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Published under direction of the Board of Agriculture of Nova Scotia.

*Omnium rerum, ex quibus aliquid acquiritur, nihil est agriculturâ melius, nihil uberius, nihil homine libero dignius.—Cicero : de Officiis, lib. I, cap. 42.*

VOL. IV.

HALIFAX, N. S., SEPTEMBER, 1882.

No. 27.

EXHIBITIONS.

- September 16th—23rd, KINGSTON, ONT. :  
Fourth Dominion, and 37th Ontario Exhibition.
- October 2nd—5th, ANNAPOLIS ROYAL, N. S. :  
District No. 2, Annapolis, Kin's, Queen's.
- October 3rd—5th, LIVERPOOL, N. S. :  
Sectional Exhibition for Queen's County, of District No. 2.
- October 3rd—5th, LUNenburg, N. S. :  
District No. 1, Halifax and Lunenburg Counties.
- October 3rd—6th, TRURO, N. S. :  
District No. 4, Colchester, Cumberland, Hants.
- October 10th—12th, ANTIGONISH, N. S. :  
District No. 5 Exhibition, Antigonish, Pictou, Guysborough.
- October 12th—13th, YARMOUTH, N. S. :  
District No. 3 Exhibition, Digby, Shelburne, Yarmouth.
- October 17th—20th, NORTH SIDNEY, N. S. :  
District No. 6 Exhibition, for the four Counties of Cape Breton Island.

CENTRAL BOARD OF AGRICULTURE.

Meeting of Executive Committee.

PROVINCE BUILDING,

5th August, 1882.

Present :—David Matheson, Pictou, President; Israel Longworth, Truro, Vice-President; Colonel Starratt, Paradise; Donald Archibald, Warden of Halifax; Hon. H. F. McDougall, Christmas Island; Prof. Lawson, Secretary.

A letter was read from H. Wade, Secretary of the Agricultural and Arts Association of Ontario, stating that the Dominion Government had appropriated \$500 toward the transportation of animals and articles from Nova Scotia to the Dominion Exhibition at Kingston.

Moved by Mr. Archibald, seconded by Colonel Starratt, and resolved, that the following scheme be submitted for consideration of the Provincial Government, viz :—

1. That the sum of \$500 so placed at disposal be expended in the transport to Kingston of such horses, cattle, and other live stock and manufactures, as may be entered and previously examined and approved of by the Board as of sufficient merit.
2. That exhibitors of live stock so approved be required to take charge of them personally or by their agents, in conveyance to and from the exhibition.
3. That a suitable exhibit of the economic minerals of the Province be made at the expense of the Provincial Government.
4. That the Government be requested to appoint a Commissioner to proceed to Kingston in care of the minerals, and that he be required likewise to take charge of such exhibits in the departments of fisheries and manufactures only as may be offered by exhibitors who do not desire either to accompany their exhibits or to employ agents. Such exhibits are to be taken at the risk of exhibitors.
5. The Executive Officers of the Board of Agriculture will give all practicable assistance to the Government Commissioner in receiving entries and arranging for the examination and transport of offered exhibits.
6. In the event of the preceding arrangement being approved of and sanctioned

by the Government, the Secretary of the Board advertise intending exhibitors to intimate the nature of their exhibits, and act generally in conjunction with the Government Commissioner when appointed.

Moved by Mr. Longworth and resolved :

That the Treasurer be authorized to draw the annual Provincial grant to the Central Board of Agriculture for the current year, amounting to \$1,700.

An application was read from Mr. Alexander Cochran, Newport, Co. Hants, requesting bonus on purchase price of a Percheron horse imported by him. Mr. Longworth, member for the district, reported favorably upon the horse. The application, statement and declaration having been examined and found satisfactory, the committee resolved to recommend that the bonus of 10 per cent. on the purchase price of one thousand dollars be paid to Mr. Alexander Cochran, in terms of minute of Council, and that a bond be taken for the faithful carrying out of the terms specified in the offer of bonuses for imported horses.

On motion of Col. Starratt, Mr. Longworth was requested to draw up a form of bond.

Applications for bonuses on horses were likewise presented from Messrs. Davison & Fulton, Mr. Tracey (per Hon H. Black) and Mr. C. P. Blanchard, and the Secretary was directed to send to the several applicants printed forms, so that they might be filled up with the full information and conditions required.

An application was read from the Tremont Agricultural Society, near Kings-

ton, Kings County, for organization under the sanction of the Board. Moved by Col. Starratt, seconded by Mr. Archibald, and resolved, that the Trenton Agricultural Society be recognized as established under the Act.

2.15 P. M.

In addition to the members of the Executive Committee of the Board, the Hon. Albert Gayton attended as representative of the Government, on invitation of the President of the Board.

Moved by Mr. Longworth, seconded by Colonel Starratt and passed, that the bye-laws of the Earlton Agricultural Society be approved of and adopted, with certain alterations.

Moved by Mr. Archibald, seconded by Colonel Starratt and passed, that the Sydney Forks Agricultural Society be recognized as in accordance with the requirements of the Act.

A communication was read from Agricultural Society of Polling District No. 3, Cumberland County (Goose River), in reply to which the Secretary was directed to intimate the recognition of the Society by the Board.

On motion of Mr. Archibald, seconded by Colonel Starratt, the bye-laws of the Shelburne Agricultural Society were sanctioned, with certain alterations.

Moved by Mr. Longworth and passed, that in case of applications for bonuses on horses, the horses be, in all cases, inspected by the member of the Board for the District, or some qualified person or persons appointed by him.

Moved by Mr. Longworth and passed :

That it be deputed to the President and Secretary of the Board to make necessary arrangements with the Government for drawing the grant for District Exhibitions, and paying the several proportions of the same over to the respective committees conducting such Exhibitions.

**THE Agricultural and Industrial Exhibition of District No. 2, Annapolis, Kings and Queen's Counties, is to be held at ANNAPOLIS on Monday, Tuesday, Wednesday and Thursday, 2nd, 3rd, 4th and 5th of October. Total amount of prizes offered, \$1,976.**

**General Committee.**—J. R. Mills, *Chairman*; A. Shearer (Agent Union Bank,) *Treasurer*. Hon. Geo. Whitman, Delancy Harris, A. Vidito, D. R. Bath, W. M. Forsyth, B. R. Balcom, B. H. Parker, Hon. W. B. Troop, James Horsfall, J. Milledge Harris, John Reagh, John F. Reagh, Joseph A. Bancroft, E. G. Dodge, Leonard W. Elliott, T. S. Whitman, J. M. Gilliat. *Members, ex officio:* The Presidents and Secretaries of the King's County Agricultural Societies.

