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NOVA SCOTIA

**JOURNAL OF AGRICULTURE**

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

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

**VOL. IV. HALIFAX, N. S., NOVEMBER—DECEMBER, 1880. No. 11.**

HALIFAX, 1st December, 1880.

The Secretaries of Agricultural Societies throughout the Province are reminded that no Society will be in a position to claim participation in the Legislative Grant for the year unless, on or before 31st December, it furnishes the Central Board of Agriculture with the following Returns:

1. Attested List of Annual Subscriptions actually paid as such by Members within the year.
2. Report of Proceedings at Annual Meeting held on first Tuesday of December.
3. Full Account of Receipts and Expenditure during the year.
4. Nomination by Officers of a person suitable for appointment to the Central Board.

HALIFAX, 1st Dec., 1880.

The steamship *Brooklyn*, landed at Halifax on 30th November, six yearling Short Horn Bulls, one young Cow and two Heifers of the same breed—all of the females being due to calve within the next three months. These animals are imported by the Central Board of Agriculture for public sale, of which due notice will be given after the March meeting of the Board.

This importation consists of very superior animals, without exception. They

were selected by Mr. Thornton, the best judge of Short Horns in England, and the highest authority on all matters of pedigree. The care taken in the selection is shown by the large number of Herds visited and the elaborate details given in his letters.

The full pedigrees will be found in the present number. The animals are all in perfect health, but are required by law to remain in quarantine for ninety days.

The Public Addresses delivered at the several Exhibitions this year were of a thoroughly practical character. We publish as many of them as we can find room for, and hope to overtake the Yarmouth Exhibition and some others next month. Sir Patrick Macdougall's address is specially worthy of careful reading.

At the Baddeck Evening Meetings subjects of great interest were discussed. On the first evening Col. Laurie gave the results of his experience in hay upland, which resulted in his going into root growing as the system best adapted for this country. It will be seen that several points of great interest and importance were made, and we hope to have the discussion continued in our columns.

We reprint an appreciative article on the Kentville Exhibition, in which one of the leading Agriculturists of New Brunswick gives an account of his journey to and from the Exhibition, and a free criticism of the country and the exhibits. His lively description of the sail down the St. John River and on the Bay of Fundy to Digby and Annapolis, his visit to the North Mountain, his revellings in

the land of Evangeline, and his description of the Exhibition Building, its contents, and the cattle in the yards, will all be read with interest. He calls attention prominently to the evils of our practice of adhering to the old custom of not allowing an exhibitor to place his name upon the article or animal he exhibits. We commend these remarks to the careful consideration of every committee man, whether in connection with Local, Provincial or Dominion Exhibition, with a view to the application of the proper remedy next season.

We desire to call special attention to Mr. Gregory's Address at the Antigonish Exhibition, which is an able statement of the trade relations of our Province in regard to agricultural products. We commend this Address, not only to the attention of farmers, but also to gentlemen who may be called upon to address local agricultural meetings, as a model, both in matter and manner which no one need hesitate to follow.

COLONEL LAURIE'S Wheat Crop this season has turned out well. We observe by advertisement in another column that he offers some for sale for seed. It is so important to get a reliable sample of clean wheat for seed free from "weevil," that we hope standing wheat growers will at once secure what they require. Year after year we receive applications for information as to where seed wheat can be got in the middle of the sowing time. The wise farmer does not wait till then.

## COLONEL LAURIE'S SPEECH

ON THE OPENING OF THE PROVINCIAL  
EXHIBITION AT KENTVILLE, SEPT.  
29TH, 1880.

*Mr. Chairman, Your Excellencies, Ladies  
and Gentlemen:—*

Understanding that we are to be addressed by their Excellencies the General and the Admiral, I should have confined myself to the simple discharge of my duty as President of the Central Board of Agriculture, and contented myself with formally receiving over the Provincial Exhibition of 1880 from the local committee, and as formally handing it over to the Chief of the Executive, the Queen's representative, in order that he might in due course declare it open. But as successful farming in Nova Scotia is with me no mere hobby, but an article of faith, I shall venture to detain you while I briefly touch upon those subjects which, whatever may be the views entertained with reference to them, are to us farmers undeniably of great moment, and I will offer a word of caution and a word of encouragement. It is so established a practice to let the sweets follow the solids, that I naturally take the less agreeable subject first, leaving the more palatable with which to conclude.

Ever since the cattle trade from this continent to Europe was developed, we in Nova Scotia have been urged on all sides to throw ourselves into this trade and share in its profits, but this advice is tendered on the assumption that there is a profit on it, and it is on this point that I offer a word of caution. My own opinion has always been that this trade originally opened up as a means of getting rid of surplus stock at a time when the prevailing commercial depression had compelled retrenchment, and so reduced the demand on this side of the water. Thus commenced, my fellow farmers will readily understand me when I say that a cash market offers great temptations, and as a fat ox is a very expensive animal to keep, the feeder naturally sells him at maturity for the best price he can get, and I doubt much whether the owner could really figure out the total cost of manufacturing the beef, and this is the point I wish our farmers to examine closely. Can they make the beef for the price at which they sell it? I feel satisfied that when our good friends advise us to go into cattle raising and cattle shipments it is done with the idea that we shall become wealthier and more independent thereby. I do not doubt that, by the exercise of great care and great judgment, beef can be made at a profit, and I have very grave doubts whether our farmers in Nova Scotia have, as a general thing, devised such a diet, have

established such a system of feeding, as will enable them to breed and feed cattle which when matured and fed for the English market, can be sold at \$4 to \$5 per 100 lbs., and leave any profit for the producer. Starting then, from this text, I would urge upon all to give very serious consideration to the question of cheapening the cost of feeding cattle. Unquestionably much of the financial success of farming depends on the farmer's capability to keep his farm well stocked, and dispose of his matured animals, at any rate, at cost of production; and, free as I am to admit that we have amongst us some farmers who show great capacity in their profession, I regret I must give expression to the opinion that the vast majority of the cattle bought off the farms cost far more than the owners obtain when they turn them into cash.

I am however satisfied that, taking our year through, we have the seasons and the land which will enable us to turn out agricultural products as cheap and as good as in any part of the continent. We are not bound to adhere to the methods followed by the settlers of one hundred years since, but, by experimenting in new breeds and new crops, we can assimilate what is suitable in the methods of other regions, and so establish a system of agriculture applicable to this Province. And as I promised a word of encouragement before closing, I would refer to the generally expressed opinion that Nova Scotia is not a wheat producing country, and reply that our reports from all over the Province show that the wheat crop is generally most satisfactory, the yield being reported large on the breadth sown and the quality good. We find spring wheat sown, in a not too favorable spring, giving us a return of 30 bushels to the acre, a yield that I do not think is reached, or at any rate exceeded on the continent, and in regard to quality I must fall back on my own testimony. Having but lately returned from Montreal, I had an opportunity of seeing the wheat exhibited by the Provincial Government of Manitoba, our great North-West granary, and I do not hesitate to say that in length of ear and in size of the cleaned grain our Nova Scotia wheat exhibited at the 1879 and 1880 Exhibitions was more than equal, it was superior.

I am well persuaded that we have no climatic obstacle to the growth of wheat; and, with the increased cultivation of the finer cereals and the consequent preliminary drilled root crops for fertilizing and cleansing the land, we have the greatest promise of prosperity to the farmer in the cash returns attained for his wheat or barley, and in the root crop and refuse of the grain being fed to his cattle, which will at any rate maintain the productiveness of his farm.

Apologizing for the length at which I have treated this subject, whose importance, however, all will recognize, I now in due form desire to hand over this Provincial Exhibition of 1880 to you, Sir, to ask that you will declare it open.

## HALIFAX EXHIBITION.

ADDRESS OF HIS WORSHIP MAYOR TOBIN.

*May it please Your Excellency:*

When the Corporation of Halifax undertook to carry out the Exhibition of 1879, they determined on erecting a structure of a permanent description, with the view to holding Annual, or, at any rate, frequent exhibitions in the city, not necessarily so ambitious in their character as that of last year, when the money of the citizens was supplemented by a liberal grant from the Provincial Treasury, but, nevertheless, of an extent sufficient to show to advantage the varied products and manufactures of the Province. In accordance with this design, we this year issued a prize list of \$6,000, inviting the farmers, the mechanics and the fishermen of the Province to meet here in friendly competition. We have to-day the response to that invitation in the well filled tables of this hall, and in the very creditable show of live stock in the sheds outside. The entries in this department are, as might have been expected, not as numerous as in 1879, by reason of the course adopted by the Committee, who, after mature deliberation, decided to restrict the amount and the number of prizes to what they considered judicious limits. The Herald prizes have been dispensed with, an opinion prevailing that the object, especially of an Exhibition to be held in the city, should be not to bring together the largest number of animals, but rather to obtain an exhibit of the best individual specimens of each kind. The experience of last year suggested the propriety of withdrawing unnecessary prizes, and left the impression that this could be done without impairing the utility of the Exhibition, while, at the same time, it pointed to the advisability of modifying the terms of competition in other cases, so as the more fully to protect the interests of exhibitors. The lessons of the present year will no doubt lead to further improvement in the next, so that in the conduct of the Exhibition itself from year to year, as in the Industry of the country, there may be a marked advance towards perfection.

It is appropriate that reference should here be made to the crops of the year, the more so because of the fact that on all sides of us in this building we have reminders of the importance they bear in relation to the prosperity of the country, and it is pleasing to state that the enquiries made on this subject have elicited the assurance that the labors of the husbandman have met with gratifying success, if we except the hay crop, which here, as in the United States and in England, has been light. Wheat raising, which during the past few years has been increasing steadily throughout the whole Province, Cape Breton included, has this year received an unusual degree of attention, and we hear that large quantities have been sown with every promise of results which

will reward the enterprise of our farmers, and encourage them to greater efforts in the cultivation of this important cereal. The prospects of the potato crop are reassuring, and there is every reason to expect a fair yield, and one of good quality, and this notwithstanding the sensation and alarm which followed the unwelcome discovery of the Colorado beetle in the county of Guysboro. It is consoling to know that the career of this destroying insect was cut short by a ready adoption of the treatment suggested by Prof. Lawson, and that it is now believed to be effectually exterminated. When we consider the world-wide fame which attaches to the orchards of Annapolis, Kings and Hants, and (judging from the exhibit here to-day) we may well add Lunenburg, and their material value to this Province, it is certainly most gratifying to know that their present appearance seems to guarantee an excellent harvest to the fruit growers of those counties, and leads to the belief that their record for 1880 will be in keeping with the splendid reputation they have already achieved.

A feature in which the city of Halifax, the long established marketing centre, as well as the capital of the Province, has recently acquired a new importance in relation to agriculture is what may now be termed its cattle trade. The shipping of cattle to England promises to develop into very large proportions, with mutual benefit to the farmers of this side of the Atlantic and to the teeming population of the old country. Our farmers may to-day raise as much good beef and mutton as their farms can produce with the certainty at any season of a ready market, good prices and cash payments; for, in addition to the supplies required by the citizens, the shipping, the military and the navy, we have ocean steamers constantly ready to convey to the best market in the world more meat and more cattle than the whole Province can produce. The immense advantages which proximity to a shipping port like Halifax gives to our agriculturists over those of the interior parts of the continent, no less than the unsurpassed facilities for root raising and pasturage which we possess, should stimulate our people to the production of meat as an industry for which the Province is peculiarly adapted. With these facts before us, it is not too much to say that energy and capital are alone required to make this Province an exceptionally fertile spot.

In none of the Exhibitions held in Nova Scotia, so far, have our fisheries received the full consideration to which they are entitled, as the foremost industry of the Province. The prize list of to-day is no exception to the rule, though the inducements it offers are fully as liberal as those of previous years. It is to be hoped that those who year after year study the advancement of the farmer and the mechanic will soon awaken to the duty they owe to the fishermen, and that, at no distant day, Nova Scotia, following the example of Norway, Sweden, Denmark, Germany, and other European countries, may give especial encouragement to every feature connected with the prosecution of its fisheries. As regards the exhibit of to-day it is comparatively an excellent one, being very much ahead of that of 1879, both in extent and quality, a fact for which we are largely indebted to the exertions of a well known gentleman in the trade, who is also a member of our committee.

