

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

Coloured covers/
Couverture de couleur

Covers damaged/
Couverture endommagée

Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

Cover title missing/
Le titre de couverture manquée

Coloured maps/
Cartes géographiques en couleur

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Bound with other material/
Relié avec d'autres documents

Tight binding may cause shadows or distortion
along interior margin/
La reliure serrée peut causer de l'ombre ou de la
distortion le long de la marge intérieure

Blank leaves added during restoration may appear
within the text. Whenever possible, these have
been omitted from filming/
Il se peut que certaines pages blanches ajoutées
lors d'une restauration apparaissent dans le texte,
mais, lorsque cela était possible, ces pages n'ont
pas été filmées.

Additional comments:/
Commentaires supplémentaires:

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X

14X

18X

22X

26X

30X

J

32X

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Coloured pages/
Pages de couleur

Pages damaged/
Pages endommagées

Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Pages detached/
Pages détachées

Showthrough/
Transparence

Quality of print varies/
Qualité inégale de l'impression

Continuous pagination/
Pagination continue

Includes index(es)/
Comprend un (des) index

Title on header taken from:/
Le titre de l'en-tête provient:

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

Masthead/
Générique (périodiques) de la livraison

NOVA SCOTIA

JOURNAL OF AGRICULTURE

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

Omnium rerum, ex quibus aliquid adquiritur, nihil est agricultura melius, nihil uberior, nihil homine libero dignius.—Cicero: de Officiis, lib. I, cap. 42.

VOL. IV.

HALIFAX, N. S., APRIL, 1885.

No. 56.

SPECIAL NOTICE TO SECRETARIES OF AGRICULTURAL SOCIETIES.

Ten Copies of this Journal are sent, Postage Prepaid, to every Agricultural Society in the Province, in payment of which a reduced charge of \$4 is deducted annually from each Society's Grant. Societies requiring their copies addressed separately to individual Members will be charged \$5. Any greater number of Copies to one address may be obtained at the reduced rate. The Annual Subscription for a Single Copy is Fifty Cents, payable strictly in advance. Subscribers wishing to have the "Journal" mailed regularly should send their address, accompanied by fifty cents, to A. & W. MacKinlay, Halifax.

CENTRAL BOARD OF AGRICULTURE OF NOVA SCOTIA, 1885.

Officers.

President—Major-General LAURIE
Vice-President—ISRAEL LONGWORTH.
Secretary and Treasurer—Professor LAWSON.

Executive Committee.

Major-General LAURIE, President.
I. LONGWORTH, Vice-President.
Hon. ISIDORE LE BLANC
Colonel W. E. STARRATT.

Representative Members

Government Member:—Hon. ISIDORE LE BLANC, M. E. C., Arichat.

Member for District No. 1, including the Counties of Halifax and Lunenburg:—Major-General LAURIE, Oakfield.

Member for District No. 2, including the Counties of Kings, Annapolis and Queens:—Colonel W. E. STARRATT, Paradise.

Member for District No. 3, including the Counties of Digby, Shelburne and Yarmouth:—CHARLES E. BROWN, Yarmouth.

Member for District No. 4, including the Counties of Hants, Colchester and Cumberland:—ISRAEL LONGWORTH, Lornedale, Truro.

Member for District No. 5, including the Counties of Pictou, Antigonish and Guysborough:—DAVID MATHESON, Pictou.

Member for District No. 6, including the Counties of Cape Breton, Richmond, Inverness and Victoria:—JOHN McKEE, Mabou.

Applications and proposals for the organization of New Societies should be addressed, in the first instance, to the Member of the District in which it is proposed to form the new Society. Blanks, copies of Agricultural Act, and other information, may be obtained on application to the Secretary of the Board.

The following Resolution was passed by the Board of Agriculture at Meeting held 4th February, 1885:—

Moved by Mr. Longworth, seconded by Hon. Mr. LeBlanc, and passed:

That, whilst this Board is not called upon to question the Herd Register of

any Country, Province, or State, it owes a duty to the Province to observe strictly the Rules adopted for the Registration of Cattle in the NOVA SCOTIA HERD REGISTER.

Therefore Resolved, That no animal be registered in the Nova Scotia Herd Register on the faith of another Herd Register unless such Register shows that the requirements of the Rules for Registration in this Province are observed.

Several applications having been received by the Board of Agriculture complaining of the strictness of the Rules for entry of Short Horn Cattle in the Nova Scotia Register, the Secretary has been directed to reply as follows:

The Board have carefully considered the matter of registration of Short Horn Pedigrees, and the representations made in regard thereto, in letters from yourself and others,—and have directed me to inform you that no departure can be made from the Rule of the N. S. Register which requires that no animal shall be entered unless it has four crosses, in unbroken line, of thoroughbred bulls, that is bulls whose pedigrees show at least four such crosses.

OFFICERS of Agricultural Societies requiring Bulls for the ensuing season will find an excellent selection advertised for sale on the last page of the present number of the JOURNAL OF AGRICULTURE. Quick purchasers secure the best animals.

BOARD OF AGRICULTURE.

CONFERENCE WITH THE ASSEMBLY COMMITTEE.

The Agricultural College proposition, Frost-Proof Warehouse, and other matters discussed.

11th March.

The Central Board of Agriculture met at 10 o'clock, this, Thursday morning. Present: Major-General Laurie, president, Hon. Isidore LeBlanc, I. Longworth, V. P., D. Matheson, John McKeen, W. E. Starratt, C. E. Brown and Prof. Lawson, secretary.

Mr. Longworth reported that the treasurer's accounts had been audited and found correct and properly vouched, the balance at credit being \$465.98; the stock farm fund, on deposit, with interest, \$1,898.34. On motion of Col. Starratt, seconded by Mr. Brown, the auditors' report was received and adopted. In consequence of a notice from the bank that interest was reduced to 3 per cent., the treasurer was directed to transfer the stock farm deposit to the savings bank.

Mr. Matheson presented an application from Messrs. John and J. N. Cameron, Picton, for compensation for the introduction of Holsteins into the province, which was ordered to lie over until other similar applications were taken up.

At 11 a. m., the members of the agricultural committee of the house of assembly met with the board. Present: Hon. A. Gayton, chairman, Col. Blair, Messrs. Whidden, Black, Munro, Cook. The president expressed regret at the absence of Hon. Mr. Leblanc, in consequence of another important meeting, and Mr. Gayton stated that for the same reason the Cape Breton member of the committee unfortunately could not be present.