**Executive Committee.**—J. B. Mills, *Chairman*; Alex. Shearer, *Treasurer*; J. Hoyt, *Secretary*; T. S. Whitman, W. J. Shannon, Delancy Harris, Geo. E. Corbitt, J. M. Owen.

#### SUB-COMMITTEES.

**Finance**—A. Shearer, J. Yeomans, R. J. Uniacke.

**Advertising and Printing**—G. E. Corbitt, A. B. Cunningham, H. E. Gillis.

**Ceremonies, Decorations, Music and Amusements**—W. J. Shannon, A. M. King, J. B. Mills, C. D. Pickles, J. M. Owen, D. Harris. **Railroads and Steamboats**—T. S. Whitman, G. E. Corbitt, Albert Mills.

**Appointing Judges**—Executive Committee.

**Lodging**—W. J. Shannon, G. B. Harris, A. S. Ruggles, A. B. Cunningham, E. Gates, J. M. Owen, E. Ryerson.

**Fodder**—Delancy Harris, Geo. LeCain, J. Lacey, J. A. Bancroft.

#### INTERNAL ARRANGEMENTS.

**Horses**—A. Hoyt, J. Horsfall, E. Hall. **Cattle, Sheep, Swine and Poultry**—J. Lacey, Geo. LeCain, W. A. Piggott, J. M. Gilliat, A. S. Ruggles.

**Roots and Vegetables, Grain, Butter and Cheese**—Arthur Ruggles, C. I. Pitman, J. Horsfall.

**Manufactures, Cloth, &c**—Andrew Hardwick, Harry Snow.

**Fruits and Flowers**—Dr. Bingay, J. B. Mills, D. Harris, J. A. Bancroft, H. O. Walker, Col. Starratt.

**Agricultural Implements, Furniture and Manufactures in Metal**—Chas. Dargie, Jas. McKay, Henry Dunn.

**Indian Work, Leather Goods and Miscellaneous**—Executive Committee, and I. M. Longley, A. D. Brown, Col. Starratt.

**Fisheries and Lumber**—Capt. Joseph Hall.

All exhibits must be on the grounds on Oct. 2nd, except perishable articles, which will be received up to 9 a. m. on 3rd, when exhibition will be opened to the public. Opening Address, 2 p. m. Exhibits may be removed on Oct. 5th, after closing address. Live stock, general produce and manufactures must be entered by 9th September; plants, flowers, roots, vegetables by 23rd September. Prizes are offered for Horses,—Thoroughbred, General Purposes, Carriage and Draft. Cattle: Short Horn Durhams, Ayrshires, Devons, Jerseys, Herefords, Polled Angus. Prizes of \$20 and \$15 are offered for Herds. Dairy, Beef and Working Cattle. The Sheep are classified into Shrops, Southdowns, Longwools, other grades; the Swine into Berkshire, White Yorkshire, and other breeds and crosses. The Poultry List is not so elaborate as at some exhibitions, but there is a good rule in regard to coops:

"All exhibits in this class must be shown in coops, open only in front, proper appliances for food, water and cleansing must be supplied. The committee suggest the following dimensions for coops:

For Fowls and Ducks, length, 3 ft., breadth, 2½ ft., height, 2½ ft.

For Turkeys and Geese, length, 3½ ft., breadth, 3 ft., height, 3 ft.

For Bantams and Pigeons, length, 18 to 22 inches, breadth, 12 inches, height, 12 inches.

Compartments may be made in coops for different varieties of Bantams and Pigeons. Coops must be made of planed lumber."

The Prizes for Roots and Vegetables vary from \$2 to 25 cents. Among the grain and field seeds we find a prize for the best collection of Forage Plants and Grasses, cut in season and cured, exhibited in bundles 3 inches in diameter. Dairy Produce. Hemp, Woollen, Flax and Straw goods. Agricultural Implements, Furniture, Fruit, Indian Work, Lumber and Lumber Manufactures; this includes pine boards, 1 and 2 inch, shipping pine, 1 and 2 inch, spruce boards, shingles, clepbboards, barrel staves, planed and rough, panelled doors, window sash and frame, mouldings, &c. Manufactures in Leather, Metal, Miscellaneous; among the latter, collection of Indian Arrows, Spear Heads, Stone Axes and Implements. Ornamental Plants and Flowers; the last entry, "Knife Plant" is a puzzler. The list winds up with the following:—

#### SPECIAL PRIZES.

Col. W. E. Starratt, for the best sample barrel of apples of the long keeping varieties suited for the English market, the sample to be understood to represent packages in future shipments, \$3.

Work for children under twelve years of age—Col. W. E. Starratt, best 12 ears sweet corn fit for the table, \$1; best pair knitted woollen stockings, \$1; best collection of fancy work, \$2. (Children of this class must give date of birth.)

For best package of preserved or canned corned beef, with description of process accompanying it—1st., \$1.50; 2nd., \$1; 3rd., 50 cents.

James Vick, Rochester, offers one Chromo, or a years subscription to his Monthly Magazine, or bound volume of magazine, as a prize.

**Fruit Growers' Association.**—For the best two collections of apples, not more than 30 sorts, 6 of each sort, named and labelled. The fruit must be grown in the district but may be the produce of several orchards, credit being given to the several growers on the labels. The collections taking such prizes to be the property of Association, for examination and future exhibition and report. The judges are requested to give the preference to those collections containing the largest number of hard or long keeping apples.

Strangers intending to visit the Annapolis Exhibition will be interested in some of the advertisements,—such as that of the Dominion House, with its "twenty-eigh. large and airy bedrooms; the Commercial House, where "Commercial Travellers are especially cared for"; the Foster House, with livery stable and "every accommodation for summer tourists," &c.

District No. 5 Exhibition (Antigonish, Pictou and Guysborough) will be held at Antigonish on Tuesday, Wednesday and Thursday, October 10th, 11th and 12th. Total amount of Prizes offered, \$1703.50, with \$12 additional by Fruit Growers' Association.

**GENERAL COMMITTEE.**

D. Matheson, Esq., Representative of Agricultural District No. 5, at Central Board.

The Presidents of the Agricultural Societies of District No. 5.

The Wardens of the Counties of Antigonish, Pictou and New Glasgow, respectively.

The Municipal Councillors of Antigonish County.

Sheriff's Hill, DesBarres, and Harris.

