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NOVA SCOTIA

**JOURNAL OF AGRICULTURE**

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., AUGUST, 1882.**

**No. 26.**

We publish this month a number of communications on the State of the Crops which were not received in time for last month's *Journal*. These, and the ample reports previously published, taken in connection with the highly favorable weather which we have lately had, will enable our readers to estimate very fairly the probable results of the Nova Scotia farmers' labours for the year 1882.

We have already called attention to the offer of the Dominion Government of \$500 towards the transportation of animals and articles from Nova Scotia to the "Grand Dominion and 37th Provincial Exhibition," to be held at the City of Kingston, Ontario, from 18th to 23rd September next. Persons desirous of forwarding live stock, &c., to the Dominion Exhibition should communicate at once with their District Member of the Board of Agriculture, as the Board are now engaged in making arrangements, and desire to meet the views of intending exhibitors as far as possible, as well as to make the most judicious application of the fund placed at their disposal. An official announcement will probably be made in the course of a few days, after the Board have had an opportunity of conferring with the Provincial Government.

ENTRIES of Live Stock for the Dominion Exhibition must be made on or before 19th August.

We reprint, for information of our readers, the Regulations and other particulars of the Dominion Exhibition to be held this year at Kingston. It will be seen that the competition is "open to world," but it is necessary to call special attention of intending exhibitors to the second rule, requiring payment of one dollar for membership of the Agricultural and Arts Association. By Rule 3, "no one but a member shall be allowed to compete for prizes, except in Classes 52 and 53." This has been long very well understood in Ontario, but will be new to many in this Province. In reading through the Rules and Regulations, it will be seen that Ontario Exhibitions are managed in several respects somewhat differently from ours.

**STATE OF THE CROPS IN NOVA SCOTIA.**

**CAPE BRETON.**

*Christmas Island, July 11th, 1882.*

DEAR SIR,—Your favour of the 3rd came to hand during my absence, and I have only time to write briefly before the mail leaves, and I fear it will not be in time for your publication.

The hay crop promises to be a fair average. Wheat early put in the ground is likely to be a perfect failure, but what has been sown later promises to be fair. The unusually wet and cold season has interfered very much with its growth.

Oats are not likely to be as good as last year for the same reason.

The potato crop promises to be fair, except in wet ground, where the seed perished early. Some people have already used their new potatoes on their table.

Farming generally is not likely to prove as profitable this year as in former years in this part of the country.

H. F. McDougall.

INVERNESS, C. B.

*Mabou, July 11th, 1882.*

DEAR SIR,—Regarding the crop prospects of this district, I think I am safe in pronouncing at least an average all round.

Hay will probably be above an average crop, but late in cutting.

Cereals of all kinds have suffered from the prolonged cold and wet of the latter part of June and first of July. Up to the 8th inst., the outlook was dark, but the last few days, which have been warm and dry, have encouraged us to hope for good returns yet.

The comparative failure of the wheat crop last year, has caused a reduction in the area under wheat this year, but so far as I can learn, with the exception of some of the early sown, which is thin, a fair prospect of a good crop exists at present.

Potatoes look well, but like other crops will be late in maturing.

The only crop which seems to have benefited by the cold rains is the turnip, which has come away well, and, so far, is almost untouched by the flies.

Apples and other fruit will probably be a light crop, if we can judge from the manner in which they bloomed.

The last few days have made a wonderful change on the face of the country, and with another week or two of this weather a good hay crop at least will be assured, which is in this country the most important the farmer raises.

JOHN MCKLEN.

Weybecomeagh, C. B.,

July 20th, 1882.

In reply to yours of 3rd inst., present appearances are in favor of a fair return for breadth sown. In this locality the scarcity of fodder in the spring necessitated the consumption of much seed, and in consequence the crop will be much lighter than usual.

Particularly is this the case with oats and potatoes, both of which are looking well.

The hay crop is assured, the only difficulty now being in securing it. The North-West having drawn so heavily on our bone and sinew, loss in making will be the result should Vennor's prophecies be correct.

Wheat has been sown more freely than for many years, and where lands are naturally dry, or well drained, has a good start. Patches poorly put in have the usual poor appearance.

Small fruits will be in abundance; apples and plums short.

A scarcity of blossoms, with a long continued spell of damp cold weather, seems to have affected the crop prospects very much. Mangolds and turnips promise well wherever sown.

Our misfortune here is, that this branch of our farm industry does not yet receive that attention or prominence its importance demands.

J. S. HART.

COLCHESTER.

Brookland, Upper Steviacke,

July 10th, 1882.

JOURNAL OF AGRICULTURE to hand. The season very backward, wet, cloudy and cold. Grain of all kinds came up well and is standing the rain wonderfully. Potatoes are suffering from the want of warmth and sunshine and will be a light crop if the rainy season continues much longer.

Artificial manures have been used to a greater extent than usual, therefore a larger area of crop sown than in former years. Fodder corn looks pale and sickly. Hay crop very promising. Pasturage good. This is not a fruit growing section, yet the small orchards have a fine appearance of fruit, the young trees look thrifty. This proves that if the cultivating of fruit were attended to, this valley would produce abundantly.

D. MCG. JOHNSON.

CUMBERLAND.

Minutic, July 12th, 1882.

In reply to your favor of the 3rd inst., I have to say that the prospects of the crops are not favorable. There being so much wet and cold weather the first part of summer, that has put all farming work behind. Not over two-thirds as much grain sown as usual. Number of bushels of potatoes planted about as usual, but late and a good many missed.

Hay on high and dry marsh will be an average crop, but on low lands winter-killed. Upland about half what it was last year. Very few mangolds and turnips grown in this district.