The large and splendid collection of poultry which has come forward speaks well for the influence of the Nova Scotia Poultry Association, to whose efforts we are much indebted for the excellence of the show in this department, while to the public spirit of a few gentlemen we owe the addition of a novel attraction in the Dog Show, which is now introduced for the first time as a speciality in connection with our Provincial Exhibition, and there can be no doubt that a visit to the kennels on the adjoining grounds will astonish and gratify the admirers of the canine race.

It may be permitted us to congratulate our manufacturers that their work now in exhibition shows in very many cases such skill in design, and proficiency in execution, as to elicit the encomiums of those best qualified to judge in the several departments. Whether we turn to the coils of the rope factory, the pyramid of edged tools, the gallery of musical instruments, the cabinet and the carriage-making, the brass finishing, the ship-models, the clothing and furnishing the wealth of floral beauty before us, the array of fancy and use of needle-work in the central tower or any of the specialties "too numerous to mention," we see everywhere around us products of useful and ornamental art, of which every Nova Scotian may well be proud. Whilst our building itself is now more complete in its ornamental details, than was possible last year, it has been subject of remark by those who have already inspected this Exhibition, that the general arrangements of the exhibits indicates the advantage of last year's experience, not only in the work of the committee, but also in the taste evinced by the exhibitors in the style and manner of showing their products.

The absence of our respected Lieutenant-Governor from a scene which could not but please him, is a matter which our Committee greatly regret, and that regret will, we are sure, be shared by all present. His Honor has associated himself very closely with all the general exhibitions held in the Province of late years, and would certainly have been with us to-day had not his promised visit to Cape Breton, where he now is, interfered to prevent him.

We were honored with the presence of Your Excellency and Lady Macdougall at the inaugural ceremonies of our last Exhibition, and the pleasure with which we welcome you to this, our second gathering, is enhanced by the fact that Your Excellency has been pleased to identify yourself so prominently with the proceedings of the day. We thank you for the readiness with which you acceded to our request in this regard, and desire to convey to you our assurance of the high esteem and respect in which your Excellency and her Ladyship are held by the citizens of Halifax.

STEPHEN TOBIN,  
Mayor and Chairman of Committee.

OPENING ADDRESS OF GENL. SIR PATRICK  
MACDOUGALL.

Sir Patrick then replied in the following words:—

In thanking you for the honor of being asked to open this Exhibition, I must express the pleasure I feel, in common with all who are interested in the prosperity of Nova Scotia, in witnessing such a show in this city,

while it is known that similar exhibitions are taking place elsewhere in the Province.

These annual occasions cannot fail to be most valuable, as affording opportunities of comparing the products of different parts, of inciting emulation, and thereby promoting improved methods of production, both in agriculture and manufactures.

The great problem for the world must always be the supply of cheap and abundant food for the masses; and for that purpose the greatest food phenomenon that has ever been witnessed on the earth is the movement of grain and cattle now taking place, from the Western to the Eastern hemisphere; a movement that excites the serious, though, perhaps exaggerated, fears of English agriculturists. The effect of railway enterprise in the United States has cheapened freights to such an extent that the consumer in Great Britain is practically brought into close neighborhood with the producer of Minnesota and Dakota. It is difficult to pronounce with certainty how far railway competition may have brought down the cost of carriage below remunerative rates, and therefore below the rates that can be permanently maintained. But at the present time—according to an interesting article in the *Fortnightly Review* for last July, on "The Railways of the United States"—it appears that a barrel of pork and a barrel of flour can be brought from Chicago to Boston at an average of one dollar and a quarter for the two barrels; or in other words, the subsistence in the matter of meat and flour of a working man in Boston for one year can be brought to him over a thousand miles of railway at the cost of his wages for one day's work.

But Chicago is now only one stage of the distance between New York or Boston and the great grain producing districts. The American corn grower is moving ever westward to a greater and greater distance from the Atlantic. But increased distance means increased freight as well as increased risk, and it is by no means so clear as appears to English alarmists that the English farmer will be unable to compete with the giant agriculturists of Dakota and Minnesota, some of whose plough furrows are said to be a day's journey in length, even though the latter work their own freeholds, and though all their work is done by labor-saving machinery.

The minimum paying price at which a quarter of wheat from the far West can be sold in England, is variously estimated. There are no fixed or certain data to go upon. The author of the article in two *Fortnightly* above alluded to, an American, takes a very sanguine view of the matter from the American stand-point. On the other hand, an able and exhaustive report has just been published by Mr. Pell, M. P., and Mr. Read, who were specially appointed by the English Government to enquire into the state of agriculture in the United States and Canada. The conclusion formed by those gentlemen is that 44s. a quarter in England is about the lowest price that would give a fair profit to the American producer under present conditions. This estimate, being based on an average yield throughout the States of only 12 bushels to the acre, is probably too high; but the present conditions are liable to change; and any change is likely to be favorable rather than otherwise to the English producer. The new wheat lands to be brought under the plough

are removing ever farther and farther towards the setting sun; the present rates of freight both by land and sea are more likely to increase than to diminish; while the increasing population steadily springing up between the wheat lands and the Atlantic will intercept a considerable portion of the supplies that would otherwise reach the English market.

Nova Scotia is not a wheat producing country, but for the Western portions of the Dominion every consideration that may affect grain trade is of vital importance. Indeed the future of the Dominion at large has been to some extent staked on the attractions and capabilities of the great North-West as a wheat-producing region. But the Maritime Provinces can only be said to have a reflected interest in the venture. They will benefit financially with the Dominion at large, if the high hopes now entertained should be fulfilled. Or they will in the same proportion suffer, if these hopes should prove delusive.

But, although Nova Scotia is not, properly speaking, a grain-producing country, there are other commodities for the production of which she is eminently suited, and for the supply of which to England her situation is unrivalled. The conditions of the Province are very favorable to the breeding of cattle for export, in which she ought to compete more than successfully with any part of the American continent; and it is encouraging to learn that these advantages are appreciated, and that this branch of commerce has already attained a considerable development in Nova Scotia.

The trade in both live and dead meat between the United States and England is daily assuming larger proportions, notwithstanding the enormous distances over which the meat has to be carried to the ports of departure.

New docks are being opened from time to time on the Northern shores of England for the purpose of accommodating this yearly increasing trade. The Avonmouth docks, near Bristol, though only completed two years ago, are filled with cattle steamers. These docks are more favorably situated than Liverpool in several particulars, they being nearer to London, more accessible from the sea, having no bar like the Mersey; and, for steamers passing South of Ireland, saving 12 hours steaming.

In the interests of humanity, it is to be hoped that the trade in dead meat may prove so profitable as to supersede the transport of live beasts; and the facts stated by Messrs. Pell & Read in their official report show some reason for expecting that this hope may be realized.

The enormous number of beasts destined in one shape or other for the English market find their way from the different cattle nurseries of the United States to the three great centres of distribution. The following is an extract from a leading article in the London Times of the 1st September last, commenting on Messrs. P. H. & Read's report:

"The beasts selected to supply live or dead meat to the English market have all English blood, more or less diffused. But the range of this admixture is limited. The quantity brought to the three great abattoirs is enormous. At Chicago, as our readers may remember to have read some time since in our columns, one man takes a third of the supply. He kills more than a thousand every

week-day, with the regularity, ease and noiselessness of a perfect machine. Skillful operators before, behind, above, and on both sides, conduct the animal in one minute from the yard, through narrowing passages, to the point where an unfeeling hand deprives it of feeling; where all the other processes of the slaughter-house are done far more carefully and neatly than with us, and the dismembered animal is soon passed through successive refrigerators, down almost to freezing, or boiled and canned, the offal and other parts being utilized.

"The exports of fat beasts to England has been a great failure, so far. The animals take much room, require much care, and cannot stand bad weather."

The breeder of cattle for the English market should learn that the shipment of animals in high condition is both cruel and unprofitable, and that the preferable alternative, now beginning to be recognized, is to send only those animals of improved breeds, as being hardier and taking up less room.

For such a trade as this Nova Scotia assuredly needs no protection. She possesses all the elements of success in a remarkable degree in her soil, her climate, her harbor, her lines of ocean steamships and her proximity to market.

But there are other commodities besides meat in which Nova Scotia ought to be able to compete successfully with the United States for the English markets.

The United States export annually, according to the report of Messrs. Pell and Read, one hundred and twenty millions of pounds of cheese, and about twenty million pounds of butter. The cheese is, as a rule, fairly good, though capable of being much improved. The butter is decidedly inferior; it comes from the far Western States, and is consumed in the manufacturing districts of the North of England, the total cost of freight being little over one farthing a pound.

There seems no good reason why butter and cheese made in Nova Scotia should not be equal to the same articles manufactured in England. A commencement in the matter of cheese has already been made at Annapolis, and I should imagine that the Northern portions of this Province generally could not easily be surpassed in favorable conditions. All that can be required is to improve the method of manufacture; and for promoting such improvement, yearly Exhibitions such as we are now holding in Halifax are obviously of the highest utility.

If in the foregoing remarks I may appear to have been somewhat bold in expressing opinions on a subject respecting which it is obvious that I can have no technical knowledge, I hope that the strong interest I shall always feel in all that concerns the welfare of Nova Scotia and its inhabitants, and especially of this city, will be accepted as an excuse.

The exhibition was then formally declared to be open, and the General and party accompanied by His Worship the Mayor visited the building and grounds.

The wheat crop of the United States, this year, according to the latest estimate, is more than four hundred and fifty millions of bushels. This will give a surplus, after supplying the home market, of nearly two hundred millions of bushels.

## CAPE BRETON EXHIBITION.

—  
BADENACH, Oct. 12th, 1880.

### COL. LAURIE'S OPENING ADDRESS.

Mr. Chairman, Ladies and Gentlemen: It is but natural that at this, the first Agricultural Exhibition held by the Island of Cape Breton I should choose as my text "The State of Agriculture in Cape Breton," but it is somewhat unfortunate that, in addressing myself to this subject, I labor under the disadvantage of not having visited those portions of Victoria and Inverness Counties, which, if all reports be true, are the most advanced farming districts in the Island.

From the accounts of eye-witnesses, as well as from the returns of crops raised in various parts of the Island, I am inclined to hazard the assertion that the two extremes of farming are to be found in Cape Breton, that some of the best and, (bear with me when I say it,) some of the worst farming done in the Province of Nova Scotia is to be found on the Island.

Where so much good farming is done it is clear that the climate is not to blame, and no one who has passed through your smiling valleys would venture to assert that the land was to blame. It is clear that we must seek the explanation of any alleged backwardness in our farming elsewhere than in an ungenial climate or an unfertile soil.

If we are behind other parts of the Dominion or the Continent, we must set ourselves to find a remedy, and to this end it will be well to seek any cause and ascertain how it may be removed.

So many causes are assigned by persons who profess to be well acquainted with the inhabitants of Cape Breton, that one almost hesitates to approach a subject so well threshed out. I have heard it asserted that the population of Cape Breton largely live by fishing, that fishing and farming are incompatible, hence the neglect of the latter industry, especially along the coast.

Again, it has been stated that the early settlers in Cape Breton were drawn from a class who knew nothing of farming, that their attempts at farming were unprofitable, and that their descendants, seeing no satisfactory results, also exhibited an utter distaste for such apparently aimless drudgery, and have never taken kindly to it as a profession.

Want of capital, too, has been given as another reason for the poor success of many of our Island farmers. Many other reasons are also given, and there is just sufficient plausibility in such reasoning to admit of the fact and the result being associated, the result being looked on as an outcome of the fact.