The Hon. Attorney-General, A. McIsaac, M.P.; John McDougall, M.P., Pictou Co.; A. C. Bell, M.P.P.; A. N. McDonald, M.P.P.; A. Ogden, M.P., Guysboro' Co.; J. W. Hadley, M.P.P.; John A. Kirk, William A. Ferguson, D. D. McDonald, Colin Chisholm, Marydale; Alex. Ross, Mill Brook Agricultural Society; Donald Fraser, Acadia Farm; John Ross, New Glasgow; James A. Torey, Michael Crispe, William Gerrior, Robert Maxwell, Limu Rock; Peter McIntosh, Argyle; Wm. Thompson, James Harty, Guysboro' Co.; John Ingles, Lochaber; Roderick McDonald, Ohio; W. Crerar, Pictou; Alex. Chisholm, North S. Harbor; Alex. McTae, Beaver Meadow; Jno. Gillis, Guysboro' Co.; John McDonald, South S. Harbor; Colin Ross, J. W. Roy, Pine Tree; J. J. McKinnon, Alex. McDonald (Ridge); Allan McQuarrie, Guysboro' Co.; E. G. Randell, Bayfield; Evan Cameron, New Glasgow; John McLean, Aston; James Kitchin, River John; Angus McDonald, Mahngant Cove; Harry Townsend, New Glasgow; Arch. McGillivray, Morristown, Esquires.

**EXECUTIVE COMMITTEE.**

Chairman—Angus McGillivray, M.P.P.

Vice Chairmen—C. C. Gregory, Esq., John Chisholm, Clydesdale.

Secretary—Professor A. G. Macdonald.

Assistant Secretary—Duncan Chisholm, Esq., St. Andrews.

Treasurer—Adam Kirk, Esq., and

C. B. Whidden, A. M. Cunningham, John McDonald (Colin), Roderick Chisholm, (Carriage-maker), John Bishop, Thomas Trotter, William Crocquet, Esquires.

The grounds will be open on Tuesday, 10th October, at 8 A.M.; this day all articles are to be placed. Live Stock, flowers and perishable articles will be received up to 8 o'clock on Wednesday morning, October 11th, and on that day, at 11 A.M., an Opening Address will be given. Admission 25 cents, children 15 cents. Exhibits may be finally removed at 4 P.M. on 12th October; on previous day horses may be removed at night and brought back in the morning. Live Stock are to be entered 16th September; Plants, Produce, etc., on 30th. No fee is charged for the entry of animals or articles.

Whilst the Committee have endeavored to offer prizes for the various industries of the District, it is not improbable that some have been overlooked. In such cases, persons desirous of exhibiting are invited to communicate with the Secretary, stating what they propose to exhibit. Any information not contained in the list will be furnished on applica-

tion, by post or otherwise, to the Secretary.

**TOTAL AMOUNT OF PRIZES OFFERED.**

Class	Prize	Amount
1.	Horses	\$222 00
2.	Cattle	500 00
3.	Sheep	287 00
4.	Swine	34 00
5.	Poultry	42 00
6.	Dairy Produce	31 50
7.	Roots and Vegetables	33 00
8.	Grains, &c.	39 00
9.	Fruits, &c.	41 25
10.	Agricultural Implements	41 00
11.	Plants, &c.	10 25
12.	Manufactures in Wood	77 50
13.	Indian Work	14 00
14.	Manufactures in Leather	63 25
15.	Hemp, Woollen and Flax	189 00
16.	Ladies' Work	35 75
17.	Tinsmiths' Work	5 00
18.	Meats, &c.	39 00
19.	Fisheries	30 00
20.	Fertilizer	4 00

Total prizes	\$1703 50
Approximate cost of Building, Sheds, Fencing, &c.	2000 00
<b>Total</b>	<b>\$3703 50</b>

The Prize List is neatly printed, with alternate pages of advertisements, not the least attractive of which to strangers will probably be those of Cunningham's Hotel and Smith's Hotel. The others include Agricultural Implements, Carriages, a Bank, Dry Goods, Groceries, Stationery, Insurance, Law, Drugs, Trees, Wool and other Mills, Flour and Meal, Millinery, Sewing Machines, &c.

The District Exhibition for District No. 4 is to be held at Truro, on Tuesday, Wednesday, Thursday and Friday, 3rd, 4th, 5th and 6th October. Prizes, \$2500. Public Opening Address, October 4th, 2 p. m. Live Stock entries must be made before or on 12th September; entries of other exhibits not later than 26th September. Competition open to the whole Province. No charge for entry of exhibits.

**GENERAL COMMITTEE.**—Col. W. M. Blair, M.P.P., Chairman; Wm. Sutherland, Allan Loughhead, Jas. E. Blair, J. B. Calkin, M.A., Jas. Norrie, W. N. Dickson, William Cummings, George A. Layton, E. C. Munro; D. H. Muir, M.D., Treasurer; W. D. Dimock, B.A., Secretary; with the Presidents and Secretaries of all the Agricultural Societies in Hants, Cumberland and Colchester.

Prizes are offered for best Stallion to breed horses for trotting carriage and road, 4, 3 and 2 years old, also brood mare and colt; best pair carriage horses, single carriage horse and colts, 3, 2 and 1 years and under. In stallions for draft, 4, 3 and 2 years, brood mare, pair draft, single do., and colts. The principal horse prizes vary in amount from \$12 to \$8, running down to \$4 and \$2 for sucking colts. Pure Short-Horn Bulls, 3, 2 and 1 year, and calf, \$10, \$10, \$8 and 6, with corresponding seconds. Cows, heifers, 2 and 1 year, and calf, \$10, \$8, \$6 and \$5, with seconds; Cows, \$8, \$6,

\$5 and \$4, with seconds. Devons same. Jerseys, Guernseys, or Alderneys same. Polled Angus same. Honorary certificates will be given as first and second prizes for best herds. Grade Cow, aged, \$7, \$6, \$5, \$4 and \$3; 3 years same; under 2 years, \$6, \$5, \$4 and \$3; heifer, 2 years, same; 1 year, \$5, \$4, \$3, and \$2; calf, \$4, \$3, \$2 and \$1. Fat cow or heifer, \$12, \$8, \$4. Pair oxen, \$30, \$20, \$10; single ox, \$15, \$10; pair working oxen, \$14, \$12, \$10, \$8. Steers and calves in proportion. Sheep are classified into (1) Short Wool, (2) Long Wool, (3) Grades, Crosses, &c. There are the usual prizes for Pigs, Poultry, Roots and Vegetables, grain and Field Seeds, Grain Manufactures, Dairy Produce, Woollen and Flax goods, Agricultural Implements, Fruits, Ornamental Plants and Flowers, Manufactures in Metal, Wood and Leather, and Miscellaneous.

Prize Lists, Entry Papers, and additional information, may be obtained on application to W. D. Dimock, Secretary Exhibition Committee, Truro.

