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THE

NOVA SCOTIAN

JOURNAL OF AGRICULTURE

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

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

VOL. III. **HALIFAX, N. S., MARCH, 1878.** **No. 13.**

NEXT number of the *Journal of Agriculture* (April) will contain the Prize List and Regulations of the Provincial Exhibition to be held at Truro during first week of October; also the Prize List of the Kentville Exhibition, to be held in September, open to the Province.

THE Annual Report of the Central Board of Agriculture for 1877 has been issued. It occupies 160 pages and embraces full statistics of Societies, extracts from the Reports of all Agricultural Societies in the Province, List of Prizes awarded at the Provincial Exhibition at Kentville, and Lists of all thorough-bred Cattle within the bounds of each Society throughout the Province. Copies of this Report may be obtained through Members of the Legislature or Members of the Board of Agriculture, or from the Secretary of the Board.

MR. SIMON BEATTIE, so well known by his importations of Duchess Stock and Clydesdale Horses, in conjuction with the Hon. Senator Cochrane, has been on a business cruise through the Northern and Southern States and the Canadian Provinces. He took passage in the *Austrian* for England on the 9th March. The Secretary of the Board had a conference with him at Halifax, and made preliminary arrangements with a view to a probable importation from England this Fall. In consequence of restrictions on importation, hitherto imposed in the States and Canada, the prices of thorough-bred stock in England are at present very low.

WE understand that there will be a public sale by auction of thorough-bred DEVON CATTLE at Oakfield in April. As there will probably be a large number of superior animals offered, the opportunity will be an excellent one for Societies providing themselves with Bulls.

The Cows and Heifers will no doubt be secured by private individuals, who will thus be enabled to start new Herds. The Oakfield Devons are in fine healthy condition.

WE commend to the earnest attention of the farmers of Antigonish County, the able lecture recently delivered to the Bayfield Agricultural Society by Dr. J. W. Macdonald, and published in this *Journal*. It may be profitably read likewise by the farmers of every other county in the Province. There is a lesson for all. Dr. Macdonald shows that 44 years ago people had as little idea of growing oats as they have now of wheat, that whilst Antigonish has made progress in other grains, it now raises only a fourth more wheat than it raised then, whilst the increase in population demands more than double the quantity; that at present the Antigonish farmers sow only enough wheat to feed the "weevil" (as they call it), and import what is needed to feed their families; that the increase in cattle export merely keeps pace with increase of population, and does not make up for breadstuffs that have to be bought, and for which the County annually pays seventy thousand dollars; that the "weevil" and rust are largely in the farmers' own hands and subject to their intelligent control; and that, for a better system of farming, we want, not a better soil, nor a better climate, but a more suitable, intelligent training of our Agriculturists. In that portion of Dr. Macdonald's lecture relating to the possible amelioration of our climate, we cannot fully follow him, until some means shall be devised of getting rid of the spring ice, and of the low temperature of the surface waters in early summer time, around our shores. Our small Peninsula has its climate determined more by the surrounding ocean currents than the physical condition of its own surface.

A NEW Agricultural Society is in course of formation at Great Village, Londonderry, County Colchester. Farmers in that district desirous of aiding in the movement should communicate with Suther Spencer, Esq., of Great Village.

ANNUAL REPORT OF THE CENTRAL BOARD OF AGRICULTURE, FOR THE YEAR, 1877.

To the Hon. the PROVINCIAL SECRETARY, *Halifax:*

I have the honor herewith to submit, for the information of His Honor the Lieut.-Governor and the Legislature, the Annual Report of the proceedings of the Central Board of Agriculture for the year 1877, together with the Treasurer's Account of Income and Expenditure, for which vouchers are also submitted.

A tabular statement, shewing the membership, total paid up subscriptions of, and Government Grant apportioned to, each society in the Province, is appended; and an abstract of the Annual Reports of the several Societies, including their accounts, is also furnished.

The comparative usefulness of each Society, in the careful and judicious management and expendidutare of its funds, and the benefits conferred by it on the Agriculture of its district, can thus be readily ascertained. The County and District Societies in operation under the Act for the Encouragement of Agricul ture, and thereby entitled to participate in the Legislative Grant for the year 1877, are 74 in number, the paying members are 4144, and total amount of subscriptions actually paid (as shewn in the attested returns) $4860, the total amount of grants in aid being $6292.50. It will be seen that the number of Societies has actually doubled in the course of 14 years, a very satisfactory proof that interest in agricultural improvement is reaching the more remote localities, as new Societies are, as a rule, organized in neighbourhoods beyond the bounds of the older Societies in the more highly cultivated districts. This will explain the additional claims for the Government Grant, as hitherto unappropriated County Grants are now being claimed. At the same time it is with regret that the Board notice that the effect of hard times is to be seen in the reduction of membership and of subscriptions in many of the older Societies; this is the more to be regretted, as, during these times of extreme business depression, it is to the farming community that the country must and does look to find employment and furnish a living for the mass of its inhabitants, and it would have been more satisfactory to have recorded an increase of membership in Societies as pointing out an increase of zeal in the agricultural community.

Whilst on the subject of the numbers and membership of Societies, the Board feel it to be their duty to point out that by Provincial Statute the sum allotted to the Societies of each County is $400, and, as the several Counties are, as already mentioned, now claiming nearly the full amounts to which they are entitled, the amount required to meet this grant is thus $7200. Hitherto the full amounts have not been called for, as the conditions of the Statute have not in every case been complied with, and $6000 has sufficed, but, as pointed out, the amount claimed under the Statute for the year 1877, is $6292.50, whilst through some misapprehension the amount placed in the estimates for this purpose was only $4000, leaving a deficiency of $2292.50; this amount being fixed by Statute must, of course, be supplied.

The Statutory Grant to the Societies is very clearly laid down, and the grant in aid, not to exceed $400 to each County, is so small that it will not bear reduction without seriously injuring the interest it aims at fostering; the Board, therefore, respectfully urge that due provision be made to meet this charge.

The Societies are gradually but steadily acquiring a more definite idea of the work devolving upon them; their members recognize the imperative necessity that exists for improving stock, and Agricultural operations generally, and it is only through association as Societies that our farmers can practically hope to obtain these ends; to take any steps, such as reducing the Legislative Grant in aid, would be a most ill-advised step, and would work serious injury to the whole community by discouraging the farmers on the path of progress on which they have entered..

The Second Annual Provincial Exhibition was held at Kentville in October, 1877. The Report of the Exhibition Committee, and the Prize List, are also appended, from which it will be seen that there was a remarkably full and satisfactory exhibit of the Agricultural productions of our Province, indicating rapid advancement, especially in the improvement of live stock.

The marked success that has attended these Annual Exhibitions shews the wisdom of the policy enunciated by the Legislature in their establishment. The interest excited by one Annual Exhibition continues unimpaired till the next, and the almost surprising increase in thoroughbred stock, and in the improvement of other exhibits, shew the wonderful effect that a healthy emulation and rivalry have produced amongst our farmers, inducing men of spirit, capacity, and means, to turn their attention to farming, as a profession which affords scope for fame as well as fortune.

The Board feel satisfied that the Legislative grant of $4000 for the Annual Exhibition Prize Fund brings in a tenfold return in the value it has added to the agricultural property of the Province.

Owing to an Order in Council issued by the Dominion Government, the Board were unable to take any action for an importation of cattle, &c., from England; and, in any case, it would have been impracticable to do so, as no funds were provided for the purpose, and the deficiency in the stock-farm fund was not made up at the last session of the Legislature. The wants of Societies have to a large extent been met by the thoroughbred stock breeders in our own Province, but, as it is most important to give our herds a high character, thus giving our breeders a market beyond the limits of the Province, the Board prefer importing entirely fresh cattle from England, instead of purchasing animals of strains of blood already common in the neighbouring Provinces or States. Should the restrictions on importation from England be removed, the Board hope to receive a grant towards, and to take action for, the purchase of cattle, sheep and pigs, which, in such case, they would propose to sell under the same conditions as heretofore, that the animals should be kept for a fixed time in the Province.

The Board are at present bound by law to apportion the County grants to each Society according to membership and subscription, without reference to the excellence or otherwise of the work done by each Society; they would ask for such an amendment in the law as would empower them to apportion the grants according to the work actually done, as they feel that the best working Societies well deserve the additional encouragement, whilst the more backward would be roused up to the purposes for which they were organized.

Several matters requiring legislation will be submitted, and it is hoped will meet with approval.

The Secretary of the Board, Professor Lawson, has, from time to time, visited such Societies as have expressed their desire to hear him, and his addresses, always practical and abounding in common sense, have been much appreciated; it is to be hoped that a still larger number will seek his services during the present year.

In view of the large increase in the number of high-priced thorough-bred cattle now owned in the Province, the Board record with pleasure that a competent Veterinary Surgeon is now resident here. Mr. Byrne holds a diploma from the EDINBURGH VETERINARY COLLEGE, and proposes to establish a Veterinary College here. It is to be hoped that his efforts may receive Legislative sanction and encouragement, as the course of training proposed would be very valuable to the practical farmer and stock-owner.

The Board have striven conscientiously to discharge the very important duties that have been devolved upon them, and they trust that their work has been of benefit to the agricultural community, and satisfactory to those under whom they hold authority.

In submitting the above,

I have the honor to be, Sir,

Your obedient servant,

J. WIMBURN LAURIE,

Pres. Cen. Board of Agriculture.

Halifax, 23rd Feb., 1878.

Comparative Statement showing the number and strength of Societies in each year, from 1864 to 1877, inclusive.

YEAR.	Number of Societies.	Number of Members.	Amount of Subscriptions.	Grants in Aid.
1st year, 1864.....	37	1714	$1859 00	$3010 00
2nd " 1865.....	48	2197	2384 00	3314 00
3rd " 1866.....	52	2543	2850 00	3566 00
4th " 1867.....	58	2833	3051 50	3444 50
5th " 1868.....	45	2246	2519 75	3232 50
6th " 1869.....	43	2209	2540 50	3601 00
7th " 1870.....	49	2742	3046 00	3372 00
8th " 1871.....	57	3245	3672 80	3543 00
9th " 1872.....	60	3597	4004 50	3904 00
10th " 1873.....	61	3586	3929 00	5785 00
11th " 1874.....	64	3971	4495 00	5830 00
12th " 1875.....	66	4140	4757 75	5790 50
13th " 1876.....	72	4150	5633 00	6255 00
14th " 1877.....	74	4144	4860 00	6292 00

Statement showing the number and strength of Societies in the respective Counties for 1877.

COUNTIES.	Number of Societies.	Number of Members.	Amount of Annual Subscriptions.	Amount of Grants in Aid.
Annapolis.....	7	355	$ 399 00	$ 400 00
Antigonish.....	3	222	254 00	400 00
Cape Breton.....	4	193	193 00	386 00
Colchester.....	7	392	407 00	400 00
Cumberland.....	7	406	449 50	400 00
Digby.....	1	109	109 00	218 00
Guysborough.....	4	182	217 00	400 00
Halifax.....	3	148	150 00	300 00
Hants.....	6	269	338 00	400 00
Inverness.....	2	123	123 00	246 00
King's.....	6	314	653 25	400 00
Lunenburg.....	3	138	138 00	276 00
Pictou.....	5	385	397 00	400 00
Queen's.....	4	193	197 00	394 00
Richmond.....	1	53	78 00	156 00
Shelburne.....	6	279	279 00	400 00
Victoria.....	3	174	173 00	346 00
Yarmouth.....	2	210	305 25	370 50
	74	4144	$4860 00	$6292 50

D. E. McKAY, Esq., writes to the effect that measures are being taken to organize an Agricultural Society at Broad Cove, in Inverness County, C. B. There are fine stretches of land there capable of supporting a teeming population.

GRANTS TO AGRICULTURAL SOCIETIES FOR 1877.

ANNAPOLIS COUNTY.

Clements Agricultural Socy.....	$ 73 63
Annapolis Royal Agricultural Socy.....	106 77
Port William Agricultural Socy.....	47 12
Paradise Agricultural Socy.....	40 10
Bridgetown Agricultural Socy.....	49 12
Laurie Agricultural Socy.....	42 11
Clarence Agricultural Socy.....	41 10
	$400 00

ANTIGONISH COUNTY.

Morristown Agricultural Socy.....	$ 250 00
St. Andrew's Agricultural Socy.....	78 33
Bayfield Agricultural Socy.....	71 67
	$400 00

CAPE BRETON COUNTY.

Boulardarie Agricultural Socy.....	$ 84 00
North Sydney Agricultural Socy.....	112 00
Sydney Mines and Little Bras D'Or Agricultural Socy.....	98 00
Sydney Agricultural Socy.....	92 00
	$386 00

COLCHESTER COUNTY.

Onslow Agricultural Socy.....	$ 126 79
Tatamagouche Agricultural Socy.....	48 16
Shubenacadie Agricultural Socy.....	40 29
Stirling, New Annan, Agricultural Socy.	42 26
Brookfield Agricultural Socy.....	42 26
Lower Stewiacke Agricultural Socy.....	40 29
Waugh's River Agricultural Socy.....	59 95
	$400 00

CUMBERLAND COUNTY.

Parrsborough Agricultural Socy.....	$ 97 89
Scotia Agricultural Socy of Fox Harbor.	56 95
Malagash Agricultural Socy.....	38 26
Pugwash Union Agricultural Socy.....	38 26
Minudie and Barronsfield Agri. Socy.....	37 38
Middleboro' Agricultural Socy.....	92 10
Amherst Agricultural Socy.....	39 16
	$400 00

DIGBY COUNTY.