The president called attention to the several matters that were at present engaging the attention of the board, particularly the Dairy association, which it was thought might well be encouraged by a small grant to defray expense of printing; the necessity of a frost-proof warehouse at Halifax; the operations of agricultural societies, which were fortunately increasing in number and efficiency; the system of district exhibitions, which had not fully realized expectations and might more profitably be

reduced to county exhibitions; the desirability of stock importation; applications from private parties for reimbursements on importations made by them; want of quarantine stations in Nova Scotia; agricultural education, in regard to which he pointed out the importance of taking means to arouse the people to the necessity of improvement before launching an expensive agricultural college.

Mr. Longworth favored a college for the three Maritime Provinces, and urged a grant to enable the Dairy association to print the papers read at the Windsor meeting.

Mr. Matheson corroborated the statements and views of the president, and thought the Dairy association well worthy of encouragement.

Col. Starratt spoke specially of the proposal for a frost-proof warehouse. One had been erected by Annapolis at great expense, and three shipments of apples were made two years ago, and one would be shortly; but the steamboat and railway arrangements did not favor Annapolis. He recommended a renewal of bonuses on horses and sheep.

Mr. McKeen, being essentially a farmer, thought he ought to know what was wanted. He was not convinced that an agricultural college was a necessity or would be a success in this province. Ontario cannot supply more than half enough students for Guelph, the other half being from other provinces and England. The difficulties with us were twofold—first, money; second, pupils. On the other hand, a system of travelling lecturers, to visit the agricultural districts, was feasible and attainable, and might be expected to work beneficially all over the country. A college at Amherst would be of very little benefit to the people of Mabou, whereas a good scientific and practical lecturer might be of great use in awakening and instructing all classes of the people in the several departments of agriculture.

The president, referring to Mr. Matheson's observations on the importance of providing reading matter, expressed a desire that the *Journal of Agriculture* should be so enlarged and improved as to be a credit to the province, but it would cost money, and he hoped something would be given for this purpose. He stated that Ontario would derive much benefit from the English pupils at Guelph, as many would become settlers.

In answer to an inquiry from a member of the committee, the secretary stated that the total circulation of the *Journal of Agriculture*, including free copies, was about 1,100, and the cost to the province for the past year was four dollars and three cents.

Mr. Blair was pleased at the success of the Dairymen's association. It had, no doubt, been worked up by a few earnest men at great personal labor and expense, and they ought to be encouraged. The committee, he hoped, would be at one in the matter. He explained how it came that the district exhibitions were established, and showed that their real utility, as that of county exhibitions, consisted in their being preparers for and leaders of the provincial exhibitions, and in providing for isolated districts beyond reach of the latter. He thought it was well to encourage importations by private individuals by means of premiums on horses and sheep. The agricultural college was a big question, but, in view of the province running into a large debt, he could not see how it was to be carried out, except by union with other provinces. At Guelph, much money had been spent, and much dissatisfaction had been expressed with it in Ontario, but it was, nevertheless, a great benefit to that province. In Nova Scotia we want a system of Agricultural Education, and the best way seems to be to appoint a Lecturer to the Normal School, who could also perform the work now done by the secretary of the Central Board. He referred to the operations of a society in England engaged in sending out young men to be trained as Nova Scotian farmers, with a view to buying farms and settling here. Mr. Gurney, who is acting as their agent here, is now locating young men with farmers in Nova Scotia for that purpose. In conclusion, Mr. Blair observed that one great difficulty we had to contend with was the indifference of the people generally, which had the effect of throwing all the work upon a few willing men whenever any movement was made. Even at the dairy meeting the number of farmers present was much less than we had a right to expect.

Mr. Black observed that we must bear in mind that we are in a very different position now than we were a few years ago. Improved machinery had enabled men of means to take hold of farming, and the importation of thoroughbred stock had enabled the farmers to take the rearing of such stock into their own hands. Farming could thus be carried on now on a greater scale, and in a way worthy of the attention and labor of intelligent, educated agriculturists. From information he had obtained, and the results observed so far, he thought the best way to promote improvement in stock was to encourage individuals. Pye Brothers have imported and brought forth about eleven head of Holstein cattle, entirely by private enterprise. Would it not be wise to encourage such, as a means of securing the best results at small public expenditure? In regard to agricul-

tural education, there were several young men from Cumberland, including his own son, at the Ontario college, and from correspondence with the officers of instruction there, and other sources of information, he felt that our province was inadequate to the support of such an institution. The only way was to have a maritime school. Even then our resources would be small for the sum required and as a field to supply pupils. The English pupils at Guelph are not, as a class, deriving as much benefit as our own boys, who apply themselves well to the work and carry off the prizes. If we could secure such a school, avoiding needless expenditure, it would be a great benefit. It is not the old conservative men who think they know enough already to work their farms that we can hope to improve, but the boys, who are more apt scholars, and more readily imbibe and act upon new ideas and seize upon new methods. The idea of an agricultural lecturer is good so far, but we should have a department whereby agriculture would come before our boys in all the schools of the country. Much time is spent in learning subjects that lie in the mind like a dead language, whereas agricultural chemistry would exert itself as a live force in the community. District exhibitions are not accomplishing the work expected. It would be better to have county ones working for the provincial.

Mr. Cook referred to the special circumstances and wants of Queen's county, and spoke strongly in favor of county exhibitions. Crosses of Jersey and Ayrshire cattle had been in use for some years in Queens, and he put some pointed questions as to what course the farmers should pursue to secure the best general purpose cow, which elicited the opinions of several members present, the general view being that nothing better than Ayrshire and Jersey blood could be infused, except in counties where there was rich food, where Short Horns, Holsteins or Herefords might be used to give size and substance.

Mr. Munro highly favored the suggestion of a travelling lecturer to go over the country in summer and teach at the Normal school during winter. He found from the reports of the Ontario Agricultural commission that experimental stations might be established at comparatively little expense; they have not cost more than a few thousand dollars.