The District Exhibition for the Cape Breton Island Counties is to be held at NORTH SYDNEY, Co. Cape Breton, on Tuesday, Wednesday, Thursday and Friday, 17th, 18th, 19th and 20th October. President, W. H. Moore; Treasurer, W. A. Archibald; Secretary, J. A. H. Rindress. Prizes, \$2716.18. Public Opening Address, Tuesday, October 17th, 2 p. m. Exhibits of Live Stock, Implements and Manufactures must be entered before or on 23rd September, but flowers, fruits, roots, vegetables, &c., may be entered up to 9th October. The Prize List is printed at length in the "North Sydney Herald."

We have already noticed the Prize List of the District Exhibition of No. 2 District, which is to be held at YARMOUTH on Thursday and Friday, 12th-13th October. President, Chas. E. Brown; Vice-President, Hon. L. E. Baker; Secretary, Thos. B. Crosby. Prizes, \$2000. Written entries of exhibits must be made before or on Wednesday, 11th October.

A separate Exhibition is to be held for the Queen's County section of District No. 2, at LIVERPOOL, Queen's County, on Tuesday, Wednesday and Thursday, 3rd, 4th and 5th October. Entry papers must be sent in not later than 28th September. Prizes \$521.65. Competition open to the whole Province. No charge for entry of Exhibits.

**GENERAL COMMITTEE.**—J. L. Hemmeon, Chairman; Joseph P. Freeman, Nathan Payzant, Jas. McPherson, W. A. Kenny, A. J. Campbell, L. W. Drew, S. C. West, C. F. Lockhart, G. T. Moore; J. H. Dunlap, Treasurer; P. Farrell, Secretary.

REGULATIONS. — 1. The Exhibition Building will be open on Monday, at 2 p. m., and continue open until 10 a. m., Tuesday, for the reception and arrangement of Exhibition articles. Exhibitors on arrival will immediately report themselves at the office of the Secretary, who, with the assistance of the Committee of Management, will allot appropriate space for their exhibits. All articles must be entered by 10 o'clock, except live stock, which will be received up to 11 a. m.

2. The Exhibition will be opened to the public at 3 o'clock, p. m., on Tuesday, with an address, and continue open until 10 o'clock; admission 15 cents.

3. The Judges will meet at the Secretary's office on Wednesday, at 9 a. m., and obtain entry books, and proceed to award premiums. The Treasurer will commence to pay premiums in the hall on Friday morning, at 8 o'clock. No exhibits will be removed before the closing address, on Thursday evening.

4. All articles for competition shall be the growth or production of the exhibitor, of the present year, and all vegetables and fruit grown in the open air. Each exhibitor will receive tickets, and is required to affix them on every article he exhibits. All roots and vegetables must be clean, topped, and surplus roots removed before taken into the building.

5. No person shall be allowed to enter for exhibition more than one specimen (or required quantity) in any one section or class, and no article can take two prizes, or be exhibited in two collections. Manufactured articles which have been awarded prizes at Exhibitions in former years, shall not be entered in competition for the prizes named in the Prize List for this year.

6. The Committee may reject all articles which they consider unfit for exhibition. No charge for the entry of exhibits.

7. Every animal and article whatever, must have name of animal or article attached, but not name of exhibitor.

8. Articles for sale must be labelled and priced, if sold will be accounted for by the Managing Committee.

9. Every intending competitor must transmit to the Secretary not later than the 28th September, an entry paper containing a correct list of the animals or articles which he intends to exhibit. Blank forms will be supplied to all Agricultural Societies for distribution.

Mr. LYNCH, of Danville, P. Q., whose visit to the Dominion Exhibition at Halifax will be recollected by all interested in dairy matters, writes to us from Ottawa respecting our Exhibitions this year, and will no doubt pay our Province another visit.

WINDSOR, N. S., Aug. 5th, 1882.

Dear Sir,—Being absent from home till late in July, I could not reply to your circular respecting the crops in this section in time for the JOURNAL, as requested.

The exceptionally fine weather for the last three weeks has enabled our farmers to harvest the hay crop in splendid condition; and, with few exceptions, they have finished the work, and have to show as fine a lot of hay as it is possible to find anywhere. The uplands, except where they are of first quality, were light; but the good dyked marshes gave a heavy crop, and the quality of the grass was much better than usual, being more free from weeds and better matured; so that, upon the whole, we have a good average quantity of best quality of hay. In my judgment there is not so great a quantity of hay in the county to-day as there was a year ago, but it is of much better quality.

The oat crop is looking well and beginning to mature, showing well filled heads without a superabundance of straw. A larger breadth than usual has been sown.

Barley is looking well; winter wheat has been badly winter-killed, but what survived is looking very well, and in a few instances is being harvested. Very few complaints have yet been made of the Weevil.

Potatoes are making a good show, but mangolds and turnips are not up to the average. Owing to the continued wet weather in June, many of our farmers found it impossible to get their land ready for turnips, hence there will be a small production of that article in this section. But little buckwheat is sown in this neighbourhood. What I have seen is looking well. Small fruits were abundant in quantity at first, but owing to the hot, dry weather, soon dried up, and were not as large as usual. Raspberry canes were badly winter-killed. Apples will be a light crop.

Upon the whole our farmers have great reason to be thankful for the abundance of the fruits of the earth and the magnificent weather so far that they have had for harvesting them.

W. H. BLANCHARD.

IN Yarmouth County the hay crop is generally reported much better than last season, and we have had splendid weather for securing it, fine, clear, warm days in succession, and week after week. The people are very dilatory, however, and the greater part of the crop is still uncut. Rain is much needed now (1st August). [The needed rain soon came and did much good.]

THE Lunenburg Agricultural Society has voted \$25 for importation of sheep.

YARMOUTH, 20th July, 1882.

I notice in the July JOURNAL your enquiry as to varieties of raspberries that stand the winter. The varieties that I have are Red Antwerp and Brinckle's Orange; in ordinary winters the fruiting canes go through without injury to the very tips, but last winter many of the plants were more or less winter-killed.

My observation on several kinds of plants, trees, &c., has led me to infer that a sufficient protection from cold winds, either in the form of hedges, fences or buildings, or even a temporary screen as of evergreen trees or branches stuck in the ground for the winter, is an effective safeguard against winter-killing. I have seen destruction begin just where protection stopped, as of a building or even a distant hill, and whole lines of trees destroyed where the north-west wind had full sweep over them, while the same continuous row of trees screened from the wind, would pass through the severest winter unscathed. In a row of 200 feet of Norway Spruce, the first 100 feet remain perfect as when planted, the second 100 feet, twice re-planted, are all more or less defective.

If you stand on the raspberry plots of Bellahill and of Lucyfield and note where the cold winter winds come from, I think you will find an explanation with reference to respective protection.

CHAS. E. BROWN.

[Our difficulty is that Red Raspberries at Bellahill are robust and unimpaired, bearing a heavy crop, whilst the White ones close by have only dead fruit canes. At Lucyfield the White variety is exclusively grown, and only gives a crop every second or third year, after a mild winter. We would like to know what difference there is in the hardiness of sorts.—Ed. J. A.]