Digby Central Agricultural Socy.....	$ 218 00

GUYSBOROUGH COUNTY.

Milford Haven Agricultural Socy.....	$ 138 25
Glenelg Agricultural Socy.....	73 74
Guysborough Agricultural Socy.....	114 27
Argyle Agricultural Socy.....	73 74
	$400 00

HALIFAX COUNTY.

Halifax County Agricultural Socy.....	$ 126 00
Lower Musquodoboit Agricultural Socy.	90 00
Upper Musquodoboit Agricultural Socy.	84 00
	$300 00

HANTS COUNTY.

Newport Agricultural Socy.....	$ 55 62
Union Agricultural Socy. of Maitland...	84 02
Enfield Agricultural Socy.....	71 01
Fenwick Agricultural Socy. of Noel.....	47 34
Progress Agricultural Socy of Hardwoodland and Nine Mile River.....	47 34
Windsor Agricultural Socy.....	91 67
	$400 00

INVERNESS COUNTY.

Mabou and Port Hood Agricultural Socy.	$ 152 00
N. E. Margaree Agricultural Socy.....	94 00
	$246 00

KING'S COUNTY.

King's County Central Agri. Socy.....	$ 72 25
Union Agri. Socy. of E. Cornwallis.....	102 87
West Cornwallis Agricultural Socy.....	55 72
King's County Agri. Socy, Horton.....	45 31
Aylesford Agricultural Socy.....	72 41
Farmers' Agri. Socy of N. E. Cornwallis.	51 44
	$400 00

LUNENBURG COUNTY.

Mahone Bay Agricultural Socy.....	$ 108 00
New Ross Agricultural Socy.....	80 00
Centreville Agricultural Socy.....	88 00
	$276 00

PICTOU COUNTY.

Pictou Agricultural Socy.....	$ 195 47
Egerton Agricultural Socy.....	70 53
Millbrook Agricultural Socy.....	52 39
River John Agricultural Socy.....	41 31
Merrigomish Agricultural Socy.....	40 30
	$400 00

QUEEN'S COUNTY.

North Queen's Agri. Socy, Caledonia...	$ 84 00
Kempt Agricultural Socy.....	80 00
M. B. Agricultural Socy of Brookfield, Pleasant River.....	82 00
Liverpool Agricultural Socy.....	184 00
	$394 00

RICHMOND COUNTY.

Richmond Agricultural Socy.....	$ 156 00

SHELBURNE COUNTY.

Barrington Passage Agricultural Socy...	$ 93 19
Barrington Agricultural Socy.....	58 78
Shelburne Agricultural Socy.....	57 35
Clyde River Agricultural Socy.....	58 78
Wood's Harbour Agricultural Socy.....	57 35
Cape Negro Agricultural Socy.....	74 55
	$400 00

VICTORIA COUNTY.

Middle River of Victoria Agri. Socy.....	$ 164 00
St. Ann's Agricultural Society.....	100 00
Baddeck Agricultural Socy.....	82 00
	$346 00

YARMOUTH COUNTY.

Yarmouth County Agricultural Socy...	$ 250 00
Yarmouth Township Agricultural Socy.	120 50
	$370 50

CENTRAL BOARD OF AGRICULTURE.

Committee Room, Province Library, 27th Feb., 1878.

Present—Members of the Board—Col. Laurie, President; Hon. Albert Gayton, Commissioner of Works; C. E. Brown, David Matheson, John Ross, W. E. Starratt, Israel Longworth, Dr. Lawson, Secretary.

Members of Agricultural Committee of House of Assembly—Donald Archibald, M. P. P., Chairman; Hon. Albert Gayton, Avard Longley, M. P. P.; Alex. McKay, M. P. P.; Wm. A. Patterson, M. P.; C. H. Davidson, M. P. P.

Col. Laurie, President, explained in detail the operations of the Board for the past year, the working of Societies in the different counties, and the measures contemplated for the ensuing season. The Agricultural societies were finding their way, more and more every year, to their legitimate work, but there were still some over which the Board had to exercise a strict control. The annual report contains full statistics of the societies, of the Provincial Exhibition, and of the thoroughbred stock in existence throughout the Province.

The meeting was addressed successively by Mr. Archibald, the Chairman of the Committee, and Messrs. Longley, McKay and Patterson, and the Hon. Mr. Gayton; also by Messrs. Ross, Starratt, Longworth, Brown and Matheson, the last explaining some of the results of the examination of returns made by societies. The members of the Agricultural Committee all manifested a very hearty interest in the operations of the Board, and expressed their desire to give such aid as was necessary to carry on the organization, with due regard to economy.

The President stated that the Secretary of the Board would be ready to furnish any further information or explanations required by any member of the committee or of the Legislature. After the committee withdrew the Board resumed the ordinary business.

The Secretary read a petition from the President, officers and members of the Pugwash Agricultural Society, endorsed and signed by the County Sessions convened at Amherst, (and communicated through Dr. Clay), representing the great obstacle to improvement of live stock, and the personal danger to residents in the agricultural districts from the practice of allowing common bulls to roam at large, and praying that the Board should request the Legislature to pass an Act providing that all bulls over one year old should be kept in proper charge by their owners, and thus prevented from running loose in any season or under any circumstances.

It was resolved to recommend the petition to the attention of the Agricultural Committee with a view to the necessary legislation.

Messrs. Ross, Brown and Starratt presented a favourable report upon the applications of the following societies to be recognized by the Board, viz.:—The Isle Madame Agricultural Society, County Richmond; the Christmas Island Agricultural Society, County Cape Breton; the Strait of Canso Agricultural Society, County Inverness.

The Committe's report was approved of, and the formation of the societies sanctioned accordingly. Mr. Ross represented that as these societies had been in operation in 1877 they should be authorized to participate in last year's grant, but it was pointed out by the Secretary that by a recent amendment to the statute *new societies that have not sent in their returns before the first day of July* "shall not be entitled to draw any portion of the Provincial allowance until the following year."

Oakfield, 28th Feb., 1878.

The members of the Agricultural Committee and members of the Board met at Oakfield, by invitation of Colonel Laurie, and spent some time in examining the fine herd of Devon cattle, now consisting of 52 head of thoroughbred animals, all in excellent condition. It was remarked by several of the members that the young stock raised at Oakfield was, as a rule, superior, both in form and size, to the animals originally imported from England.

Committee Room, Province Library, 1st March, 1878.

The Board met at 10 a. m.

Messrs. Matheson and Brown, who had examined the Prize List, reported, recommending its final approval by the Board; but, in addition to the alterations previously suggested and adopted, the committee recommended an extension of the Poultry List by separate prizes for Rouen, White Pekin, Aylesbury and Cayuga Ducks; also a prize for the new Butman Squash.

The Prize List, as re-adjusted, was approved of and ordered to be sent to the Hon. Provincial Secretary for the consideration of the Governor-in-Council.

A letter was read from Mr. McNaughton, Hopewell, in reference to the returns of the Pictou County Agricultural Society. The Secretary was directed to write to the Secretary of the Pictou Society for information and explanations, and to lay the same before the Executive Committee of the Board.

The President read a telegram from Mr. Dimock, Truro, in reference to the Provincial Exhibition of 1878, as follows: "Ample accommodation will be found for all visitors. You cannot overcrowd us."

2 P. M.

The Board met again in conference with the Committee on Agriculture of the House of Assembly.

On suggestion of Mr. Longley, an approximate estimate was formed of the probable cost of the proposed importation of live stock and probable proceeds. It was found that the principal loss would be on sheep, in consequence of which it was recommended to decrease the number. The following are the animals proposed to be imported:—

2 Short Horn Bulls.
2 " Heifers or Cows.
2 Devon Bulls.
2 Yearling Jersey Bulls.
4 " 1 " Heifers.
2 Ayrshire Bulls.
2 " Heifers.
20 Sheep (chiefly shortwool.)
4 Pigs (Ellesmere.)

On motion of Mr. Brown, seconded by Mr. Ross, the following gentlemen were named as an Executive Committee for the year (three to be a quorum):—The President, Vice-President, Hon. Mr. Gayton, Mr. Longworth, Mr. Starratt and the Secretary.

NOVA SCOTIA POULTRY AND FLORICULTURAL ASSOCIATION.

OFFICERS.

President, Andrew Downs; *Vice-Presidents*, H. Harris, H. Crosskill, F. H. D. Veith; *Secretary*, R. J. Wilson; *Asst. Secretary*, Thos. Goudge; *Treasurer*, A. McKinlay; *Executive Committee*, C. W. Anderson, J. W. Belcher, T. J. Egan, Forshaw Day, Geo. W. Ritchie, F. C. Stevens, John G. Trider, T. S. Veale; *Auditors*, J. W. Hutt, Geoffrey Morrow.

CONSTITUTION AND BYE-LAWS.

ARTICLE I.—*Name and Object.*—This Association shall be known as the "*Nova Scotia Poultry and Floricultural Association.*" Its object shall be to encourage the interest, and promote improvement, in the breeding of Poultry, Pigeons and Cage Birds, and a more general taste for the cultivation of Flowers.

ARTICLE II.—*Officers.*—The officers of this Association shall be a President, three Vice-Presidents, Secretary, Assistant Secretary, Treasurer, two Auditors, and an Executive Committee, consisting of the above officers, with the exception of the Auditors, and eight additional members, all of whom shall be elected by ballot at the annual meeting.

ARTICLE III.—*Membership.*—*Sec. 1.*—All members shall be admitted by ballot, and one black ball in five shall exclude.

Sec. 2.—The names of candidates for membership must be given to the Secretary, together with the names of the proposers, at least twenty-four hours previous to any regular or special meeting of the Association.

Sec. 3.—No member under the age of 18 shall be allowed to vote at any meeting of the Association.

Sec. 4.—The entrance fee, payable on admission to the Association, shall be $1.00, and the annual subscription $1.00. The latter shall become due on the first day of October in each year, and no member whose subscription is unpaid at that date shall be allowed to vote at any meeting, or be entitled to any of the privileges of the Association. The subscription for the current year must be paid by members, with the entrance fee, on admission, and any one failing to pay within one month, after due notice, shall thereby forfeit his membership.

Sec. 5.—On the admission of each new member, the Secretary shall notify him thereof, and request him to pay the en-

trance fee and subscription, and the member shall subscribe to the constitution on the first opportunity thereafter.

Sec. 6.—Any member wishing to retire from the Association must first pay all dues for which he may be liable, and then send in his resignation, in writing, to the Secretary.

Sec. 7.—Gentlemen may be admitted honorary or life members of the Association, on payment of the sum of ten dollars.

ARTICLE IV.—*Meetings.—Sec. 1.*—The annual meeting of this Association shall take place on the second Tuesday in October in each year, and quarterly meetings on the second Tuesdays in January, April and July. A special meeting may be called by the President, at any time, if the interest of the Association require it, or on his receiving a requisition to call such meeting signed by eight or more members.

Sec. 2.—Ten members shall form a quorum.

Sec. 3.—No political or religious subject will be allowed to be discussed at any meeting of the Association.

ARTICLE V.—*Duties of Officers.—Sec. 1.*—The President shall preside at all meetings of the Association, and exercise the usual functions of a presiding officer of a deliberative body.

Sec. 2.—In case of the absence of the President, or of his inability to act, the senior Vice-President in attendance shall act as presiding officer.

Sec. 3.—The Secretary shall conduct the general correspondence of the Association, and have custody of the same; distribute notices of meetings; notify new members of election, &c.; have charge of all books and papers appertaining to his office; and shall keep the minutes of all meetings (regular or special). He shall pay to the Treasurer all money received by him for subscriptions, &c.; and all liabilities shall be paid by an order on the Treasurer, signed by the Secretary and countersigned by the President, or, in the event of his absence from the city, by the Vice-President.

Sec. 4.—The Treasurer shall have charge of all funds belonging to the Association, and shall pay all bills after they have been approved by the President and Secretary (as provided in Sec. 3). He shall keep his accounts in proper form for the inspection of the Auditors, and shall submit his accounts, duty audited, at the annual meeting.

Sec. 5.—The Auditors shall audit the books and accounts of the Association previous to the annual meeting.

Sec. 6.—The Executive Committee will hold special meetings at the call of three or more of its members, five of whom shall constitute a quorum. It shall control the affairs of the Association; give orders for all printing required; shall give publicity to and secure accommodation for public exhibitions; and report its transactions at each quarterly meeting; and shall also submit a full report in writing at the annual meeting.

ARTICLE VI.—*Amendments, &c.*—The Constitution and Bye-Laws of this Association may be amended, altered, or repealed, at any time, by the Executive Committee, with the written consent of two-thirds of its members, confirmed by the majority of the votes of the Association.

FIRST WINTER EXHIBITION.

This Association was inaugurated on the 5th day of December last, and within a fortnight thereafter the Officers and Executive Committee were appointed, and at once proceeded to carry out the objects of the Society.

The want of such an Association has been long felt in this Province, and we are pleased to know that the want is now satisfactorily supplied. The gentlemen who have been instrumental in starting the Society are energetic, active, and intelligent workers, and seem to understand their business.

In less than three months from the first meeting of the Association, the first Exhibition was held, and it closed on the 28th February under very encouraging circumstances, and we congratulate the Association that they have, through admirable management, succeeded in giving general satisfaction.

When we simply say the Exhibition was a success, we hardly do it justice, it was—if we may use the expression—more than a success.