Mr. Gayton closed the discussion. He would be disposed at once to recommend a small grant to the Dairymen's association; the question of agricultural education was one in which he was greatly interested; the *Journal of Agriculture* should be extended and improved so as to afford regular information

to our farmers on the several departments of their work and the improvements constantly being made, instead of its remaining as hitherto, an official record of proceedings and matters relating to the board and societies, and he thought the committee would recommend the necessary funds. Effort should be made to obtain a frost-proof warehouse for shipment of apples and other produce; the quarantine station should be established as recommended by the agricultural committee of the house of assembly in a former report.

The committee then retired, and the board adjourned to 2.30 p. m.

When the board resumed there were present: Gen. Laurie, president, I. Longworth, V. P., C. E. Brown, John McKeen, Col. W. E. Starratt, David Matheson and the secretary; afterwards Hon. I. LeBlanc. The secretary was directed to hand to the chairman of the agricultural committee, applications for bonuses on importations of stock from Messrs. Bell, Russel, Chase and John and J. N. Cameron, for consideration of the committee; also to furnish copies of circulars embracing regulations under which such bonuses were formerly granted.

The secretary presented and read a communication from Hon. Mr. Whitman, with statement showing deficit of \$452.59 on the district exhibition held at Annapolis Royal in October last, and asking whether any money could be got from the agricultural grants to assist in payment of the balance due the exhibition committee. Col. Starratt recommended the application to the attention of the board, but the board could not see any way of granting relief.

Moved by Mr. Matheson, seconded by Mr. McKeen, and passed, that the treasurer be authorized to apply to the hon. provincial secretary for a warrant for \$6,835, being the amount appropriated to agricultural societies, and to issue warrants for their grants, withholding, however, those of societies whose returns and explanations were still imperfect or otherwise unsatisfactory.

Moved by Mr. Matheson, seconded by Mr. McKeen, and resolved: In accepting the offer of the King's county municipal council to hold the provincial exhibition of 1885, it is to be understood that the board require a guarantee that sufficient accommodation will be provided for the large number of visitors who may be expected; that the charges for accommodation will not exceed ordinary rates; that forage will be provided on the grounds at actual cost; and that the railway rates will not be in excess of those charged on occasion of previous provincial exhibitions.

The secretary was directed to request that the prize list be sent as soon as possible for consideration of the board and submission to the hon. the lieut.-governor-in-council, in terms of the act.

The board expressed their opinion that in fixing the time for the provincial exhibition at Kentville, it should not be later than the first week of October.

Moved by Mr. Matheson, seconded by Mr. Brown, and passed, that the examination of the prize list be referred to the executive committee of the board.

The board then adjourned.

THE NEW DAIRYMEN'S ASSOCIATION met at Windsor on 11th March,—the president, Rev. A. C. Macdonald, in the chair. He explained that although a number of those who were expected to attend, Prof. Barnard, of Quebec, among them, were for various reasons, detained, valuable papers had been sent in and would be read. The address of the president, occupying nearly an hour in delivery, and replete with facts and figures about dairying, was well received by the association, comprising among others a number of the members of the central board of agriculture and the leading farmers of Windsor and vicinity.

Mr. P. C. Black, of Windsor, read a valuable paper on the question of an Agricultural College for the Maritime Provinces. This gave rise to an animated discussion, in which Major-General Laurie, Rev. Mr. How, Mr. H. Blanchard, Colonel Starratt, Mr. Israel Longworth, Judge DeWolfe and others took part. We are a pastoral people in this province, and dairying, inasmuch as it was a paying business when intelligently and scientifically conducted, as well as the best means of restoring land exhausted by an imperfect system of cultivation, or by excessive grain cropping, must be perseveringly carried on by the farmers of the present and the future in Nova Scotia. Agricultural colleges had been the means of doing great good for other countries, and it would do a corresponding amount of good for this country also. The real difficulty lay in providing ways and means. If the local government could not, for want of means, afford the expenditure for purposes of educating the farmer, why should not the Dominion Government be appealed to and pressed to spend, out of an "overflowing" treasury, funds for this purpose? With whom have we to compete in the markets of the world? With the trained and educated dairymen and scientific farmers of Denmark, Great Britain and the United States.

With reference to the Manufacture of Butter, the quality of which is so inferior, generally speaking, as was pointed out in the president's address, and dwelt upon

by various speakers, that better breeds of cattle, more careful manipulating of dairy products and improved appliances, would save untold thousands of dollars now lost, and enable cheaper production, while adding to the total of products. A dairy instructor would reach the great majority of the farmers now so desirous of learning the art of producing a better article, and conduce very materially to the amount of revenue derived from exports. Beef-producing was commented on, and its advantages pointed out, especially in this country, possessing advantages of a seashore, fine climate, and almost entire immunity from cattle disease.

The interest of the meeting did not for a moment flag for three hours and more, and, but for the arrival of six o'clock, the time for adjournment, it is safe to say would have continued with the same enthusiasm for a much longer time. The Members of the Central Board took their leave of the Association, expressing much satisfaction with the work accomplished by it, and speaking hopefully of its future.

At seven o'clock in the evening the association again met, with a fair attendance of members and visitors. The first business taken up was the reading of a most valuable paper by Rev. A. Nicholson, on "Home Butter Making," by an unknown contributor. It was full of excellent points on the subject treated, stated in a terse form, and clothed in eloquent language. A discussion on this paper occupied nearly the whole of the session, Mr. H. Blanchard in particular, by his extensive knowledge of butter making, feeding of stock, and treatment of farm land, taking a leading part.

On the following morning, 11th March, another session opened, at 10 o'clock. The first business was the reading of Professor Barnard's paper,—a most valuable one, dealing with dairy products, first statistically, among other things showing that the contribution of our dairy products to Great Britain was only four per cent. of the total importation of that country. The paper then took up the questions of improved butter making and cheese manufacture, model farming, and the part that governments should take to assist the agriculturists, by giving subventions to agencies having for their object the improvement of all the products of the farm. He believed that by object lessons given by itinerant instructors, as they do in Quebec, the quality of dairy goods would, in a short space of time, take a high place in the markets of the world, and give a ten-fold increased quantity. Altogether the paper, dealing with such practical questions, with the knowledge of a gentleman having had thirty years experience qualifying him for the task, possessed merits of a

high order, and, if the Association could distribute it in a printed form to the thousands of the farmers of Nova Scotia it would be doing a good work. A cordial vote of thanks was ordered to be transmitted by the Association, through its president, to Professor Barnard.