For my own part I cannot recognize that any of these so-called causes can be

held responsible for the reputed results. 1st, unquestionably a farmer, to be successful, should give his whole mind and time to his business, as indeed should a man who wishes to succeed in any profession; and I can well understand that fishing and farming, on any reasonable scale, cannot well be carried on by the same individual, where he actually attempts both with his own hands, but they certainly can be carried on by the same man as an employer of labor, or by a community where some would farm and some would fish. A most important fertilizer is thus brought to the very doors of the farmer, a substance to which not only is no value attached, and no consideration given, but it is too often got rid of to the very serious injury of the fisherman and his fishing grounds, whereas under proper arrangements it should be utilized for the great advantage of the community. When we consider that the fisherman plies his trade, and after catching his fish prepares it for market, and finally receive about \$4 per 100 lbs. for such as he sells, when he throws away the so-called offal, probably equal, on the average, to one-half the weight of the fish marketed, and this offal, if regularly prepared, would find a ready sale at \$2 per 100 lbs. as a fertilizer, thus keeping in the country the money which is now sent to buy so-called artificial manures, injury is caused on all sides, the fishing grounds suffer, the fisherman throws back a very valuable part of his catch, at least 25 per cent. of his profit, labor that might be employed in preparing this offal has to seek work elsewhere, and the farmer has to send his money out of the country to buy fertilizers, and largely because an idea is abroad that the interests of farmer and fisherman run counter instead of parallel, and, indeed, that they cannot advantageously be prosecuted side by side.

That ignorance of the methods of farming may have to some extent militated against the first settlers is no doubt true, but the importance of this is overrated. To a man going into the woods to chop out a farm, it would matter little that he had not mastered the best system of farm management as practised in the Lothians or in Leicestershire. Strong arms, the use of an axe and a willingness to bear privation and make the best of things, were the qualities most desirable in our hazy pioneers; and, judging by the results of their labors, they were not deficient in these gifts. Our late General, Sir William Haley, at one of our agricultural exhibitions, being called on suddenly for a speech, said he had travelled through the country a good deal, and it was very evident to him that some one had done a good deal of work here at some time or other. I thought of Artemus Ward's favorite word "sarkasm," for certainly our respected friend must have intended

to throw out a quiet hint that the present generation did not show the same fondness for hard work. Undoubtedly our predecessors were not scientific farmers, but they undertook a certain work and did it well; they cleared up the land and left us to apply the improved methods of working that science teaches. Want of capital is unquestionably a serious hindrance to successful farming, in fact in the present day a farm cannot be worked profitably without a considerable outlay, but is "want of capital" the right expression? Do you not often find a farmer whose farm palpably requires money laid out on roads, on drainage, on stock, or implements, without which it cannot be satisfactorily worked? Do you not often find such a farmer starving his farm and putting his money into ships or some other venture, which, whilst it might give a good return, was entirely foreign to the occupation by which the farmer professed to live.

The Hon. Joseph Howe always dwelt with great pride on the fact that in his later days Nova Scotia owned a ton of shipping for every man, woman and child of her population—unquestionably it was a subject on which a man or a Province might indeed feel proud, but since I have been so much amongst the farmers I have always doubted whether our possession of that vast tonnage was really a matter of congratulation or of regret; and, handsome as might be the income drawn from these ships sailing round the world and developing the commerce and carrying to market the productions of other nations, I must confess I always wished that less of that capital had gone abroad and more of it had remained at home to develop our farms, and open up the resources of our Province, so that the ships we did own might be engaged in carrying the products of our soil and our people's labor to other countries, thus instead of *want* of capital, I incline to use the term *diversion* of capital from its proper employment. Perhaps I have discussed these so-called causes too fully and, to borrow a simile from our census, I may be "flogging dead horse" in citing the reasons given and combating them—but, be the causes what they may, we are justified in asserting that there is great backwardness in farming, and we would seek a remedy. I believe that education, the spread of general knowledge, will be the most powerful assistance to us. I know it is very much the fashion to decry education as having the effect of withdrawing its votaries from manual labor, as making people too good for the work that has to be done, and that, as it becomes universal, it is commonly believed, the distaste for labor will so increase that we shall not find hands sufficient to carry on the necessary work of the world. I hold an entirely different view on this point. When education was

less widely diffused it was but natural that young men who had cultivated their minds should seek companionship amongst men educated like themselves, and should, whenever possible, withdraw from the society of those whose intelligence had not been awakened by study. Such youths would seek the universities and a career in life in the so-called learned professions; but when all are educated this motive will cease to work—or rather, I believe, the effect will be exactly the opposite of what it now is. I mean in regard to the subject we are more particularly considering—agriculture. As the farmer becomes educated his calling becomes more and more attractive; no longer will it be a mere routine of manual labor, and, when carried on like any other business on a large scale, it calls for qualities supposed to be characteristic of and to command success in the professions that stand highest in the social scale and in the world's esteem.

To simply labor advantageously and obtain the best results with greatest economy of time and of labor demands a talent for organization that we look for in the skilled professional soldier. To utilize the changes of weather, availing oneself of the advantages of each season and never being caught unprepared, suggests the ready wit and power of adaptation of the sailor. To investigate the problems that arise in the course of the manufacture of crops from the materials furnished by the soil, the atmosphere, the manure heap and the seed, to solve the cause of failures, or the reasons of success, this tests the skill and powers of investigation of the chemist. With such exercise for the brain and intelligence, education will certainly not tend to drive men from the farm, but rather to attract them. And even the laborer, so called, will find that brains and developed intelligence are more and more a necessary part of his stock in trade, quite as much so, indeed, as physical strength. To a man attending stock acute observation is necessary if the animals are to be kept in health and good thrift. When a human being feels ill, he has it in his power to go to a doctor and describe his sensations, possibly his ailments, and answer questions to enable the medical adviser to trace the disease and prescribe a remedy, but the animal is at the mercy of its attendant. It cannot complain, it cannot describe its sensations, hence the necessity that the attendant should note the animals in their movements and habits for signs of health and sickness. And now that almost every farming operation is carried on by machinery, the work is much more of a mechanic than of manual labor, with, however, the extra demand on the farmer's capacity, that he must not merely run the machine when placed in his hands, but he must also be prepared

to keep it in running order and himself make the necessary repairs from time to time; as, if a machine fails, it is sure to do so when in use, and then there is no time to send it to a machine shop for repairs.

Education will furnish the knowledge and skill, but the power to apply these must be at the back. Industry is a most important factor towards success, and you who I am now addressing will fully agree that, like common sense, industry is a most uncommon article. I mean the industry that makes the most of the time and opportunities afforded. Talking lately with some neighbors I urged on them to give greater attention to turnip and other roots, to which they replied that roots were tedious to raise and took a good deal of labor. I at once asked if amongst all their neighbors there was one who did not have 10 or 12 days idle between seed time and harvest, and the reply was undoubtedly all had that much idle time. Here then at once was time enough to do all the labor on a couple of acres of turnips, or, in other words, an addition of six head of cattle to the stock of the farm, and this would be but a beginning, and if followed up this would soon bring capital on the farm, and, earned in this way, I incline to think the capital would be retained and advantageously used on the farm.

As to the farming of the future, I assume that we shall fall into line with other parts of the Province and the Dominion. The increased means of communication make the world our markets, the competition thus becomes more lively, and whilst we can undoubtedly sell whatever we raise, and send to market, it will be well that we study more closely how to avail ourselves of our position in regard to market, as well as any special advantages our climate confers on us.

Through good and evil reports, through good and bad times, some of Nova Scotia's sons have steadily shown their faith in her future—too many, I regret to say, have decried her many advantages. The principal aim in my farming, so far, has been to prove that on ordinary land, not specially favored by climate, and with no extraordinary treatment, crops fully equal in quantity and quality to anything grown in the temperate zone can be raised in Nova Scotia. In this I claim complete success; my occupations have been such that I am unable to figure closely the cost of these crops, and ascertain whether financially I have succeeded, but, with land as cheap as in any part of the world, with labor at a moderate figure, and with yields such as I mention, I reason that it can only require ordinary business capacity and attention to ensure a proper return for money invested—or, at any rate, a return as good as can be obtained elsewhere.

Our neighbors are almost daily celebrating centenaries—not of the original founding of their towns, &c., but of the commencement of the new era when they plunged into the unknown future with self-dependence, and a determination to succeed, and whence they date their marvellous prosperity. With the political question, I have now nothing to do, and shall not touch on it beyond saying that in matters Dominion, Provincial, or county, our tendency of late years has been in the direction of depending more on ourselves and less on a paternal Government; and, in this local effort, encouraged, and to some extent assisted by the Provincial Government, but still so largely and honourably supported by the people of Cape Breton, I see the dawn of a determination to lean more on themselves, to dare and to do. With such a spirit aroused, with the great natural advantages surrounding you, and with the good Scotch blood in you, sow sometimes as fate, your beautiful Island will more and more rapidly develop into a second garden of the St. Lawrence, rivalling the Island of Prince Edward; and at the centenary of this Exhibition, which your descendants will hold, they will own the debt of gratitude that Cape Breton owes to those who so earnestly strove to make this, the first Island Exhibition, such a thorough success.

#### PROF. LAWSON'S CLOSING ADDRESS.

*Mr. Chairman, Ladies and Gentlemen,—*

As a refreshing shower is grateful after a period of sunny weather, so a few parting words may not be unwelcome at the close of this Exhibition, which, I feel assured, has been a source of much enjoyment as well as profit to a large portion of the inhabitants of this island. It must be matter of satisfaction to every intelligent man in these Maritime Provinces that Agriculture, regarded in former times as a mean and unprofitable employment, is so rapidly taking its place as the most important industry in which our people engage. Other occupations are so dependent upon it that a country which neglects agriculture, and forgets to honor and esteem the men engaged in the pursuit, can make no real progress in civilization. The increased attention to agriculture we see manifested in many parts of the country in the increased area of ploughed land, in the growth of roots and cereals, in the improved live stock, in the greater number of calves raised and the greater care bestowed upon them, in the better quality of beef, mutton, pork, poultry and dairy produce brought to market, but more conspicuously than all in the Autumn Exhibitions, to which our agriculturists and mechanics bring the choicest products of the soil, the purest

types of animal beauty, and the most finished works of useful and ornamental art. It is satisfactory to see that Cape Breton has come so well into line with other progressive countries. The present position of our agriculture, and the work before our ambitious agriculturists, were so clearly set forth in Colonel Laurie's address at the opening, and time becomes so valuable as the eleventh hour approaches, when we can scarcely stand upon the order of our going, that I shall limit myself to a very few notes on some of the productions now before us.

The exhibit of live stock cannot fairly be compared with what we are now accustomed to see at the Nova Scotia Provincial Exhibition, whether at Truro, Kentville or Halifax, centres around which a few breeders have already introduced the raising of thorough-bred stock as a special industry in itself, apart from general farming, dairying or cattle feeding. But my recollection of the great Provincial Exhibition held at Halifax in 1868 suggests that we have here at Baddeck a show of thoroughbred stock by no means inferior in quality or numbers to what was seen on that memorable occasion, and thus notwithstanding the obvious circumstance that some of the best stock on the Island, particularly short horns, have been prevented from coming by reason of great distance and difficulty of transit. Time will not permit me to refer in detail to the Devons and grades which show so well, but the competition in Ayrshires is specially noticeable: it embraces no fewer than eight aged bulls, nearly all such good examples of their kind that the only regret of the judges is that they have not six or seven prizes to award instead of three, whilst the female stock are as graceful in outline as they are generous at the pail, and all are as clean and as well carried and cared for as if they were intended for the trotting park instead of the homely occupation of making butter and cheese.

In regard to oxen and fat cattle the most judicious remark to make will probably be that there is still room for improvement, but we know that at this, as at other Exhibitions, the labor and expense of fitting such cattle for and bringing them to the Exhibition have operated in preventing us seeing many of the best specimens.