The Society have not only succeeded in carrying out a first class Exhibition, *which has paid*, but have created an interest in the objects of the Association among many who before had no idea that there could be so much pleasure and profit in the breeding and rearing of the feathered tribes. It was a pleasure to see the happy cheerful faces of the members of she Association, and the careful tenderness with which the exhibits committed to their charge were handled and fed; the owners could not have paid more attention to their stock than the committee gave it.

We have hardly space to give a detailed account of the many varieties of fowls exhibited; suffice it to say there were splendid turkeys and geese; Pekin, Aylesbury, Rouen, Muscovy, wild and common ducks; Light and Dark Brahma fowls, Buff and Partridge Cochins, Houdans, Black Spanish, Leghorns, Games, Hamburgs, Polish, the new American Plymouth Rocks, Dorkings, Bantams, &c., most of which were thorough-bred, and scored as many points—according to the "Standard of Excellence"—as any birds exhibited in any part of America. There was a great variety of pigeons and cage birds also. The exhibition of flowers was nearly a failure, there were only a few entries, but the collection from Mr. Harris's Nursery was good, and added greatly to the appearance of the hall.

We hope to see more interest taken in this branch of the business of the Association at the proposed autumn exhibition.

In regard to the Poultry, we were pleased to find there was so much interest displayed; but we want to see our agricultural population take hold of the matter. When we consider that it costs less to raise a ton of poultry than a ton of beef, and that the former is worth more in the market, it is a wonder that our friends in the country are not all poultry breeders.

The Poultry and Floricultural Association now numbers about one hundred members, but there is nothing in the bye-laws limiting the number, and we are assured that our Agricultural friends throughout the Province will be heartily received into the Society on payment of the fee and subscription, amounting to only two dollars.

On Tuesday, 26th Feb., the Exhibition was formally opened by HIS HONOR THE LIEUT.-GOVERNOR, who delivered the following address on the occasion:

LADIES AND GENTLEMEN,—I am sure you will agree with me that the Society, under whose auspices we are met to-day, has a right to be congratulated on the success of their efforts. Not only do they deserve this congratulation, but it is our duty to offer it. While they are engaged in a service which is truly a good one, they need the assistance which the appreciation of their efforts by their fellow citizens affords. The more the object of their aims and exertions is appreciated, the more they will feel the benefit of such appreciation.

This exhibition is a proof of our having made some progress in national life. Such exhibitions are not held in the earliest stages of society in a new country. The struggle of the first settlers in such cases is for subsistence. It is not till some considerable progress is made, till continued labor and toil have created a certain amount of capital, and there is something laid up, on which people can draw, beyond the proceeds of daily toil, that the qualities of mind are developed which find expression in exhibitions like these. In happier climes; in countries where nature glows with warmth and light; where she spontaneously covers the fields with flowers, and the trees with food for man; where everything that can delight the senses is bestowed without stint, and received without labor, the æsthetic part of our nature is almost an instinct. Beauty, in all its forms, is worshipped. The imagination glows with life. The painter, the poet, and the sculptor, give expression to forms of beauty and grace, the beaux ideals of their fervid fancies; but, in these northern climes we are differently situated. What would happen to us, if by

any chance the direction of the Gulf Stream were to be deflected upon our coasts, instead of away from them, and we were left free from the chilly sway of winter, and had flowers and fruits instead of ice and snow, whether this would make us poets and artists or not, it is hardly worth while to speculate. Be it our consolation to know that if we reap not the advantages, neither do we bear the ills, of a southern sky. If our climate is rigorous and severe, it produces the homelier and hardier virtues. If our people have but half the year to do their work, and if for the other half nature closes her bosom to them, and refuses to bring forth food for man or beast, these conditions create forethought, prudence, care for the future; and our people emerge from their struggle with adverse circumstances with a sense of self-reliance, and an independence of character, which are not so marked where nature lavishes spontaneous gifts, and where man has only to hold out his hand to receive. There is no situation without its compensating advantages, so that, if ours imposes great inconveniences, we have at least what may be called the climatic virtues, those which arise from a successful struggle against difficulties—difficulties not too great to be overcome, but sufficiently great to develope certain valuable qualities, which are found only where struggles exist. It is gratifying to see how well our people have fought their battle.

Already the earliest and most difficult stages in agricultural progress have been passed. Comparative ease and comfort have taken the place of previous privations and toil. Our people find, with this improvement in their circumstances, new wishes and desires springing up. They begin to yearn for the beautiful in nature and art, and it is in stimulating nascent aspirations for further improvement that societies like this find their proper sphere.

It is only within the last day or two—I make the confession with some shame—that I came to know of the existence of this Society, which was formed some weeks ago, and has since been pursuing its course of quiet usefulness. I confess I was at first struck with the conjunction of objects indicated by its title. There did not seem to be any visible connection between Poultry and Flowers; and though each of these objects was of consequence by itself, it seemed an odd association of ideas. But on further consideration, I see that the association of Flowers and Birds is not a novelty in the world, and was by no means an original idea with the society.

You will all recollect the beautiful picture, in the Song of Solomon, of the departure of winter; when the Royal Poet, in reference to the hope of a coming spring, a hope which in a month or two hence we may be cherishing here, says, "Lo! the winter is past and the rain (if Solomon had been a Nova Scotian, he would have said not the rain but the snow), is over and gone, the *Flowers* appear on the earth, and the singing of *Birds* is come."

But a greater than Solomon uses the same juxtaposition of Birds and Flowers to adorn and illustrate his discourse. In the sermon on the Mount, our Saviour says: "Consider "the lilies of the field, how they grow, they "toil not, neither do they spin, and yet I say "unto you that Solomon, in all his glory, "was not arrayed like one of these." This simple flower, spread with lavish hand o'er every field, possesses an artless beauty, whose excellence no human heart can rival. At the same time and in the same discourse, the Divine teacher illustrates his idea by a reference to birds.

"Behold," says he, "the fowls of the air, "for they sow not, neither do they reap, yet "your Heavenly Father feedeth them."

The flowers of the field, the birds of the air, are both applied to illustrate the glory of God and the dependence of man.

So, again, the immortal author of Paradise Lost, "the sightless Milton," as Wordsworth calls him, that noble poet who was compensated by his Heavenly Father for the physical blindness from which he suffered by the power of mentally seeing visions brighter and more glorious than were ever beheld by mortal eyes—that glorious old poet, in his picture of a coming morn, uses the same conjunction of flowers and birds:

"Sweet is the breath of morn, her rising sweet,
"With charm of earliest *birds*, pleasant the Sun
"When first on this delightful land he spreads
"His orient beams on herb, tree, fruit, and *flower*."

And, again, when he wished to express the idea of everything which, in ordinary circumstances, could delight the soul of man, he adds:

"But neither breath of morn when she ascends
With charm of earliest *birds*, nor rising sun
On this delightful land, nor herb, nor *flower*,"

could make up for the absence of something else on which his heart was set.

And, again, in the description of the happy event when Eve gave her consent to become of one flesh with our first progenitor (the oldest precedent for a practice so extensively followed ever since) he says:

"Joyous the *birds*, fresh gales and gentle airs,
"Whispered it to the woods, and from their wings
"Flung *rose*, flung *odors* from the *spicy shrub*."

All poetry abounds in allusions to flowers. Heber, in reference to the winter passing away, and from the same stand-point as the writer of the Canticles, speaks beautifully of that season as the one

"When Spring unlocks the flowers,
To paint the laughing soil."

Shakespeare, who never fails to catch the spirit of a beautiful idea, and whose poetic soul must have glowed whenever he thought of the lovely image of the lily in the Sermon on the Mount, describes it as—

"Wasteful and ridiculous excess,
To paint the lily o'er."

Or, carrying the idea on a step further.

"To throw a perfume on the violet."

It appears, therefore, that so far from the association of the two branches to which the society devotes itself, being original with our friends, it may be proved, by these lawyer like citations, that it was done of set purpose, and that the Society is justified by the precedents and doctrines clearly laid down in the books. The love of flowers is one of the surest indications of refinement. Look around among your neighbors, and find me some one who delights in the cultivation and care of flowers, I will undertake to say you will find a person, gentle, humane, refined. If a woman, she will be

"The very mark and model of her time,
The mould in which female face is formed."

I must, however, give one warning to the unmarried ladies who take an interest in this subject. If you are afraid of standing too high in the opinion of the other sex, if you dread the consequences of having to reject and repel the addresses of endless admirers, don't cultivate flowers, don't show a taste for those scenes.

"Where daisies pied and violets blue
"And lady-smocks all silver white
"And cuckoo buds of yellow hue
"Do paint the meadows with delight."

For, if you do, you must take the consequences which will inevitably result, however distressing it may be, to witness the pangs of your disappointed and broken-hearted admirers.

But I fear you will think it time to have a truce with nonsense—

"Revenons a nos moutons."

I have congratulated the society on its successful debut, but I must not forget there is a word or two which ought to be said of your President, and this not for the information of the society, who know all about him, but for the benefit of persons who are only beginning to take an interest in the subjects to which Mr. Downs's life has been devoted. Of him it may be observed that he has already achieved a more than Provincial reputation. Many years ago when comparatively little interest in subjects of this kind was felt among our people, he established a place at the head of the North West Arm which was one of the attractive objects of Halifax in former times. Guided by an instinctive fondness for animals, he made an admirable collection which he kept up for years. It was, though small in extent and maintained mainly by private means, the show place of Halifax, and would have been a credit to a community much more wealthy and advanced than the Halifax of that day. As a taxidermist, Mr. Downs is celebrated all the world over. At this moment the museums of the King of Italy contain many moose prepared by Mr. Downs and sent there on the order of the late Victor Emmanuel. A Polar Bear is also a contribution from the same quarter. There is not a sovereign in Europe that does not own one or more moose heads prepared in the small and unpretending establishment at the Dutch Village. Mr. Downs brings to the Society the experience and skill of a life-time spent in creating and diffusing a taste for the objects which the society is intended to encourage. The other gentlemen who are associated with him are inspired by similar feelings, and it is not too much to expect that they will be able to effect an improvement in the public taste on which they can look back with satisfaction.

It is but right, after detaining you so long, and, I am afraid, wearying you not a little, to ask Mr. Downs or some other gentleman connected with the society, to give you the benefit of a few practical remarks, after which nothing will remain for me but to declare "the exhibition open."

The following is a list of the awards by which parties requiring fowls or eggs for hatching may learn from whom they may obtain just what they want. Those who obtained prizes got them entirely on the merits of their stock; there could be no partiality, as the rules governing the Exhibition were so strictly carried out that it was next to impossible for the judges to know to whom each individual coop belonged:

POULTRY, &c.

Class 1.

Light Brahmas, pair—
1st prize, T. Goudge, Halifax.....$3 00
2nd " J. W. Betcher, " 1 50
Collection, J. H. Bauld, " 4 00
Dark Brahmas, pair—
1st prize, " 3 00
2nd " " 1 50
Buff Cochins, pair
1st prize, Geo. Piers, " 3 00
2nd " Geo. Piers, " 1 50
Partridge Cochins, pair,
1st prize, T. Goudge, " 3 00
2nd " E. Blanchard, Ellershouse..... 1 50
Collection, T. Goudge, Halifax..... 4 00

Class 2.

Houdans, pair—
1st prize, A. Anderson, Halifax.....$3 00
2nd " F. Hyde, Dartmouth 1 50

Class 3.

W. F. B. Spanish, pair—
1st prize, E. Goudge, Halifax.....$3 00
2nd " W. J. Lewis, " 1 50
Collection, E. Goudge, " 4 00
White Leghorns, pair—
1st prize, H. Keeler, Dartmouth..... 3 00
2nd " B. Beattie, Halifax 1 50
Collection, Mrs. Gray, Windsor Road... 4 00
Brown Leghorns, pair—
1st prize, G. Piers, Halifax..... 3 00
2nd, " W. Anderson " 1 50
Collection, F. C. Elliott, Dartmouth.... 4 00

Class 4.

Black Red Games, pair—
1st prize, G. Morrow, Halifax.....$3 00
2nd, " G. Morrow, " 1 50
Brown Red, pair—
1st prize, Wm. Gibson " 3 00

Class 5.

S. P. Hamburgs, pair—
1st prize, C. D. McDonald, Pictou.....$3 00
G. S. Hamburgs, pair—
1st prize, Geo. Piers, Halifax..... 3 00
2nd, " Geo. Piers, " 1 50

Class 6.

W. C. B. Polish, pair—
1st prize, F. C. Stevens, Halifax.....$3 00

Class 7.

Plymouth Rocks, pair—
1st prize, H. Crosskill, Halifax.....$3 00
2nd, " Wm. Stevens, Bedford Basin 1 50
Collection, Mrs. M. Murphy, Halifax... 4 00

Class 8.

Game Bantams, pair—
1st prize, A. Downs, Halifax $2 00
2nd, " H. Townsend, New Glasgow.. 1 00
Frizzled, pair—
1st prize, A. Downs, Halifax..... 2 00
Golden Sebrights, pair—
1st prize, W. J. Lewis, " 2 00
2nd, " Mrs. Geo. Bauer, " 1 00

Class 9.

S. G. Dorkings, pair—
1st prize, H. Keeler, Dartmouth.....$3 00
2nd, " F. Hyde, " 1 50

Class 10.

Bronze Turkeys, pair—
1st prize, J. W. Hutt, Halifax.....$3 00

Class 11.