The hour having arrived for the election of officers, the President announced his intention of retiring from active work in the Association in future, now that he had brought it into existence and imparted to it a fairly vigorous life. The members expressed deep regret that he had so decided; it was felt that few persons possessed the enthusiasm he had exhibited in the work. Col. Starratt, of Annapolis, was elected President, and Mr. P. C. Black, of Windsor, Secretary-Treasurer for the ensuing year. The following were the Vice-Presidents: Mr. W. M. Blair, M.P.P., Rev. A. C. Macdonald, Mr. McKeen, Mahon, C. B.; Major-General Laurie, Mr. A. McN. Patterson and Mr. C. E. Brown, Yarmouth. A few new names were substituted for some of the old directors, and the whole list represents prominent agriculturists for each county in the Province.

A committee, consisting of the President, Mr. H. Blanchard, and County Judge DuWolf, was appointed to draw up a memorial to the Government asking for a subvention for the purpose of aiding in the printing and distributing of reports and papers of the Association, whose report was received and adopted at the afternoon session. After a hearty vote of thanks to the President, the Association adjourned to meet next year at Kentville in the month of February, the day to be fixed by the executive.

REPORT OF THE PROVINCIAL VETERINARY SURGEON.

Halifax, March 6th, 1885.

Arrangements were made in the year 1883 by the Government and the Central Board of Agriculture, whereby I undertook to make professional visits periodically to the several Agricultural Districts of the Province, so as to treat cases of Domestic Animals suffering from Disease or Accident, or requiring Operations performed,—as more fully explained in my last year's Report.

In accordance with such arrangement, the Central Board of Agriculture prepared a Programme of my District Work for the summer of 1884, and accordingly issued the following advertisement:

CENTRAL BOARD OF AGRICULTURE OF NOVA SCOTIA.

Arrangement for Local Visits of the Provincial Veterinary Surgeon for 1884.

W. JAKEMAN, Provincial Veterinary Surgeon, will visit the several localities arranged for, and will be prepared to

treat cases of Domestic Animals suffering from Disease or Accident, or requiring Operations performed.

Scale of Fees (modified under arrangement with Board):

Visits, advice and prescription, \$1.00 for first, and 50 cents for each succeeding visit. Medicines extra at reasonable rates.

Operations from \$1 up to \$5, according to nature and circumstances.

When called specially to a distance at places or times not advertised, the charge will be \$5 per full day, and actual necessary travelling expenses.

Mr. Jakeman will visit the several places mentioned in the following list at the dates noted:—

	June.	July.	Aug.	Sept.	Oct.	Nov.
Windsor.....	23	30	20	19	29	11
(Doran's Hotel.)						
Bridgetown.....	14	11	9	6	3	
(Beckwith's Hotel.)						
Kentville.....	15	12	10	7	4	
(Lyons' Hotel.)						
Annapolis....	16	13	11	8	5	
(Dominion Hotel.)						
Digby.....	17	14	12	9	6	
(Daley's Hotel.)						
Yarmouth.....	18	15	13	10	7	
(American House.)						
Tiverton.....	9	7	17	16	14	
(Victoria Hotel.)						
New Glasgow....	10	21	20	23	21	25
(Norfolk House.)						
Pictou.....	22	27	24	22	26	
(Revere House.)						
Antigonish.....	23	23	25	22	27	
(Cunningham's Hotel.)						

By order of the Central Board of Agriculture.

Visits were paid during the season to the several localities named in the above programme, and, in addition to these visits, I responded to special calls by visiting the following localities:—

Stellarton, County Pictou.

Falmouth, Shubenacadie, Stewiacke, and Maitland, County Hants.

Grand Pre and Aylesford, County Kings.

Cape Breton.

Middletown, County Annapolis, Springfield and Preston, County Halifax.

Brookfield, County Colchester.

A large number of cases were treated at the several places visited during the season, but none of them were of such unusual character as to call for special remark. The animals of the Province generally are in a very healthy condition.

On March 4th, 1884, by the request of the Hon. Provincial Secretary, I paid a special visit to Kings Country for the purpose of investigating a disease existing there and supposed to be of a contagious character. On examination of the cases I found them to be not contagious, but simply a form of Psorosus,

nggravated by the free use of oil of vitrol (H_2SO_4). I accordingly gave instructions for treatment, and was afterwards pleased to learn that, in course of a few days, the affection had subsided.

On April 3rd, I made a special visit to Yarmouth, this time at the request of the Dominion Veterinary Inspector. The object of the visit was to examine into the nature of a disease said to exist there, and supposed to be of a contagious nature. After careful enquiry I could not learn of a single case. Several cattle had died, but from natural causes.

On 25th April, I visited Cape Breton again by the request of the Dominion Inspector of stock, having been requested to investigate an alleged cattle disease prevailing at Middle River, Victoria. In accordance with instructions I proceeded to that place.

I found, on enquiry, that there had been quite a number of young animals lost by the malady in question. It is the disease known as Black-leg (*Anthrax*). I explained to the owners of animals the pathology of the disease, and pointed out the necessity of burning the carcases of animals that died of it, to prevent its spreading in the district. Skinning the animals, and allowing the skins or any other parts to lie about the farm buildings, fields, roadways or pastures, is a sure method to propagate the disease, and secure its permanency in the locality. I am glad to say that the information received from correspondents in Middle River has shown that but few cases occurred subsequent to my visit.

In Halifax and suburbs we have been visited by quite a severe form of Influenza in horses since September last. The mortality has not been great. After the cold frosty weather of winter set in (which was at an unusually late period) the disease almost vanished.

My detailed reports of work done in investigations at Yarmouth and Middle River, Victoria, have been made to the Dominion Inspector, under whose instructions I acted in making these special enquiries.

Wm. JAKEMAN,
Prov. Veterinary Surgeon.
6 Rottenburg St., Halifax.

Liverpool, March 7th, 1885.

GREES & WHINERAY, K 30 Exchange Buildings, cannot report any improvement in the landing condition of Apples, most of the parcels being more or less touched with frost. This is specially the case with cargoes from Boston, and some very low returns have been made on consignments.

Maine Apples land in fairly good condition, and prices remain steady.

We do not expect any improvement in the market until apples come clear of

frost, when this is the case, we look for a sharp rise in prices.