The roots and vegetables demonstrate at once the fertility of the soil and the suitability of the climate for their production. The potatoes, of which I counted 107 exhibits of different samples, are conspicuous for their size; the carrots, globe mangles and Aberdeen turnips are the most shapely of the roots, and the long red mangles, of which there are 15 lots, and the Swedish turnips, well represented by nine lots of purple tops, show that large and profitable crops are being raised,

and that a little more care by exhibitors in selecting the finest instead of the largest specimens is alone required to make a first class show of roots. The caulages and cauliflowers are fine, and the saline soil and moist climate so well adapted for them, and suitable manure—fish and kelp—so accessible, that I shall look for even larger and finer specimens at next Exhibition.

The show of fruit, whilst far behind that at the Provincial show at Kentville, and even the recent Halifax Exhibition, is still greater in quantity than that at the Provincial Exhibition of New Brunswick held at St. John last week, and much of it not inferior in quality. Here we have no fewer than 34 dishes of plums—golden gages, Washingtons, magnum bonum, egg, blue and white plums, and damsons; 8 dishes of cranberries that cannot be excelled by either the cultivated or wild fruit of any part of America or Russia, a few bunches of Concord grapes ripened so well as to indicate what may be done in open air vine culture, although it will not be likely to develop into more than a pleasant gardening amusement, as it is in most parts of Nova Scotia; 30 dishes of brilliantly colored crab apples; a few pears—so very few as to show that this fruit is still neglected, and, more important than all the rest, 105 exhibits of apples, some lots small and spotted and others wrongly named, but most of them large and fine specimens of their respective kinds. There is evidently no reason why we should not have splendid apple orchards on this Island.

From the show of grains, and the interest manifested in wheat growing at the evening meetings, it is evident that there is a determination among the farmers to produce their own flour, whilst the handsome loaves of bread, every one fit for the table of a Princess, show that the best use will be made of it after it is produced.

Of the more tender products that depend upon a dry atmosphere and cloudless sky for their ripening, we have satisfactory evidence that they can also be successfully produced. The large well-ripened ears of twelve-rowed yellow corn from exhibitors in various parts of the Island, the firm sweet corn, the squashes, giants in size and an army in number, and especially the tomatoes, of which there are 19 dishes, most of them as large, as bright colored and as well ripened as those at Kentville, Halifax or St. John, all these—not to speak in detail of the dwarf and pole beans of various sorts—show that whilst the season here is later in time than that of some parts of the Province, yet the freedom from early autumn frosts enables the ripening process to go on sufficiently long to mature almost every crop that can be

raised in Nova Scotia or New Brunswick. What the crops are that may be most profitably grown on the large scale as the staples of your agricultural industry is a problem that must be worked out by yourselves from your own experiences in the light of your own results as compared with those realized in other countries.

So much for some of the leading products of your labours in the fields and gardens and among the live stock. We realize the true value and nobility of the farmer's vocation when we see him, not by a magic wand, but by the irresistible energy of a wisely directed strong arm, spreading fertility and beauty over the sunny hills and through the well watered valleys of a fair Island Eden like this. But it is not well for the farmer to labour alone. What would he be without his better half? And what would an Exhibition be without the home manufactures, the flowers and the elegancies of art, so suggestive of loving wives, laughing children and comfortable homes? Even the commercial results of farming are by no means independent of the care and labours of the house-wife. See these 84 crocks and tubs of butter before us, arranged with every regard to neatness and cleanliness, an exhibit more extensive, and upon the whole more satisfactory, than has ever been presented before at any of our exhibitions, or, indeed I may say, at any exhibition that I remember to have seen in any other country. Whatever popular delusion may have prevailed in the past in regard to Cape Breton butter is surely now dispelled, for we see that the fair Island daughters are prepared to contest the palm in butter making with the Dairy Women of any Province of the Dominion.

This Exhibition will be no exception to the general rule. That in its management there are shortcomings will become known to the Committee sooner or later in various ways; but of one thing I feel assured—that the success attained in carrying out this first Cape Breton Exhibition entitles the Committee, and all who have assisted in their work, to the hearty thanks, not of competitors and visitors only, but of every patriotic inhabitant and well-wisher of the Island, inasmuch as the foundation has been laid for a system of exhibitions that requires only to be followed up to ensure rapid progress in agricultural improvement, and yearly increasing prosperity in other departments of industry. In whatever calling we may engage, if we labour faithfully and honestly, like men who look for the Divine blessing upon our labours, we shall not go without our reward, and our country will not cease to prosper. That this sentiment may be realized fully in your actual experience I express as my earnest hope in bidding you adieu on this occasion. May God bless Cape Breton!

We read in the *Colchester Sun* how cattle feeding is done on Lorrindale Farm:—On 15th April, 1879, a pair of three quarter-bred Durham steers, after "Kingston," and grandsired by "Jock" and Sir Gaspari," were delivered at the Truro laystables to the owner of Lorrindale farm for 1,060 pounds live weight. By the 20th October, of same year, they had grown to 1,590 pounds, and their weight on 19th of November, instant, was 2,350 pounds. A second pair of high grade Durham steers, of a similar age, on same farm, 14th October, 1879, weighed 2,065 pounds, and, the 19th of this month, 2,590 pounds, while a pair of old breed, or common breed working cattle, four years old July 15, 1879, weighed 2,040 pounds; and on the 28th October ultimo, turned the scales at 2,749 pounds. For score fed cattle,—supplied only with fodder to keep in good growing condition, and not to fatten,—we should judge they had all done very well; but have no doubt that their growth will be found more remarkable when stall fed, on the home-stretch from Smith's Island to Smithfield.

**VALUE OF FORESTS.**—One of the sensible things done by the American Association for the Advancement of Science, at its recent meeting at Boston, was to adopt a memorial to the legislatures of the several states, urging upon them the great importance of providing by proper legislation for the protection of the existing forests of the country against needless waste, and for the encouragement of measures tending to a more economical use and suitable maintenance of our timber supply; The memorial recommends the passage of a law in every state to protect trees planted along highways, and to encourage such planting by deductions from highway taxes. It contains other recommendations designed to promote forest culture. The fact may not be generally known, yet it is a fact, that for years past we have been destroying the forests of this country more rapidly than they have been reproduced, especially in respect to the more valuable kinds of timber. The supply is gradually lessening, while the demand is increasing. It does not take much wit to see that this process, if continued long enough, will at length become a very serious matter in its final results. We must treat our forests more economically, and adopt methods of forest culture to supply their waste by the consumption of wood and timber, or in the end pay the penalty for our want of economy and lack of foresight. We are glad that the American Association has called attention to this important subject.

The famous system of rotation, now extended quite generally throughout England and Scotland, with occasional modification, is as follows:—The first year, clover and mixed grass seed; the second year, wheat; the third year, turnips or ruta bagas; the fourth year, barley; and then the system begins again. An innovation on this is to add another grain crop, oats, to the shift, making a five year's course; and so efficient has this course been that it has been calculated that the grain-crops have increased one-fourth.



**PEDIGREES OF THOROUGH-BRED SHORT-HORN DURHAM CATTLE,**

*Imported from England by the Central Board of Agriculture of Nova Scotia, on the recommendation of the Agricultural Committee of the House of Assembly, and by authority of the Government and Legislature.*

These animals are of a very superior description, and well calculated to improve still further the Short-Horn stock of the Province, which is already of a high character. They were selected, under special instructions from the Board, by John Thornton, Esq., formerly Editor of the English Short-Horn Herd Book, and who, from his knowledge and long and extensive experience, is regarded as the best judge and first authority in England.

They were inspected in England before being shipped, and again officially at the port of landing, and found to be all in excellent health and high condition, but all imported cattle, without exception, are required by law to be kept in quarantine for ninety days before being sold or removed. Ample notice will be given by advertisement in the newspapers of the time, place, and conditions of sale, as soon as these are arranged by the Board.

**SHORT-HORN BULLS.**

Mark on horn.

**YOUNG EBOR.**

Roan. Calved July 3rd, 1879. Bred by Mr. W. G. Garne, Broadmoor, Northleach, Gloucestershire. Sire Ebor 41499.

Dam Lady Like by Ranger 35203,  
 gr d Lady Day by Duke of York 23804,  
 g gr d Village Miss by Captain Cherry 31363,  
 g g gr d Village Girl by Sheriff 18822,  
 g g g gr d Bonhill Lassie by Booth 14180,  
 g g g g gr d Orphan by Lord Raglan 13246,  
 g g g g g gr d Maid of Aln 2nd by Crusade 7938,  
 g g g g g g gr d Maid of Aln by Regent 2517,  
 g g g g g g g gr d Edith by Borderer 3191,  
 g g g g g g g g gr d Eclipse by Eclipse 1949,  
 g g g g g g g g g gr d by Togston 5487,  
 g g g g g g g g g g gr d by Bolingbrook 3184,  
 g g g g g g g g g g g gr d by Son of Midas 435,  
 g g g g g g g g g g g g gr d by twin brother to Ben 660.

I hereby certify having sold the Short-Horn bull Young Ebor to Mr. John Thornton for exportation to Nova Scotia, that the bull and my herd are perfectly healthy, and that no disease exists in the neighbourhood.

WM. G. GARNE, Broadmoor.

I certify the above is correct. Nov. 11/80.

JOHN THORNTON.

Mark on horn.

**LORD RANDOLPH.**

Roan. Calved October 19th, 1879. Bred by Mr. W. G. Garne, Broadmoor, Gloucestershire. Sire Sir Robert Frogmore 40719.

Dam Ranunculus by Pinactical 38870,  
 gr d Red Lass by Marksman 26814,  
 g gr d Red Lass by Experience 23900,  
 g g gr d Red Lass by Experience 15977,  
 g g g gr d Red Rose by Napier 13368,  
 g g g g gr d Rosetta by Norval 9450,  
 g g g g g gr d Roseberry by Rob Roy 7434,  
 g g g g g g gr d Roseblossom by Gazer 7030.

I hereby certify having sold the Short-Horn bull Lord Randolph to Mr. John Thornton for exportation to Nova Scotia, that the bull and my herd are perfectly healthy, and that no disease exists in the neighbourhood.

WM. G. GARNE, Broadmoor.

I certify the above is correct. Nov. 11/80.

JOHN THORNTON.

Mark on horn. **LORD BRETT.** See vol. 26, p. 442, English Herd Book.

Red and white roan. Calved September 13th, 1879. Bred by Mr. W. G. Garne, Broadmoor, Northleach, Gloucestershire. Sire Sir Robert Frogmore 40719.

Dam Windsor Beauty by Lord Chief Justice 34507,  
 gr d Windsor Butterfly by Royal Butterfly 20th 25007,  
 g gr d Misdeeds by England's Glory 23889,  
 g g gr d Peggy by British Prince 14197,  
 g g g gr d Miss Folly by Prince Alfred 13494,  
 g g g g gr d Folly by Paris 7314,  
 g g g g g gr d Butterfly by Vanguard 5545,  
 g g g g g g gr d Ladybird by Robin Hood 4970,  
 g g g g g g g gr d Millicent by Anticipation 750,  
 g g g g g g g g gr d Folly by Emperor 1614,  
 g g g g g g g g g gr d by Young Windsor 669,  
 g g g g g g g g g g gr d by Windsor 693.

I hereby certify having sold the Short-Horn bull Lord Brett to Mr. John Thornton for exportation to Nova Scotia, that the bull and my herd are perfectly healthy, and that no disease exists in the neighbourhood.

WM. G. GARNE, Broadmoor.

I certify the above is correct. Nov. 11/80.

JOHN THORNTON.

Mark on horn.

**EARL OF SURREY.**

Red and little white. Calved April 10th, 1879. Bred by Capt. Moir, The Manor House, Colley, Reigate. Sire Fugleman 36670.

