THE DISEASE.

The tubercle bacillus may enter the body through a number of channels and thus cause infection. With cattle it is most frequently drawn into the air tubes in the form of dust floating in the atmosphere of the stable. In many cases, however, it enters into the alimentary canal with food that has been soiled with the saliva or other secretions of diseased animals. It may also gain entrance through a milk duct or through the vaginal opening, or by means of a wound. The bacillus appears to be able to penetrate the mucous membranes, at least in certain places, even when there is no wound or abrasion, and it may pass through the membrane without leaving any tubercular material or other sign to show where it gained entrance. However, in its progress through the tissues it is usually soon arrested either by a lymphatic gland or in some other manner, and then it multiplies and causes the formation of tubercle. The channel by which the infection occurred may generally be determined with some degree of certainty by the location of the older tubercles. If the bronchial or mediastinal glands show the earliest lesions the infection probably came through the inspired air; but if the retropharyngeal, mesenteric, or portal glands have the oldest lesions the infection was probably through contaminated food.

When the tubercle bacilli have lodged in or invaded any organ their irritating effect upon the tissue surrounding them sets up changes similar to those seen in ordinary inflammation. The fixed connective tissue cells and the cells of the endothelium of the capillaries begin to multiply and produce large numbers of new cells which group themselves side by side in the form of a hollow sphere around the bacilli. These cells are then called epithelioid cells, and for the reason that it is composed of such elements the tubercle at this early stage is known as the epithelioid tubercle.

THE DETECTION OF TUBERCULOSIS.

The detection of tuberculosis in any other way than by the tuberculin test is often difficult or impossible during the life of the animal. In the case of a herd of cattle we have three sources of information—the symptoms brought out by a physical examination of each of the individual animals, the tuberculin test, and the examination of the carcasses of such animals from the herd as die of disease or are slaughtered. Each of these sources of information is of great value, and none of them should be neglected in case there is any reason to suspect the existence of the disease.

PHYSICAL EXAMINATION.

The inspection of a herd of cattle affected with tuberculosis frequently reveals evidence strongly indicative of the presence of the disease. Some of the animals may be emaciated, the skin tensely drawn over the bones, the hair standing on end, rough, and lusterless. There is an undue amount of coughing in the morning when the animals are fed, when they are driven out of the stable into the cold air, after drinking cold water, or when they are made to take rather violent exercise. The lymphatic glands located about the throat, in front of the shoulder, or in the flank may be enlarged. If the history of the herd shows that occasionally an animal lost flesh, yielded a decreased quantity of milk, and gradually pined away until it died or it became necessary to kill it, tuberculosis should be suspected.

In examining the individual animals the object is to learn the condition of the organs most frequently the seat of tubercular disease. As the lungs are affected in from 60 to 75 per cent of the cases, these organs should receive careful attention. With tuberculosis of the lungs the most prominent symptom is a cough; this is persistent, short, dry, strong, and often high in pitch, almost whistling. As the disease advances the cough is more prolonged, violent, convulsive, and may be accompanied by protrusion of the tongue. Auscultation reveals various modified and abnormal sounds in the lungs. There may be friction sounds, the result of disease of the pleura, increased respiratory murmur from bronchial irritation, loss of respiratory murmur from large tubercular deposits or adhesion, mucus rales from the inspired air being drawn through collections of mucus in the

air tubes, and whistling sounds from thickening of the walls of the bronchial tubes. Percussion over the chest walls may in some cases show abnormal resonance from the tubercular deposits causing portions of the lungs to recede from the ribs, but in a larger number of cases there are areas of dullness corresponding to tubercular masses. In many cases with severe lesions of the lungs no satisfactory evidence can be obtained by either auscultation or percussion.

THE EFFECT OF INSANITARY CONDITIONS.

The ideal conditions for health and for resistance to the tuberculosis contagion are life in the open air and an abundant supply of nutritious food. The greater the departure made from these ideal conditions, the more is the development of tuberculosis favored. At the same time it should be remembered that this disease will not appear in an animal unless the tubercle bacillus has gained entrance to its tissues and this bacillus can not originate in a stable, no matter how insanitary its conditions may be. The tubercle bacillus, like other forms of living things, must come from a preexisting germ of the same species; and as it grows only in the body of an animal, it must be transported in some manner from a diseased to a healthy one before the latter can contract the disease. These are foundation principles which are thoroughly established and which must be borne in mind in handling animals for the prevention or the suppression of tuberculosis.

Life in the open air is not always sufficient to prevent infection with tuberculosis or to cure animals that are already affected by it, but its influence is favorable and reduces the chances of infection to the smallest proportion, while at the same time it places the diseased animal under the best conditions for its recovery. In most stables the conditions of life are radically different from what they are in the open air. It is only necessary to make the most casual inspection of the ordinary stable to assure oneself that the conditions of life there are unfavorable in the extreme.