Domestic Geese, pair—
1st prize, W. Walker, Halifax.....$3 00
2nd, " S. Simmons, " 1 50

Class 12.

Pekin Ducks, pair—
1st prize, A. MacKinlay, Halifax.....$3 00
2nd, " A. MacKinlay, " 1 50
Aylesbury Ducks, pair—
1st prize, H. Crosskill, " 3 00
Rouen Ducks, pair—
1st prize, T. J. Egan, " 3 00
2nd, " J. W. Hutt, " 1 50
Muscovy Ducks, pair—
1st prize, J. L. Barton, " 2 00
Common Ducks, pair—
1st prize, G. Piers, " 3 00

Class 13.

Guinea Fowl, pair—
1st prize, W. J. Lewis, Halifax.....$2 00

Class 14.

Grade Fowl, pair—
1st prize, A. MacKinlay, " $3 00
2nd, " G. Piers, " 1 50

Class 15.

Eggs, 1 doz.—
1st prize, H. Keeler, Dartmouth.....$3 00
2nd, " G. Piers, Halifax..... 1 50

Class 16.

Cage—Chas. Tillman, Halifax.....$1 00

Class 17.

Drinking fountain, D. H. H. Black, Halifax $1 00
Taxidermy,
1st prize, A. Downs, Halifax..... 3 00
2nd, " A. Downs, " 1 50

Class 18.

Pouters, Austrian, pair—
1st prize, A. Anderson, " $1 50
Pouters, other colors, pair—
1st prize, A. Anderson, " 1 50
Carriers, English, pair—
1st prize, W. Anderson, " 1 00
Carriers, Antwerp, pair—
1st prize, A. Downs, " 1 00
2nd, " A. Downs, " 0 50
Fantails, pair—
1st prize, W. Anderson, " 1 00
2nd, " A. Downs, " 0 50
Turbits, pair—
1st, A. Downs, " 1 00
2nd, A. Downs, " 0 50
Jacobins, pair—
1st prize, W. Anderson,..... 1 00
Trumpeters, English, pair—
1st prize, A. Anderson,..... 1 00
Archangels, pair—
1st prize, A. Downs,..... 1 00
Magpies, pair—
1st prize, A. Downs,..... 1 00
2nd, prize, A. Downs,..... 0 50
Swiss pigeons, pair—
1st prize, A. Downs,..... 1 00
Doves, pair—
1st prize, A Downs..... 1 00
Collection, assorted pigeons, W. Anderson.. 3 00

Class 19.

Belgian cock	Canary—	2nd prize,	J. Beattie.	$0 50
" hen	"	"	J. Beattie.	0 50
Yellow cock	"	1st "	W. J. Lewis.	1 00
" "	"	2nd "	J. Dugwell..	0 50
Green "	"	1st "	H. W. Barnes	1 00
" "	"	2nd "	F. C. Stevens	0 50
Mottled "	"	1st "	T. Gough....	1 00
Mule "	"	1st "	W. Anderson	1 00

Class 20.

Cock Robin, 1st prize, J. L. Barton, Halifax.$1 00
Cock Linnet, 1st " E. Goudge, " 1 00
Catbird, 1st " A. Downs, " 1 00
Blackbird, 1st " J. L. Barton " 1 00
Redbreasted Grosbeak, 1st prize, H. M. Doane, Halifax..... 1 00

Class 21.

Cardinal, 1st prize, A. Downs, Halifax.$1 00
Mockingbird, 1st " W. Rhind, " 1 00
Java Sparrows, 1st " A. Downs, " 1 00
Oriole, 1st " J. L. Barton, " 1 00
Starling, 1st " J. L. Barton, " 1 00

Class 22.

Parrot, 1st prize, A. Downs, Halifax.$1 00
" 2nd " T. Gough, " 0 50
Paroquettes, 1st " A. Downs, " 1 00
Love Birds, 1st " Mrs. R. Pickford " 1 00

SPECIAL PRIZES.

1st. One dozen Dark Brahma eggs from his celebrated imported English (Wright's) stock, value $6.—Offered by C. E. Perry of Boston, Mass., for the best Light Brahma Hen.—Taken by J. W. Betcher, Halfax.

2nd. One Setting (13) Partridge Cochin eggs, value $3.—Offered by Thomas Goudge of Halifax, for the best Partridge Cochin Cockerel.—Taken by Thomas Goudge, Halifax.

3rd. Cash $2 50 offered by A. Mackinlay, breeder of Pekin Ducks, Halifax, for the larger collection of Poultry owned by exhibitor.—Taken by C. D. McDonald, Pictou.

4th. Cash $2 50, offered by A. Mackinlay, for the best Pekin Drake.—Taken by A. Mackinlay.

5th. Pincushion, value $6, offered by C. H. Clifton, Halifax, N. S., for the best batch of chickens (with hen) of 1878.—Taken by J. W. Betcher, Halifax.

6th. Framed engraving, value $10, offered by Alex. Walker, Halifax, for the best Light Brahma Cockerel.—Taken by T. Goudge, Halifax.

7th. A double Set of Chromos, offered by H. H. Stoddard, Editor of the "Poultry World," Hartford, Conn., for the best Dark Brahma Cockerel.—Taken by J. W. Betcher.

8th. Bound volume of "Poultry World," value $2, offered by H. H. Stoddard, for the best W. F. B. Spanish Cockerel.—Taken by John O'Connell, Halifax.

9th. Subscription to "Poultry World" and "Poultry Yard," 1878, offered by H. H. Stoddard, for the largest and best collection of Asiatics shown and owned by Exhibitor.—Taken by T. Goudge, Halifax.

10th. 2 settings of eggs from varieties to be selected by winner.—Offered by C. D. McDonald, Pictou, for heaviest pair of Asiatic chickens of 1877.—Taken by T. Goudge, Halfax.

11th. 2 settings of eggs from varieties to be selected by winner.—Offered by C. D. McDonald, for smallest pair of Bantams.—Taken by A. Downs, Halifax.

12th. 10 Subscriptions to the "Poultry Herald," Toronto, offered by the editor Dr. W. H. Merry, for varieties allotted as follows:

Dark Brahmas.....	J. W. Betcher, Halifax.
Houdans	A. Anderson, "
Blown Red Games... ...	W. Gibson, "
Polish.....	F. C. Stevens, "
Game Bantams.....	A. Downs, "
Golden Sebrights.....	W. J. Lewis, "
Dorkings.....	H. Keeler, Dartmouth.
Geese.....	Wm. Walker, Halifax.
Aylesbury Ducks.....	H. Crosskill, "
Rouen.....	T. J. Egan, "

13th. Silver medal, offered by Dr. W. H. Merry, editor "Poultry Herald," Toronto, for the largest collection of premium poultry, resulting in a tie. This special prize is referred to the donor to decide.

FLOWERS, &c.

Stand of ferns, T. Mitchell, Halifax .....$ 2 00
Nurserymen's collection, H. Harris, Halifax 10 00
Painting in water color, bird, Mrs. R. Pickford, Halifax..... 2 00
Painting in water color, flowers, Miss Florence M. Lordly, Halifax..... 2 00
Vase of wax flowers, Mrs. J. E. McLean, Halifax..... 2 00

ADDITIONS TO NOVA SCOTIA STOCK REGISTER.

DEVON BULL CALVES.

CXCIII.—Sir Fenwick Williams. Calved Feb. 13th, 1878. Bred and owned by Colonel Laurie, Oakfield.

Sire Prince Alexander CXXII. G. S. Napier CLVI.

Dam Lily CXIII. by Havelock CVI. gr d Blossom CV. (618) by General Grant LXXXI.

g gr d Margaret CXIX. (381) by Wilmot CL. 261.

g g gr d Lady Ann CI. 245 by Lord Elgin 156.

g g g gr d Fancy 244 by Don Juan (347).

CXC.—General Doyle. Calved 3rd December, 1877. Bred and owned by Colonel Laurie, Oakfield.

Sire Prince Alexander (122) G. S. Napier 156.

Dam Verbena 114 by Havelock 156.
gr d Lady Ann 101 by Lord Elgin 148.
g gr d Fancy 244 by Don Juan.

CLXXXVIII.—Cesarovitch. Calved 15th October, 1877. Bred and owned by Colonel Laurie, Oakfield.

Sire President 120, g s Hartland 2nd, 87.

Dam Duchess of Edinburgh 104 by Napier 156.

gr d Violet 2nd, 189 by Samsen 520.

DEVON HEIFER CALVES.

CLXXXIX.—Dahlia. Calved 16th Nov. 1877. Bred and owned by Colonel Laurie, Oakfield.

Sire Sir Charles Napier 126, g s Havelock 106.

Dam Snowdrop 130 by Havelock 106.
gr d Lady Pink 103 by Wilmot 150.
g gr d Lady Ann 101 by Lord Elgin 148.

CXCI.—Princess Helena. Calved 16th Dec., 1877. Bred and owned by Colonel Laurie, Oakfield.

Sire The President 120, g s Hartland 2nd, 87.

Dam Princess Victoria 125 by Napier 156.

gr d Young Hagar 160.
g gr d Hagar 2717, Engd.
g g gr d Rebecca 2311, Engd.

CXCII.—Redan. Calved 8th Sept. 1877. Bred and owned by Col. Laurie, Oakfield.

Sire Prince Alexander CXXII. G. S. Napier CLVI.

Dam Maid of Miller Hill CIV. by Wilmot 261.

gr d Lady Ann CI. 245, by Lord Elgin 156.

g gr d Fancy. 244 by Don Juan 347.
g g gr d Roulette (1483) by the Duke (570).

SHORT-HORN DURHAM HEIFER CALVES.

CCCXXXVIII.—Gypsey. White. Calved Oct. 22nd, 1877. Bred by and the property of Jonathan Rand, Canning.

Sire Wetherby Star 255.

Dam by Sir Roger Tichbourne 240.
gr d by Yeoman 11.
g gr d by Sir William 12.

CCXXXIX.—Nelly Grey. Roan. Calved Dec. 26th, 1877. Bred by and the property of Jonathan Rand, Canning.

Sire Wetherby Star 255.

Dam by Yeoman 11.
gr d by Sir William 12.
g gr d by Duke of Brunswick 267.

CCCXL.—Rowanna. Calved Nov. 20th, 1877. Colour, red with a very little white. Bred by Edwin Chase.

Sire Wetherby Star CCLV.

Dam Flora CXXXV. by Lord York LXIII.

gr d Lily by Constance Duke 7753.
g gr d Dairy Queen by Oswald Cray [514].
g g gr d Dairy Spot by Snowball [696] 3444.
g g g gr d Queen by Dallimore 400.
g g g g gr d Fancy by Wellington [791].
g g g g g gr d Donna Maria by Duke [175] 440.
g g g g g g gr d Nancy *alias* Countess 3rd, by Wellington [790] 1086.
g g g g g g g gr d Countess 1st by a son of Comet (155).
g g g g g g g g gr d Princess imported by Lancaster (360).
g g g g g g g g g gr d Golden Pippin by North Star (459).
g g g g g g g g g g gr d Golden Pippin by Favourite (252).
g g g g g g g g g g gr d Golden Pippin by Favourite (252).
g g g g g g g g g g gr d Golden Pippin by Broken Horn (95.

SHORT-HORN BULL CALF.

CCCXLI.—Rowan. Colour roan. Calved August 27th, 1877. Bred by Edwin Chase, Cornwallis, N. S.

Sire Lord York LXIII.

Dam Rose by Brunswick [831].
gr d Dairy Queen CXXXVIII. by Oswald Cray [514.]
g gr d Dairy Spot by Snowball [696] 3444.
g g gr d Queen by Dallimore 400.
g g g gr d Fancy by Wellington [791].
g g g g gr d Donna Maria by Duke [175] 440.
g g g g g gr d Nancy *alias* Countess 3rd, by Wellington [790] 1086.
g g g g g g gr d Countess 1st by a son of Comet (155).
g g g g g g g gr d Princess imported, by Lancaster (360).
g g g g g g g g gr d Golden Pippin by North Star (459).
g g g g g g g g g gr d Golden Pippin by Favourite (252).
g g g g g g g g g g gr d Golden Pippin by Favourite (252).
g g g g g g g g g g gr d Golden Pippin by Broken Horn (95).
g g g g g g g g g g g gr d Golden Pippin, bred by Mr. Best of Mansfield.

Agricultural Meeting at Bridgetown.—The adjourned meeting appointed to be held in the Court House here on the 12th February, convened at 10 o'clock, Avard Longley, M.P.P., taking the chair, W. B. Troop, M.P.P., acting as Secretary. After the object of the meeting was stated by the chairman, and the minutes of the former meeting held at Annapolis on the 22nd of January, were read; several communications and resolutions were submitted and read by the secretary, from the different societies located in the County, evincing their desire to have County Exhibitions held in suitable buildings to be erected for that purpose, and expressing their willingness to co-operate in the same by voting from their funds a sum of money to be appropriated towards supplementing the prize money to be provided by the company. The committee from Annapolis submitted a prospectus, in which it was stated that Annapolis was prepared to erect suitable buildings. Bridgetown also submitted a similar proposal. A very animated discussion arose respecting the advantages of the places named, part of the meeting being in favor of one locality and part in another. No definite understanding, it was plain to be seen, could be arrived at by the meeting, and it resolved to appoint a committee of seven from those present, and the Presidents of each society should appoint a number from his society to confer with the committee named by the meeting and meet a fortnight from to day to receive the proposal of Annapolis and Bridgetown, and after taking into consideration the offers made by the respective towns, decide which place held out the best inducement. The meeting then adjourned.—*Monitor.*

Bridgetown is doing nobly. The subscription paper will be in circulation in Annapolis next week.—*Annapolis Journal.*

After the last sheet of the Annual Report of the Board of Agriculture had gone to press, we received the following statements of registered thorough-bred cattle :—

Within the bounds of the Amherst Agricultural Society, in the County of Cumberland, February, 1878.