Dam Wild Eyes Gwynne by Baron Wild Eyes 19290,\*  
 gr d Rebecca Gwynne by Knight of Distington 18158,  
 g gr d Ruth Gwynne by Exquisite 14524,  
 g g gr d Young Dowager Gwynne by St. Thomas 10777,  
 g g g gr d Dowager Gwynne by Prime Minister 2456,  
 g g g g gr d White Moll Gwynne by Wallace 5686,  
 g g g g g gr d Dorothy Gwynne by Marnion 406,  
 g g g g g g gr d Daphne Gwynne by Merlin 430,  
 g g g g g g g gr d Nell Gwynne by Layton 366,  
 g g g g g g g g gr d Nell Gwynne by Phenomenon 491,  
 g g g g g g g g g gr d Mr. R. Colling's Princess by Favourite  
 . 252 &c.—See *Coulter's Herd Book*, vol. 1, p. 445.

I hereby certify having sold the Short-Horn bull Earl of Surrey to Mr. John Thornton for exportation to Nova Scotia, that the bull and my herd are perfectly healthy, and that no disease exists in the neighbourhood.

L. MOIR.

*The Manor House, Colley, Reigate,* }  
 9th November, 1880. }

I certify the above is correct. Nov. 11/80.

JOHN THORNTON.

\* Baron Wild Eyes is a son of Duke of Connaught, the highest priced bull in the world—4500 guineas.—[*Ed. J. A.*]

Mark on horn.

V

ROWLAND 43928, *English Herd Book.*

Roan. Calved September 18th, 1879. Bred by Col. R. Loyd Lindsay, Lockinge Park, Wantage, Berkshire. Sire Earl of Horton 11th 36588.\*

Dam Ronda by Rob Roy 29806,  
 gr d Rosetta by Costa 21487,  
 g gr d Rosette by Prince of Prussia 16752,  
 g g gr d Red Rose by Horatio 10335,  
 g g g gr d Maria by 3rd Duke of Northumberland 3647,  
 g g g g gr d Modesty by Velocipede 5552,  
 g g g g g gr d Urcus by Sir Thomas 2636,  
 g g g g g g gr d by Marske 418,  
 g g g g g g g gr d Laurastim by Comet 155,  
 g g g g g g g g gr d Luma by Tom 652,  
 g g g g g g g g g gr d Cleashy Lady by Favomite 1033,  
 g g g g g g g g g g gr d Lucinda by Hutton's Bull 323,  
 g g g g g g g g g g g gr d Lucy by Barningham 56.

I hereby certify having sold the Short Horn bull Rowland 43928 to Mr. John Thornton for exportation to Nova Scotia, that the bull and my herd are perfectly healthy, and that no disease exists in the neighbourhood.

For Col. R. Loyd Lindsay, V. C., M. P.,

CHAS. H. EADY.

I certify the above is correct. Nov. 11/80.

JOHN THORNTON.

Mark on horn.

VI

CABUL 42862, *English Herd Book.*

Roan. Calved November 14th, 1879. Bred by Col. R. Loyd Lindsay, Lockinge Park, Wantage, Berkshire. Sire Earl of Horton 11th 36588.\*

Dam Clotilda Rock by Lord Rockville 34658,  
 gr d Clotilda by Grand Duke of Kent 2nd 28759,  
 g gr d Chaff 13th by Second Earl of Walton 19672,  
 g g gr d Clarissa by Oxford Duke 18508,  
 g g g gr d Cecilia by Viceroy 13945,  
 g g g g gr d Chaff by Duke of Cornwall 5947,  
 g g g g g gr d Challenge by Morpeth 7254,  
 g g g g g g gr d Cleopatra by Helicon 2107,  
 g g g g g g g gr d Clarence by Henwood 2114,  
 g g g g g g g g gr d Minna by Nestor 452,  
 g g g g g g g g g gr d Minerva by Harold 291,  
 g g g g g g g g g g gr d Mary by Meteor 432,  
 g g g g g g g g g g g gr d Magdalena by Comet 155,  
 g g g g g g g g g g g g gr d by Cupid 177,

I hereby certify having sold the Short-Horn bull Cabul 42862 to Mr. John Thornton for exportation to Nova Scotia, that the bull and my herd are perfectly healthy, and that no disease exists in the neighbourhood.

For Col. R. Loyd Lindsay, V. C., M. P.,

CHAS. H. EADY.

I certify the above is correct. Nov. 11/80.

JOHN THORNTON.

\* Earl of Horton 11th is a Kirkleavington bull.

### SHORT-HORN COW.

Mark on horn. DUCHESS OF WARWICK 3rd. See vol. 23, p. 460, *English Herd Book.*

Red. Calved June 30th, 1876. Bred by Mr. W. G. Garne, Broadmoor, Northleach, Gloucestershire. Sire Grand Duke of Geneva 2nd 31288.

Dam Duchess of Warwick by Earl of Warwickshire 3rd 28524,  
 gr d Butterfly's Duchess by Royal Butterfly 20th 25007,  
 g gr d Delicacy by the Druid 20948,  
 g g gr d Destiny by Progression 18770,  
 g g g gr d Damsel by Enterprize 11443,  
 g g g g gr d Blonde by Patriot 10595,  
 g g g g g gr d Bracelet by Son of Elevator 6969,  
 g g g g g g gr d Blanche by No Mistake 8357,  
 g g g g g g g gr d Young Beauty by Young Consul 6893,  
 g g g g g g g g gr d Old Beauty by Fairfax 1023,  
 g g g g g g g g g gr d Beautiful by Speculation 1472.  
 Served in April, 1880, by Sir Robert Frammore 40719.

I hereby certify having sold the Short-Horn cow Duchess of Warwick 3rd to Mr. John Thornton for exportation to Nova Scotia, that the cow and my herd are perfectly healthy, and that no disease exists in the neighbourhood.

Wm. G. GARNE, Broadmoor.

I certify the above is correct. Nov. 11/80.

JOHN THORNTON.

### SHORT-HORN HEIFERS.

Mark on horn.

II

MERRY FACE. See vol. 25, p. 339.

Roan. Calved January 28th, 1878. Bred by Mr. H. Bettridge, East Hamney, Wantage. Sire Rockville 2nd 37356.

Dam Medora by Masterpiece 24561,  
 gr d Miss Peel by Cynric 19542,  
 g gr d Miss Ambler by Royal Oak 16870,  
 g g gr d Miss Mitford by Bashaw 12449,  
 g g g gr d Milford by Lord George 9314,  
 g g g g gr d Manager Rose by Manager 8271,  
 g g g g g gr d Young Rose by Raffle 7391,  
 g g g g g g gr d Rose 2nd by Gazer 7030,  
 g g g g g g g gr d Old Rose by a bull of Mr. Champion's, Blyth.  
 Served March 24th, 1880, by Burgundy 37926.

I hereby certify having sold the Short-Horn heifer Merry Face to Mr. John Thornton for exportation to Nova Scotia, that the heifer and my herd are perfectly healthy, and that no disease exists in the neighbourhood.

HENRY BETTRIDGE.

I certify the above is correct. Nov. 11/80.

JOHN THORNTON.

Mark on horn.

III

ROSELEAF. Vol. 25, p. 340, *English Herd Book.*

Red & little white. Calved February 20th, 1878. Bred by Mr. H. Bettridge, East Hamney, Wantage. Sire Rockville 2nd 37356.

Dam Rose of Poughley by Baron Booth 1st 27915,  
 gr d Redheart Rose by Artemus Ward 23326,  
 g gr d Rynil Rose by A 1 15538,  
 g g gr d Rosette by Royal 13636,  
 g g g gr d Ringlet by Lord George 9314,  
 g g g g gr d Rosebud by Fitzhardinge 8073,  
 g g g g g gr d Red Rose by Augustus 6751,  
 g g g g g g gr d Red Rose by Consul 1868,  
 g g g g g g g gr d Red Rose by Second Fairfax 8050,  
 g g g g g g g g gr d Old Red Rose from the stock of the late Mr. Champion.

Served March 24th, 1880, by Burgundy 37926.

I hereby certify having sold the Short-Horn heifer Roseleaf to Mr. John Thornton for exportation to Nova Scotia, that the heifer and my herd are perfectly healthy, and that no disease exists in the neighbourhood.

HENRY BETTRIDGE.

I certify the above is correct. Nov. 11/80.

JOHN THORNTON.

## ANTIGONISH EXHIBITION.

ADDRESS BY MR. C. C. GREGORY ON THE  
OPENING OF THE ANTIGONISH AGRICULTURAL  
EXHIBITION, 13TH  
OCTOBER, 1880.

*Gentlemen*,—We have met together for the pleasant purpose of exhibiting and viewing the agricultural products of our county.

It is hoped that this may be the inauguration of a long series of similar Annual Exhibitions, each one of which may excel its predecessor in the quality and variety of the exhibits and in the public interest manifested.

The number of farmers who can afford to attend the Provincial Exhibitions at Halifax, Truro or Kentville is comparatively small, and hence the advantage derivable from such exhibitions is slow to reach the great masses in the outlying districts. Every farmer, however, can attend his county exhibition at no greater expense than is usually involved in an ordinary holiday.

The productions seen at a Provincial Exhibition are apt to be looked upon as coming from some locality specially favored and adapted to them; but at a County Exhibition each farmer sees what has been accomplished by his neighbors, who have the same climate and the same advantages and difficulties as himself, and so he is more likely to make an effort to equal and excel them.

Were county exhibitions held annually by each county, and only one general exhibition for the Maritime Provinces held annually, by turns, in each of the Provinces of Nova Scotia, New Brunswick and Prince Edward Island, and arrangements made for the forwarding, at the public expense, the prize exhibits from each county show to the general exhibition at Halifax, St. John or Charlottetown, or wherever held, a great saving in money would be made, both to the public treasuries and to individuals; while, at the same time, the utility would be vastly increased, since, under such a system, every farmer would, at a minimum charge, virtually have a comparison of his own productions with those of his neighbors, and also with those of the whole of the Maritime Provinces.

To the farmer every occasion which brings him into communication with his fellow-farmer is of value and should be fostered and encouraged. His occupation is one that does not naturally lead to such intercourse, but is for the most part solitary. The effect of this isolation is seen in the small amount of influence wielded by the agricultural class as compared to its numbers. Every other profession, trade or calling has its societies or unions, by which combination is effected

and united action secured for defensive and often for aggressive purposes. Doctors have their Medical Societies, lawyers their Barristers' Societies, merchants their Boards of Trade and Chambers of Commerce, carpenters and masons have their respective societies, workingmen have their unions, and, however the members may wrangle among themselves, yet they unite as one man to advance the welfare and standing of their class and calling.

What steps do the farmers take to advance or maintain their position and welfare? It may be said, none whatever. And yet have they less stake in the country, or are they less interested than others in the great questions and contests of the day? Surely not. They possess the imperishable real estate of the country, and they therefore hold the most permanent interest in the country. In Great Britain and in most other countries of Europe and of the world which have stood the test of ages, the classes possessing this permanency of interest have special functions in the government of the country, which afford a safeguard against extravagant or reckless experiments in statesmanship, which the classes possessing less permanent interests might attempt in order to secure some temporary prosperity or avert some temporary evil, at the expense of future burden and injury, which would cling to the land and be a yoke upon all who possess it forever.

Although it appears to be contrary to the genius of the people and institutions of the continent of North America that the landed or permanent interests should have any distinct and exclusive functions in the government, yet it is surely open to them to fully avail themselves of the rights which they enjoy, in common with others, to do which they must do as other classes do, that is to meet and confer among themselves and decide how their interests are to be maintained and advanced, and how they are to be affected by any unusual proposition or emergency. No country is safe where the owners of the soil do not take the trouble to study and to understand how their interests are being dealt with, and hence every measure tending to bring the farmers of this country together and to foster an *esprit de corps* among them will not only benefit them and strengthen their position as a class, but will render more stable the society and institutions of the country. As things now are it is only the fact that the farmers are the originators of the wealth of the country and the indispensable foundation of the very existence of the community that has maintained for them even their present relative position.