Ventilation.—Most stables have no provision for ventilation. Any air which enters them must come through the doors or the walls of the buildings; either there are drafts of air upon the animals, favoring the production of colds and catarrhs, or there

is an insufficient supply of oxygen. The circulation of pure air in a stable furnishes an abundant supply of oxygen, which increases the resisting powers of the animal, and it also serves to carry away dust and other impurities which may be floating in the atmosphere of the stable. Where there is no ventilation disease germs carried into a stable are likely to remain there until they infect the animals. Where there is little ventilation stables are always damp, and such dampness favors the preservation of the bacilli and tends to the production of catarrh in the air tubes of the animals, which is a condition favorable for the lodgment of these germs. Tuberculosis is most frequent with people, as well as with animals, who are crowded together in small and poorly ventilated quarters. An abundant supply of fresh air in the stable acts favorable in several ways: First, it is a means of supplying the animals with the proper amount of oxygen for carrying on the functions of their bodies; second, the circulating air carried away the carbon dioxide and the moisture given off from the animals' bodies, and leaves the stables dry and healthful; third, the air currents also carry away bacteria of all kinds which may be floating in the atmosphere of the stable, and in that way they reduce the chances of infection; and, fourth, fresh air and dryness are unfavorable conditions for the preservation of bacteria, and, consequently, well-ventilated stables are not so easily infected as others, and the infection dies out more readily in them.

Light.—It is just as desirable that there should be ample provision to let light into a stable as that there should be ventilation. The direct rays of the sun are of especial value for destroying tubercle bacilli and for increasing the resistance of the animals to their attacks. In addition to this the sun's rays aid in drying and disinfecting the stable. Light is also necessary to enable those who care for the stable to see the dust and filth and to put it into proper sanitary condition. Dark stables are almost universally dirty, damp, and unhealthful.

THE TUBERCULIN TEST.

Tuberculin is a product of the growth of the tubercle bacillus. It is prepared by sterilizing, filtering, and concentrating the liquids in which the tubercle bacillus has been allowed to multiply in the laboratory. This substance was first made and

studied by Koch, and it was found that when injected into the tissues of a tuberculous animal it had the effect of causing a decided rise of temperature, while it had no such effect upon animals free from tuberculosis. The value of tuberculin for revealing the existence of tuberculosis was tested by many investigators during the years 1890 and 1891. The injection of his new drug was at once recognized as a most remarkable and accurate method for the detection of tuberculosis, even in the early stages and while the animal appeared to be in perfect health. Our knowledge of the tuberculin test was built up through the most careful and thorough scientific experimentation and should be accepted as entirely reliable.

In practice the tuberculin test is conducted by first taking the temperature of the animal to be tested, at intervals of about two hours, a sufficient number of times to establish the normal temperature of the body under the ordinary conditions of life. The proper dose of tuberculin is then injected under the skin with a hypodermic syringe. The point of inoculation is not essential, but the side of the neck is usually selected for convenience and because of the thinness of the skin of that region. The injection is preferably made late in the evening, and the temperature is taken every two hours the following day, beginning early in the morning and continuing until late in the evening. De Schweinitz, in 1896, calculated the average temperature of about 16,000 tuberculous cows which were tested with tuberculin, and from this average it appears that in general the rise of temperature begins from five and one-half to six hours after the tuberculin is injected, reaches its greatest height from the sixteenth to the twentieth hour, and then gradually declines, reaching the normal temperature again by the twenty-eighth hour. When a chart is made showing graphically this gradual rise and decline of the animal's temperature after it has been injected with tuberculin, we have what is called the tuberculin curve.

In studying the variations of temperature which followed the injection of tuberculin into healthy and tuberculous cattle it was found that in order to diagnose tuberculosis safely there should be a rise of temperature of not less than 2° F., also that the temperature should at its highest point reach about 104° F. To avoid errors it was found to be important that a full dose of

tuberculin should be administered and that a reaction should be considered to have occurred only when the temperature remained elevated for several hours.

Many of the supposed errors of diagnosis made from the tuberculin tests during the first years of its use were due to an insufficient search for the tuberculous lesion in the carcass of the slaughtered animal. Tuberculin proved to be a much more delicate test for the existence of tuberculosis in cattle than was at first appreciated, and it was not until the veterinarians learned that a single small tubercle in an obscure part of the body was enough to cause a reaction that they began making a sufficiently careful search to discover such a lesion in case of its existence. It is now generally admitted that a reaction seldom, if ever, occurs without there being a tubercle somewhere in the animal's body. The errors of diagnosis arise not with the animals which react, but with the tuberculous animals which fail to show a reaction. Nearly all the animals failing to react although affected with tuberculosis may be grouped in two classes. The first of these classes consist of animals in an advanced stage of the disease and in most of which the disease may be recognized by physical examination. The second class consists of animals which have been injected with tuberculin one or more times and which have become insensible to it.