AMOS VERNON,

Sec'y Minutic and Barronsfield  
Agricultural Society.

GRAND DOMINION AND THIRTY-SEVENTH PROVINCIAL EXHIBITION,

UNDER THE MANAGEMENT OF THE AGRICULTURAL AND ARTS ASSOCIATION OF THE PROVINCE OF ONTARIO, AT THE CITY OF KINGSTON, COMMENCING ON MONDAY, SEP. 18TH, AND CONTINUING UNTIL SATURDAY, 23RD. \$20,000 IN PRIZES AND DOMINION MEDALS.—COMPETITION OPEN TO THE WORLD. OFFICE OF THE ASSOCIATION, COR. YOUNG & QUEEN STS., TORONTO.

AGRICULTURAL & ARTS ASSOCIATION OF ONTARIO.

Members of the Council:

- Dist. No. 1.—D. P. MCKINNON...South Finch.
- " 2.—IRA MORGAN...Metcalfe.
- " 3.—JOSHUA LEGGE...Camanoquo.
- " 4.—J. B. AYLESWORTH...Newburgh.
- " 5.—JOHN CARNEGIE...Peterborough.
- " 6.—GEORGE GRAHAM...Brampton.
- " 7.—G. MOORE...Waterloo.
- " 8.—J. C. RYKERT, M.P...St. Catharines.
- " 9.—HENRY PARKER...Woodstock.
- " 10.—J. HUNTER...Eden Grove.
- " 11.—L. E. SHIPLEY...Greystead.
- " 12.—STEPHEN WHITE...Clatham.
- " 13.—CHARLES DRURY...Crown Hill.

Ex officio member:

Hon. S. C. Wood, Commissioner of Agriculture, etc. Toronto.

Officers:

President—C. DRURY...Crown Hill.  
Vice-President—D. P. MCKINNON...South Finch.  
Treasurer—GEORGE GRAHAM...Brampton.  
Secretary—HENRY WADE...Toronto.  
Consulting Chemist—Prof. N. F. DUBOIS, Queen's College...Kingston.  
Veterinary Surgeon and Referee—ANDREW SMITH, V. S...Licentiate Edin. Vet. Col.

Bankers—CANADIAN BANK OF COMMERCE.

General Superintendent of the Exhibition—A. H. WHITE...Charing Cross.  
Superintendent of Grain, Roots, and the Horticultural Department—JOHN HOLDER...St. Catharines.  
Superintendent of the Arts Department—THOMAS HUNTER...Toronto.  
Superintendent of Ladies' Work Department—MRS. HEASLIP...Toronto.  
Reporter of Live Stock—PROFESSOR BROWN, Ontario School of Agriculture...Guelph.  
Representative from Mechanics Institute—E. JACKSON...Newmarket.

Committees:

- On HORSES—Messrs. White and Moore.
- CATTLE—Messrs. Shipley and McKinnon.
- SHEEP AND PIGS—Messrs. Hunter and Legge.
- POULTRY—Messrs. Parker and McKinnon.
- JUDGES AND DELEGATES—All the Council.
- ARTS DEPARTMENT—Messrs. Carnegie and Rykert.
- HORTICULTURAL PRODUCTS—Messrs. Rykert and Graham.
- AGRICULTURAL PRODUCTS—Messrs. Aylesworth and Hunter.
- DAIRY PRODUCTS—Messrs. Aylesworth and Shipley.

PROGRAMME FOR THE EXHIBITION.

MONDAY, SEPT. 18th.—Officers and members of the Association, judges and exhibitors, notified to attend, members of the press, and necessary attendants, will be admitted on presenting the proper credentials, badge, or ticket of admission. Other persons will be admitted on payment of 25 cents each time. The rule for admission will be the same throughout the Exhibition.

TUESDAY, 19th.—The judges and delegates requested to attend on this day, will report themselves on arrival to the Secretary and commence their duties at once. On receiving the class-books, they will be furnished with the blank prize tickets, which they shall fill up and affix in each section so soon as they shall have finally determined their awards. The First Prize Tickets will be Red; the Second, Blue; the Third, Yellow; the Fourth, White; Extras, Green; the "Highly Commended" Tickets, White. On completing the class, Judges shall report to the Secretary. The main exhibition building will be closed till 4 p. m., for the purpose of affording the Judges an opportunity of discharging their duties properly. Non-members admitted to the grounds on payment of 25 cents each time. All the buildings and grounds will be open to visitors.

WEDNESDAY, 20th.—The Judges on Live Stock requested to attend will report themselves on arrival to the Secretary, and commence their duties at once. On receiving the class-books, they will be also furnished with the blank prize tickets, which they shall fill up and affix in each section so soon as they shall have finally determined their awards. The First Prize Tickets will be Red; the Second, Blue; the Third, Yellow; the Fourth, White; Extras, Green; the "Commended" Tickets, White. On completing the class, the Judges shall report to the Secretary. Admission, 25 cents. The display of fruits, plants and flowers, and all exhibits will be open to the public. The Annual Meeting of the Council of the Provincial Agricultural and Arts Association for the purpose of hearing the President's address, the awards of the Judges on the Essays, a discussion on the present position and

future work of the Association, and other business, to conclude with the presentation of Medals to the successful competitors for Farm prizes in group No. 3, at the City Hall at 7.30 p. m.

**THURSDAY, 21st.**—Admission as usual to non-members, 25 cents. Prize animals to be in the ring at 2 p. m.

**FRIDAY, 22nd.**—All the buildings and grounds will be open to visitors. Admission 25 cents. Prize animals to be in the ring at 2 p. m.