Viscount Oxford, Short Horn, 118, Amherst Agricultural Society.
Garibaldi, Short Horn, 281, Amherst Agricultural Society.
Logan, Short Horn, 282, Jas. E. Page, Esq., Amherst.
Scott, Ayrshire, 144, Amherst Agricultural Society.
Roan Rose 4th., Short Horn, 283, Withered Bent.
Nun, Short Horn, Col. C. J. Stewart.
Abbess, Short Horn, Col. C. J. Stewart.

Within the bounds of the Annapolis Agricultural Society, in the County of Annapolis, February, 1878.

General Grant, Short Horn, 114, George LeCain, Rosette, Annapolis.
Jerpoint, Short Horn, 284, Jas. Horsfall, Esq., Clements, Annapolis.

AGRICULTURAL ADDRESS.

By Colonel Laurie.

Delivered at Shubenacadie, Feb. 15, 1878.

Farmers' meetings for the discussion of Agricultural topics are at last coming into fashion; their great benefits have long been recognised in theory, but until lately they have not been worked out in practice. It is for such meetings and discussions that our Agricultural Societies are supposed to be organized, or, at any rate, that is recognized by law as a very important part of their work, and, with a view to galvanize some of these rather torpid organizations into a more active life, our able Secretary of the Central Board, Prof. Lawson, has undertaken to visit such societies as may express a wish to hear him, and it would be well if more of them would avail themselves of his offer: then other latent talent, tending in the same direction, might be developed; more interest would be aroused in farming questions, and intelligent and educated men would recognize the farmer's profession as a fitting field for their talents and research, instead of running off in search of an avocation that they imagine will give them a higher social standing. At a recent meeting in Pictou, Prof. Lawson, according to the published reports, took a very sensible position. I was not present at the meeting, but wish I had been, as Prof. Lawson's addresses are always so practical and to the point, and full of information.

It has been too much the practice for those who have studied agriculture, and who undertake to instruct us, to ignore the circumstances of the country and the farmers, and to rush off to what *should be*, rather than than what actually is; and to build up, like the German philosopher, "out of their own inner consciousness," a new and perfect system on which we should work.

I think it was Lord Palmerston who said, that if he had the making of a new map of Europe, he could arrange it much better than he found it existing. No doubt he could have done it, and so saved the world the sad spectacle of nations in arms tearing one another to pieces in the last for increased territory. Following out the same idea as Lord Palmerston gave expression to, if those of us who wish to see Nova Scotia what she must eventually become, a rich agricultural country, had the power to remodel every thing according to our views of what *should be*, we might at once work a vast improvement; but we have no such power, and must take things as we find them. Starting therefore, and working for a gradual improvement, we shall be practical instead of visionary, and thus stand a better chance of attaining our ends.

In one sense this is more than ever the age of small things; it is by attending to the minutest details that the greatest successes are won. That has been plainly proved in war:—it was by attention to details that seemed in themselves almost frivolous that the Germans trained the army that crushed France in the autumn months of 1870. It was by utter neglect of details that Russians and Turks, each in their turn, have, during the present war, met with serious disasters from very slight causes. In the same way, it is in trifles as we call them, that our farmers are thoughtless and careless; "take care of the pence and the pounds will take care of themselves" is an old English adage, conveying very tersely the principle that thrift and method in small things establish such a sound system of business that it becomes second nature, even in larger operations, and humanly speaking, must lead to competence and wealth; and Prof. Lawson, at the Pictou meeting, well put it, that he would not so much urge the farmers to go into underground drainage and high farming, as press on them the necessity that existed for stopping the small leaks, of the waste of manure, and of food, and through bad cultivation. Improvement in these matters would naturally lead to a desire for the other, but to invest large amounts of capital in farm improvements, and then to waste the produce of the farm by want of method and care, would be employing disproportionate power to get very inadequate results,—to use a well worn simile, much like putting up a steam hammer to crack nuts, and farming would sink lower than ever in public estimation. All practical men should, therefore, strive for an improvement in small matters which do not involve heavy additional money outlay, and farmers, both great and small, finding that there is decided gain thereby, will be encouraged to launch out, and spend both labour and money in improvement; but it cannot be too often repeated that we cannot accept the system pursued in any other country as our pattern. The general principles will be the same, but we must modify the imported systems to suit our soil, climate and markets; in fact, by experiment and careful record, we must work out and establish a system of our own to suit our peculiar conditions.

I believe that what first stirred me up to go into farming in Nova Scotia was the sight of so many of our young men going off to other countries, seeking they hardly knew what. I can understand and accept the proposition that it is not at all imperative that every young man brought up on a farm, should of necessity take to farming as a pursuit; men's tastes differ, and altho' on a farm there is not much to satisfy the mechanical or commercial taste, still it is as well that from the healthy men and women raised up on our farms, our cities should be replenished, thus giving new life and vigor to our town population.—a population that, without a constant influx of new blood, is very apt to become torpid and stagnant instead of progressive. I mention this because it is a common belief that the townspeople are the energetic and stirring, and the country people the sleepy and slow going race; now I am willing to accept the fact that the centres of life and activity are generally to be found in the towns, much of which is no doubt due to the wits being sharpened by constant contact with others. But I ascribe it largely to the energy imported into the inhabitants by the constant infusion of new blood, of the healthful and vigorous young countrymen who, with a fancied distaste for farming, pour into the towns to push their own fortunes. Such men have hitherto, to far too great an extent, gone away to the cities of the neighbouring republic; the tide set in in that direction, and men were very much like sheep; when once the bellwether leads, there's a rush to follow. I believe that the same energy and enterprise, accompanied by the same hard work, would have made them as wealthy as, and much more comfortable at home than, they have become abroad, and they, as well as we, should have had the satisfaction of seeing our acknowledged vast natural resources developed. I could enlarge on this at some length, for I have always believed that industrial and agricultural prosperity go hand in hand. But I am running away from my subject. I have said I *believed* that our mechanical and commercially-inclined young men could do as well at home as abroad; *I am sure* that those who desire to follow farming as a business can do as well here.

The same conditions are necessary to success everywhere and in every business, and I take it that farming must be conducted as a business if it is to succeed either here or elsewhere. A farmer must not only have land but he must have stock—teams to do his work—cattle to consume certain products of the farm and thus maintain its fertility, and implements with which to perform his various operations. He must provide seed to put in the ground, and must furnish himself and his labourers, whether members of his family or hired hands, with the means of living till the ground gives its returns at harvest time. All this is as necessary in California as in Nova Scotia. He must have the skill to plan his operations, the knowledge of the requirements of each crop in regard to manures and cultivation; the cost of producing each and the returns that can be obtained from it and the judgment as to the time, place, when and where, and the form in which it can be brought to market so as best to reimburse the outlay.

A farmer should make his calculation that his farm should yield him the interest on its value—in fact, if he is the proprietor, it should pay him the rent—should pay for the labour, both manual and mental, expended on it; should return not merely a percentage on the cost of the implements used, but should cover their wear and tear and consequent depreciation. In fact, every operation of the farm should be separately weighed and considered, and the profit obtainable from it should be calculated, and if there is no benefit in it, either directly or indirectly, the sooner a change is made the better. At the same time the fault may not lie in the plan, but in the way it is carried out; and there is of course another consideration which must be taken into account in this country where the vast majority of occupiers own their farms; it is that, although they may not be drawing proportionate returns from their farms, it may be because they are putting labour on to them and thus increasing their value, and this is not only equivalent to, but decidedly better than taking the profit out of them.

A friend of mine in * * * County, and a very fine young fellow, told me that he farmed about 200 acres. He ploughed up about 30 acres every year, sowed 5 to 6 bushels of oats to the acre and obtained about 20 bushels—took two crops of oats in this way and then turned the land out to pasture *till it got rich enough to give oats again*. Yarded the cattle at night in summer on a piece of land, which was ploughed up for potatoes the following year, and obtained about 100 bushels per acre, and on enquiry as to what they did with the manure, for I told him they surely must make some,

and must have to get rid of it some way, he said they used that for their wheat. I could not help expressing an opinion that it was pretty hard farming and must be difficult to make both ends meet, and he agreed that it was, and I think that if my forefathers had left me a farm on which such a system had been long pursued, I should be strongly tempted still to abandon farming as a pursuit or else to try it on virgin lands elsewhere. And yet a hundred years ago land in England was cropped in this way, and now it is, through proper treatment, as fertile as any part of the world, and our so-called run-out lands can be much more readily restored to fertility than new land can be brought into regular cropping order.

Now there was nothing actually wrong in the system of rasing oats from lea-lands, nor in cropping potatoes on the land on which the cattle had been yarded; yet the results were most unsatisfactory. I urged on him to try as a change putting the manure on to his oat stubble, and taking a crop of roots, and he would find that, thanks to the extra cultivation the land would thus get, he would obtain a crop of roots and equally good wheat, whilst he might also probably get one or two good crops of hay; the manure heap would thus be largely increased, and following this up round the whole farm, he would soon find farming not by any means such a bad business. What profit could there be in such a system as he pursued? A strong team was required; there was considerable wear and tear of implements, a good deal of labour, and such poor results. The 20 bushels of oats hardly paid for the seed, and the labour of ploughing, sowing, harrowing, rolling and harvesting, and the straw about repaid the threshing; the 100 bushels of potatoes could hardly pay for the labour put upon them; the wheat, if it turned out well, would be profitable, but full advantage of the manure was not obtained, and in confining the wheat so much to one spot, its enemy, the weevil, would take up its quarters on the spot, and take its prey as soon as the patient industry of the cultivator had brought it to the stage that weevils appreciate. Then think of the cows turned out on to land impoverished by two years successive oat crops, growing up in weeds and natural grasses, and their mission not only to obtain food to maintain themselves, but to supply milk and cream to fill the butter-tub and cheese-press; and to enrich the land at the same time and prepare it *for* another crop of oats, whilst their droppings, the remains of their scanty gleanings, after their own carcases were maintained, and their milk manufactured, went on to the yard to raise potatoes for the family; *such* a summering followed by a winter on straw, without meal or roots would not tend to develope the breed. And for such cattle any barn would do. The buildings would be neglected, the cattle would thus suffer from the cold, and would stunt in growth, thus everything acting and re-acting in its turn, tended still more to discourage the would-be farmer.

Now, as I have already said, I am not inclined blindly to follow in the footsteps of farmers in any other country. I feel quite satisfied that we cannot do as the farmers of Illinois are reported to have done in old times, cart the manure to the river bank and tip it into the water to get rid of it; nor the other well-vouched-for story of the man who pulled down his barn and rebuilt it in a fresh place because he was so blocked up with the manure piled up all around it. We know that we want the manure but we have not arrived at the knowledge of how to make enough, but I will assume that we recognize the necessity for the rotation of crops; we have yet to ascertain which will work and pay best.

We start of course with oats at breaking up out of lea—thus providing food for our teams, and plenty of straw; following next with roots we must be guided by season and soil.

Potatoes require a very dry season in heavy land, and then, I find, do well, but my experience is that they should be planted not later than the first of June; after that time or with a wet season, Swedish turnips would seem to be the most successful; but this necessitates men being good hoers and the turnip crop has been so little cultivated in Nova Scotia that *good* turnip hoers are the exception rather than the rule.

Mangold wurzel give a splendid yield when the ground and season suit them, but the ground should be both mellow and rich, and they are liable to be injured by early frosts which would make them more liable to rot in the cellar.

White and yellow turnips come in as a crop that can be started much later, if from any cause the others have failed, and as they come in for early feeding, meet a want which is very generally felt, to keep the cattle from going back when they lose the grass in the autumn, and are first stabled and put on to dry food.

Next comes the question, is it advantageous to take *one* or *two* crops of roots in the rotation? From my own experience I am now inclined to try two successive crops; no doubt it absorbs a great deal of manure, but I think that the land is so much the better for the double working and manuring, that the crops succeeding shew the benefit of the treatment, the land is generally grateful and shows its gratitude in a substantial manner, but much depends on the nature of the soil—and here comes the most momentous of all the questions, and that which is really of most interest to the farmer; with what grain shall we follow the roots? This is the crop in the rotation from which we should look for our profits; those we have so far referred to are useful and profitable in their own way, but they were originally introduced mainly as a preparation for this crop.

It has been to corn, as all grains are called in England, that the farmers there have looked as their mainstay, and I can recollect the time in England, when a farmer raised a crop of turnips and gave them to sheep-owners, who folded their sheep on the fields;—feeding the whole crop to them; the owner of the crop simply bargaining that each sheep should receive daily 1lb of linseed-oil-cake in addition to the turnips; the land was thus enriched for two succeeding grain crops; I paid a visit in 1861 to Mr. Mechi, the celebrated razor-man, who started a farm on a hard brick clay common and erected capacious and substantial farm buildings, much to the amusement of his neighbours, who prophesied that he never would fill them from his farm—and after working out his ideas of farming, shewed me 120 head of cattle, large and small, besides cows, team-horses, etc., which he kept on a farm of 170 acres, and these he kept, as he explained to me, not that he expected to make the slightest profit on them, but simply as manure makers to maintain the fertility of his farm and enable him to grow grain for the market; things have considerably changed since those days owing to the cattle disease and the increased consumption of meat by the labouring classes: but we are considering our grain crop, the crop which should and can be sold off the farm, and should bring in the cash to meet the wage bill and other expenses.