Tuberculin is of inestimable value for ascertaining whether tuberculosis exists in a herd of cattle at a period when it could not possibly be diagnosed by physical examination. For this purpose it is practically infallible in its indications, since when the disease exists in a herd of any size some of the affected animals are certain to show a reaction. There are very many cases on record where herds supposed by their owners to be free from disease were found by the tuberculin test to be seriously infected. The determination of the fact of the existence of tuberculosis in a herd is of the greatest importance, for it enables the owner to adopt at the earliest moment the measures which are needed for the control and eradication of the contagion. The animals which react to the test are certainly affected, and those in the same herd which fail to react must be regarded as suspicious until they have been kept for several months after the last reacting animal has been removed and have undergone subsequent tests without reacting.

The cows in a tuberculous herd which failed to react to the tuberculin test should be submitted to careful physical examination, and those which are emaciated, or have abnormal sounds in their lungs, or are frequently in heat, or which cough or have digestive disturbances, should be regarded as probably affected. The udder should also be examined with great care, and if hard, painless swellings are found in one or more quarters, and particularly if a hind quarter is affected, the trouble is probably caused by the tuberculosis bacillus. By this careful physical examination the cows in a more or less advanced stage of the disease which fail to react to the tuberculin test may be detected and measures taken to prevent the disease spreading from them.

The second class of cases from which errors are liable to occur—that is, the animals which have been injected with tuberculin until they have lost their sensitiveness to it—are not likely to be found in a herd tested for the first time, unless new animals have recently been purchased. The first test of a herd with tuberculin combined with a physical examination of the individual animals may therefore be accepted as reliable in its indications, not only as to the existence of tuberculosis in the herd, but also as to the healthfulness of the various animals composing the herd.

With newly purchased animals and those about to be taken into the herd the case is different. A tuberculous animal may have been injected several times for the express purpose of putting it into a condition that will prevent its reacting at the time of sale, or it may have been injected a number of times in the ordinary course of procedure with a tuberculous herd, even if it fails to react when tested with tuberculin. A single injection with tuberculin may be sufficient to prevent an animal from reacting until a period of five or six months, or longer, has elapsed after the test was made; on the other hand, some animals react to every injection of tuberculin, even when there are but a few weeks interval.

IMMUNIZATION OF CATTLE AGAINST TUBERCULOSIS.

The immunization of cattle against tuberculosis is a subject upon which the investigators have been working for a number of years, with results that have inspired the hope that we shall have in the near future an additional means of combating the disease,

and one that greatly strengthen our present resources. The papers which have recently been published on this method of prevention, together with the discussions at the International Veterinary Congress held in Budapest in 1905, show that the ablest veterinarians in the world are confidently expecting that a practical and safe plan of procedure will soon be developed. If this expectation is fulfilled the operations against tuberculosis will not only be materially simplified, but the expense involved in the eradication of the disease and the loss falling upon the individual owners will be vastly reduced.

A method of prevention which promises so much is deserving of very careful consideration, even at this early stage of its development for undoubtedly we shall soon be called upon to pass judgment as to its practicability. If it can be safely applied and is effective, it should be adopted and utilized as soon as it is perfected; but if, on the other hand, it is neither safe nor a satisfactory preventive, these facts should be made known as soon as possible. The value of the method can only be estimated when we have some knowledge of the investigations which have led up to it, and when we fully understand and appreciate the dangers which must be avoided.

The cattle immunized by the Von Behring method appear to acquire a considerable degree of immunity, but some of them certainly have not had sufficient to enable them to resist fatal doses of the bovine tubercle bacillus. It is believed by Von Behring that immunization by this method will protect cattle against natural infection when they are exposed in stables to diseased cattle; but, unfortunately, some of the cattle reported upon as tested were not immunized by the latest process which recommends, and consequently do not furnish an indication as to its value. Further experiments will be required to establish the efficacy of Von Behring's method, and particularly to determine the length of time the dried tubercle bacilli will retain their activity under the different conditions to which they are likely to be exposed.

This method of protecting cattle from tuberculosis is still so new, and has been used so little under practical conditions, that it should only be adopted by the cattle owner with much caution and under expert veterinary supervision. The danger of adopting hasty conclusions as to the degree of immunity conferred

upon cattle by inoculation with tubercle bacilli has been shown by some of the experiments which have been mentioned in preceding pages. There is still much to learn about these "vaccines" and their effects, and the owner of cattle will be wise to avoid their use pending further investigations, except in the most urgent cases and under conditions where such treatment is clearly indicated.

ERADICATION OF TUBERCULOSIS FROM THE FARM.