Within a few years some societies called Grangers have been started among the farmers in the United States and in some parts of Canada. It is not yet certain,

however, that they have been productive of much good. They have, in most instances, perhaps, been too aggressive, and have wandered too far from the legitimate object of their association. A step, however, in the right direction will be taken by every farmer who becomes a member of an agricultural society. Every farmer in the country should be a member of some such society, and he should strive to be an active, working member. He should respect his society and himself as a member of it, and he should thoroughly appreciate that his calling is the most ancient and independent, and that there is none more honorable under the sun; that he it is who is the first receiver of the blessings sent by God upon the earth, and who distributes them to his fellow-creatures; that he and his fellow-farmers are directly or indirectly the source from which employment and the means of living for all other classes is derived. The meetings of the societies should be frequent, and subjects of interest to the farmer should be discussed in a friendly and intelligent manner, and experience and ideas interchanged. In this way much pleasure and benefit would be gained.

Next to the fertility of his land the most important matter to the farmer is his market. The larger this is the more uniform are the prices, and generally the better the returns, but a higher and more uniform quality in the goods is exacted. If farmers have only a home market and no foreign market, they are obliged to raise a great variety of products, the demand for each being so limited. But when one has his attention divided among too many things he excels in nothing, and countries and classes are in this respect like individuals. No one ever saw a man who was a jack of all trades get to be rich. And so with communities—the people of a county or a town will never attain to wealth or commercial standing as a body if they are dabbling in a little of everything and have no great staple production. Look at Great Britain. There we find one town noted for its cutlery, another for its cotton goods, another for its pottery, another for its woollens, and so on. And where there is this division and speciality of production uniformity is secured, so that the wares may be officially inspected and classified so as to be known, and quoted, and bought and sold in all the markets of the world by brand alone, for actual inspection of each lot by the purchaser is impossible in foreign trade.

No country has a fair position in the commercial business of the world until it is noted for some staple product which may be safely dealt in and transferred upon the faith of its brand alone. If, then, a country has the ambition to take its proper position, the first question to be

asked is, "For which one of the great staple productions required by the world is the soil and climate and its other circumstances specially adapted?" That question is seldom difficult to be answered. It appears to have been the design of Providence so to distribute its blessings that every clime and quarter of the globe should have special advantages for something, so that the mutual interchange thus rendered necessary should draw and knit together the whole human family. That question, applied to our own county, would receive the answer that the abundance of land, its great fertility and especial adaptation for meadow and pasture, the moist summer climate also favoring the meadows and pasturage, plainly point out that cattle and sheep and their products should be our contribution to the markets of the world. And the best proof that cattle and sheep raising and export is our proper industry lies in the fact that in times past this county built up for itself a flourishing trade in such exports to Newfoundland—a trade which has brought millions of dollars into the country, and is substantial evidence of the industry, resources and enterprise of the people. And very few places in the Dominion of Canada could be pointed out where the same number of people have been engaged in advancing the material prosperity of the country to the extent that the people of this county have in building up and maintaining this Newfoundland trade. Cape Breton and other ports have lately been following your example, and you now find that your Newfoundland market is too small for all—it is too liable to be overstocked. It is fortunate that just when our old market fails us a new and a better one is thrown open to us and to all who will send productions of a sufficiently high standard of quality.

The people of this county have only to seize their present and future opportunities, as they and their fathers seized those of the time past, in order to participate in the full benefit of this new trade and market—the export of cattle and sheep to Great Britain. It is not a trade that has been growing on for years, and one that required an effort beyond your powers to share in. But it is a new trade, a new opportunity, the possibility of which has just been discovered, and which is only now being opened.

Twenty years ago such a trade was an impossibility. Steamships then burned 7½ lbs. of coal for every horse power of their engines every hour. The consumption has been gradually lessened by improvements in their engines and propelling apparatus, and now instead of 7½ lbs. they only consume 2½, and some even less. The result is, that where 1,000 tons of coal were required 20 years ago,

300 tons will now suffice, allowing 700 tons more cargo to be carried, while the cost for fuel for the voyage is only one-third. This wonderful reduction in the cost of steam navigation has caused the Atlantic trade to be done by steamships instead of sailing vessels. These steamers, daily leaving American ports for England with cargo in the hold, but plenty of space on deck and between decks, gave opportunity for some enterprising party to send a few cattle to England as an experiment. The experiment succeeded, and at once a vigorous trade began to spring up, which, although still in its infancy, has been doubling or tripling itself in volume every year. It is destined to assume gigantic proportions, and will continue to increase until beef and mutton become, as they should be, the daily food of the working man in Great Britain, Ireland, France, and throughout Europe, and that at a cost only exceeding the cost in this country by the expense of carrying it across. Some idea of the rapid development which has taken place in this trade may be gained by the following figures:—

The export of cattle from the United States to Great Britain was—

In 1876 ...	244 animals.	\$ 31,210 value.
In 1877 ...	5,091 "	516,823 "
In 1878 ...	24,932 "	2,403,643 "

And the export from Canada to Great Britain was as follows:

	1877.	1878.	1879.
Cattle .	6,940 head.	18,655 head.	25,009 head.
Sheep .	5,509 "	41,250 "	80,372 "
Swine .	430 "	2,078 "	5,335 "

The cost of transportation of cattle across the Atlantic varies with the port, the season and the demand for space, but it may be said to range from \$15 to \$30 per head, and as 1,500 lbs. live weight is considered to be a fair shipping weight the charge would be from one to two cents per lb. live weight. The specification or standard generally required by English dealers is that every 200 lbs. live weight should make at least 55 lbs. of salable butchers' beef, the higher the breed of the animal the greater being the proportion of beef. For convenience of reckoning we will take the proportion of beef to the live weight as only one half, or 50 lbs. to the 100 lbs. Then this cost of transportation of one to two cents per lb. live weight amounts to from two to four cents per lb. for butchers' beef. And if we allow three cents per lb. more for commissions, insurance and profit, we have from five to seven cents as the difference of cost of beef upon a dinner table in England and upon a dinner table on this side. And so if it sells here at \$6.00 per cwt., or 6 cents per lb., it should cost there not more than 13 cents per lb.; or if it brings 21 cents, or 10½ pence sterling, per pound, a not unusual price, it

would pay the shippers to give 14 cents per lb., or \$14 per cwt., for it here.

The prices in England and in America near the Atlantic Coast must assimilate so as to leave no greater difference than this seven cents per lb. of beef or 3½ cents per lb. of live weight. Any greater difference would afford unwarrantable profit, to the middlemen. The assimilations will take place at a point between the two extremes instanced, and at such figures as, while giving it to the English consumer at much diminished cost, will allow a vast increase of price to be paid to the farmer on this side. There is a difference of at least eight cents per lb., to be shared between the consumer in England and the farmer here; and if we divide it equally between them it will bring the beef to \$10 per cwt., or 10 cents per lb. to the farmer on this side, and to 17 cents or 8½ pence sterling per lb. to the British consumer. But there can be very little doubt that for many years to come the farmer on this side who raises suitable animals will get more than half of the difference, for the demand on the other side will vastly increase at every cent of reduction in price, and it must be remembered that not only Great Britain requires to import, but France also, which now derives its foreign supply from Italy. And when the export from this continent assumes its proper and distinct proportions all Western Europe will vastly increase its consumption of animal food and will afford an unlimited market. At present the difficulty which those who are engaged in shipping cattle have to encounter is the scarcity of animals suitable for the English market. The ordinary breeds of the country are too rough and there is too much weight of waste in proportion to the weight of beef. Cattle require to have a considerable proportion of the Durham or Hereford or other choice heavy breeds in them in order to come up to the shipping standard proportion of 55 lbs. of beef to the 100 lbs. live weight.

The published reports of the state of the Montreal market on the 12th of August last show that while local butchers paid only from 3 to 3½ cents, shippers paid 5 cents per lb., live weight, for cattle suitable for shipping. So that an ox of 1,500 lbs. weight would only bring \$45 to \$52.50 if sold for use of the Montreal butchers, but if it were same weight, but of breed fit for shipping, it would bring \$75—being an increase of \$22.50 or \$30 on one animal. And the prices quoted for the Chicago market at the same date were:—

	Live weight.
Export cattle, in demand at.....	\$4.00 to \$5.00
Butcher's cattle dull, at.....	\$2.20 to \$3.30

The higher prices obtained for cattle suitable for shipping has caused a great demand, even in the Western States, for

thoroughbred stock from which to obtain suitable stock for shipping. At a sale last Spring of thoroughbred short-horns, in Chicago, 43 animals of the Cochrane and Cannon herds, from Canada, brought \$38,525—32 cows averaging \$995 each, and 11 bulls \$622 each.

If the farmers in Ontario and the Western States are so eager to improve their stock and to engage in this trade, notwithstanding that they have heavy expenses to meet in conveying their animals by railway to the point of shipment, how much more earnest should the farmers of the Maritime Provinces, who are right at the seaboard, be to begin at once to improve their stock and to engage in the trade. And what applies in this respect to the Maritime Provinces generally, applies more especially to this county. We have every advantage and adaptation for raising the cattle and for shipping them without expense for land carriage. This county is destined to take an active part in this trade. It is for us to decide whether it will be twenty years hence or seven years hence. This is a favorable time to begin in earnest. The success of the wheat crop must annually save thousands of dollars which used to go out of the country to purchase flour. One tenth of the amount thus saved in flour if invested in improving the cattle would in seven years bring the stock of the county up to as high a standard as that of any county in the Dominion. In other counties where, through the agricultural societies, the improved stock has become numerous, companies are being formed and shipments made.

The question may be asked, "How can the farmer who is without surplus means so rapidly improve his stock?" The reply is, "Through the agricultural societies." If he is not already a member, he should become one at once, and he will then have the benefit of the combined capital contributed by the members and from the Provincial Treasury. Annual county exhibitions under the auspices of the agricultural societies will be the surest means of stimulating and making general the improvement necessary. I believe that a prosperous future is opening for the agricultural interests of the Maritime Provinces, and that if we go to work at once and in earnest, ten years from now cattle and sheep will be sent from this county and shipped at Pictou and the strait of Canso, and perhaps from Bayfield, for England in as great numbers as they are sent to Newfoundland, and that the time will be hastened or delayed according to the interest or apathy attending the agricultural societies and the county exhibitions.

I heartily thank you for your kind patience, and I can only wish that some one better qualified had had the honor of addressing you.

#### THE KENTVILLE PROVINCIAL EXHIBITION FROM A NEW BRUNSWICK POINT OF VIEW.

(From the Maritime Farmer.)

#### TO THE NOVA SCOTIA EXHIBITION, AND RETURN.

On Saturday, 23rd ult., in company with our friend John Slipp, Esq., of Upper Hampstead, Queen's county, we took passage on board the fine steamer "David Weston," of the Union Line, commanded by the gentleman whose name the vessel bears, and who, for 32 years, has been sailing as master of some one of the many steamers that have sailed our beautiful river St. John. The "Weston" is a general favorite with the travelling public, and the careful attention given by the officers of the boat to their several duties gives a feeling of security so much enjoyed by all who travel either for pleasure or business. We were not long in losing sight of our homes and familiar scenes as we softly sped on our trip to the city of St. John. Island after island was passed, frequent calls were made at the different landings to take in passengers or land them: Leaving Oak Point, we enter the beautiful stretch of water known as Long Reach, where, for a distance of 18 miles the vessel need not alter her course to make the necessary landings. Sailing through this magnificent stretch of water, and reaching the mouth of Nerepis, our course is changed easterly, and soon we reach the Grand Bay, a beautiful expanse of water, on which we notice a number of sailing vessels of a variety of descriptions, some laden with lumber going to St. John, others with cordwood for the same port, while pleasure yachts and small boats with their fine lines and snow-white sails give to the picture a particular beauty.