**SATURDAY, 23rd.**—The Exhibition will be considered officially closed at 9 a. m., when the Treasurer will commence paying the premiums. Exhibitors will remove all their property from the grounds and buildings. The gates will be kept closed as long as necessary, and none will be admitted except those who can show that they have business to attend to.

#### RULES AND REGULATIONS.

**MEMBERSHIP.**—1. The members of the Agricultural Societies of the several Townships within the County of Electoral Division or United Counties wherein the Annual Exhibition may be held, and the members of the County or Electoral Division Society, shall be also members of the Association for that year, provided the Agricultural Societies of the said Townships or Society of the said County or Electoral Division, or United Counties shall devote their whole funds for the year, including the Government grant, in aid of the Association, and shall pay over the same, accompanied by a list of the members of Society, to the Treasurer or Secretary of the Association, two weeks previous to the Exhibition; and provided also that the sum so paid over shall not be less than one dollar for each member of any such Society.

2. The members of the Council of the Agricultural and Arts Association, both elected and *ex officio*, all life members, and all subscribers of one dollar annually (which shall entitle such subscriber to membership only for the year for which the subscription is paid), shall constitute the Agricultural and Arts Association. The payment of ten dollars shall constitute a life membership of the Association, when given for that special object, and not as a contribution to any local fund; and those persons who have heretofore been made life members under by-laws of the Association, shall continue to be life members of the same.

**ENTRIES.**—3. No one but a member shall be allowed to compete for prizes, excepts in classes 52 and 53.

4. All entries must be made on printed forms, which may be obtained of the Secretaries of Agricultural and Horticultural Societies, or of Mechanics Insti-

tutes throughout the Province, free of charge. These forms are to be filled up by the exhibitor, enclosing a dollar for membership (and intending members are requested to send the dollar by registered letter to prevent mistakes), and when entries of ordinary sized Horses are made, in addition to the one dollar member fee, one dollar must be remitted for stabling, and in case of heavy draught Horses and Stallions, one dollar and one-half for extra sized stables, and in the case of Poultry, besides the member fee of one dollar, twenty-five cents per entry must be enclosed for feed and care taking and sent to the Secretary of the Association, Toronto, previous to or on the following named dates, viz:—

5. *Horses, Cattle, Sheep, Swine, Poultry, Agricultural Implements and Machines*:—Entries in these classes (except for *Farmer's Advocate* prize, class 14, sec. 12, which will be taken up to day of show) must be made by forwarding the entry form, as above mentioned, filled up, and members subscription enclosed, on or before Saturday, August 19th, four weeks preceding the show.

6. In the classes of Blood Horses and pure bred Cattle, full pedigree, properly certified, must accompany the entry. No animals will be allowed to compete as pure bred unless they possess regular Stud or Herd Book Pedigrees, or satisfactory evidence be produced that they are directly descended from such stock. In the class of Durham Cattle particularly, no animal will be entered for competition unless the pedigree of the same be first inserted in the English, American or Canada Short Horn Herd Book, or in the Canada Stock Register, kept at the office of the Association, Toronto, with Herd Book or Registry number in right hand column of entry form.

7. Grain, Field Roots, and other Farm Products, Machinery for other than agricultural purposes, and Manufactures generally, must be entered previous to, or on Saturday, August 26th, three weeks preceding the show.

8. Horticultural Products, Ladies' work, the Fine Arts, &c., may be entered up to Saturday, September 2nd, two weeks previous to the Exhibition.

9. Exhibitors are particularly requested to take notice that it is absolutely required that entries be made at the dates above mentioned, in order to afford sufficient time to examine the entry papers, and to correspond with parties, when necessary, for the correction of errors and omissions. In cases where entries have not been made in accordance with the foregoing rules, the Secretary may receive the entries upon the exhibitor paying one dollar extra for each and every entry.

10. In the Live Stock Classes, the entry must in every case be made in the

name of the *bona fide* owner, and unless this rule be observed no premium will be awarded, or if awarded it will be withheld. If any person shall exhibit any animal of which he is not the *bona fide* owner, he shall forfeit any premium which may be awarded him, and be precluded from exhibiting for such term as the Council may decide.

11. In all the other classes, entries must be made in the names of the producers or manufacturers only, and by such producers themselves in person, or their agents duly authorized. Any person making entries as an agent for more than one producer or manufacturer must pay the usual subscription of one dollar for each of such parties. If any person shall enter an article for exhibition, as produced or manufactured by himself, when it has not really been so, he shall forfeit any premium which may be awarded the article, and be precluded from exhibiting for such term as the Council may decide.

12. In all departments (unless otherwise specified) the competition is open to exhibitors from any part of the world, without reservation, on compliance with the rules.

13. Manufacturers are requested to furnish, with the articles exhibited, a statement of the quantity they can produce or supply, and the price, for the information of the Judges, whose decision will be based on the combination of quality, style and price, and the adaptation of the article to the purpose or purposes for which it is intended.

14. No person shall be allowed to enter for exhibition more than one exhibit in any one section of a class, unless the additional article be of a distinct named variety or pattern from the first. No exhibitor in the Arts and Manufactures Department shall be awarded more than one prize in any one section of the same class.

15. *Extra Entries.*—Every article must be entered under some one of the headings in the regular list, when possible; but if any article is of a distinct character from anything specified in the list, it may then be entered in the extra section of that class with which it most nearly corresponds. No article, however, will be allowed to be entered as an extra for want of sufficient quantity or number, or any other similar defect, when of the same kind or variety as anything named in the list; in such a case the article cannot be exhibited.