REPORTS have been made in the newspapers and otherwise of the occurrence of the Colorado Beetle on the potato crop in Nova Scotia, particularly in the counties of Cumberland, Pictou and Kings. It is probable that in some cases, if not all, some pest other than the great destroyer has been found. We shall feel much obliged if persons who have the opportunity will kindly send us dead specimens for examination. The beetle can be humanely killed by dropping into alcohol or chloroform, and will then travel in a pill box.

MR. EDMUND SYMES, Truro, requests us to announce his intention to publish a set of tables for estimating weights of cattle. He has also prepared an extensive series of drawings of the leading breeds. We have no space to give details this month.

### BYE-LAWS OF MAPLETON AGRICULTURAL SOCIETY,

As passed March 7th, 1882. Sanctioned by Central Board of Agriculture, 8th August, 1882.

Rule 1.—That the Society shall be called the "Mapleton Agricultural Society," and shall be organized in connection with the Central Board of Agriculture, and in accordance with the Act for the Encouragement of Agriculture.

Rule 2.—The object of this society is the introduction of improved breeds of cattle, sheep, and swine, the purchase of seeds, grains, roots, farm implements and the improvement of the farm management of this district.

Rule 3.—That the Society be managed by a President, Vice-President, Secretary, Treasurer and five Directors, to be chosen by ballot at the annual meeting on the first Tuesday in December.

Rule 4.—That the President shall preside at all meetings of the Society, keep order, regulate discussions, state and put questions, and shall not permit any improper remarks of a personal character, sign orders on the Treasurer, and perform such other duties as belong to his office; in his absence the Vice-President shall take the chair, and, if both are absent, the Society shall choose a chairman *pro tem*.

Rule 5.—The Secretary shall attend all meetings of the Society, keep a correct record of all transactions, collect all monies due and pay the same to the Treasurer, notify the members of the Society of each meeting, submit a report annually of the proceedings of the Society, conduct all correspondence, and perform such other duties as belong to his office.

Rule 6.—The Treasurer shall receive all monies paid him by the Secretary, and acknowledge receipt of the same and pay them over only by order of President and Secretary, and submit annually a report of his proceedings, and shall give bonds for double the amount of cash in his hands.

Rule 7.—That the duties of the Directors shall be to devise and recommend to the Society such improvements in the practice of agriculture and horticulture, and the introduction of improved breeds of cattle, sheep, horses, swine and fowls, as they may deem advisable for the promotion of the Society, and shall endeavour to secure at the regular meetings practical subjects for discussion, also to assist the Secretary in preparing his report and supervise the purchase and care of stock and other property of the Society.

Rule 8.—That the Society hold four regular meetings during the year—on the first Wednesday in March, June and September, and the first Tuesday in December, but special meetings may be called by the President on a requisition

of any five members, after giving due notice to the members.

Rule 9.—At the annual meeting the officers for the ensuing year shall be elected by ballot of the members present in good standing, and all accounts, business transactions and reports shall be brought forward and passed.

Rule 10.—Every person subscribing and paying to the Treasurer one dollar, may become a member of this Society, but no member shall compete for a premium or receive any of the benefits of the Society unless his subscription shall have been paid on or before the first day of December in each year.

Rule 11.—The members of the Society agree to be governed by a vote of the majority of the members present at any regular meeting.

Rule 12.—That fifteen members shall constitute a quorum for the transaction of business at any meeting of the Society.

Rule 13.—That at any annual meeting the foregoing rules may be altered and amended, or the Society may pass such bye-laws and rules of order as they may deem advisable, by a vote of two-thirds of the members present, such amendments, alterations and bye-laws to be subject to approval of the Central Board of Agriculture.

Rule 14.—At each annual meeting of the Society three members, not officers nor directors, shall be appointed to audit the accounts.

Rule 15.—That the order of business at annual meeting shall be as follows:—1st, reading minutes of previous meeting; 2nd, collection of dues; 3rd, report of Secretary; 4th, report of Treasurer; 5th, report of Auditors; 6th, report of Directors; 7th, report of Special Committees; 8th, Discussion of Questions; 9th, Miscellaneous business; 10th, Election of officers.

Rule 16.—No political nor religious subjects will be allowed to be discussed at any meeting of the Society.

### BY-LAWS OF THE EARLTOWN AGRICULTURAL SOCIETY,

Adopted by the Society at a meeting held at North Earltown, March 2nd, 1881, as approved and sanctioned by Central Board of Agriculture, 8th Aug., 1882.

1. This Society shall be called "The Earltown Agricultural Society," of the County of Colchester. It shall be organized in connection with the Central Board of Agriculture, and in accordance with the Act for the Encouragement of Agriculture.

2. That this Society be managed by a President, Vice-President, Secretary, Treasurer, and five Directors, to be chosen at the annual meeting, on the first

Tuesday in December. That the officers and Directors be eligible for re-election.

3. That the annual subscription fee be one Dollar, to be paid at or before the quarterly meeting in September.

4. That the Society hold four regular meetings during the year,—on the first Tuesday in March, June, September and December, but special meetings may be called when necessary, by the President, on a requisition of any five members of the Society, after giving due notice thereof.

5. The President shall preside at all meetings of the Society, keep strict order, and regulate discussions, state and put questions, and shall not permit or allow any improper remarks of a personal character; sign orders on Treasurer, and perform such other duties as belong to his office. In his absence the Vice-President shall take the chair, and, in the absence of both, the Society shall appoint a chairman, *pro tem*.

6. That the offices of Secretary and Treasurer may be combined in one person, and the duty of the Secretary shall be to attend all meetings of the Society, keep a constant record of all transactions, collect all monies due and pay them over to the Treasurer, notify members of Society of the meetings, advertising time and place of such meeting posted seven days previously in three or more conspicuous places; submit a report annually of the proceedings of the Society; conduct all correspondence, and perform such other duties as belong to his office.

7. The Treasurer shall receive all monies paid him by the Secretary, and pay them over only by an order from the President and Secretary; he shall also submit annually a report of his proceedings.

8. The duty of the Board of Directors shall be to take charge of all stock, seed, and roots, etc., belonging to the Society, and shall make such application of said property as a majority at any regular meeting may determine.

9. Any person wishing to join this Society may do so on payment of one dollar as annual fee and subscribing the list of members.

10. The members of this Society agree to be governed by a vote of the majority of the members present at any regular meeting.

11. That no person who is not a member of the Society shall be allowed to speak or vote on any question, and that no member shall be entitled to any of the privileges of the Society, nor shall be allowed to vote, until all demands against him are paid.