Passing Boar's Head, a well-known bluff at the junction of the Kennebecasis waters with the St. John, we soon enter the Narrows, and, turning sharply to the left, Indiantown opens in full view, and soon we are landed at the wharf, where all is bustle and stir. Indiantown is nicely situated just above the falls of the river, and, for six months of the year does a large business with the farming population residing in the valley of the St. John and the Grand Lake. Its business men enjoy largely the confidence of the people, and the trade is carried on extensively by the farmers consigning their goods to the merchants, and sending orders for what they may need to purchase. We are quickly transported to the city, where we enjoyed the hospitality of friends till Monday morning, when we embarked on board the steamer "Empress" for Annapolis. This steamer

has been on the route between St. John and Annapolis for some years, and has given very general satisfaction. Swinging off from the wharf at the same time with the steamer "Falmouth," which runs to Boston, the steamers ran out of the harbor side by side, and, when opposite the Beacon light, saluted it with three sharp whistles, and were answered from the Beacon with three strokes of the Beacon bell. Similar salutes were given and received from the Partridge Island Light-house as we passed. Steaming out in the Bay of Fundy, we took a parting look at the city, which, in the light of the early morning shining on the city and gilding the numerous spires of which St. John can boast, made a pleasing effect, while the Exhibition Building was fairly ablaze with the sunshine on its walls and dome of glass. Our trip across the Bay was quickly made, and, entering Digby Gut, we soon sighted the beautiful village of Digby, where we called to land and receive passengers.

About fifty passengers came on board here, all bound for the Provincial Exhibition at Kentville. Leaving Digby in the distance, we soon reached Annapolis, which is nicely situated at the head of steam navigation on the Annapolis River. It has some three churches, and possesses good hotel accommodation. This is the terminus of the Windsor and Annapolis Railway, which runs its carriages down to the wharf when the steamer lands, and passengers have only to step up the floats to enter the cars, while the baggage is quickly transportee to the baggage car, where it receives about as rough a handling as one could reasonably desire.

Directly opposite Annapolis is the village of Granville, which can boast an equal number of churches with Annapolis.

Leaving Annapolis by the Windsor and Annapolis Railway we reach Bridgetown, the head of navigation for sailing vessels of moderate tonnage. Passing along we begin to note the extent of this beautiful valley, situated between the North and South Mountains, running in an easterly and westerly direction. The valley of the Annapolis is from 6 to 12 miles in width, and is perfectly sheltered from the cold north winds by the North Mountain, which rises to an elevation of 460 to 540 feet above the level of the sea, but, as we refer to this again, we will pass on. Paradise Station and Lawrence town are passed, and Middleton is reached. Wilmot and Kingston are only a little farther on, and as we have friends living here who were formerly of New Brunswick, the temptation to call and see them is very strong. Learning from the conductor that a train will leave Annapolis early next morning for Kentville, arriving there at 11 A.M., we at

once decide to step off at Kingston, and have the good fortune to be just in time to take the mail conveyance for Malvern Square, where our friend, Samuel Tilley, formerly of Sheffield, on the St. John, resides. We reach his residence and receive an old-fashioned welcome which carries us back to other days. A call on friend Phinney, who is well known to many of our readers as a skilful orchardist and fruit grower, where we take our tea and get additional hints on the culture of the apple and pear. We are told, on leaving, that if we rise early a rich treat will be in store for us. So with thoughts of the bright to-morrow we return to our lodging place at Malvern Square. A pleasant chat before we retire, and a refreshing sleep during the night, and we awake at early dawn, and from our window note that our friend of the previous evening has proved true to his promise, and a horse and buggy await our movements. Soon we are off for the mountains, some two miles distant, to catch a view of the surrounding country. With three in the carriage we do not make a very rapid ascent, and, as the morning is just a little foggy, some misgivings are heard as to the success that awaits us. Our worst fears are soon realized, for the fog, which seemed to hang heavily over us, has quickly settled down on the top of the mountain, and when we reach its summit we find the view entirely shut out from us. However we are out for sight seeing, and friend Phinney is not to be easily foiled, so we retrace our steps down the mountain road, but, before reaching its base, turn sharply to the right, taking the road which passes through what is known as the Vault. This is a break in the mountain range, and might very properly be called a pass through the mountain, which, before the days of railroads, was very much needed as a highway by which the productions of the fruitful valley could reach the sea board over a short route. A brief examination of this peculiar spot, and our horse's head is turned homeward, and, after a drive through the extensive orchard farms which are here to be found, we reach our lodging place with a splendid appetite for our morning meal. Breakfast over, we visit, by invitation, the organ factory of Gates Bros, where, in addition to the manufacture of organs, apple barrels are made by machinery. A saw mill in connection with the establishment cuts lumber for the farmers in the vicinity, while a thresher, run by steam, threshes their grain, and a grist mill, run by the same power, will grind it into flour for them.

Malvern Square occupies a district of about four and a-half square miles, and in this district the estimated yield of

apples this year is over 4,000 barrels. Reaching the station in time, we take the train, and are again on our way to Kentville, where we arrive at 11 A.M., and at once start for the Exhibition Building supplied with letters of introduction to the President and Secretary of the Provincial Board of Agriculture, as well as to the President of the Fruit Growers' Association. We received a hearty welcome, and at once felt at home among our brother farmers of the sister Province.

#### THE EXHIBITION.

The building, which, although quite plain in appearance as compared with either that of St. John or Fredericton, is not without architectural beauty. From the numerous flag-staffs float flags of every device and color, giving the building a gay appearance. As this is the first day of the opening, the building is not crowded, and we take the opportunity of making an examination of the exhibit which is spread out upon the tables. Entering by the front entrance, the first thing that catches our eye is the immense display of fruit; fruit to the right of us, fruit to the left of us, fruit in front of us, appeared in such profusion that the impression was at once made upon us that we were in fruit land for sure. Apples, ripe, large and luscious, of almost every known variety in winter and autumn fruit, are here. To name all would occupy much space. We were prepared to see a fine display, but were agreeably pleased to find that our most extravagant ideas were more than realized, and we have yet to learn that it can be excelled by any country under the sun. In pears a fine show was also made, consisting of Bartlets, Sheldons, Beurré Diel, Duchess d'Angouleme, Great Britain, Vicar of Wakefield, Clapp's Favorite, and Beurre d'Anjou. No difficulty has as yet been experienced in growing these varieties, the trees being free from blight, and ripening their fruit in good season.

A magnificent display of grapes grown in the open air was also shown, consisting of the following varieties: Black Prince, Black Cluster, Black Hamburg, Hartford Pr. Jilic, Canterbury, Champion, Delaware, Victoria, Isabella, White Sweet Water, Royal Muscadine, Diana and Salem. The majority of the grapes shown were grown by William Sutton, Church St., Cornwallis, who grows on an average 1000 lbs. per year, all in the open air.

The show of plums was also good, some eight varieties being shown. In peaches one exhibit was shown which was very fine.

The show of vegetables was good, but quite limited; that of wheat extensive and good. Winter rye, of which there

are large quantities grown, was also good and largely represented. Oats, barley and buckwheat of good quality were also exhibited. Fully one-half the wheat on exhibition was the winter variety, which does well and is cultivated to a considerable extent. In domestic manufactures many good samples were shown. This is particularly true of woollen mats and counterpanes, which were to be seen in great variety. The exhibition of dairy produce was very good.

Our Nova Scotia friends still adhere to the old custom of not allowing an exhibitor to place his name upon the article he exhibits. This entirely prevents visitors from learning who the producers of the article are that they may be examining, and robs them of much of the interest and pleasure that otherwise would be afforded them. In consequence of this it is quite out of our power to refer to any particular specimen or article on exhibition.

We think that visitors very generally regretted not being able to learn something about the producers and manufacturers of the articles on exhibition, and we most sincerely hope that in the future, should we have an opportunity to again visit a Nova Scotia Provincial Exhibition, we shall see the names of the exhibitors on each article.

It is quite impossible to witness the display made in the building without being favourably impressed with the agricultural capabilities of our sister Province, nor would the skill and taste of her fair daughters be for one moment questioned by those who had the pleasure of examining their handiwork, whether in quilts of beautiful workmanship, or hearth-rugs, which were marvels of taste and beauty of design; articles so indispensable to the comforts of any household. Nor were their labours confined to these departments in household economy alone, but also in the thousand and one things that the fancy of woman could suggest and skilled fingers create, and that go so far towards making the comforts and pleasures of home life enjoyable.

The view of the surrounding country, to be had from the tower of the building, is exceedingly fine, taking in, as it does, the villages of Canard and Canning to the eastward, as also the comfortable homesteads to be seen on Canard and Church streets, in the same direction. The beautiful village of Kentville in the valley below, nestling as it were among the hills by which it is partially surrounded, and the farm-houses to the west; add to this scenery the magnificent orchards, that occupy a large portion of every homestead, and the picture is one of rare loveliness and beauty, and is sug-

gestive of the comforts that the dwellers in this beautiful valley possess.

Descending from this favourable outlook we pass out into the Cattle Yard, and take a turn among the Short Horns, where can be found many good specimens of this favourite breed. We are sorry that the names of the breeders cannot be given by us, for which the system of not allowing exhibitors' names to appear upon productions is wholly responsible. The best we can do is to say that the exhibit in bulls over three years, of this class, were very fine animals, as were also two heifer calves, the other animals of this class being of fair form and in moderate condition. The Ayrshire cattle were a fine show and probably ahead of anything we have in New Brunswick. A herd exhibited, as we afterwards learned, by Col. Starratt, of Annapolis Co., was awarded the first prize, while the honours were pretty equally divided when the animals were shown in their respective classes. It would give us much pleasure to give the names of the other breeders who exhibited in this class, if we could.

All Devons, Jerseys and Herefords the show was small. This, however, cannot be said of the crosses and grades, which were numerous and fine, the show of oxen and steers particularly so. Five pairs of oxen were shown, two pairs of which were very handsome, and girted respectively 8 feet each for three, while the fourth girted one inch and a-quarter less.

Grade cattle were well represented in every department of its class.

Horses fair, and we were told an improvement over other years. The poorest display made in this class was probably in the draft teams, only three were shown, and two of them very inferior.

We were a little disappointed in the sheep department, as it was not nearly so good as we expected to find it. South Downs were in the majority, while the Leicesters, the favourite breed in New Brunswick, was meagerly represented. Some few specimens of other breeds were shown.

The exhibit of swine was good, and it is quite evident that much attention has been paid to this branch of agricultural economy.

Crossing the grounds, and to the east of the building, runs a long shed, under which the agricultural implements are placed, and thither we turn our steps. Here are mowing machines manufactured by McFarlane, Thompson & Anderson, of Fredericton, N. B., and by Cassitt Bros., of Brockville, Ont., who also exhibit through their agents, Van Meter & Co., the only reaper on the grounds, as also ploughs, harrows, horse hay rakes, fanning mills, and other implements for

which this manufactory is noted. Mr. Van Meter, who was on the grounds, makes a very creditable display. Hand hay rakes, hay forks potato hoes and forks, are exhibited, of good workmanship and manufactured in the Province, as are also quite an extensive variety of ploughs that are to be seen. An endless chain horse power, and thresher and cleaner combined, manufactured in the United States, was on exhibition. Some very fine carriages and sleighs were also shown. About the newest thing we saw, in the inventive genius displayed, was in connection with the carriage business,—Dunn & Jones' Patent Anti-friction Hub and Axle. These gentlemen live at Bear River, N. S., and, from what we saw of the patent, we should judge it must come into very general use. It consists in a circle of rollers about three quarters of an inch in diameter placed in each end of the hub, so that the inner side of the circle will fit the axle closely, while the outer circle will just fit the pipe in the hub, or the hub itself, as is the case in the carriage to which we saw it applied, which had just been driven 150 miles without oil of any kind, showing no signs of wear, and running easily and smoothly. By this invention it is claimed that when applied to heavy truck wagons, the same force will draw 25 per cent. more than with the best patent axle heretofore made. As this is a matter in which our New Brunswick carriage makers, as well as the people, are interested, I have the promise of the gentleman who has the matter in charge that he will send a wheel and axle to which the patent has been applied to the St. John Exhibition.