16. All Agricultural or Horticultural products must be the growth of the present year. Manufactured articles, or works of art, which have been awarded prizes at any previous Provincial Exhibition, shall not be entered in competition for the prizes named in the prize list for

this year, but shall be awarded diplomas, if, in the opinion of the Judges, such articles are superior to any others exhibited, and are deemed worthy of the same.

17. On the entry of each animal or article, a card will be furnished the exhibitor, specifying the class, the section, the number of the entry, and the name of the exhibitor, which card must remain attached to such animal or article during the Exhibition.

**TRANSPORT OF ARTICLES, PLACING THEM ON EXHIBITION, AND CHARGE OF THEM WHILE THERE.**

18. All animals and articles must be delivered on the grounds, arranged and placed on exhibition, not later than Monday, 18th September. Cut Flowers will be admitted up to 12 noon on Tuesday, the 19th.

19. Exhibitors must provide for the delivery of their articles upon the Show Ground. The Association cannot, in any case, make provision for their transportation, or be subjected to any expense therefor, either in their delivery at, or return from the grounds. All the expenses connected therewith must be provided for by the exhibitors themselves.

20. Articles not accompanied by their owners may be addressed to the care of the Superintendent of the Exhibition, who will receive them on their being delivered at the grounds; but in no case will such articles be brought on the grounds and placed on exhibition except by and at the expense of the owners or their authorized agents.

21. Exhibitors on arriving with their articles, will apply to the Superintendent of the Grounds; who will be stationed within the entry gate, and who will inform them where the articles are to be placed.

22. Exhibitors will at all times give the necessary personal attention to whatever they may have on exhibition, and at the close of the Show take entire charge of the same.

23. No articles will be allowed to be removed from the grounds till the close of the Exhibition, on Saturday, September 23rd, at 9 A.M.

24. Though the Directors will take reasonable precaution to ensure the safety of articles sent to the Exhibition, yet they wish it to be distinctly understood that the owners themselves must take the risk of exhibiting them; and that should any article be accidentally injured, lost, or stolen, the Directors will give all the assistance in their power towards the recovery of the same, but will not make any payment for the value thereof.

**STEAMBOATS, RAILROADS, CUSTOMS.**

25. The Association will make favourable arrangements, where practicable,

with steamboat, railroad and express companies for carrying articles and passengers at reduced rates.

26. Arrangements will be made with the Customs Department for the free entry of articles from foreign countries for competition.

**ADMISSION TO THE GROUNDS.**

27. Each member on paying his subscription, will be furnished with four small admission tickets, each of which will admit the holder once, and must be given up at the turnstile on passing into the grounds. If a member shall have used them all, and still desires admission, he will have to pay for admission in the same manner as a non-member. Life-members will be furnished, as heretofore, with tickets or badges admitting them during the Show.

28. The entry tickets upon animals or articles will admit the persons bringing them to the Show Grounds for exhibition, along with such animals or articles, without the use of any other ticket. Afterwards, such parties must be provided with proper admission tickets.

29. Necessary attendants upon stock and articles belonging to exhibitors will be furnished with admission tickets for each day of the Exhibition, with their names written upon them, which tickets will be good, to the persons whose names they bear, at the Exhibition Gate only, during the Show, and the Superintendent of each department will be the person to whom to apply for orders for such tickets, to be then furnished by the Secretary.

30. The price of admission to those who are not members will be 25 cents each time of entering through the gates during the Exhibition. The admission will be by means of registering turnstiles, and each person will be required to be provided with the proper change before entering. Carriages and horsemen will not be admitted. All horses entered for exhibition purposes shall only be ridden or driven while being exhibited, and in the ring.

31. Numbers of carriage, buggy and saddle horses having heretofore entered merely for the purpose of obtaining cheap stabling, and driving about the grounds, the Committee on Horses will exclude from the grounds any such animals as appear unworthy of entering for competition.

**JUDGES AND THEIR DUTIES.**

32. The Judges will be appointed by the Council of the Association previous to the Exhibition, and will receive a circular informing them of the fact, and inviting them to act.

33. The Judges are requested to report themselves at the Secretary's office, presenting their circular of appointment, im-

mediately on their arrival at the grounds, on Tuesday, for every thing but Live Stock, and Wednesday for Live Stock, the 19th and 20th September, and they will begin their duties on those days at 1 P.M.

34. No person shall act as a Judge in any class in which he shall be an exhibitor.

35. In addition to the stated premiums offered for articles enumerated in the list, the Judges shall have the power to recommend such premiums not enumerated, as they may consider worthy, and the directors will determine whether any premium be awarded, and the amount of such premium. The Judges may also distinguish such animals or articles as they consider deserving of notice, but which have not received prizes, by ticket, with the words "Highly Commended."

36. In the Fine Arts and Mechanical Departments Diplomas will be awarded, in addition to the money prizes, to any specimen evincing great skill in its production, or deemed otherwise worthy of such a distinction, on its being recommended by the Judges and approved of by the Committee, to whom all such matters shall be referred.

37. In the absence of competition in any section, or if the stock or articles exhibited be of inferior quality, the Judges are instructed to award only such premiums as they think the articles deserving of. They will exercise their discretion as to whether they will award the first, second, third, or any premium.

38. Under "Extras" in each of the classes, when more than one entry of the same kind of article has been made, they will be judged as in competition for first and second prizes, the same as though they had been regular sections, and when but one such entry has been made, the article, if worthy, shall be recommended a first or second prize. The Judges, however, are instructed not to recommend prizes in either the "regular" or "extra" sections of a any class, unless the articles come up to the desired "standard of excellence." No award of prizes for Extras will be paid until sanctioned by the Committee of the Association.