If there is any reason to suspect the existence of tuberculosis in a herd, and effort should be made at once to determine definitely whether it is present and which animals are affected by it.

The general condition of the animal should furnish some indication. If any of the animals are not doing well, are losing flesh, and fail to yield the amount of milk which is to be reasonably expected, a careful examination should be made of them to determine whether their temperature is normal, whether there are signs of enlargement of the external lymphatic glands, and whether abnormal sounds can be detected in the lungs. The examination of the carcasses of any animals which may have died or are slaughtered is a valuable indication as to the existence of the disease in the herd.

The most reliable means of determining this question is, however, the tuberculin test. While this may occasionally fail to reveal tuberculosis in an individual animal, it may be relied upon with certainty to reveal the existence of the disease in a herd. If this test indicates that some of the animals are tuberculous, measures should be at once adopted to eradicate the disease from the herd, or at least to prevent its further spread. In case there are only one or two animals affected, and these are not especially valuable, the best plan is to slaughter them at once and thoroughly disinfect the stable in which they have been kept. If a large proportion of a herd is affected, and the animals are not especially valuable, the best and cheapest plan would be to separate the reacting animals from the healthy ones, and to have the former slaughtered under inspection as soon as they can be put in proper condition. It is probable that the flesh of most of these animals would be found fit for food, and the loss, therefore, would not be very great. In case the herd has been long affected and many of the animals are in an advanced stage of

the disease, they are unfit for milk production, and the sooner they are slaughtered the less will be the loss:

If the herd contains animals which are valuable for breeding purposes, the Bang system of management or some modification of it may be profitably adopted.

What is generally known as the "Bang method" of eradicating tuberculosis is entirely voluntary on the part of the owners and consists essentially in testing the entire herd with tuberculin and isolating as completely as possible the animals which do not react and which show no physical signs of the disease, and also in isolating the calves from reacting cows and feeding them upon the sterilized milk of reacting cows or upon the milk of cows which have not reacted.

In making the tuberculin test it was found that in Denmark, where approximately 50 per cent of the cows were tuberculous, 22 per cent of the herds tested were entirely free from this disease. In many other herds but a few animals reacted, and it was often an easy matter to put such animals in a separate place until they could be sold. In those cases in which almost all grown-up animals reacted, while most of the young cattle were sound, it was often possible to place the latter in a particular stable for your cattle, as such a stable may easily be made if it is not at hand. The greatest difficulty of isolation occurred when there were both a great many diseased and a great many sound cattle. In this case it was necessary to divide the stable by a solid partition. But not infrequently the construction of the stable was such that it was necessary to have doors in one partition to allow feeding or the removal of manure. This arrangement did not prove to be a good one, as there was too much opportunity for contagion even if the doors were kept shut during the time they were not in use. In some cases good results were obtained even with such unsatisfactory stabling. When the sound animals were placed in completely isolated stables, and especially when these were in different buildings, the result was usually very satisfactory. The best manner of isolation was found to be to place the animals upon another farm from that occupied by those which reacted.

It is not the intention by this plan to exterminate tuberculosis promptly, but to reduce it gradually and without great expense to the owner of the infected herd.

If a stock of heavy milking cattle has been built up by years of selection, or if the herd is pure-bred, the blood may be retained and the breeding operations continue without interruption. It is in such cases that the method has the greatest value. With ordinary cows it would probably be to the financial advantage of the owner to establish a clean stable for the non-reacting cows and for newly purchased ones, all of which should of course be tested, and to turn off the reacting cows as soon as possible and without attempting to raise calves from them.

In formulating the "Bang method" it was assumed that animals reacting to tuberculin but showing no evident clinical signs of tuberculosis are in the majority of cases affected but to a limited extent and that therefore it is not necessary to kill them. They may live and keep apparently healthy for years, their animmils as a rule does not contain tubercle bacilli, and by pasteurisation every danger of contagion can be avoided. Their flesh, also, will generally be safe for food, and if killed under inspection the dangerous carcasses may be condemned. In the immense majority of cases such cows will produce healthy calves.

Among the reacting cattle there will always be some subjects which the disease develops, so that they become disseminators of contagion. The reacting animals must, therefore, be separated from the sound ones as thoroughly as possible. The new-born calves must be immediately removed from the stable where the reacting cows are placed, and they must have boiled or pasteurized milk. The sound section should be tested with tuberculin at least once every year, in order that the animals which have contracted tuberculosis in spite of the separation may be removed.

With reference to two of the farms where this plan had been in operation several years., Professor Bang said that in spite of the separation every year several animals have fallen by renewed test of the sound division, some years very few, some years more. It cannot be expected that every trace of the contagion will be excluded from the sound section when the two sections are near each other, since there are too many opportunities for the contagion to be carried in various ways, as by people, dogs, cats, rats, etc., and perhaps also through food, as in Danish stables the common hayloft is usually above the stable. Where

it has been possible to place the two sections in quite different buildings or on separate farms the results are usually much better.