Taken as a whole, the Exhibition is pronounced an improvement over previous ones, which must be very gratifying to its promoters.

Through the kindness of Dr. Hamilton, President of the Fruit Growers' Association, we were able to visit the delightful country lying east of Kentville as far as Canard, Canning, and the termination of Church and Canard streets, which reach down to the waters of Minas Basin.

Looking out upon the surface of this beautiful Basin, whose waters lay basking in the sunbeams of this lovely September morning, a true index probably of the happy contentment enjoyed by the inhabitants who dwell within view of its historic waves, we catch a far away glimpse of Colchester and Cumberland counties, and Cape Blomidon.

How swiftly memory recalls all the associations with which Longfellow's "Evangeline" has connected this charmed land, and we can hardly realize that we are so near the spot where "In the Acadian land, on the shores of the Basin of Minas, distant, secluded,

still, the distant village of Grand Pré lay in this fruitful valley."

#### THE HOME OF EVANGELINE.

The Doctor kindly points out to us the chapel at Grand Pré, which can easily be seen, and which is only a short distance from the site of the old chapel erected by the French in the early settlement of the country, and so graphically described by the poet. The extensive dyke marshes that are here to be seen give the county a fine appearance. But we must stay our pen. Returning to Kentville we bid adieu to the many kind friends who so assiduously cared for our pleasure and comfort, whose attention we shall not soon forget, and to whom we now tender our warmest thanks.

The run home was quickly made over the Windsor and Annapolis Railway, by steamer "Empress" to St. John, and by steamer "Weston" to our place of starting. The trip will have many pleasant recollections for us.

#### FARMERS' MEETING IN BADDECK.

In accordance with the usual practice, a Farmers' meeting was held in Mr. Hart's Public Hall, Baddeck, in connection with the Cape Breton Exhibition. Col. Laurie presided, and, by request, led off the discussion by a short address on the best rotation of crops and the places in the rotation where manure should be applied. He stated that in his earlier farming days in Nova Scotia he was advised on all sides to get his land into hay as soon as possible and keep it under hay. He had given the system a fair trial, and found that it did not work well. His experience was that hay upland would not maintain itself, the manure made from the crop of hay not being sufficient to keep the farm in fertility. He was thus driven, in order to keep his farm in good heart, to adopt a rotation. He believed in breaking up the low land for oats, following with a heavy manuring for roots, thus enriching the land by thoroughly mixing the manure with the soil and sprouting and killing the weed seeds so plentifully found in all manure, thus leaving the ground thoroughly clear and pulverized for the wheat or barley, and to take the grass seed which would then yield a good grass crop for three years. He believed that manure ploughed under in this manner would give the best crops, which if put on as top-dressing he did not obtain more than four crops of grass, and he did not calculate that one good top-dressing on grass land would bring more than five tons of hay before the land would again require treatment, either pure top dressing or ploughing up. Taking the fair

rental of a stocked farm at \$5 per acre and the valuation of the manure at \$1 per load, he found that in the case of putting on the manure by top dressing his outlay and returns in four years would be :

Land, 4 years at \$5.....	\$20
Manure, 50 loads at \$1.....	50
	<hr/>
	\$70
Hay, 5 tons at \$10.....	\$50
Balance loss.....	20
	<hr/>
	\$70

Or an annual loss of \$5 per acre.

Taking the outlay and yield under the rotation he proposed, balancing the straw against the cost of cultivation and harvesting :

Land 6 years at \$5.....	\$ 30
Manure, 50 loads at \$1.....	50
Cost hoeing roots, 3 men, 3 horses, hoeing.....	10
Bal. profit.....	75
	<hr/>
	\$165

Oats, 40 bushels, at 50c.....	\$ 20
Roots, say turnips, 700 bushels, at 10c.....	70
Barley or wheat.....	30
Hay, 4½ tons, at \$10 per ton.....	45
	<hr/>
	\$165

Or an annual profit per acre of \$12.50.

This excludes many minor outlays and value on both sides, but these will, roughly speaking, balance each other. This further enables the necessary quantity of manure to be raised to maintain and even increase fertility and admits of a much larger quantity of hay being raised on the farm and of a much higher and therefore more marketable quality.

Hon. D. McCurdy fully believed in rotation as opposed to simple hay growing, but enquired how it could be explained that the manure put under the soil would give so much larger returns than manure used as top dressing.

Col. Laurie, in reply, stated this must be accounted for largely by the surface manure evaporating much of its ammonia and also by the rain washing off the land rather than into it.

Mr. Hart gave his opinion that by ploughing in manure with the grain, afterwards top-dressing the young grass all on well drained land, he had been able to maintain his grass land, cutting from two and a half to three tons to the acre for ten or twelve years.

A general discussion took place on the best way of saving manure, most of the farmers present stating they could not obtain manure enough to put one-sixth of their arable land under manure, and the advantages of growing soiling crops such as red clover, and Southern corn, and feeding under cover and bedding animals on substances such as clay, spent tan bark, or sawdust were much dwelt upon.

Mr. John Ross raised the question whether farming on such a scale could be justified by the returns obtained, whether it indeed paid to put capital into farming,

whilst Mr. McGilvray wished to know, as a subject of more general interest, how the farmer without capital could make farming pay.

To the latter enquiry the answer was given that the man, starting entirely without capital, could at best only expect to make a living, and that he was certainly in a more independent position as a farmer on his own land than as a labourer working for others, and that, although he might not obtain large cash returns, by the improvement of his land he was gradually acquiring capital; while to Mr. Ross's questions, as to whether the returns of farming justified the investment of capital the only answer could be—that we were nearer markets, and could obtain the English prices for our goods; that we could raise as much to the acre as other places; and that land and labor were as cheap as elsewhere. Hence, the cost of producing was no greater, and the produce fetched as good a price. So, if farming paid elsewhere, it must do so here, if properly carried on.

The increase of value, also, of a well-worked farm was also a matter to be remembered.

Sheriff Dunlop said farming suffered largely from the want of steady industry on the part of its votaries. He compared the ploughman rising at four o'clock in Scotland, and doing a solid day's work the year round, with the easy-going way in which our farmers laid hold of their work; insisted on it that a rotation was necessary: that deep ploughing must come into fashion; that if a man wanted to get work done he must do it—it would not do itself. He also dealt at length on the advantages of draining.

By request of Colonel Laurie, Professor Lawson then addressed the meeting on the various subjects that had come up in the discussion. He explained that it was not from the manure that the plant obtained its food, but from the soil when the manure became incorporated with it. Hence the superior results obtained by mixing the manure with the soil instead of applying it on top. He gave as his experience that, especially in first laying down the land, it paid well to take two successive root crops off the land, manuring each, and that the land would then stand much longer, as it would be so thoroughly mixed up and enriched. In considering the question of farming paying as an investment of capital, he should say that in bringing a farm into order it must be looked on for a time as an absorbent of capital eating up the profits, but in so doing increasing its value, and if preserved in, its productiveness. He then answered questions on subjects pertaining to agricultural chemistry, and replied at length, giving much valuable information. On the application of lime he warned the

farmers against leaving it in heaps, and letting it re-absorb the carbonic acid gas from the air, by so acting its utility would be entirely destroyed. Top-dressed on land it was of little value. To be serviceable it should be mixed and thoroughly incorporated with the land as soon as slacked.

After a vote of thanks to the Chairman and to Professor Lawson the meeting adjourned about 10.45, with a general feeling that such meetings should be held oftener and are productive of great good.

PROF. SHELDON'S IMPRESSIONS OF NOVA SCOTIA.

In accordance with a wish expressed by His Excellency, the Marquis of Lorne, Professor Sheldon, who has been on a tour of agricultural observation through Canada and the United States, visited "the Dyke Lands of Nova Scotia,"—and reports as follows in the London *Live Stock Journal*,—for which we are indebted to Mr. James W. Stairs :—

The dyke lands of Nova Scotia are found in the Annapolis valley, along the banks of the tidal rivers, and on the shores of the inlets of the Bay of Fundy. As the name suggests, they are dyked in from the sea, from which they have been from time to time reclaimed. In many cases marsh grass is cut from saline swamps, which have not yet been dyked, and over which the high tides, for which the Bay of Fundy is noted, still continue to flow. The grass is made into hay in the best way possible under the circumstances—on the ridges of higher land, on platforms, etc.—and is stacked on a framework which is raised several feet above the land, supported on piles; and it is a curious sight to see the water flowing under stacks and in and about the piles when the tide is at its height. In one case I counted, near to the town of Annapolis, upwards of 140 of these stacks each of them containing a ton or so of hay. They are put up in this manner hurriedly, and are fetched into the farm yards in winter as they are wanted, to use along with ordinary hay, with straw and with roots, to which they are found to form a tolerable though coarse addition. But the dyke lands proper are so fenced in from the water by a strong bank of earth thrown up some six or eight feet high, with a broad and substantial base, that the land within them is firm and solid, of excellent quality, and covered with a thick sward of coarse, though vigorous and nutritive grass. The fertility of these reclaimed soils is unusually high; they are never manured, but they cut on average upwards of two tons of hay to the acre—a yield which has been sustained for many years, and shows no



Signs of running out. The land, however, under this system of farming is found to become weedy in the course of time, and it becomes expedient to plough up portions of it in rotation, at intervals of ten or twelve years, taking one crop of wheat or oats, with which new grass seeds are sown, to form the new sward which is desired. This once ploughing is found to kill the weeds for the time being, and they do not again become troublesome for some years, and when at length they do, the land is simply ploughed up again in the way described. These bottom lands are valuable acquisitions to the upland farms adjoining, most of which have more or less of them attached; and they do much towards maintaining the fertility of the uplands, obviating the necessity of using purchased fertilizers on them. These land dykes are in much request on this account, and they are worth from one to three hundred dollars an acre, in a country where ordinary upland farms are not worth as many shillings an acre. The portions of these dyke lands owned by different men are marked out for identity's sake, but are not fenced off from the rest. Each man cuts off the hay from his portion and takes it home, sometimes several miles, and the aftermath is eaten in common by the stock of all the owners combined, commencing on the first of September. A few days before this date a committee of assessors is appointed to place a value on each man's portion of the land and to decide on the number and kind of animals he shall send for pasturage. So it follows that we see very large tracts of land, on which hundreds of cattle roam about and feed at will. . . . The geographical position of these Maritime Provinces gives them a strong claim on the notice of old country farmers, who see the need of fresh fields and pastures new; comparative nearness to Britain, with regular and uninterrupted communication all the year round, offers a strong inducement for English settlers to come here, and the new trade in cattle and sheep which is rapidly growing up between the new and old countries, is sure to make farming in these Provinces a profitable business to those who have the will and the judgment to lay themselves out to produce live stock of the quality which will find favour in England.

A. M. HEMMON, at the Queen's County Exhibition, said that at Agricultural Exhibitions he had long believed that "blessed was the man who made short speeches," but that he could not do less than say he was delighted with the Exhibition now being held, —that the Fruit would compare favorably with that of any other section of the Province, and as for vegetables and

cereals he had seldom seen anything better, even at Provincial Exhibitions—plainly showing that in soil and intelligent farmers to cultivate the same, we stood second to none. He considered that when we compared our fruitful lands; healthy, temperate climate, and peaceful mode of living, with other countries where devastating wars were waged, floods overwhelmed, or dire disease decimated the inhabitants by thousands, we could not but conclude that we dwelt on one of the most favored spots of God's fair earth.

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No. 10, GRANVILLE STREET,  
HALIFAX, NOVA SCOTIA.

TERMS OF SUBSCRIPTION:

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