The following quotations are for tight barrels:-

Baldwins, Boston.....	11s to 14s 0d
" New York.....	12s to 16s 0d
" Maine.....	12s to 16s 0d
" Canadian.....	15s to 18s 0d
Northern Spy.....	13s to 16s 0d
Golden Russets, Canadian.....	23s to 22s 0d
"	14s to 18s 0d
Rox Russets	9s to 13s 0d
Creamings.....	10s to 14s 0d
Canada Reds	17s to 18s 0d
Slack packed	9s to 13s
Slack and wet.....	3s to 9s

Arrivals for the week are as follows:-

Palestine,	@ Boston	2357
Borderer,	"	1327
Venetian,	"	490
Catalonia,	"	328
Circassian,	Portland	5073
Illinois,	Philadelphia	200
Adriatic,	New York	666
City of Berlin,	"	228
City of Chester,	"	1133
Total arrivals for week... 11,794 barrels.		
" to date.....	468,643	"

The following is the conclusion of Professor Asa Gray's Paper on the American Flora:-

I have thought that some general considerations like these might have more interest for the biological section at large than any particular indications of our most interesting plants, and of how and where the botanist might find them. Those who in these busy days can find time to herborize will be in the excellent hands of the Canadian botanists. At Philadelphia their brethren of "the States" will be assembled to meet their visitors, and the Philadelphians will escort them to their classic ground, the Pine Barrens of New Jersey. To have an idea of this peculiar phytogeographical district, you may suppose a long wedge of the Carolina coast to be thrust up northward quite to New York harbor, bringing into a comparatively cool climate many of the interesting low-country plants of the South, which, at this season, you would not care to seek in their sultry proper home. Years ago, when Pursh and Leconte and Torrey used to visit it, and in my own younger days, it was wholly primitive and unspoiled. Now, when the shore is lined with huge summer hotels, the Pitch Pines carried off for firewood, the bogs converted into cranberry-grounds, and much of the light sandy or gravelly soil planted with vine-yards or converted into melon and sweet-potato patches, I fear it may have lost some of its botanical attractions. But large tracts are still nearly in a state of nature. *Drosera filiformis*, so unlike any European species, and the beautiful *Sabbatias*, the Yellow Fringed Orchises, *Lachnanthes* and *Lophiola*, the larger *Xyris* and *Eriocaulons*, the curious grass *Amphicarpum* with cleistogamous

flowers at the root, the showy species of *Chrysopsis*, and many others, must still abound. And every botanist will wish to collect *Schizaea pusilla*, rarest, most local, and among the smallest of Ferns.

If only the season would allow it, there is a more southern station of special interest,—Wilmington, on the coast of North Carolina. Carnivorous plants have, of late years, excited the greatest interest, both popular and scientific, and here, of all places, carnivorous plants seem to have their most varied development. For this is the only and the very local home of *Dionaea*; here grow almost all the North American species of *Drosera*; here, or near by, are most of the species of *Sarracenia*, of the bladder-bearing *Utricularias*,—one of which the President of our Section has detected in fish-catching,—and also the largest species of *Pinguicula*.

But at this season a more enjoyable excursion may be made to the southern portion of the Alleghany or Appalachian Mountains, which separate the waters of the Atlantic side from those of the Mississippi. These mountains are now easily reached from Philadelphia. In Pennsylvania, where they consist of parallel ridges without peaks or crests, and are of no great height, they are less interesting botanically than in Virginia; but it is in North Carolina and the adjacent borders of Tennessee that they rise to their highest altitude, and take on more picturesque forms. On their sides the Atlantic forest, especially its deciduous-leaved portion, is still to be seen to greatest advantage, nearly in pristine condition, and composed of a greater variety of genera and species than in any other temperate region, excepting Japan. And in their shade are the greatest variety and abundance of shrubs, and a good share of the most peculiar herbaceous genera. This is the special home of our *Rhododendrons*, *Azaleas*, and *Kalmias*: at least here they flourish in greatest number and in most luxuriant growth. *Rhododendron maximum* (which is found in a scattered way even as far north as the vicinity of Montreal) and *Kalmia latifolia* (both called Laurels) even become forest trees in some places; more commonly they are shrubs, forming dense thickets on steep mountain-sides, through which the traveller can make his way only by following old bear-paths, or by keeping strictly on the dividing crests of the leading ridges.

Only on the summits do we find *Rhododendron Catawbiense*, parent of so many handsome forms in English grounds, and on the higher wooded slopes the yellow and the flame-colored *Azalea calendulacea*; on the lower, the pink *A. nudiflora* and more showy *A. arboreascens*, along with the common and widespread

A. viscosa. The latter part of June is the proper time to explore this region, and, if only one portion can be visited, Roan Mountain should be preferred.

On these mountain tops we meet with a curious anomaly in geographical distribution. With rarest exceptions, plants which are common to this country and to Europe extend well northward. But on these summits from southern Virginia to Carolina, yet nowhere else, we find—undoubtedly indigenous and undoubtedly identical with the European species—the Lily-of-the Valley!

I have given so much of my time to the botany of the Atlantic border that I can barely touch upon that of the western regions.

Between the wooded country of the Atlantic side of the continent and that of the Pacific side lies a vast extent of plains which are essentially woodless, except where they are traversed by mountain-chains. The prairies of the Atlantic States bordering the Mississippi and of the Winnipeg country shade off into the drier and gradually more saline plains, which, with an even and gradual rise, attain an elevation of 5,000 feet or more where they abut against the Rocky Mountains. Until these are reached (over a space from the Alleghanies westward of about twenty degrees of longitude) the plains are unbroken. To a moderate distance beyond the Mississippi the country must have been in the main naturally wooded. There is rainfall enough for forest on these actual prairies. Trees grow fairly well when planted; they are coming up spontaneously under present opportunities; and there is reason for thinking that all the prairies east of the Mississippi, and of the Missouri up to Minnesota, have been either greatly extended or were even made treeless under Indian occupation and annual burnings. These prairies are flowery with a good number of characteristic plants, many of them evidently derived from the plains farther west. At this season, the predominant vegetation is of Compositæ, especially of Asteræ and Solidagines, and of Sunflowers, Silphiums, and other Helianthoid Compositæ.