STATE AID FOR THE ERADICATION OF TUBERCULOSIS.

In the eradication of a disease so widely disseminated, and one of which causes serious losses to the animal industry of the country, there should be assistance offered by the State in order to relieve the burdens which fall upon the owners of live stock. A considerable number of States have shown a disposition to come to the assistance of farmers whose stock is affected, but the assistance has sometimes been coupled with conditions which made it unwelcome. In some States compulsory testing and the slaughter of reacting animals have been required, but this has not been a popular measure. It is essential that a plan should be devised which will meet with the approval of the stock owners and which will aid them without being too burdensome in its conditions. There are certain measures which have been adopted by individual States which have accomplished satisfactory results, but which would be far more successful if adjoining States would adopt the same or similar regulations. Among the reasonable measures which a State may adopt for the repression of tuberculosis the following may be mentioned:

1. Cattle which are brought into a State for breeding or dairy purposes may be tested with tuberculin, and those which react may be refused admission to the State. In connection with this measure it should be provided that cattle which have been tested by the authorities of another State or of the Federal Government and found free from disease should be allowed admission without being retested. The testing of animals coming into a State is essential in any effort to control this disease, and is one of the first measures which should be enforced in any effort to eradicate it.

- 2: There should be an inspection of all slaughtered animals coming from breeding or dairy herds within the State in order to discover in what herds the disease exists. Animals from the greater part of the milk-producing herds are being continually sold for slaughter as their usefulness in the dairy is over, and an examination of the carcasses of these cows would serve to locate the existence of the disease in many herds where its presence is unsuspected. Unfortunately few of the animals

killed in the small slaughter houses are inspected, and in those cases where there is an inspection and tuberculosis is discovered it is seldom that the herds from which they came are traced and the owners informed of the discovery of this disease. In any effort to suppress tuberculosis it is almost essential that information of this kind should be obtained and an attempt made to persuade the owner to adopt proper measures for getting rid of the contagion.

3. Measures should be adopted for testing herds with tuberculin without expense to the owners. In the beginning of the work, at least, this should not be compulsory, but it should be made to the interest of the owner of a tuberculous herd to have it tested under the auspices of the State. Apparently it would also be wise and a great aid to stockmen for the State to test herds with tuberculin and certify to the healthfulness of animals from all those herds where no reaction occur. At present it is a difficult matter in most States for the breeder or dairyman to purchase cattle for his herd with any assurance that they are healthy. He may have them tested, but there is always a possibility that they have been treated with tuberculin a short time before and that for this reason they have not reacted. The loss which has fallen upon the breeders of the country through the introduction of tuberculosis in their herds has been tremendous, and it appears that it would be only a proper aid and encouragement to agricultural interests to assist breeders in obtaining animals free from disease. Not only would this encourage farmers to enter into breeding operations and increase the value of the industry within the State, but the certification of breeding animals would help to build up a market in other States for breeding animals.

NOTICE OF QUARANTINE.

Rule 1. The Cattle Commissioners of the State of Maine, having found from recent experience that it has become absolutely necessary to supplement our former notice of quarantine issued January 1, 1892, so that it shall include not only Massachusetts but all other states, order that no cattle for dairy or breeding purposes shall be brought into this State either by road, water, railroad or other conveyance until further notice; and all such cattle entering our State, without a permit signed by some

member of our Board, will be subject to quarantine at the owner's expense, and the attention of all persons is directed to chapters 177 and 194 of the Public Laws of Maine of 1889 and 1893 respectively, which will hereafter be rigidly enforced.

Rule 2. Each and every animal brought into this State of Maine for any other purpose than those stated in Rule 1 shall be subject to the same restrictions, except Western cattle for slaughtering purposes. And all owners of such animals shall secure a written permit for transporting such animals into the State, which permit shall be signed by one or more members of the State Board of Cattle Commissioners, now existing.

QUARANTINE STATION.

Rule 3. There will be three quarantine stations provided, one at Saco, near the Eastern Division Railroad Station, the other at Brunswick, on the line of the Maine Central Railroad, also one at Westbrook Junction.

Rule 4. The style of permit shall in each instance be as follows: No.....

STATE OF MAINE.

BOARD OF CATTLE COMMISSIONERS.

F. O. Beal, Bangor, President.

John M. Deering, Saco, Secretary.

Frank S. Adams, Bowdoinham.

LIVE STOCK PERMIT.

.....1889.

Permission is hereby granted Mr.of to bring into the State of Maine from, head of neat stock. This permit is valid on any transportation company, railroad or steamship, if used within thirty days from its date.