Wheat of course is the most paying, if it can be grown, and I see no reason why it cannot be; the causes that militated so much against it in old times were probably very much what I have already referred to, repeated cultivation in the same soil and insufficient change of seed, the former owing to deficient knowledge of farming, the latter to difficulty of communication with other parts; with fresh and thoroughly sound seed, and in new soil each year, I trust wheat may yet prove a success with us.

Ordinary Horse beans, a most valuable and paying crop in England, have been tried successfully here. They are found to grow well, but there is no demand for them at present, and they probably will not be grown in sufficient quantities to justify our attempting their export to Europe.

Barley gives a good bottom to grass seeds, and, as our brewers buy a large quantity and are now malting at the breweries, it is possible that we might do well with it as a crop—it generally succeeds well and although not as prolific as wheat appears to be less precarious. Of Rye I cannot speak, but it has the name of a hardy and prolific crop.

Buckwheat does well both in yield and in protecting and starting grass seeds, but it always seems to me more a crop for a patch than for large fields, as it requires such delicate handling to secure the grain. It is an old saying in England that no man should hoe his own turnips, he is too careful, but with buckwheat the converse is the case. I think no man should let any one else touch his crop of buckwheat. Next we come to the grass crop following the grain.

Hay is a crop that every one in Nova Scotia understands, or imagines he does.

Timothy and red clover and, in places where hay is raised for sale, more timothy and less clover, are selected as the seeds for this crop. Now, in the first place, we know that they do not ripen together.

Clover is good for certain purposes, it enriches rather than impoverishes the ground and gives a fair after feed; but if it is rich, the hay is too course and stick like, and the cattle do not eat it up clean when fed whole, although when cut and steamed it is capital milk making food. But as after-grass, although the cattle are greedy for it the first day or two, they soon tire of it and trample it.

Timothy gives a fine cut of feeding hay when the ground is rich, it spends well, but as generally cut it is I think an exhausting crop, and as it gives very little after-grass, the land is virtualy kept up for the annual cut of hay.

Two tons is a good crop and this at $12 per ton in the barn or $24 in all, is a small return for the labor and manure expended on the land and the crop.

I think we may improve on our grass crop, a great deal of our land inclines to brown

top, and I find it is much cultivated in the United States where in its improved form, it bears a good name as a feeding hay.

Kentucky blue grass and orchard grass each have their advocates, but I do not know if they have been tried here to any extent.

Alsike clover is well spoken of. It was represented to me as a white clover as big as red. I was unfortunate as mine turned out red clover as small as white.

I seeded something over an acre last summer with common English rye grass and clover. It was sown with oats and alongside a piece of land seeded with timothy and clover, all did well, as I had worked the laid with roots for two years, but the rye grass was high and very thick and better by far than the ordinary grass. I cannot of course say how it will stand the winter.

To my mind the question of after grass as fall feed for the cattle is a most important one.

Hitherto I have been inclined to get my land laid down to grass as soon as I had worked it sufficiently to get a good bottom of grass and have aimed at depending on top-dressing with harrowing and rolling to keep up the crops.

I find, however, that the grass runs out and weeds take possession. Sowing seeds with each top-dressing may keep the sod on the land, and I am anxious it should, for once grass land gets a good bottom the work is simple and easily done. The Mowing Machine has a clean course. It travels over an acre an hour, and tedder and hay rake all do good work

On 60 acres of grass land this past summer we only broke one section of the Mowing Machine cutter, and that was in an old pine root close to the fence.

In many respects hay is a very satisfactory crop. It is a pleasure to work at it, the days are fine and long, and, when all goes smooth and with good crops, men can get along grandly. I have put hay into the barn as low as $1 20 per ton (of course all depends on the weather), but, after all, it is an unprofitable crop either by sale or feeding, and upland hay farming, as I have already publicly said, is a poor affair; such a farm will neither pay expenses nor maintain its own fertility.

So much for our field crops, now for the animals by whose means we maintain our farms in a fertile state. I mentioned that Mr. Mechi, in 1864, held the opinion that beef-making did not pay, but had to be done in order to keep the farm in heart. The cattle disease and the increased demand for meat have changed that.

England, a few years since, was manufacturing for the world at large, and coal and iron could not be produced fast enough; wages rose enormously and the so-called working classes launched out into a more extravagant style of living; very little was put by as savings, the prospect appeared bright, and people thought it would last for ever. But the United States, requiring a large revenue to pay for their civil war, put on heavy import duties, and thus unintentionally encouraged and fostered their young manufacturers. Their statesmen saw in this a means of developing the growth of the country, by creating employment for the mechanic and the labourer, and thus benefitting the farmers position by improving his market, and avowed themselves Protectionists on principle, thus giving a wonderful impulse to the settlement and cultivation of their waste lands.

Immigrants have flocked in by millions. The country has grown and prospered, as no country ever did before. The development of manufactures under this system has reached such proportions, and competition and attention to details have so reduced the cost of production, that now the United States are able to sell as low as England in foreign markets. And the mills, mines and forges of England are idle, or working short time. Hence the struggle to keep such markets as ours open and to discourage us from manufacturing ourselves.

However, referring to the demand for meat in England, the workman increased the consumption in prosperous times and the demand is still great, although times are so dull—as a constant meat diet has become a necessity to them.

The cattle disease too caused the destruction of large herds of cattle slaughtered where one or two showed symptoms of the disease, and thus indirectly also raised the price, as it checked both breeding and importation. This has made meat feeding although somewhat more risky, much more profitable, as beef was last winter selling at the London butchers shops at 1s. 2d., or 28 cents per lb., and when wheat is selling low, farmers have found it pay to crush the wheat and feed it to the cattle, and barley is much malted in England as being more profitable to feed cattle in that state.

I think, in regard to cattle, that we must work an entire revolution in our feeding, our present system or want of system is (I am speaking of the general run and not of individuals), to pasture through the summer on ground condemned as too poor to give hay, to gnaw the after grass as short as possible, and then to put the animal into the barn and feed it with about 3 tons of good hay, and bring it out again in the spring, under favourable circumstances as good as it went in in the fall. Thus we spend our means and labour in preparing the ground for and harvesting the hay, and our winter in shaking it down before the animals nose and clearing away the manure from behind it. There is next to no growth again during the winter, and all our summer's labour goes to carry us through the winter. We certainly are working in a curious circle. The winter is no benefit whatever, and yet it eats up the summer, what profit is there in being a farmer when all our returns must come from the few months summer run on poor pasture. We must provide better pastures, so as to make the most of the early summer months, and until we can in some manner, by a change of grass seeds, or some other way, improve our after feed, we must raise some soiling crop to cut and carry home and feed to the cattle in the barn, thus making manure and forwarding the cattle in readiness for winter. I have found the Southern corn most successful. It grows very rank and strong and gives an enormous yield to the acre. The cattle are very fond of it, and it makes a great deal of milk. If cut early, and somewhat high, it is stated that it will start again, but in August it is most luxuriant. If it does not pay to cut it so early, tares might be sown for use from the middle of July to the middle of August. The frost takes the corn early in October and after that, until the cattle settle down to their winter food, some other succulent food is necessary.

Drum-head or cow cabbage have been suggested. They are extensively cultivated for cattle in England and Scotland, grow to the height of 38 or 40 pounds and make a great deal of milk. They would probably be troublesome to cultivate until our people got into the way of them, but might be tried on a small scale with advantage.

White or yellow turnips, as already mentioned, come in well as an early winter or late autumn food, and meet a want between the green and the dry food.

And now to keep up the growth through the winter, in fact to use the whole twelve months to profitable purpose we must give time and study to this question.

Swedes at first, and later on, mangolds, furnish soft feed and swell the manure pile. The produce of a third of an acre of turnips goes a long way towards feeding an animal; with these, and some grain or meal, and the animals can be kept thriving. But they require some bulky food also to fill them out. For this purpose hay is too expensive, and I am satisfied cannot be profitably employed. As we work into a regular rotation and raise grain for sale, the straw will be virtually a refuse on our hands. It will, however, with the food already mentioned, satisfy the required feeding conditions almost, if not quite as well as hay, and the land now used for hay can be appropriated to other and more profitable purposes; or the hay itself, where grown in rotation, can be taken to market, and with less thus offered the price must rise.

We must get out of the happy-go-lucky style of farming: of raising what we can, and selling anything that *will* sell, in order to raise a few dollars as we happen to want them. We must go to work as food manufacturers in business fashion, and, with proper appliances, with a definite idea of *what* we are raising for market, and *what* for home use. In fact, we must live by our farms and not simply on our farms.

BYE-LAWS OF THE BAYFIELD AGRICULTURAL SOCIETY, OF THE COUNTY OF ANTIGONISH,

Organized the 6th day of March, 1877.

1. This Society shall be called the Bayfield Agricultural Society, the boundaries to be as follows:—Commencing at the eastern bank of Jimmie's Pond, thence to the eastern line of lands occupied by John Torpey, thence to the eastern line of Peter Delorey, thence to the eastern line of Edmund Flynn, thence to the waterfall on Southern branch of Little River, thence westwardly to the public highway, commonly called Old Manchester Road, where it is intersected by the line dividing the County of Antigonish from the County of Guysborough, thence along the eastern bound of such highway northwardly until it comes to the eastern bank of Black River, thence along such bank down stream until it comes to the waters of Pomquet Harbour, thence along the eastern shore of said Harbor to the Bay of St. George, thence along the shore of said Bay to the place of beginning, It shall be organized in

connection with the "Central Board of Agriculture," and in accordance with the "Act for the Encouragement of Agriculture."

2. The object of Society shall be the promotion of Agriculture by the introduction of Improved Stock, Seeds, Fruit Trees, &c., by the holding of Exhibitions whenever deemed advisable, and by any other means that may seem best adapted to attain the object in view.

3. The annual subscription fee shall be one dollar, to be paid at or before the quarterly meeting in September.

4. The officers of the Society shall consist of a President, Vice-President, Secretary and Treasurer, and five Directors, to be elected annually at the general meeting on the first Tuesday in December.

5. There shall be a regular Quarterly Meeting on the first Tuesday in March, June and September.

6. Special Meetings may be called, whenever necessary, by the President, or by the requisition of any five members after one week's notice thereof.

7. Three of the Board of Management and seven members shall constitute a quorum competent to do business.

8. The Officers and Directors shall take charge of, and keep, for the benefit of the Society, all property belonging to the same, and shall make such application of said properties as a majority at any regular meeting may determine, and report at the Annual Meeting the proceedings of the Society during the year, with such remarks upon the Agriculture of the District as they may be enabled to offer.

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

10. These Bye-Laws may be altered or amended, or added to, by a vote of two-thirds of those present at any regular meeting of the Society, by notice at the regular meeting previous.

11. It is desirable that the members of this Society should meet monthly in the Winter season on the first Tuesday of each month, beginning with the month of October, for mutual improvement and for the discussion of Agricultural subjects.

Bayfield, Feb. 28th, 1877.

MARGARINE—AN IDYL.

DEDICATED TO DAIRYMEN.

Margarine, sweet Margarine!
Who art thou? Some one's bosom queen?
My heart is in a flutter.
Imagining thy bright eyes sheen
Thy breath like fragrant Floriline,
As thy soft name I utter.

No; Margarine, sweet Margarine,
Weareth no human form, I ween;
Idle that name to mutter!
Sweet, fresh, and French is Margarine—
'Tis beef-fat, *minus* stearine.
And—substitute for butter!

—*Punch.*

CAN WE SUPPLY OUR OWN BREAD?

BY J. W. MACDONALD, M. D., Edin.

L. R. C. S. E., ETC.

Being a lecture delivered by that gentleman before the Agricultural Society of Bayfield, Antigonish County.

I AM am very well aware that, as a practical Agriculturist, I have no right to address you; but, as the Science and Art of Husbandry embrace a wide field of study, you will agree with me, that he who would cultivate the soil with success, must draw upon a variety of sources for his information. Here, the Geologist, the Chemist, the Botanist, meet on common ground. The Historian too, and the Political Economist, can, in no small degree, add to the treasures of Agricultural lore.

Without further apology, I shall at once address myself to the task which I have taken upon me this evening; that is, to discuss the question, *Can our County supply its own bread?*

If we are anything at all, we are an Agricultural people, for the great majority of the inhabitants of this county depend upon farming for their subsistence. Such being the case, we would naturally expect that, after raising enough produce to supply all our own wants at home, a good surplus should remain for exportation This is true in regard to some products. Hay is raised in sufficient quantities, not only to feed the stock required at home, but to raise and fatten a large number of horses, cattle, and sheep for distant markets, and in this branch of Agriculture, we have no reason to complain. Still, if farmers were alive to their own interests, they would strive more earnestly to improve the condition of their stock. If cattle are to stand through our long cold winters in stables where the snow and the frost find ready access through numberless cracks and crannies, shivering with the cold, and getting merely enough food to keep life within them until the grass returns in Spring, we cannot for one moment expect that they can compete in a market beside animals which have been well housed and well fed.

In regard to most kinds of food, our farmers also raise an overplus. In Wheat, however, there is a lamentable deficiency, for, instead of having an overplus of this commodity, we are so far deficient as to suffer a drain upon our county of $70,000 a year for flour, or $4.24 a year for every man, woman and child in the county.