The drier and later plains beyond, clothed with the short Buffalo-Grasses, probably never bore trees in their present state, except, as now, some Cottonwoods (i. e. Poplars) on the margins of the long rivers which traverse them in their course from the Rocky Mountains to the Mississippi. Westward, the plains grow more and more saline; and Wormwoods and Chenopodiaceæ of various sorts form the dominant vegetation, some of them *sui generis*, or at least peculiar to the country, others identical or congeneric with those of the steppes of northern Asia. Along with this common campsteine vegeta-

tation, there is a large infusion of peculiar American types, which I suppose came from the southward, and to which I will again refer.

Then come the Rocky Mountains, traversing the whole continent from north to south; their flanks wooded, but not richly so,—chiefly with Pines and Firs of very few species, and with a single ubiquitous Poplar, their higher crests bearing a well-developed alpine flora. This is the arctic flora prolonged southward upon the mountains of sufficient elevation, with a certain admixture in the lower latitudes of types pertaining to the lower vicinity.

There are almost 200 alpine Phenogamous species now known on the Rocky Mountains; fully three-quarters of which are arctic, including Alaskan and Greenlandian; and about half of them are known in Europe. Several others are North Asian but not European. Even in that northern portion of the Rocky Mountains which the Association is invited to visit, several alpine species novel to European botany may be met with; and farther south the peculiar forms increase. On the other hand, it is interesting to note how many Old-World species extend their range southward even to lat. 36° or 35°.

I have not seen the Rocky Mountains in the Dominion; but I apprehend that the aspect and character of the forest is Canadian, is mainly coniferous, and composed of very few species. Oaks and other eupliferous trees, which give character to the Atlantic forest, are entirely wanting, until the southern confines of the region are reached in Colorado and New Mexico, and there they are few and small. In these southern parts there is a lesser amount of forest, but a much greater diversity of genera and species; of which the most notable are the Pines of the Mexican plateau type.

The Rocky Mountains and the Coast Ranges on the Pacific side so nearly approach in British America that their forests merge, and the eastern types are gradually replaced by the more peculiar western. But in the United States a broad, arid and treeless, and even truly desert region is interposed. This has its greatest breadth and is best known where it is traversed by the Central Pacific Railroad. It is an immense plain between the Rocky Mountains and the Sierra Nevada, largely a basin with no outlet to the sea, covered with Sagebrush (i. e. peculiar species of Artemisia) and other subsaline vegetation, all of grayish hue; traversed, mostly north and south, by chains of mountains, which seem to be more bare than the plains, but which hold in their recesses a considerable amount of forest and of other

vegetation, mostly of Rocky Mountain types.

Desolate and desert as this region appears, it is far from uninteresting to the botanist; but I must not stop to show how. Yet even the ardent botanist feels a sense of relief and exultation when, as he reaches the Sierra Nevada, he passes abruptly into perhaps the noblest coniferous forest in the world,—a forest which stretches along this range and its northern continuation, and along the less elevated ranges which border the Pacific coast, from the southern part of California to Alaska.

So much has been said about this forest, about the two gigantic trees which have made it famous, and its Pines and Firs which are hardly less wonderful, and which in Oregon and British Columbia, descending into the plains, yield far more timber to the acre than can be found anywhere else, and I have myself discoursed upon the subject so largely on former occasions, that I may cut short all discourse upon the Pacific coast flora and the questions it brings up.

I note only these points. Although this flora is richer than that of the Atlantic in Coniferae (having almost twice as many species), richer indeed than any other except that of Eastern Asia, it is very meagre in deciduous trees. It has a fair number of Oaks, indeed, and it has a Flowering Dogwood, even more showy than that which brightens our eastern woodlands in spring. But, altogether it possesses only one-quarter of the number of species of deciduous trees that the Atlantic forest has; it is even much poorer than Europe in this respect. It is destitute not only of the characteristic trees of the Atlantic side, such as Liriodendron, Magnolia, Asimina, Nyssa, Catalpa, Sassafras, Caryæ, and the arboreous Leguminosæ (*Cercis* excepted), but it also wants most of the genera which are common throughout all the other northern-temperate floras, having no Linds., Elms, Mulberries, *Celtis*, Beech, Chestnut, Hornbeam, and few and small Ashes and Maples. The shrubby and herbaceous vegetation, although rich and varied, is largely peculiar, especially at the south. At the north we find a fair number of species identical with the eastern; but it is interesting to remark that this region, interposed between the N. E. Asiatic and the N. E. American and with coast approximate to the former, has few of those peculiar genera which, as I have insisted, witness to a most remarkable connection between two floras so widely sundered geographically. Some of these types, indeed, occur in the intermediate region, rendering the general absence the more noteworthy. And certain peculiar types are represented in single identical species on the coasts of

Oregon and Japan, etc., (such as *Lysichiton*, *Fatsia*, *Glehnia*); yet there is less community between these floras than might be expected from their geographical proximity at the north. Of course the high northern flora is not here in view.

Now if, as I have maintained, the eastern side of North America and the eastern side of Northern Asia are the favored heirs of the old boreal flora, and if I have plausibly explained how Europe lost so much of its portion of a common inheritance, it only remains to consider how the western side of North America lost so much more. For that the missing types once existed there, as well as in Europe, has already been indicated in the few fossil explorations that have been made. They have brought to light Magnolias, Elms, Beeches, Chestnut, a Liquidambar, etc. And living witnesses remain in the two Sequoias of California, whose ancestors, along with *Taxodium*, which is similarly preserved on the Atlantic side, appear to have formed no small part of the Miocene flora of the arctic regions.

Several causes may have conspired in the destruction;—climatic differences between the two sides of the continent, such as must early have been established (and we know that a difference no greater than the present would be effective); geographical configuration, probably confining the migration to and fro to a long and narrow tract, little wider, perhaps, than that to which it is now restricted; the tremendous outpouring of lava and volcanic ashes just anterior to the Glacial period, by which a large part of the region was thickly covered; and, at length competition from the Mexican plateau vegetation,—a vegetation beyond the reach of general glacial movement from the north, and climatically well adapted to the southwestern portion of the United States.