(Signed)

Rule 5. In case any animal is found diseased, and is therefore condemned and killed by the Cattle Commissioners, the owner of such animal at the time of its killing shall give a release

to the Board of Cattle Commissioners, and shall declare in the said release his acceptance of the appraisal. Said release shall read as follows:

STATE OF MAINE.

BOARD OF CATTLE COMMISSIONERS.

F. O. Beal, Bangor, President.

John M. Deering, Saco, Secretary.

Frank S. Adams, Bowdoinham.

CONDEMNED LIVE STOCK RELEASE.

I hereby release the Board of Cattle Commissioners from all liability or action on account of killing.....owned by me, found diseased by, under the provisions of chapter 19 of the Public Laws of 1889, as amended by chapter 19 of the Public Laws of 1893. I also hereby agree to accept the appraisal of.....in full compensation for said condemned animal.

Rule 6. If any person owning animals suspected of being diseased makes lawful application to the Cattle Commissioners for an examination of such animals, and the symptoms of the suspected animal are not sufficiently developed to warrant the destruction of the animal, the Commissioner or his agent making the examination may make an agreement with the owner to the effect that if said animal reacts under the tuberculin test, the State shall pay for such testing, otherwise the owner shall pay the expenses incurred.

Rule 7. Upon application of the boards of health, municipal officers, or citizens and taxpayers of the several cities and towns within the State, the Commissioners stand ready to promptly investigate and examine such cases as are reported to them. The Commissioners are to be regarded as the examiners or judges of suspected animals, and consider it the duty of the boards of health, and any others who may be interested or affected by diseased animals, to notify them of any and all cases which may be dangerous to the health of the community.

Rule 8. There shall be a meeting of the Board of Cattle Commissioners on the first Wednesday of January, April, July and

October respectively, for the purpose of auditing bills incurred in the preceding three months, and all such bills shall then be paid, provided there are sufficient funds in the State treasury therefor.

Rules adopted by the Maine Cattle Commissioners June 27, 1899.

F. O. BEAL,
JOHN M. DEERING,
FRANK. S. ADAMS.

AUGUSTA, June 27, 1899.

The foregoing rules are approved by me.

LLEWELLYN POWERS,
Governor of Maine.

LAW RELATING TO CONTAGIOUS CATTLE
DISEASES AS AMENDED IN 1899.

CHAPTER 19.

An Act to Extirpate Contagious Diseases Among Cattle.

Be it enacted by the Senate and House of Representatives in Legislature assembled, as follows:

Sect. 1. That for the purpose of facilitating and encouraging the live stock interests of the State of Maine, and for extirpating all insidious, infectious and contagious diseases, now or that may be among cattle and other live stock, and especially tuberculosis, the governor of the State is hereby authorized and required, immediately after the passage of this act, to appoint a board of cattle commissioners consisting of three persons of known executive ability, who shall be charged with the execution of the provisions of this act, and who shall be known and designated as the State of Maine Cattle Commission and whose powers and duties shall be those provided for in this act, and whose tenure of office shall be at the option of the governor. The compensation of said commissioners shall be at the rate of three dollars per day during the time they are actually engaged in the discharge of their duties as commissioners. The said commissioners shall respectively take an oath to faithfully perform the duties of their office, and shall immediately organize as such commission by the election of one of their number as president thereof, and proceed forthwith to the discharge of the duties devolved upon them by the provisions of this act.

Sect. 2. That it shall be the duties of the said commissioners to cause investigations to be made as to the existence of tuberculosis, pleuro-pneumonia, foot and mouth disease, and any other infectious or contagious diseases. And such commissioners or their duly constituted agent are 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 they have reason to believe there exists any such diseases, 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 said commissioners are hereby authorized to give notice, by publication, of the existence of such disease, and the locality thereof, in such newspapers as they may select, and to notify in writing the officials or agents of any railroad, steamboat or other transportation company, doing business in or through such infected locality, of the existence of such disease; and are hereby authorized and required to establish and maintain such quarantine of animals, places, premises or localities as they 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 according with such rules and regulations by them as hereinafter authorized and provided, and also to cause the same to be destroyed, and to pay the owner or owners thereof one-half of their value, as determined upon the basis of health before infection, out of any moneys appropriated by the legislature for that purpose; provided, however, that no appraised value shall be more than two hundred dollars for an animal with pedigree recorded or recordable in the recognized herd-books of the breed in which the animal destroyed may belong, nor more than one hundred dollars for an animal which has no recordable pedigree; provided, further, that in no case shall compensation be allowed for an 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 the State within one year previous to such animals showing evidence of such disease; nor shall compensation be allowed to any owner who, in person or by agent, knowingly or 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.

Sect. 3. That the said commissioners are hereby authorized and required to make record, and publish rules and regulations providing for and regulating the agencies, methods and manners of conducting, and the investigations 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 the said animals so diseased or 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 the judgment of the commissioners, be deemed requisite to the full and due execution 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 regulations and after such publication said rules and regulations shall have the force and effect of law, so far as the same are not inconsistent with this act and other laws of the State, or United States.