12. All special meetings shall require four days' notice from time of posting, and any resolution having passed the Society shall not be re-considered, altered, or repealed, at such special meetings

without previous notice having been given.

13. That seven members shall constitute a quorum to transact business at any of the meetings of the Society.

14. At any regular meeting of the Society the foregoing By-laws may be altered or repealed or amended by a two-third vote of the members present, subject to approval of the Central Board of Agriculture.

*Committee.*—Angus Munro, Hugh McDonald, John McKay, John McKay, Alexander Ferguson,

DONALD SUTHERLAND, *Sec'y.*

North Earlton, April 1st, 1881.

### CONSTITUTION AND BY-LAWS OF THE SHELburne AGRICULTURAL SOCIETY,

Approved by Board, 8th August, 1882.

1. The object of this Society is the improvement of Horticulture, Agriculture, of Stock, Farm Management, and Rural Economy, in the Township of Shelburne.

2. Every person subscribing and paying to the Treasurer the sum of one dollar may become a member of this Society; and no member may compete for a premium unless his subscription fees for the current year are paid.

3. The annual meeting of this Society shall be on the first Tuesday in December of each year and the election of officers shall take place at such meeting.

4. The officers shall be a President, Vice-President, Secretary and Treasurer, and five Directors.

5. The President, Vice-President, Secretary and Treasurer, together with five Directors, duly elected, shall be a committee of management for the whole year for which they shall have been elected. Three of the Board of Management and four members shall constitute a quorum for the transaction of business; and, in case of vacancy by death, resignation or removal, the remaining officers shall call on the Society to fill up such vacancy at the quarterly meeting which shall occur next after such vacancy shall happen.

6. The Committee of Management shall be empowered to set forth the promotion of the objects of the Society; shall have the entire control of all the property belonging to the Society; and shall make the list of premiums for the annual exhibitions.

7. There shall be no appropriating of the funds of the Society by the managing committee for a greater sum than ten dollars, unless passed by a majority at a regular or special meeting.

8. There shall be regular quarterly meetings on the first Tuesday in March, June and September, the March and September meetings to be held in the

Temperance Hall, Middle Ohio; the June and December meetings to be held in the School House at Lower Ohio, or some suitable place in that locality.

9. Special meetings may be called whenever necessary by the President on the requisition of any five members after giving due notice thereof.

10. All monies in the hands of the Treasurer, unappropriated, shall be deposited with the Dominion Savings' Bank, in Shelburne, in the name of the Shelburne Agricultural Society, and shall be drawn out by a draft on the Treasurer, by order of the President, countersigned by the Secretary, when ordered at a meeting, whether quarterly or special.

11. At the annual meeting all business of the Society for the preceding year shall be settled.

12. Those who do not pay up their subscription fees at or before the annual meeting in December cannot become members for the ensuing year. The by-laws to be read at every meeting.

13. The members of this Society agree to be governed by a majority vote of the members present at any meeting, whether quarterly or special.

14. That none of these rules be altered or added to, except by a two-thirds vote at a regular quarterly meeting, and then only if a written notice of such alterations were handed to the Secretary at any previous quarterly meeting,—such alterations to be subject to the approval of the Central Board of Agriculture.

DAVID S. BOWER, *Sec'y.*

THE Ontario Bureau of Industries has published a statement of the condition of grain-crops, meadows, and fruit, on the 1st July, compiled from the reports of five hundred correspondents, made on that date, and covering nearly every township in the Province. These reports give additional value to the estimates of produce made one month earlier, for they show us regards cereals and meadows that there was a steady improvement throughout the month.

The summary of acreages shows that there is this year a very large area under cereals, the total being nearly 5,000,000 acres. Wheat takes the lead with 1,763,876 acres; oats come next, occupying 1,425,943 acres; barley is third, 895,466 acres; peas fourth, 554,464 acres; corn fifth, 210,080 acres, and rye sixth, 182,968 acres.

The area under fall wheat is 1,179,284 acres, and under spring wheat, 584,592 acres, with an estimated produce respectively of 21,737,341 and 9,046,343 bushels. This is a great relative change since 1870, when the total area was 1,365,872 acres, and the product 1,891,989 bushels of spring wheat and 6,341,460 bushels of fall wheat. The change has taken place chiefly in the

West Midland, Georgian Bay and Lake Huron counties. In the last-named group in 1870 the total produce of spring wheat was 1,161,341 bushels, and of fall wheat 343,553 bushels, or in the proportion of 3.38 to 1; the estimated produce of this year is 533,316 bushels of spring wheat, and 3,598,243 bushels of fall wheat, or in the proportion of 1 to 6.75.

The fall wheat is reported very good on 1st July throughout the western half of the Province. It has recovered admirably from the effects of spring frosts, and, if the weather continues favorable until the harvesting, the yield will be better than an average. In the eastern half the reports are less favorable. In the St. Lawrence and Ottawa countries there will be not more than half a crop. It must be remarked, however, that eastward of York county a much greater area of spring wheat is grown than of fall wheat, and the condition of spring wheat is reported excellent. Assuming that the estimated produce is fairly realized, and that the crop is safely harvested, Ontario will have a surplus for outside markets of fully 20,000,000 bushels.

Oats promise to be an excellent crop in all sections of the Province, and barley and peas fairly good. The heavy rains of May and June, while favorable to the former grain, were somewhat injurious to the latter; but the warm days of the last two weeks of June caused all crops to thrive wonderfully. The season is one of slow maturity for cereals, and harvest time will be fully two weeks later than usual. Corn seems destined to be a failure; the temperature has been too low for it.

The clover crop will be short, in consequence of the plant having been heaved by spring frosts; in many districts it has been ruined. Timothy meadows had a late start, as the result of a cold May, but they picked up finely throughout June, and the crop will not fall far short of an average.

Fruit has suffered severely throughout the western counties; the cold weather and east winds which followed the blossoming season having blighted it. In the eastern counties the trees came later into bloom, and apples especially promise to be a large crop. There will be a scarcity of peaches and plums, but small fruit is abundant.

The wool statistics are incomplete, and the figures will doubtless be considerably increased by later and revised returns. They are interesting, however, as showing, first, the high average of wool clip that has been attained through years of careful breeding; and, secondly, that (in obedience to what appears to be an inexorable demand of fashion) Ontario farmers have already made some progress in the change from coarse-woolled to fine-woolled breeds.

The report on the weather has been compiled at the Central Meteorological Office. It is unnecessary to say that it is both valuable and complete. The weather must always occupy an important place in the economy of crops, and it is very desirable that we should have a scientific record of it in connection with the crop reports.—*National Farmer*.