It is now becoming obvious that the Mexican plateau vegetation is the proximate source of most of the peculiar elements of the Californian flora, as also of the southern Rocky Mountain region and of the Great Basin between; and that these plants from the south have competed with those from the north on the eastward plains and prairies. It is from this source that are derived not only our *Cactaceæ* but our *Mimoseæ*, our *Daleas* and *Petalostemonis*, our numerous and varied *Onagraceæ*, our *Loasaceæ*, a large part of our *Compositæ*, especially the *Eupatoriaceæ*, *Hibanthoidæ*, *Helenoïdæ*, and *Mutisiacæ*, which are so characteristic of the country, the *Aselepiadæ*, the very numerous *I'clemoniadæ*, *Hydrophyllaceæ*, *Eriogoneæ*, and the like.

I had formerly recognized this element in our North American flora; but I have only recently come to apprehend its full significance. With increasing knowledge we may in a good measure discriminate between the descendants of the ancient northern flora, and those which come from the highlands of the southwest.

THE following statement of the present condition of Agriculture in Canada in general, and Nova Scotia in particular, is from the London *Morning Post*:

During the whole of the year 1884 a Select Committee of the Dominion House of Commons has been inquiring into the

condition of the agricultural interests of Canada, and its report, which has just been issued, is more noteworthy for the information it gives on the actual state of agriculture in the various parts of the Dominion than for the very bald and meagre conclusions at which the committee have arrived. The conclusions are that a Bureau of Agriculture and a State experimental farm be formed for the Dominion. The volume shows, however, very clearly that the newer and more prolific lands of the north and northwest, and the low prices which they have caused, are affecting the older lands of the Dominion quite as much as they affect the English farmer. There, as here, it is smart farming that pays, and smart farming only. Those who grow wheat and risk their all on the crop are being pushed to the wall, but there is abundant evidence in this volume of over 200 pages that, while the North-West may well be left to produce wheat, in the Eastern provinces other crops are fast taking its place, and that these crops are so far as possible of the best varieties, of a sort easily grown, and such as shall command a good market. Thanks to the kindly given information of the large firm of potato and apple salesmen—Messrs. Northard and Lowe, of King's Cross—we have given our readers once or twice during the present year information regarding Nova Scotia. This province may well be taken as an example of what is being done all over the Eastern provinces of Canada. While English farmers have been crying over bad seasons and worse markets, the Nova Scotians have entirely changed their croppings, have planted large areas of apples, and for both of these crops have made a market in England and America. We have during the past year examined and tried both the apples and the potatoes. Of the former the gravensteins, pippins, russets and baldwins have taken the top place and price—not only in New York, but also in England, while the Burbank potato has been proved to be far superior to the magnum bonum whenever it has been tried in 1884; and at the present time some 200 tons, grown in Scotland, are being offered for seed for the Midland and Southern counties. But the Canadians are tired of each grower having to find out for himself what are the best sorts to grow, and some of the provinces have not been so successful as Nova Scotia. Hence the Select Committee of the Canadian House of Commons, and the request of it for the help of a good Bureau of Agriculture and experimental farm. This latter is to try the various varieties of the different crops, and to report on the best. Besides this there is a great movement in favour of an extension of dairy farming and stock

feeding. Canada is, in point of fact, giving us a very useful lesson in procedure in these disastrous times.

A FARMERS' Institute, under the auspices of the Michigan State Board of Agriculture, was held, Jan. 15th and 16th, at Flushing, Mich.

Prof. Samuel Johnson, of the Agricultural College, read a paper on "Practical Agriculture at the Agricultural College." He opposed the idea that students at agricultural colleges should devote their whole time to study alone. Theory and practice, study and work, should go hand in hand. Were it otherwise, the theory of agriculture could as well be taught at the university. He held that manual labor, at agricultural colleges, should be compulsory. Unless students labor, there is danger of their acquiring a sort of contempt for it. He gave a synopsis of what is taught at the Michigan Agricultural College, and how it is taught. At fifteen minutes to one o'clock the students, dressed in working suits, report for labor, are divided into gangs, and, under the direction of overseers, they labor three hours in the performance of work that has been previously planned. Students are paid 8 cents an hour for their labor: seniors are paid a shilling an hour when they have freshmen under their charge. The pay received for labor enables many young men to secure an education who otherwise could not afford a college course. The two greatest obstacles were to furnish sufficient labor, and to secure competent superintendents. The most satisfactory plan had been to allow the most competent seniors to act as overseers, increasing their pay, and making all consider it a position of honor. Agricultural colleges had been objected to because many of the graduates did not become farmers. He admitted that agriculture was not the only thing taught, that many students came there with no intention of becoming farmers, but a large percentage of the students did become farmers. Many, beside agricultural students, did not follow the calling for which they were educated. Some thought the college should pay a handsome profit, others, that it should be an experiment station; his idea was that, so far as possible, it should be conducted in much the same manner that a successful farmer would manage his farm.

S. R. Billings said that, if he had a son that he wished to have become proficient in any special branch of farming, he should not send him to the agricultural college, but to some man who was successfully making a specialty of that branch of farming, but if he wanted him to receive a scientific course, he would send him to the agricultural college, because work was joined with study.

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 60 cents each insertion for advertisements not exceeding ten lines, and five cents for each additional line."

WANTED.

A two or three-year old Short Horn Bull. Apply, with full particulars, to Secretary Agricultural Society, Baddeck.

HORSE BEANS.

The Central Board of Agriculture having imported, last year, a quantity of

ENGLISH HORSE BEANS.

Several bags of which still remain unsold.—Notice is hereby given that the same may be obtained at the rate of \$2.50 per bushel. Orders, with the cash, should be sent to JACK & BELL, Pickford & Black's Wharf, Halifax. No less quantity than a bushel can be sold.



**VICK'S
FLORAL GUIDE**

A beautiful work of 150 pages, Colored Plate, and 1000 Illustrations, with descriptions of the best Flowers and Vegetables, Juries of Seeds and Plants, and how to grow them. Printed in English and German. Price only 10 cents, which may be deducted from first order. It tells what you want for the Garden, and how to get it instead of running to the grocery at the last moment to buy whatever seeds happen to be left over, meeting with disappointment after weeks of waiting. BUY ONLY VICK'S SEEDS AT HEADQUARTERS.

JAMES VICK, Rochester N. Y.

FOR SALE

By the subscriber two AYRSHIRE BULLS, 22 and 11 months old, thoroughbred and good stock getters.