Some will say that this is a matter of small consequence, that the farmers finding it unprofitable to raise Wheat, have turned their attention to the raising of cattle, and that the value of the surplus of cattle more than balances the amount of money paid for flour. Let us see how far this is the case.

This table has been constructed to shew the progress made in the Agriculture of Antigonish and the two neighbouring counties in 44 years, that is from the year 1827 to 1871:

AGRICULTURE.												
POPULATION.			PRODUCE.					STOCK.				
Names of Counties.	Years.	Total No. of souls.	No. of acres cultivated.	Bushels of Wheat.	Bushels of other Grain	Bushels of Potatoes.	Tons of Hay.	No. of Horses.	No. of Horned Cattle.	Sheep.	Swine.
Antigonish.	1827	7,103	31,411	17,378	28,413	233,277	10,012	563	10,943	16,958	5,053
	1871	16,512	107,990	22,422	264,005	240,545	28,880	3348	21,983	29,369	4,674
Pictou.....	1827	13,947	49,181	38,198	98,662	122,654	11,750	1669	11,701	21,128	12,946
	1871	32,114	159,680	76,426	530,455	415,824	32,334	6787	27,618	43,416	4,343
Guysborough..	1827	5,657	8,054	4,641	9,760	130,061	5,780	285	5,213	7,391	2,652
	1871	16,555	43,707	1,240	65,600	146,373	13,564	1520	9,602	16,552	2,177

During the above period the population of Antigonish has increased 2.32 times, Pictou has increased 2.30 times, Guysborough has increased 2.00 times.

In order to supply bread to its people our county should raise more than twice the quantity of Wheat raised in 1827. It will be seen by the table, however, that it raises only a little over a *fourth* more than was raised in 1827. Pictou has doubled its supply of Wheat, while Guysborough does not raise one-third of the quantity of Wheat which it produced in 1827.

In the matter of other grain, Antigonish has far outstripped the other two counties. In '71 the quantity was 9 times as great as that of '27. Pictou did not increase its yield 5½ times, and Guysborough a little more than 6½ times.

It is generally believed that the increased exportation of cattle is an equivalent for the increased importations of flour, but, unless the census of 1871 is

utterly incorrect, the increase in the number of cattle is only equivalent to the increase of the population.

Nor can we console ourselves with the fact that the production of other grain increased 9 times in the above period of 44 years. In the year '27 a considerable quantity of oatmeal was imported, and the quantity of grain raised at the time was not equal to the wants of the county. We were as backward then in the cultivation of Oats as we are to-day in the cultivation of Wheat. Gentlemen, we cannot shut our eyes to the fact, that there is something seriously wrong in our husbandry. No one can travel through our county without meeting with fields so exhausted that it is difficult to say whether they are intended for hay land or commons; fences in such a wretched state that they do not offer the slightest resistance to horses or cattle; land of the very best quality chilled and useless for want of drainage; disorder, negligence, thriftlessness and confusion reigning about the farm house, while the tiller of the soil loiters about in lazy unconcern, or spends his time in drunken riot about our streets; such scenes meet us wherever we go, and vividly remind us of that dire sentence passed upon old father Adam, "Cursed is the ground for thy sake, ... thorns also and thistles shall it bring forth unto thee."

There are many farmers who do not attempt to raise more produce than will supply their own families, and yet they incessantly complain that they cannot save any money, and find it impossible to make ends meet. Now what would we think of the shoemaker who only made enough boots to supply his own household, or the blacksmith who only shod his own horses, or the tailor who only made his own clothes, or the doctor who only prescribed whatever medicine went down his own throat? True, when the farmer supplies the wants of his table and a part of his clothing from the produce of his farm, his expenses are more than half met, but common sense teaches that, in any advanced state of civilization, a man must have a good overplus of the commodities which he produces in order to exchange them for those which he cannot produce.

When we, for one moment, compare the scanty crops raised by our farmers with the full and abundant harvest of farmers in Britain, we cannot fail to be struck with the idea that our county is lamentably far behind. Our little neighbouring province of Prince Edward Island is one hundred years in advance of us. While visiting a farmer a few miles from Charlottetown, in September last, he pointed out a field of turnips consisting of ten acres, the crops from which would probably be about 4 times the quantity of turnips grown in the township of Tracadie, and nearly half of what is grown in the whole county of Antigonish.

However, to return to our subject. I have said that we send annually out of our county $70,000 for flour, and that there is not an equivalent raised for it. Now, can this be remedied? We are told that the causes of the failure of the wheat crop of last year are two,

1st, Weevil.

2nd, Rust or Mildew.

The Weevil is a name that is misapplied. Weevils belong to the beetle tribe and their young prove very destructive to corn in granaries. It is a little snouted beetle of a brownish red colour. So prolific are they that one pair of these beetles may produce six thousand in one year. If grain be kept cool and frequently moved, it is not liable to be attacked, for it is when the corn is housed that the female deposits her eggs in it; the young maggots, as soon as hatched, burrow into the grain, each maggot selecting a different seed, the inside of which it devours, and, having undergone their various transformations, no time is lost in depositing eggs for another brood.

The insect to which the name of weevil is given in this country, is the *Wheat Midge*, called by naturalists *Cecedomyia Tritici*. It belongs to the natural order of insects called *Diptera*. To this order belong the common house fly, the gnat, and the mosquito. Insects of this order have two wings, as the name implies, but behind the wings they have as it were, a pair of abortive wings, these are commonly called halteres or balancers; they are frequently kept in rapid motion while the true wings are apparently quiescent, and by this rapidity of motion cause a loud piping noise. This is familar to us all, in the hum of the gnat and the mosquito.

One peculiarity of the *Diptera* is their tendency to exist in immense numbers, becoming in some instances a plague and a nuisance. One of the plagues of Egypt was a "swarm of flies," probably mosquitoes from the banks of the muddy Nile. Records of the appearance of immense hosts of flies in Britain are not wanting; in 1736 they appeared at Salisbury in such hosts as to resemble columns of smoke; and in August, 1766, they accumulated in incredible numbers in Oxford, resembling a black cloud, almost totally intercepting the beams of the sun. In Lapland they swarm in incredibe hosts during certain parts of the year; there is neither rest nor sleep for the inhabitants, indoors or out, unless the body is smeared with some unguent, such as grease, tar, or oil. In the eastern part of the world we well know that mosquitoes are a plague by day and a "terror by night."

We have seen that the insects of this order are very troublesome to man. They are no less a nuisance to him by the loss which they occasion to crops of grain. There are several species which are very destructive. Linnæus mentions one *Chlorops Frit* which infests the heads of barley and occasions a loss of not less than half a million dollars annually in Sweden. This genus have yellow eyes as their name implies; the Wheat Midge in this country has dark eyes.

The *Wheat Midge* which proves so destructive to our crops is, in its fully developed state, a pretty little creature, its body being of a bright yellow colour, its two large wings perfectly transparent, with iridescent reflections, its eyes black and its antennæ or feelers long and jointed; the male is smaller than the female, and has its antennæ ornamented with hairs.

If we watch a field of Wheat on a calm, warm evening, about the month of July, we can see these tiny creatures hovering over it in little clouds. If undisturbed, they will alight on the ears of Wheat and deposit their eggs upon the chaff. The egg when hatched, brings forth a little grub which creeps inward to the young grain, and feeds upon its juices. By the time the grain is ripe, the little grub is in a lazy, torpid state, while the grain of Wheat upon which it lived is more or less destroyed. If the grain be left long enough, the shaking of the ears by the wind causes the grubs to fall to the ground. They then burrow into the earth and pass the winter there. In the following June they again come to the surface, their shell bursts and out flies the fully developed Midge, ready to lay its eggs in the nearest Wheat field.

Now that we know the habits of the little creature, what can we do to prevent its ravages? It is evident that for the greater part of its life the Midge is beyond the farmer's control. He cannot prevent it from depositing its eggs, he cannot drive the young grubs away after they are hatched, nor has he any power over them during winter, while they are buried in the ground. But there is a time when, with a little care, he can destroy them by the million. This is as soon as the grain is ripe; as soon as it can be housed without loss, and before the storms of Autumn shake the larvæ from the chaff to the ground. In this country Wheat is often left until it is too ripe, over ripe grain being much inferior to that which is earlier cut in quantity and quality of its flour. The Wheat should, if possible, be reaped, rather than cradled, in order to avoid shaking as much as possible. Having housed the grain, it should at once be thrashed on a close barn floor, which will not allow the larvæ to fall through. The grain should

then be cleaned and all the chaff and dust separated from it should be burned. From the Wheat which grew on eight acres about four bushels of the Midge larvæ have been thus obtained and burned. This quantity would represent about 150 millions of the insects, and would have been sufficient to destroy the following Wheat crops. By destroying them the Wheat crop of the next year was sure.

This simple method of check-mating our little enemies does not cost much, and it is certain that, if followed, it would, to say the least, greatly lessen the evil, if not completely remove it. Surely our farmers should not give up in despair and admit themselves conquered by a tiny little fly. At present I know of no effect that they are making to resist this plague. They merely sow enough Wheat to feed the Midge, and import what is needed to supply their families. I know of no question so important to our Agricultural Societies as this one of the growth of Wheat, and if they master the subject and succeed in raising enough Wheat in our county to supply us with bread, they will be conferring one of the greatest boons it is possible to confer. Gentlemen, this thing can be done. The rich and cultivated soils of our Province are capable of producing Wheat as good as is found in the known world. Last Summer in Pictou a Mr. Chisholm of East River raised 72 bushels of Wheat from 4 bushels of seed. It is not for want of good soil nor good climate, all we want is a little brainwork, and I trust that the Agricultural Society of Bayfield will look the matter straight in the face.

In regard to the second great enemy of our Wheat crop, viz., rust or mildew, a word or two will suffice. If we examine a healthy straw of Wheat we will find its outer surface smooth, hard, and glistening; it is a firm, protecting coat of silica or flinty matter, which at once gives strength to the Straw and protects it from mildew. But if the plant cannot extract this flinty matter from the soil, if the ground upon which the Wheat is sown is wet and badly drained, or if it contain much undecomposed vegetable matter, then the Straw is liable to have a mould or fungus plant attached to it, whose minute seeds are wafted by the wind or absorbed with moisture from the roots. This fungus takes root in the cells and vessels of the stem and leaf of the Wheat and constitutes rust or mildew.

The best means of preventing rust are:

1st. To use seed which is quite free from it.

2nd. To prepare the soil in such a way that it shall be rich enough and yet shall not contain much undecomposed vegetable matter.

3rd. By attending to *draining*.

Time will not allow me to go into details on these points, but the subject of *draining* is so important, and moreover, so little attended to in this country, that I cannot pass it by. Wheat strikes its roots deep into the ground and suffers more from excessive moisture in the earth than any other crop. In fact wetness in any soil is destructive of healthy and vigorous vegetation, and in no way can labour be better bestowed than in draining off the surplus waters from the surface of the land.

The effects of draining can scarcely be comprehended, until we learn what has been accomplished by it, by referring to history, and this we shall presently do. By a law of physics:

A solid body passing into a liquid form takes up heat—a liquid passing into a gaseous form takes up heat; thus, if, on a hot Summer day, you sprinkle water over the floor of a room, that water quickly passes into the form of vapour, and in doing so, very perceptibly cools the air of the apartment. *The liquid passing into the gaseous form takes up heat.* In like manner, if we place a block of ice in a room, the solid body, ice, soon passes into the liquid form, water, and, in doing so, abstracts heat from the air of the room, and thereby the room becomes cooler.

It is, therefore, clear that if the surface of the earth be saturated with water, the constant passage of the water into vapour will abstract an immense amount of heat from the air. In the present state of our country the woods retain snow and ice beneath them till late in the Spring. The cleared land, for want of means to carry off the water, lies wet and cold, and thus we so often have late, backward Springs. Would you be surprised to hear that the whole nature of our climate could be changed, that instead of the long, cold winters which we now endure, chilly, wet and backward Springs, and the uncertain Summers, we should have a climate like that of Italy or the South of France, our rivers never freezing, our fields scarcely covered with snow, the grape, the orange, and the olive, blooming on our plains, and the cold which we now endure, only known by the records of the historian. Nova Scotia lies between the parallels of 40 and 48 of north latitude. It is therefore in the same latitude as the southern half of France, and the northern half of Spain. Italy, Turkey, Austria, the south of Prussia, Switzerland, and the south of Russia, are also in the same latitude. Now if we can prove that these countries, before their forests were cut down and their land cultivated and drained, were as cold as our country is now, we can fairly assume, that when our land is brought under the same condition as these countries our climate will be equally changed.

The finest portion of France is the southern region that stretches between the Cevennes and Pyrenees, having the Rhone on the one hand and the Garonne on the other. This beautiful vale, where apples, cherries, and several other fruits grow wild, is rich in grain, vines, olives, mulberry trees, oranges and lemons. Such is the country to-day, but when Cæsar attacked the Helvii he crossed the mountains of Cevennes, *which were covered with six feet of snow*, and esteemed impassable. His appearance before the enemy took them completely by surprise, as they always thought themselves safe from invasion during the depth of winter. In his second expedition to Britain, he stopped in the midst of his conquest in order to return to Gaul before the autumnal equinox, so much dreaded was the approach of winter, in that country where now winter can scarcely be said to exist.