39. Each award must be written in a plain, careful manner, on the blank page opposite the number of the entry.

40. Any person who shall attempt to interfere with the Judges while in the discharge of their duties, or who shall afterwards, on the premises of the Association, use any contemptuous or abusive language to any Judge in consequence of any award made by him, shall forfeit his right to any premiums to which he might otherwise be entitled, and shall be excluded from exhibiting for one year thereafter, and Judges are requested to report any such interference.

EXTRACTS FROM BY-LAWS.

41. "The Judges shall, in the execution of their duties, be careful to act with the most rigid impartiality; shall make their entries in a clear and conspicuous manner, in all cases of doubt or difficulty referring freely to the Secretary, or to the Committee of the Council in charge of the department; and when they have completed their reports shall sign and deliver their books to the Secretary of the department to which they belong.

42. "Upon the discovery of any fraud, deception, or dishonest practice, either in the preparation, ownership, or of any representation concerning any article exhibited, which may have affected, or may have been intended to affect the decision of the Judges, the Council shall have power to withhold the payment of any prize awarded, and may prohibit any such party from exhibiting in any class for one or more years, and may also publish the names of such persons or not as may be deemed most expedient."

DELEGATES, THE ANNUAL MEETING, ETC.

43. Delegates will be admitted on Tuesday and Wednesday of first week, and will be furnished with admission tickets. Members of the press will receive badges on reporting themselves at the Secretary's office.

44. The Annual Meeting of the Council of the Association will take place on Wednesday, the 20th of September, at 7.30 o'clock, P.M., at the City Hall.

45. Delegates from County Societies desiring to obtain a portion of the Canada Company prize wheat for their Counties will please apply to the member of the Council for the District in which their respective Societies are situated.

THE GENERAL SUPERINTENDENT.

46. The General Superintendent will have the entire supervision of the grounds and the arrangement of the Exhibition. He will have an office upon the ground, where all persons having inquiries to make in relation to the arrangements will apply, and will also be the person to apply to for orders for attendants' tickets for Live Stock, Machinery, &c.

PAYING THE PREMIUMS.

47. The Treasurer will be prepared to commence paying the premiums on Saturday, 23rd of September, at 9 A.M., and parties who shall have prizes awarded to them are particularly requested to apply for them before leaving Kingston, or leave a written order with some person to receive them, stating the articles for which prizes are claimed.

48. Persons entitled to cash premiums must apply for them at the Secretary's

office, who will give orders on the Treasurer for the amount.

49. These orders must be endorsed, as they will be paid to order, not to bearer, and on presentation to the Treasurer, properly endorsed, will be paid either in cash or by cheque on the bank.

50. Orders for premiums not applied for on Saturday, as above, will be given by the Secretary, and the amount forwarded by the Treasurer, on receipt of proper instructions.

EXTRACTS FROM AGRICULTURAL STATUTE.

51. "All persons to whom a prize is awarded shall apply to the Secretary of the Association for payment thereof before or on the 30th day of November of the year in which such prize is awarded, or shall forfeit such prize.

52. "The Council or Board of Directors of any Association or Society organized under this Act, on being made aware of any fraud having been committed by any member or exhibitor, in the entry of any stock or goods in competition for prizes at any Exhibition, shall have the power of withholding the payment of any prizes that may have been awarded by the Judges to such members or exhibitors, on such fraudulent or any other entries made at any such Exhibition.

53. "If any person wilfully injures or destroys any property within the Exhibition Grounds of the Agricultural and Arts Association, or of any Agricultural or Horticultural Society, or hinders or obstructs the officers or servants of said Association or of such Society, or any policeman or constable duly appointed as aforesaid, in the execution of his duty, or gains admission to the said grounds contrary to the rules of such Association or Society, he shall be liable to a fine of not less than one nor more than twenty dollars; said fine to be enforced and collected as fines are usually collected, and to be paid over to such Association or Society for its use and benefit; and, in default of payment, the said offender shall be imprisoned in the common gaol for a period of not more than thirty days. 31 Vic., chap. 29, sec. 57.

54. "The officers of any such Association or Society may by their rules and regulations prohibit and prevent all kinds of gambling, theatrical, circus or mountebank performances, exhibitions, or shows, and also regulate or prevent the huckstering or trafficking in fruits, goods, wares, or merchandise on the Exhibition Grounds, or within three hundred yards thereof; and any person who, after due notice of such rules and regulations, violates the same, shall be liable to be removed by the officers, policemen or constables of said Association or Society, and be subject to the penalty prescribed by the next preceding section. 31 Vic., chap. 29, sec. 58.

55. "It shall not be lawful to carry on any horse-racing during the days appointed for holding any Exhibition by the Agricultural and Arts Association, or by any Electoral District Society, within five miles of the place of holding the same. 35 Vic., chap. 32, sec. 10.

(2) "Any person who shall be guilty of a violation of this section shall be liable, upon summary conviction before a Justice of the Peace, to a fine not exceeding fifty dollars, or imprisonment in the common gaol of the County for a period not exceeding thirty days. 35 Vic., chap. 32, sec. 11."

MISCELLANEOUS.

56. Provender will be provided by the Association for live stock at cost price. For information, exhibitors will apply to the superintendent of the grain and fodder department, at his office.

57. In case the directors shall require any particular information in reference to animals or articles taking first prizes, the owners will be expected to transmit it when requested to do so.

58. All protests against decisions of the Judges must be made before 12 o'clock noon on Friday, and must be delivered to the Secretary in writing, stating the cause of protest. Any difficulty, or protest, in respect to the awarding of prizes in any of the departments, shall be referred to the proper Committee of the Council over that department, who shall have full power to adjudicate upon the same, and report their decision to the Council for approval, and such approved decision shall be final, and the protest and report upon it shall be entered in a book kept for that purpose. This rule shall not apply to alleged errors on points of merit.