The following information regarding the commercial value of Fertilizers is taken from a communication by George H. Cook in the *National Farmer*, Washington, D. C., a weekly paper which is the ablest agricultural periodical published at the present time in the United States:

Prices for various constituents of commercial fertilizers, deduced from a careful examination of the market prices for the latter half of 1881, by Prof. S. W. Johnson, Director, and Dr. E. H. Jenkins, Chemist, of the Connecticut Agricultural Experiment Station, Dr. Chas. A. Goosman, Inspector of Fertilizers of Massachusetts, and the Director and Chemist of the station. Prices used at the station last year are put down for comparison.

	1881.	1882.
	Cents per lb.	
Nitrogen in nitrates.....	25	26
" in ammonia salts.....	2½	29
" in Peruvian guano, fine-stamped bone, dried and fine ground blood, tucal, and fish, superphosphates, and special manures.....	20	24
" in coarse or moist blood, meat or tankage, cotton seed, linseed, and castor pomace.....	16	18
" in fine-ground bone, horn and wool dust.....	15	17
" in fine medium bone.....	14	15
" in medium bone.....	12	14
" in coarse medium bone.....	12	13
" in coarse bone, horn shavings, hair and fish scrap.....	11	11
Phosphoric acid, soluble in water.....	12½	12½
" "reverted" and in Peruvian guano.....	9	9
" "insoluble, in fine bone, fish-guano, and superphosphates.....	6	6
" "insoluble, in fine medium bone.....	5½	5½
" "insoluble, in medium bone.....	5	5
" "insoluble, in coarse bone, bone-ash, and bone-black.....	4	4
" "insoluble, in fine-ground rock phosphate.....	3½	3
Potash, in high-grade sulphate.....	7½	7
" in low-grade sulphate and kalic.....	5½	5
" in muriate or potassium chloride.....	4½	5

A number of fertilizers very highly esteemed by farmers, and which found large use, are not included in the above list. They are comparatively bulky and of small cost at first, and the prices for them are mainly made from the expenses incurred in handling and transporting them. Lime, slacked and unslacked, green sand marl, shell marl, muck ground limestone, etc., are of this class. It is very rare that lime can be valued above a quarter of a cent a pound.

Muck contains a little nitrogen, but it is so combined that it is liberated but

slowly, and its mineral constituents are valueless. The chief value of muck must be found in its usefulness as an absorbent of liquid manures and in its effects in improving the texture of soils.

In many published analyses the ammonia is given instead of its equivalent, nitrogen. The following are the prices adopted for it in its different sources:

Ammonia in nitrates.....	21.4 cents.
" in ammonia salts.....	23.0 "
" in Peruvian guano, &c.....	17.3 "
" in coarse or moist blood, &c.....	14.8 "
" in fine-ground bone, &c.....	11.0 "
" in fine medium bone.....	12.4 "
" in coarse medium bone.....	11.6 "
" in coarse bone, &c.....	9.1 "

Every farmer is interested in the practical use of this table of prices; for those who may not yet have practiced such calculations the following example is worked out:

ANALYSIS.

Nitrogen from ammonia salts.....	4.5 to 5 per cent.
Phosphoric acid, soluble.....	8.0 to 10 "
Potash, in high grade sulphate.....	6.0 to 7 "

All these percentages in the analysis are the same as the number of pounds in one hundred pounds of the fertilizer, the number of pounds of each constituent in a ton can be found by multiplying each of the constituents by 20. Thus, in the above example, there are in each ton:

Nitrogen from ammonia salts.....	90 to 100 pounds.
Phosphoric acid, soluble.....	160 to 200 "
Potash, in high grade sulphate.....	120 to 140 "

And the valuations made from these weights are found by multiplying the amount of nitrogen in the ton by 29, our price for nitrogen in ammonia salts; the amount of phosphoric acid in the ton by 12½, our price for soluble phosphoric acid, and the amount of potash in the ton by 7, our price for potash in high grade sulphate. The valuations for the ton are then as follows:

Nitrogen in ammonia salts.....	\$26 10 to \$29 00
Phosphoric acid, soluble.....	20 00 to 25 00
Potash, in high grade sulphate.....	8 40 to 9 80
	\$54 50 to \$63 80

A little practice will enable any farmer to make similar computations from the analyses which are attached to packages of fertilizers in market, and, guided by these figures and his own good judgment in trade, and his experience of requirements of his soil and crops, he can make his purchases with enlightened confidence. It must, however, always be born in mind that these are only comparative valuations. The retail prices of fertilizers at any local market properly depends only in part upon the price of its constituents in the greater markets. The cost of transportation, credit given, amount of sales, etc., must necessarily be provided for in the price asked of the consumer.

THE APPLE CROP in Nova Scotia, which is every successive year increasing in quantity and importance, is rather irregular this season. The trees appear to have blossomed very full in most or-

chards, but it is only in some that there will be a heavy crop of fruit. The following account of the crops anticipated in the United States, France, Germany, Holland and Belgium, is from the *Garden*, a London publication:—

AMERICAN APPLES.—The reports which we have received from Messrs. J. W. Draper & Son, Covent Garden, the principal London agents for the sale of these fruits, indicate that the crop is most prolific this season. From personal observation we gather that in England the crop is comparatively a failure; in France a poor half crop is calculated upon; in Germany one-third crop only; in Holland only half a crop; and in Belgium not half a crop,—thus the prospects were never more favorable for shipments from America to England than they are this year. The American apple trade, formerly monopolized by Liverpool, has during the last few years (in consequence of direct steam communication) been gradually diverted to London, which market now competes favorably with that of Liverpool.

HISTORY OF THE PICTOU CATTLE DISEASE.

No. IV.

*Preliminary report on the Disease of Cattle at Pictou, Nova Scotia, and adjoining Districts, addressed to Hon. J. H. Pope, Minister of Agriculture, by D. McEachran, F. R. C. V. S., Inspector of Stock.*

[Continued from last Number.]

DEFICIENCY OF ALBUMENIDS IN THE FOOD.

A careful consideration of the information we possess with regard to the pathological conditions found in this disease, lead me to suspect that there may be an intimate relation between the disease and the inferior quality of the food on which the animals subsist, especially the hay, which, as a rule, is cut late, often after it has gone to seed, when it is well known it has lost most of the albumenoids. By reference to Professor Lawson's report it will be seen that "throughout the district the pastures are remarkable for the large quantities of weeds growing in them. The most conspicuous herbaceous plants in many of the pastures, with a single exception, were the native solidago and asters, and other perennials that are usually avoided by cattle, although not known to have injurious effects. The most remarkable plant in the district is a European weed that has been naturalized around the town of Pictou, and in some cases fills whole fields to the exclusion of useful herbage." (Ragwort.)

From these remarks it will be seen that hay grown on such fields and under such a system of cultivation will be of the poorest quality.