But let us go further back, as far as 2,000 years ago Herodotus, the father of history, informs us that on the north shores of the Black Sea and around the ancient Palus Mæotis, the duration of winter was for eight months, during which the ground was entirely buried in snow; and that all the countries beyond this line were accounted uninhabitable. Ovid, who was banished to the banks of the Euxine, describes the severity of the weather as insupportable, and distinctly states, that he crossed the Black Sea upon the ice, and that he saw oxen and carriages frequently passing—a circumstance which we would esteem fabulous were it not confirmed by other concurrent facts and testimonies. The ancient historians unite in asserting that all the lakes, marshes and rivers of Gaul, Germany, Thrace and Dacia, were every winter frozen over to a great depth, and presented a firm footing to the hordes of barbarians on which to run down and pillage the southern provinces. Diodorus, Siculus, Strabo, P. Mela, Seneca, Pliny the Naturalist, Herodian and Justin, are unanimous in delineating these countries as of horrid feature, and under the dominion of ice and snow the greater part of the year.

Their accounts are so inapplicable to these now fair regions of the earth that had they not specified the rivers and seas by name, we would have been mistrustful and supposed them engaged in the description of some inhospitable climate such as Lapland or Siberia.

Virgil speaks very positively on this point. He is contrasting the Shepherd life on the plains of Lybia, (that part of Africa bordering upon Egypt) with what it is round the Sea of Azov, on the banks of the Danube, and at the foot of Rhodope—a mountain in Thrace—places situated exactly in our latitude. This is

what he says: "But not so is the climate where dwell the Scythian natives, where flow the waters of the Palus Mæotis, or the turbid Danube whirling along his yellow sands, or where Rhodope bends round, stretched under the polar axle. There the herds remain shut up in their stalls; for there are no herds on the plain nor leaves on the trees. The earth, without form, lies buried under a heap of ice and snow, which rise to the height of seven ells. There reign always winter and the north winds breathing frosts."

"They live," he says, in caves dug deep in the ground, and clothe their bodies with skins and furs. They catch the deer, not with hounds let loose, nor toils and nets, but sinking in the yielding snow and incapable of escape. Their garments stiffen on their back, and the icicles hang from their beards; even the wine which they drink is distributed in frozen masses and cut with their hatchets." This description would apply to the Esquimaux, and we are bewildered at the fact that it is a true delineation of a country now covered with vines and roses.

Juvenal tells us that the Roman matrons, even in the depth of winter, and early in the morning, were obliged to bathe in the sacred waters of the Tyber, and for this purpose the ice had to be broken. The Tiber to-day is no more bound by such fetters than the Ganges or the Nile, and cannot furnish to the moderns such opportunities of showing their zeal and devotion. (See Letters of Agricola.) Such is the mighty change wrought by the hand of man. Steady, continuous, long and patient labour have changed a howling wilderness, buried beneath arctic frosts and snows, to be one of the most fruitful and delightful portions of the globe. If anything were wanted to reflect honour and dignity upon husbandry, surely this would suffice. The Scientist may smooth mountains and level valleys, he can cover the land with a network of railways, and carry over them the produce of the world with terrific speed, he can draw upon the clouds for their lightning, and use it to convey his thoughts around the globe, a a complete victor of space; he can carry the electric wire beneath the mighty ocean, and stretch it over vast continents of land. But the husbandman can do more. Under the guiding hand of the Great Creator, he can make the earth yield food for man and beast, He can change the biting north wind to the soft and balmy zeyphr, the frosts and snows of winter to the refreshing showers and dews of summer. Under His mighty arm the vast howling wilderness is transformed into fruitful, smiling plains, and fields once barren and desolate, wave with golden grain, or rejoice under the groves of the orange, the olive and the lemon.

From our own Correspondent, at Prome, Pegu:—A railway train was going out driven by Mr. Stone, Locomotive Superintendent, assisted by Mr. Stewart, Loco. foreman, when, about the 35th mile from Rangoon, a large elephant was seen to break through the fence and get on to the line. Steam was shut off, and Mr. Stone tried to open the blow-off cock, which, being in front of the engine, would by ejecting the hot water to some distance ahead induce "Tusks" to leave the line. The cock was slightly stiff and could not be readily opened, and the engine was soon on the unfortunate beast. The brute had turned tail and fled on seeing the engine, but was speedily caught. The buffer blocks of the engine being very low, the beast's hind legs were taken from under him, and he was forced to sit down as it were with his hind quarters against the smoke box door, which was of course nearly red hot. The poor beast managed to keep his fore feet going, though hustled along faster than ever he had gone in his life before, and in a few minutes the train came to a standstill, and he got away. He moved off the line at the double, uprooted a clump of bamboos, then wreaked dire vengeance on a tree, and was last seen rushing through the jungle, tearing and smashing everything in his path. He was sadly cut and burnt in the hind quarters, and will probably never be of use again. The mahout luckily escaped with his life, while those on the engine may safely congratulate themselves on their escape. Thanks to the coolness, bravery and skill of Messrs. Stone and Stewart, not the slightest damage was done to the train, and no one on board sustained even the slightest shock.

The Arnold Arboretum.—A tract of land at Jamaica Plain, Mass., of about 130 acres, is assigned by Harvard University to the Arnold Arboretum, of which Prof. Chas. S. Sargent is the able director. It being desirable to have the land laid out to the best possible advantage, and the income from Mr. Arnold's bequest not being equal to any extraordinary expenditure, Mr. Fred. Law Olmsted, so favorably known as a landscape architect, volunteered his services for the work, and a few of the wealthy gentlemen of Boston and vicinity have volunteered the few thousands necessary to pay the surveyors and draughtsmen. Thus this important preliminary work will be accomplished without drawing upon the proper income of the fund, and in a manner so thorough that it cannot fail to be of the greatest value to the Arboretum —an Institution to the development of which arboricultutrists and lovers of trees, not only in America, but abroad, look with the liveliest interest.—*American Agriculturist.*

FOR SALE.

THE pure-bred Jersey Bull ROUND ROBIN. Took first prize in his class at the last two Provincial Exhibitions. Present age 33 months. This Bull has proved a sure stock-getter, is of good size, form and colour, and is descended from noted prize-takers at the Jersey Royal Agricultural Show in 1870, on both the sire and dam side. For price, terms, &c., apply to DR. GEORGE LAWSON, Halifax, or the subscriber at Truro.

ISRAEL LONGWORTH.

Truro, Dec. 8th, 1877.

GROUND BONES! GROUND BONES!

A LENGTHENED experience in Europe and the United States has shewn this to be the most valuable fertilizer for every crop.

During the past season THE PROPRIETOR OF THE WELLINGTON TANNERY has totally altered his machinery for preparing this valuable manure, and is now prepared to supply Agricultural Societies and the public generally with

FINE GROUND BONES

of a quality far superior to any that can be imported.

PRICE—Delivered at Wellington Station—

Fine Ground Bones - - - $35.00 per ton.
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The machinery being now in thorough working order, orders will receive prompt attention and despatch.

As the supply of BONES, in this Province obtainable for grinding is yet very limited, customers are requested to send forward their orders as early as possible, in order to ensure obtaining a supply for this year's crop.

Address:

MANAGER, WELLINGTON TANNERY,
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THE Subscriber offers for sale his thoroughbred Bull 2nd Gwynne of the Forest, 18 months old. Certified Pedigree. Took First Prize at the Provincial Exhibition, Kentville, and also at County Exhibition, Truro, 1877. This Bull is of the celebrated and fashionable Gwynne tribe, and a very fine animal and pronounced by good judges superior to any imported of the same age.

Societies wishing to purchase will do well to communicate with the Subscriber at once as to terms and price. J. B. FRASER.

Shubenacadie, Oct. 29th, 1877. nov.

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THE Infirmary has been fitted up on the most improved principles; it contains loose boxes and stalls, and is provided with all the requisites of a first-class Veterinary Hospital.

The Forge is second to none in the Province, being commodious and warm. The latest principles in shoeing are carried out under the direction of the Principal and competent workmen.

Scale of Charges for Shoeing.

Set of new Shoes, for cash.....$1.00
do. do. 3 months account..... 1.25
Set of Removes, for cash..... 0.50
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By paying the annual sum of $20 for each horse, they will be shod and have Veterinary Attendance and Medicine when sick or lame. The subscriber has also the privilege of having any horse he wishes to purchase examined as to soundness, and advice thereon free of charge.

C. H. BYRNE, F.V.M.S.,
feb 1 *Veterinary Surgeon.*

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THE subscriber has on hand three Thorough-bred Durham Bulls, which he offers for sale. Persons intending to purchase would do well to call and convince themselves of their preferment in comparison to the merits of other animals bred in this Province. Below see statement of age, size, weight, colour, &c.:

No. 1. BRETWALDA.—Age, 2 years, Dec. 1st, 1877; colour, dark roan; girth, 6 ft. 10 in.; weight on 16th Feb., 1600 lbs. His sire is Sir Roger Tichbourne, that took first prize at Provincial Exhibition at Truro, 1876.

No. 2. ROLLO.—Colour, white; age, 1 year, Feb. 6th; girth 5 ft. 6 in.; sire Sir Roger Tichbourne.

No. 3. PATRICK.—Age, 11 months; colour, dark red; girth, 5 ft. 1 in.; sire, Duke of Edinburgh.

For any information respecting said bulls, address,

J. W. MARGESON,
Church St., Cornwallis, N. S.

mar 1

Fourt's Patent Hay Loader.

Warranted to load a *ton of hay from the winrow in five minutes.*

One of the Judges of Provincial Exhibition held in Truro, 1876, says "it is worthy the most careful attention of our farmers."

Prize Medal and honorable mention, Centennial Exhibition, 1876.

Certificate of Merit, Provincial Exhibition, Truro, 1876.

Orders for delivery in June, 1877, solicited.

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General Agent for the Lower Provinces.

☞ Agents wanted in unrepresented districts.
nov 1—7m

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Old Windsor Road, 14 miles from Halifax, 2 miles from Beaver Bank Railway Station, 4 miles from Bedford Station.

Short Horn Durham Cattle,
Ellesmere Pigs,
White Aylesbury Ducks,
White Pekin Ducks,
Buff Cochin Fowls.

ALL stock warranted pure, and shipped by Rail or Vessel free of expense.

Orders are now being taken for Spring Pigs and Eggs for Hatching. Pure Ellesmere Pigs, five weeks, $10 each. White Aylesbury Duck's Eggs, from birds imported from Rev. Mr. Fowler, Aylesbury, and first prize at the Halifax Poultry Show, Feb., 1878, $3.00 per dozen. Pekin Ducks' Eggs, from birds of the original stock, $3.00 per dozen. Buff Cochin Eggs, $3.00 per dozen.

Apply at the Farm, or by letter to

DR. G. LAWSON,
February 1st, 1878. HALIFAX, N. S.

FOR SALE.

A FEW very fine White-faced Black Spanish Cockerels for sale at $1.50 each, boxed and delivered at the Windsor Railway Station.

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Windsor, Jany. 21st, 1878. feb 1

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CLOCKMHOR, No. 34, registered. A Short-Horn Bull, six years old. Apply to GEORGE A. McKENZIE,
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Jany. 26th, 1878. feb 1

FOR SALE.

A COW 4 years old, July 5th, 1878, "Lily 3rd," in calf, from imported Bull "Wallace."

Bull "William," white and red, 2 years old, June 7th, 1878.

Bull "Rob," red and white, two years old May 7th, 1878.

Bull Calf "Rob Roy," white and red, calved April 1st, 1877.

Bull Calf "Wallace 2nd," white and red, calved May 27th, 1877.

The above are full bred Ayrshires, and are very handsome.

HENRY BURRELL, SENR.,
feb 1 YARMOUTH, N. S.

Thorough Bred Devon Herd.

ELLESMERE PIGS.

Oakfield Station on Intercolonial Railway, close to House.

SURPLUS STOCK FOR SALE.

BULL "PRESIDENT," 3 years old, dam Margaret, sire Hartland 2nd, took 1st prize as 2 year old at Truro in 1876, and 1st prize as calf at Halifax in 1874. Price $150.

Bull SIR HASTINGS, 2½ years old, dam Lady Pink, sire Havelock, took first prize as yearling at Truro in 1876. Price $150.

Bull PRINCE ALEXANDER, 2½ years old, imported by Central Board of Agriculture, from the Herd of Her Majesty the Queen at Windsor, took 2nd prize at Truro as 2 year old. Price $150.

Bull SIR CHARLES NAPIER, 2 years old, dam Violet, sire Havelock. Price $100.

Heifer ORANGE, 2 years old, dam Lady Anne, sire Havelock, in calf to Prince Alexander, took 2nd prize as yearling at Truro. Price $80.

Heifer KALMIA, 21 months old, dam Margaret, sire Hartland 2nd. Price $80.

Heifer MARIGOLD, 13 months old, dam Violet, sire Havelock. Price $60.

Heifer POPPY, 12 months old, dam Lily, sire The President. Price $60.

Heifer LARKSPUR, 11 months old, dam Mayflower, sire Havelock. Price $60.

Heifer CARNATION, 11 months old, dam Mayflower, sire Havelock. Price $50.

Heifer HEARTSEASE, 10 months old, dam Lady Pink, sire Havelock. Price $50.

Heifer HAWTHORN, lately calved, dam Tulip, sire Prince Alexander. Will be sold when weaned. Price $35.

Several Bull Calves of the present season, at prices varying from $40.

Also, a few thorough bred YORKSHIRE (ELLESMERE) PIGS, from imported Stock.

Apply by letter to
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