Prize Lists and Entry Papers for the Dominion Exhibition at Kingston may be obtained on application by post card or otherwise, to:

HENRY WADE, ESQ.,  
Sec'y Agricultural & Arts Association,  
Toronto.

Or to PROFESSOR LAWSON,  
Halifax.

The Exhibition is to be held at Kingston.

REPORT ON THE CROPS AND LIVE STOCK OF ONTARIO.

The following information is reprinted from the Agricultural Returns to the Ontario Bureau of Industries for May, 1882, kindly furnished to us by Chas. Carpmael, F. R. S. C., the Superintendent of the Meteorological Observatory of the Dominion:

The Bureau of Industries was established by an Act of the Ontario Legis-

lature, passed during its last session. It is one of the Chief objects of the Bureau, as stated in my first circular to correspondents, to collect facts and statistics relating to food supplies from every section of the Province, and to abstract, tabulate and publish the same in the common interest of producers, dealers and consumers. A second object, hardly less important, is the procuring of similar information from other agricultural countries, and from countries in which the Province usually finds a market for its surplus products. By this means producers and consumers may be brought nearer together; sudden fluctuations in prices may be averted; the country's annual surplus or deficit of products may be ascertained; and its resources, capabilities and progress in material wealth may be accurately gauged.

The information given in this report has been gathered from all the townships in the Province, except a few in the remote and sparsely-settled north. It is a digest of more than fifteen hundred returns, made in reply to a circular of April 15th, asking for a report on the state of crops and live stock, and kindred subjects. The questions proposed were:

1. What is the general condition of Fall Wheat?
2. What is its condition on the various soils?
3. To what extent, if at all, has it been injured by winter or spring frosts?
4. To what extent, if at all, by worms or insects?
5. Has any wheat land been ploughed up? Or is any likely to be? To what extent?
6. Is Winter Rye grown? What is its condition?
7. What is the condition of the Clover crop, and how has it been affected by winter or spring frosts?
8. What is the condition of Live Stock—Horses, Cattle, Sheep and Pigs?
9. Has any disease appeared among them; and if so, of what nature, and what have been its effects?
10. Was there a sufficiency or a scarcity of fodder supply throughout the winter?
11. What progress has been made with spring work? When did ploughing and seeding begin?
12. In what stage is vegetation, and what is the appearance of the Fruit Trees? How has the winter affected Fruit Trees?
13. Is any considerable quantity of Wheat in farmers' hands above reserves for home consumption?
14. Is any considerable quantity of Hay and Oats?
15. Are any considerable numbers of Fat and Store Cattle?
16. General Remarks.

The circular was addressed to the officers of Agricultural Societies and Granges, the Reeves, deputy-Reeves, and clerks of townships, the inspectors of schools, and others, and the answers were returnable on the 25th of April. Owing, however, to some delay in completing arrangements for the free use of mail service by

the Bureau—which the Dominion Government readily granted—the circular was not sent out as early as was intended, and in some instances less time was given for enquiry than the correspondents would desire. But in spite of this drawback the promptness of the returns has been very gratifying. The correspondents manifest an earnest interest in the objects of the Bureau, and the general tenor of their replies is terse, practical and intelligent.

The main wheat-growing region of Ontario lies westward of the Laurentian system, the easterly limit being an irregular line drawn from the Thousand Islands, in the St. Lawrence, through the counties of Frontenac, Addington, Hastings, Peterborough, Victoria, and Simcoe, to Georgian Bay.

The returns of acreage received from township clerks are incomplete, but they indicate that a large breadth of fall wheat has been sown. In the western peninsula it embraces nearly one-fifth of all the cleared land, but in the counties north of Lake Ontario it is not more than one-tenth; in these counties spring wheat is chiefly grown. The condition of the crop is much less favourable than it was a month ago. The night frosts and the east winds have done it serious injury, especially on low and undrained lands; but, should warm weather set in, accompanied by genial showers of rain, a fair harvest may yet be reaped.

The clover has been irretrievably damaged by winter exposure and spring frosts. The same discouraging reports come from all quarters, and, under the most favourable circumstances, it will not be more than half a crop.

Live stock are generally in good condition. With plenty of fodder, and an open winter, they have fared well. In the eastern counties of the Province, and in the lumbering districts of the north, "pink-eye" prevailed very generally, and in some sections many horses died of it; a common effect on brood mares was to cause them to lose their foals.

The supply of wheat in farmers' hands is reported low; the good prices paid last fall brought nearly the whole surplus of the country into market. The same thing may be said of fat and store cattle, and, even under more favourable conditions than now seem possible, prices are not likely to decline.

The ground was workable at an early stage of the season, and farmers have the great bulk of their ploughing and seeding finished. But vegetation is very slow; there is little growth perceptible, and in Toronto to-day [May 6th] the trees are as naked as in mid-winter.

In the detailed report the counties have been arranged in topographical

groups, the object being to embrace in each group counties possessing the same climatological conditions.

A. BLUE, Sec'y.

BUREAU OF INDUSTRIES,  
TORONTO, May 6th, 1882.

AREA AND POPULATION.—RETURNS OF  
ACREAGE UNDER FALL WHEAT.

A Return made to the Bureau from township clerks gives the population, acres occupied and cleared, and acres in fall wheat, as collected this year by the assessors. The acreage of fall wheat was obtained at the request of the Commissioner of Agriculture, through a circular issued on the 1st of February. In a number of municipalities, however, the assessors had commenced their work before the receipt of the circular, so that the returns are incomplete. But enough have been received from every county of the Province to furnish data for estimates of the whole acreage, and care has been taken to avoid extreme figures.