Sect. 4. That any person or persons who shall knowingly and wilfully refuse permission to said commissioners, or either of them, or their duly constituted agent to make, or who knowingly and wilfully obstructs said commissioners, or either of them, or their duly constituted agent in making all necessary examinations of, and as to animals supposed by said commissioners to be diseased as aforesaid, or in destroying the same, or who knowingly attempts to prevent such commissioners, or either of them, or their duly constituted agent from entering upon the premises and other places hereinbefore specified where any of said diseases are by said commissioners supposed to exist, shall be deemed guilty of a misdemeanor, and, upon conviction thereof, or of either of the acts in this section prohibited, shall be punished by fine not exceeding one hundred dollars, or by imprisonment, not exceeding ninety days, or both fine and imprisonment, at the discretion of the court.

Sect. 5. That any person who is the owner of, or who is possessed of any interest in any animals affected with any of the diseases named in section two of this act, or any person who is agent, common carrier, consignee, or otherwise is charged with any duty in regard to any animal so diseased, or exposed to the contagion of such disease, or any 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 said contagion, and who shall knowingly and wilfully fail, with a reasonable time, to report to the said com-

missioners their knowledge or their information in regard to the existence and location of said disease, or of such exposure thereto, shall be deemed guilty of a misdemeanor, and shall be punishable as provided in section four of this act.

Sect. 6. That when the owner of animals, decided 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 commissioners to declare and maintain a rigid quarantine as to the animals decided, as aforesaid, to be diseased or to have been exposed to any contagious or infectious disease, and of the premises or places where said cattle may be found, according to the rules and regulations to be prescribed by said commissioners, approved by the governor, and published as provided in the third section of this act.

Sect. 7. That no person or persons owning or operating any railroad, nor the owner or owners, or masters, of any steam, sailing, or other vessels, 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 animals to be affected, or to have been so exposed nor shall any person or persons, company or corporation, deliver for such transportation to any railroad company, or to the master or owner of any vessel, any animals, knowing them to be affected with, or to have been exposed to, any of said diseases; 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. Any person or persons violating the provisions of this section, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by fine not exceeding the sum of two hundred dollars, or by imprisonment not exceeding six months, or by both fine and imprisonment.

Sect. 8. That 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.

Sect. 9. That the said commissioners are hereby authorized to appoint or elect one of their number as secretary of said board, who shall receive a reasonable compensation for his services during the time in which, under the provisions of this act, the services of the said commissioners shall be required. The said commissioners shall make and preserve a full record of all rules and regulations promulgated under the provisions of this act, of all payments and expenses hereunder incurred, and all other transactions performed by said commissioners in the discharge of their duties as herein provided; and the said commissioners shall, on or before the first Wednesday in January of each year, during their continuance in service, and at other times as they may deem conducive to the public interests, or as they may be required so to by the governor of State, report to said governor full and accurate accounts of their expenditures, and other proceedings under the provisions of this act, and of the condition of said diseases, if any, in the State, to be communicated by him to the legislature. Whenever the functions of said commission shall be suspended or terminated, it shall turn over to the secretary of State, all its 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 commission may be restored.

Sect. 10. That the commissioners shall have power, and are hereby authorized to employ skilled veterinarians, and such other agents and employes 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 their discretion; and they are 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 themselves and their said employes, stationery, expense of disinfecting premises, cars and other places, destroying diseased and exposed animals, and paying for the same, and such other expenses and expenditures as they may find to be annually necessary to properly carry into effect the provisions of this act.

Sect. 11. That the moneys appropriated by this act shall be paid over to the secretary of said commission, from time to time, as the same may be found to be needed, upon requisition

made by the said commissioners, and shall be disbursed by the said secretary of said commission only upon vouchers approved by said commissioners or a majority of them. The said secretary shall, before entering upon the duties of his office, take an oath to faithfully discharge the duties thereof, and shall enter into a bond to the State of Maine, with sureties to be approved by the treasurer of State, in such sum as he may designate, for the faithful accounting of all moneys received by the said secretary of the commission, under the provisions of this act.

Sect. 12. That for the purpose of carrying into effect the provisions of this act, the sum of five thousand dollars, or so much thereof as may be necessary, is hereby appropriated out of any moneys in the treasury not otherwise appropriated.

Sect. 13. That all acts and parts of acts inconsistent or in conflict with the provisions of this act, be, and the same are hereby repealed.

Approved February 14, 1889.

STATE OF MAINE.

IN THE YEAR OF OUR LORD ONE THOUSAND NINE
HUNDRED AND FIVE.

An Act in addition to chapter nineteen of the Revised Statutes relating to contagious diseases among cattle.