U. F. DESBARRES,
Guyoboro, N. S.

**STOKE POGIS—VICTOR HUGO
JERSEYS.**

The subscriber being owner of the Jersey Bull "Grand Master Pogis, 14121," A. J. C. C. Register, son of "Cowslip of St. Lambert, 8344," and sired by the pure Victor Hugo Bull "The Sultan, 2392," being closely inbred to the famous cow "Mary Ann of St. Lambert, 9773," with a record of 36 lbs. 12 $\frac{1}{2}$ oz. butter in 7 days. The service of the above Bull can be obtained for a few A. J. C. C. Cows—service fee \$50, and for Cows registered only in the Nova Scotia Herd Book—\$25.

JAMES KITCHIN,
Liver John,
Co. of Pictou, N. S.

**CHEMICAL FERTILIZER WORKS,
HALIFAX, N. S.**

Great Success with our Fertilizers.

Good crops grown on them notwithstanding the wet and cold season where otherwise crops were almost a total failure. We offer for the seventh season our CELEBRATED FERTILIZERS, which no farmer can afford to do without.

"CERES" SUPERPHOSPHATE,
(The Complete Fertilizer).

GROUND BONE, Best Quality. Finest Mechanical MEDIUM BONE, Condition.
BONE MEAL, Fertilizers analyzed by Prof. Geo. Lawson.
Send for circular and price list.
JACK & BELL,
Pickford & Black's Wharf, Halifax, N. S.
Agent wanted in unoccupied territory On 27 Dec.

For Sale.

A thoroughbred BERKSHIRE BOAR, 20 months old, perfectly sound, and a sure stock getter.

ALSO.

A thoroughbred AYRSHIRE BULL CALF, 7 months old, good pedigree.

Lunenburg. C. FRITZE.

T. B. JACQUES,
Church St., Cornwallis.

Bull "DOCTOR LAWSON," No. 197. Calved October 16th, 1882. Colour Rosy.

Bull "MARQUIS OF LANSDOWNE," No. 216. Calved October 23rd, 1883. Colour Red.

Bull "ENTERPRISE," No. 218. Calved December 9th, 1883. Colour light red.

All registered in the New Nova Scotia Herd Book.

Correspondence solicited.

FOR IMMEDIATE SALE.

THE splendid Ayrshire Bull, No. 92, N. S. New Register.

KILBURN,

Red and white, calved April 10th, 1881, bred by John A. McCurdy. Sire Bismarck, 12, imported Dam Lady May, 36. G. d. Pearl Drop, imp. G. d. Rosy, owned in Scotland.

The Bull is in fine order, and a splendid looking animal.

Apply to MRS. J. A. MCCURDY,
Brookside Farm,
Onslow.

AYRSHIRES.

THE Subscriber offers for sale YOUNG BULLS, 1 and 2 years old, from the First Prize Herd, Dominion Exhibition, 1881, the Herd that has produced such Cows as "Lady Ballindalloch," record 60 lbs. per day; "Lady Franklin," record 50 lbs. per day; "Little Dorrit," Heifer, first Calf, 40 lbs. per day; "Galaxy," three years old, 45 lbs. per day.

C. P. BLANCHARD, Hillside Farm, Truro, N. S.

SHORT-HORN BULL FOR SALE.

THE Short-Horn Durham Bull, "DUNDERBERG," No. 133, bred by C. F. Eaton, Esq., Upper Canada, King's County. Color Rosy. Sired by "Weatherby Star," 22. Dain by "Roan Duke," No. 78. "Dunderberg" is quiet and docile, and is a good stock-getter. For further particulars apply to

JOHN SUTHERLAND,
Mill Brook, Pictou Co., N. S.

EGGS FROM THE FINEST BREEDING STOCK
FOR INDUSTRY, TRADE, CIRCUS,
EXHIBITION, ETC.

FOR SALE.

Yearling Short Horn Durham Bulls, Earl of Goslow and Island Chieftain, both prize winners and of prize stock—the latter from Government Stock Farm, P. E. Island. Also fair Berkshire Pigs from prize parents.

ARTHUR F. GURNEY,
Wick House, near Truro.

WANTED TO PURCHASE

By the WALLACE AGRICULTURAL SOCIETY, a Thorough-bred Durham Bull, two years old. State price and size.

Address—C. W. MORRIS, Wallace, N. S.

FOR SALE

By the subscriber, one Short horn Bull, "Duke of Albany," No. 232, nine months old. Also one Heifer "Duchess of Albany," one year old, No. 179. Also Brown Leghorn, Plymouth Rock Eggs, and White Pekin Ducks Eggs.

HERBERT F. JACQUES,
Weston, Cornwallis, (via Berwick.)

WANTED TO PURCHASE

BY the Strathlorne Agricultural Society FIVE Thorough-bred Bulls, age about 2 years next May. Short-horn Durham and Ayrshire preferred. Parties having Bulls for sale will please state prices, &c., &c.

A. J. GILLIS, Secretary.

Gillivare, Inverness Co., 21st Feb., 1885. inch

FOR SALE.

A Grade Polled Angus Bull, fourteen months old, sired by imported bull "King of Diamonds," and out of a well bred Durham Cow. Colour jet black with white legs, every way a fine specimen of the Polled Angus breed.

D. H. NEWCOMB.

Pereaux, Kings Co., March 2nd, 1885. inch

SHORT HORN BULLS**For Sale by the Subscriber.**

Two Thoroughbred Durham Bulls, one 21 months old, the other 9 months old.

Full pedigree, registered in the British American Short Horn Association.

Correspondence solicited.

T. H. PARKER.

Berwick, Kings County, Feb. 28th, 1885.

The JOURNAL OF AGRICULTURE

—is published monthly by—

A. & W. MACKINLAY,

No. 10, GRANVILLE STREET,

HALIFAX, NOVA SCOTIA.

TERMS OF SUBSCRIPTION:

Fifty cents per annum—payable in advance.
Single copy five cents.

Printed at the office of the Nova Scotia Printing Company, Halifax, N. S.

PETER

SEEDS

OUR ILLUSTRATED CATALOGUE FOR 1885, OF
"EVERYTHING FOR THE GARDEN,"
full of valuable cultural directions, containing three colored plates, and embracing everything new and rare in Seeds and Plants, will be mailed on receipt of stamps
to cover postage (6 cents). To customers of last season sent free without application.
PETER HENDERSON & CO.,
35 & 37 CORNLANDT STREET, NEW YORK.

PLANTS

HENDERSON.