The total area in fall wheat as given in the summary table is 1,149,100 acres. This is an average of 1 acre to every 9 acres of land cleared and under cultivation in the Province, but the proportion varies greatly in different sections. In some of the western counties it is as high as 1 to 4½, while in some eastern counties it is as low as 1 to 55. In the eastern half of the Province, and in the northern portion of the western half, spring wheat is chiefly grown, and it is proposed to collect its acreage in time for the next monthly report of the Bureau. If its cultivation has kept pace with that of fall wheat it is probable that the total area under wheat will be found to be not less than 2,000,000 acres. In 1870, as shown by the census of 1871, the total area was 1,386,366 acres, with the product of spring and fall wheat nearly equal. The area of land occupied is shown to be 20,150,000 acres, of which a little more than one-half is cleared and under cultivation. In 1870 the area occupied was 16,162,676 acres, of which 8,833,626 acres were cleared and under cultivation. The proportion of cleared to wooded land has been closely maintained. The population, as furnished by the municipal returns, has not been given in the table. One reason is, that the returns are incomplete; another is, that there is too great a discrepancy between them and the returns of the census enumerators. They would indicate that the population of the Province had decreased by 30 per cent within a year. The total population of Ontario, as given by the census of 1881, is 1,923,228, being an increase of 302,377 in ten years. The population of the township municipalities is 1,324,235, which, less a moderate percentage for the population of

unincorporated villages, shows the numerical strength of the farming class in this Province. The total urban population is about 600,000.

## HISTORY OF THE PICTOU CATTLE DISEASE.

No. III.

*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.]

The whole of the alimentary tract presented the same pathological conditions and the same sub-mucous infiltration as seen in the stomach.

The liver was pale and firm, but the mucous membranes of the vessels were thickened by infiltration of serum. The gall-bladder was large, its walls about an inch thick, but only containing about three ounces of bile of a dark green colour. The spleen was of a normal size, but firm and bloodless, the trabeculae and malpighian bodies very distinctly seen.

The kidneys, normal size but pale, and surrounded by a quantity of soft flaccid fat and a thick effusion of lymph.

The bladder was empty, pale, and its sub-mucous layer œdematous.

The diaphragm also shared in the general condition of dropsy, thinness and pallor of its muscular coats. The lungs were pale, but free from traces of acute disease. The heart was pale and all traces of surrounding fat were absent. The pericardium was thick and contained a quantity of fluid. The pleura was thick œdematous, but free from adhesions. The brain was soft and pale in substance, except when congestion was caused by the concussion which killed the animal, and the subarachnoid fluid was greatly increased. The spinal cord presented the same general appearance.

The effusion, when escaping from the abdomen was clear as spring water and flowed freely; when left exposed to the air for a few minutes it became gelatinous, but clear, soft and easily broken up.

The blood was dark in colour, and in ten minutes settled in the test tube into a firm clot filling the tube about two-thirds which could be lifted entirely out of the tube, so firm was the coagula, while the serum was scarcely coloured. It rapidly, however, underwent decomposition, the corpuscles parting with the colouring matter which coloured the serum a dark red colour.

A microscopic examination of the blood within an hour of being removed from the body, showed no bacteria, but a few filamentous bodies were present. The red corpuscles were very small, stellate,

and showed no tendency to form rouleaux. The proportion of white corpuscles was greatly increased.

*Post mortem No. 2.*—A small black steer, four years old, very thin and feeble, said to have been ill for over two weeks. Pulse 72, respirations 24, short and shallow, temperature 101 $\frac{1}{2}$ °. The abdomen is round and dependent, diarrhoea of black fetid evacuations. Killed by a blow from an axe. The post mortem lesions correspond in every particular with those observed in David Foote's steer, except the gall-bladder which was about double its normal size; its coats were thick and œdematous and it contained about fifteen ounces of thick blackish-green bile.

About four gallons of clear serum escaped from the belly when opened. The chest contained no fluid. The thoracic organs were healthy but pale.

Similar post-mortem lesions were discovered in two animals killed for the purpose, in an investigation conducted by William McEachran, M. D., V. S., and Dr. E. F. Thayer, of Newton, Mass., one of the recently appointed Cattle Commissioners of the United States Treasury Department, who was sent on behalf of that Government to investigate the disease, and to report whether or not it was contagious, with a view to prevent the importation of hides from Nova Scotia into Boston and other United States ports.

### MICROSCOPIC EXAMINATION OF FLUIDS AND TISSUES.

(By Professor Wm. Osler, M.D., F.R.C.P.L.)

Having brought with me for future examination, blood in capillary tubes hermetically sealed, blood in test tubes closely corked, serum in vial, serum in capillary tubes, portions of muscle, liver, spleen, kidneys, stomach, and intestines. The solids were preserved in methylated spirits.

To aid me in arriving at correct conclusions as to the nature of the disease, I submitted the above mentioned fluids and solids to Professor Osler, Pathologist of McGill University, with a request to examine them. I here subjoin Dr. Osler's report which, for the reasons given by him, viz., the putrefactive changes in the fluids and the action of the spirits in which the solids had to be preserved, the results of the experiments conducted by him are not satisfactory.

*Physiological Laboratory,*

*McGill College, 31st July, 1880.*

"Professor McEACHRAN.

"DEAR SIR,—I beg to submit the following Report on the specimens handed to me for examination on the 26th inst., consisting of (1) test tube full of blood; (2) small pipettes full of same; (3) bottle

full of serum; (4) bits of liver, spleen, lung, muscle, intestine and stomach in spirits in a bottle.