Be it enacted by the Senate and House of Representatives in Legislature assembled, as follows:

Section 1. It shall be the duties of the assessors of all cities, towns and plantations to keep a record of all pure blooded cattle kept for breeding purposes, and shall report to the secretary of the Cattle Commissioners on or before the first day of July of each year, the name of the owner, number of each herd, age and sex, such reports to be made upon blanks furnished by the Cattle Commissioners.

STATE OF MAINE.

IN THE YEAR OF OUR LORD ONE THOUSAND NINE
HUNDRED AND FIVE.

An Act in addition to chapter nineteen of the Revised Statutes relating to contagious diseases among cattle.

Be it enacted by the Senate and House of Representatives in Legislature assembled, as follows:

Section 2. All persons selling pure blooded cattle or cattle represented to be pure blooded, for breeding purposes, shall, before delivery, make a report to said commissioners on blanks furnished by them on application, stating the number of cattle sold, their age and sex and to whom sold, and before delivery thereof such cattle shall be tested with tuberculin and a certificate of health be given by said commissioners or some person duly authorized by them to the seller and purchaser.

STATE OF MAINE.

IN THE YEAR OF OUR LORD ONE THOUSAND NINE
HUNDRED AND FIVE.

An Act in addition to chapter nineteen of the Revised Statutes,
relating to contagious diseases among cattle.

*Be it enacted by the Senate and House of Representatives in
Legislature assembled, as follows:*

Section 3. Any person bringing pure blooded cattle into this State for breeding purposes shall report to the commissioners the name and residence of seller, number purchased, age and sex upon blanks furnished by the commissioners upon application. Such cattle shall remain upon the purchaser's premises thirty days from the date of arrival and within that time be tested by order of the commissioners. But nothing herein contained shall be construed as requiring the testing of calves under four months old.

DISEASES AS AMENDED IN 1893.

CHAPTER 19.

An Act to Amend an act entitled "An Act to extirpate Contagious Diseases Among Cattle."

Be it enacted by the Senate and House of Representatives in Legislature assembled, as follows:

Sect. 1. Section one of chapter one hundred and seventy-seven of public laws of eighteen hundred and eighty-nine, is hereby amended by striking out the words, "and other live stock" in the fourth line, and inserting instead the words 'horses and sheep,' so that said section as amended, shall read as follows:

'Sect. 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 and sheep, and especially tuberculosis, the governor of the State is hereby authorized and required, immediately after the passage of this act, to appoint a board of cattle commissioners consisting of three persons of known executive ability, who shall be charged with the execution of the provisions of this act, and who shall be known and designated as the State of Maine Cattle Commission, and whose powers and duties shall be those provided for in this act, and whose tenure of office shall be at the option of the governor. The compensation of said commissioners shall be at the rate of three dollars per day during the time they are actually engaged in the discharge of their duties as commissioners. The said commissioners shall respectively take an oath to faithfully perform the duties of their office, and shall immediately organize as such commission by the election of one of their number as president thereof, and proceed forthwith to the discharge of the duties devolved upon them by the provisions of this act.'

Sect. 2. Section two of said act is hereby amended by striking out the word "two" in the twenty-ninth line and inserting instead thereof the word 'one'; and by striking out the words "one hundred" in the thirtieth and thirty-first lines and inserting instead thereof the word 'fifty'; also by striking out the word "one" in the thirty-sixth line, and inserting instead thereof the word 'three'; also by inserting after the word "disease" in the thirty-seventh line the words 'and the owner or owners shall furnish satisfactory evidence as to the time such animal or animals shall have been owned in the State,' so that said section two as amended, shall read as follows:

'Sect. 2. That it shall be the duties of the said commissioners to cause investigation to be made as to the existence of tuberculosis, pleuro-pneumonia, foot and mouth disease, and any other infectious or contagious diseases. And such commissioners or their duly constituted agent, are 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 they have reason to believe there exists any such diseases, 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 said commissioners are hereby authorized to give notice, by publication, of the existence of such disease, and the locality thereof, in such newspapers as they may select, and to notify in writing the officials or agents of any railroad, steamboat or other transportation company, doing business in or through such infected locality, of the existence of such disease; and are hereby authorized and required to establish and maintain such quarantine of animals, places, premises or localities as they 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 by them as hereinafter authorized and provided, and also to cause the same to be destroyed, and to pay the owner or owners thereof one-half of their value, as determined upon the basis of health before infection, 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 an animal with pedigree recorded or recordable in the recognized herd-books of the breed in which the animal

destroyed may belong, nor more than fifty dollars for an animal which has no recordable pedigree; provided, further, that in no case shall compensation be allowed for an 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 three years previous to such animals showing evidence of such disease, and the owner or owners 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.'

Approved March 10, 1893.