It is a well-known fact that albumenoids are most abundant in the plant



before it seeds, and that they are most abundant in the seed when ripe; hence hay and other grasses require to be cut before they seed, cereals after the grain is fully developed; if not, the hay or the grain is innutritious from deficiency of albumenoids.

There are three groups of nitrogenous substances in the animal body, viz: Albumenoids, gelatinous substances and horny matters.

"Albumenoids are by far the most important, since all manifestations of animal life are dependent chiefly on them and on the organs which are composed of them, and in fact they furnish the materials out of which the others are formed. Albumenoids are found in manifold modifications in all the organs and fluids of the healthy body except the urine; and all these modifications suffer an almost continual mutual alteration under the influences of the vital processes. Albumen predominates in all animal fluids, especially in chyle, serum of the blood, fluid contents of the corpuscles, in juice of muscles and in nerves. They all contain, as essential constituents, carbon, hydrogen, oxygen, nitrogen and sulphur."\*

That the primary and essential lesions which give rise to the extraordinary pathological conditions found in animals dying from this disease are referable to the quality of the blood, I think is evident, and that these changes are due to a deficiency of albumenoids, or some cause giving rise to a diminution of the quality of the blood crisis. Observations in both man and animals prove that deficiency in quality as well as quantity of essential elements of nutrition, gives rise to alterations in the vital fluid which produce results similar to what we observe in the disease. That it is a dropsical disease we now know; and that it depends not on the presence of bacteria or other organisms in the blood, I think may be accepted as a fact. Microscopic examination fails to show any changes in the corpuscular elements of the vital fluid. Fibrin is increased, as seen by the firmness of the clot and the rapidity with which it forms; and this also shows that the corpuscles still retain their fibrinoplastic substance or paraglobulin. That they still retain their haemaglobulin is learned from the colour of the blood and the colourless character of the serum.

What, then, is the change in the blood that gives rise to this condition of general passive dropsy, for a blood disease I think we are compelled to call it? I think the following extract from Jones & Sieveking's Pathological Anatomy will throw some light on the condition, and show that all dropsical diseases are not

\* For further information on this subject see Manual of Cattle Feeding, by —.

due to interrupted circulation, as is often supposed, but that in many instances we may have general passive from a diminution in the quality of the blood crisis, this alteration being due to an insufficient supply of albumenoids in the food on which the person or animal subsists:—

"Cases of dropsy are occasionally met with in which, as there appears no absolute organic disease, but only an hyperæmic condition of the blood, one is compelled to think that the effusion is dependent on this. Andral mentions that during a famine, where the poorer classes had been obliged to seek a scanty nourishment in roots and herbs growing in fields, many people became dropsical. This has not always been observed in famines, but a curious observation of Brucke's bears on this point. He confined a frog, having the sciatic nerve of one leg divided, in a glass vessel for some months. When the frog was insufficiently fed, œdema occurred in the leg of which the nerve was divided. Abundant animal food removed the œdema, which re-appeared when the animal was again starved. The occurrence of œdema in the affected leg only illustrates the effect of the abolition of nervous influence in causing local dropsy. The same thing is sometimes, though rarely, observed in infantile paralysis. Dr. Laycock has repeatedly drawn attention to similar facts.

"In these circumstances it is very probable that the proportion of albumen in the blood was diminished, as it is clear that the supply of it ordinarily derived from the food was so. When from cardiac or renal causes, or both combined, together with altered crisis of the blood, the tendency to dropsical effusion is very strong. It is quite remarkable how universal the dropsy becomes; the peritoneum, both pleura and the pericardium, may be found full of fluid, the areolar tissue everywhere infiltrated, the air cells of the lungs loaded with frothy serum, the tissues of the brain 'wet,' and the subarachnoid fluid greatly increased. In fact, it seems as if the vessels no longer presented any containing barrier but permitted the escape of fluid everywhere that it traversed. It is often observable in these cases after death, how the naturally transparent mucous membranes have lost this appearance; they look thick and of a dull white-grey tint, as it were soddened in the fluid. There can be no doubt but that this depends on a chronic thickening and increase of their fibrous layer."

By a consideration of the subject in this light, it will be seen that attention should be paid to the quality of the food on which the cattle are fed, and particularly that a sufficiency of food rich in albumenoids is supplied to them.

(To be continued.)

## Advertisements.

Resolution of Provincial Board of Agriculture, 3rd March, 1882.

"No advertisements, except official notices from recognized Agricultural Societies, shall be inserted in the JOURNAL OF AGRICULTURE in future, unless prepaid at rate of 50 cents each insertion, for advertisements not exceeding ten lines, and five cents for each additional line."

## DOMINION

# EXHIBITION

OF 1882.

Kingston, Sept. 13th to 23rd.

## NOVA SCOTIAN EXHIBITS.

NOTICE is hereby given, that Special Arrangements have been made for the conveyance of approved Exhibits from Nova Scotia to Kingston. A sum of \$500 has been appropriated by the Dominion Government towards the transport of Live Stock, Manufactures, Fish Exhibits, etc. All Live Stock must be taken charge of during transport and at the Exhibition by their owners or agents employed by them. Fish Exhibits and Manufactures may be sent to care of Dr. Honeyman, Provincial Museum, Halifax, who will act as Commissioner for the Provincial Government, and will accompany such Exhibits to Kingston.

There will be a special exhibit of the Economic Minerals of Nova Scotia, and persons willing to contribute to this department are requested to communicate with Dr. Honeyman. Enquiries have lately been made for Sulphides, Barytes, Manganese, and others of the less common minerals, and owners of mines may find it advantageous to exhibit.

Competitors for Prizes are required to pay \$1 for membership. Entries: for Live Stock and Agricultural Implements, 19th August; Field Produce and Manufactures, 26th August; Horticultural Products, Ladies' Work and Fine Arts, 2nd September. All Exhibits must be approved by Board of Agriculture before being forwarded at public expense.

Prize Lists and Forms may be obtained from H. Wale, Secretary Arts Association, Toronto, or Dr. Honeyman, Provincial Museum, Halifax.

Whilst reasonable care will be given by the Commission, all Exhibits will be at risk of owners.

By order of the Board of Agriculture,  
GEORGE LAWSON,  
Secretary.  
Provincial Exhibition Office,  
Provincial Museum, Halifax.

## JERSEY BULL.

THE splendid thorough-bred Jersey Bull CHIEF OF THE ISLAND, No. 46 N. S. Register, No. 4338 Am. Club; solid smoky fawn, black tongue and switch; stands for service during this season at Bedford, N. S., at the stable of Mr. Wm. Willis. Cows sent from a distance will receive every care and attention. Fee for service two dollars.

G. W. BOGGS.  
Bedford, N. S., Aug. 10, 1882.