"The examination of the portions of the solid organs gave no clue to the nature of the disease. The spleen tissue is apparently healthy and contains no bacilli. The epithelium of the kidney and the liver cells are cloudy and very granular. The submucous coat of the stomach and intestine is much infiltrated with serum. There is nothing abnormal in the muscular substance.

"The blood had begun to decompose. The red corpuscles still contain the colouring matter; many of them are small and irregular, otherways natural looking. The white corpuscles seem somewhat increased in number.

"There are no definite rod-shaped bacteria or bacilli, but certain filaments occur in considerable numbers and which contain little spore-like bodies. These structures bear a close resemblance to the developed or mature form of the bacillus anthracis, the supposed excitant of the disease anthrax.

"With a view of ascertaining, if possible, the nature of the disease the following experiments were made with the blood:—

"I, 26th. Inoculated a guinea pig with blood containing filaments and spores resembling those of anthrax.

"28th. No bacilli having developed in the blood.

"31st. Remains well.

"II, 26th. Inoculated guinea pig with blood; result, negative.

"III, 26th. Inoculated a young rabbit.

"28th. Blood contains no bacilli.

"31st. Remains well.

"V, 27th. Inoculated a mouse with the blood.

"28th. Blood contains no bacilli.

"29th. Found dead; tail at site of inoculation swollen; spleen contains bacteria, and small filaments, but not those of anthrax; blood contains a few rod-shaped bacteria.

"VI, 27th. Inoculated a mouse with the blood, died to-day; same condition as in experiment 5.

"Death in these two animals resulted from septecæmia, not from the development of the anthrax bacillus. When blood has undergone decomposition, the activity of the virus is greatly diminished or it may be destroyed, and this must be borne in mind in considering the negative results of the experiments.

"Yours, &c.,

"WM. OSLER, M.D., M.R.C.P.,

London.

MANNER IN WHICH IT IS SUPPOSED TO SPREAD.

Mr. Donald Fraser, a farmer living a few miles from Pictou, traces it in his stock to a cow belonging to a party living



in Picton, which had been sick, was turned loose on the highway, and having wandered near his farm, where it died on the roadside. It was allowed to lie unburied for days, till at last Mr. McDonald and some neighbors piled some wood over it and burned the carcass. Within a week, two of his young cattle were sick with the same disease; both died, and within a year, he lost twelve animals. Mr. Fraser further states that after losing all his stock he completely renovated his stables, and since then he has not lost any. His neighbour, Mr. Grant, loses some every year.

Mr. James Foot, who has been a heavy loser by the disease says:—"Fresh cattle taken into a building in which the disease has been, will take it."

Mr. Matheson was of the opinion that it reached Abercrombie Point by a cow dead of the disease having been thrown into the harbour, and having floated on to the shore carried the disease to the cattle on the Point.

At New Glasgow it first appeared in Squire McKay's barn, about twenty years ago. For a number of years it was confined to that locality, not extending west for years. He lost nearly all his stock (fifteen in number); after which he built a new barn, but the disease broke out again in the new building, caused, he thinks, by his having retained some of the old stock. Three years ago he got rid of all the old stock, and since then he has had no disease.

Mr. McKay remarked that, of cows from New Glasgow which were regularly quartered with his, some took the disease while others escaped.

From these statements it would appear that the disease, if not communicable by direct contact, it is communicable by mediate agents, notably infected buildings, and by the animal fluids and decomposing bodies.

If it is contagious, contagium does not form a marked feature in the disease.

Notwithstanding that these facts are generally known, and its spread is referred to these causes, I found that they still continued to turn the sick animals on to the commons and highways, allowing them to mix with those of their neighbours, and to throw the carcasses on to the shore in summer, or draw them on to the ice during winter to be floated off by the tide in spring.

Others living at a distance from the shore drag them through their fields out to a common or swamp and leave them unburied, for dogs to eat and drag piecemeal through their own or neighbour's fields. Even in cases where they do bury them it is seldom that they are covered by more than a sprinkling of earth, consequently dogs easily dig them up.

By the above careless and illegal practices the disease is spread and continued in the affected counties.

#### SUPPOSED CAUSES OF THE DISEASE.

As already stated, a belief exists extensively that the weed ragwort has something to do with it, which idea, however, is erroneous. (See Dr. Lawson's Report.) It is also believed by some that the water supply has to do with it, by the presence of some poisonous element. The incorrectness of this theory is proved by the fact of its occurring under all conditions of water supply, thus: On some of the farms on which I found the disease the water supply was very scanty, in others it was abundant and good; in fact it was met with where they were watered from the family well, where they had access to running streams, where the water was good and where it was bad. By reference to the report of Professor Lawson, it will be seen that the very careful microscopical and analytical examination of water from the different farms on which the disease was found to exist, shows it to be in most samples good water, and in a few instances containing such impurities only as are nearly always present in unfiltered water in ponds and streams of pasture lands.

Professor Lawson's report on the soil does not point to anything abnormal or indicate anything which would lead us to suppose that it had anything to do with its production. In fact we find it appearing on all kinds of soil; it prevails on the high rolling land, on the swampy soil, on the uncultivated common, and on the best tilled farms.

Until a careful clinical report from continued observation repeatedly made by a competent veterinary, and a properly conducted series of experiments, by placing healthy and sick together, by inoculation, by placing healthy animals in places supposed to be infected, to prove or disprove its contagiousness, and by thorough microscopic examination of the fluids and solid tissues of diseased animals, are made, we must remain ignorant of the true nature of the disease, and hence of the causes which give rise to it.

(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."

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ISRAEL LONGWORTH,  
Lorndale Farm, Truro.  
March 6th, 1882. pd

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