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

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

VOL. IV.

HALIFAX, N. S., DECEMBER, 1884.

No. 52.

SPECIAL NOTICE TO SECRETARIES OF AGRICULTURAL SOCIETIES.

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

The Hon. Isidore LeBlanc, M. E. C., has been appointed Government Member of the Central Board of Agriculture.

An article suggesting a new departure in Horse Breeding in Nova Scotia, and several others, are excluded this month from want of room, but will appear in our next number, which will be issued early in January.

A list of the Annual Returns received from Agricultural Societies for 1884, will be printed in the January number. Should any Society not find its Returns acknowledged, the Officers had better make enquiry at the Post Office as to what has become of them, and simultaneously communicate with the Member of the Board for the District, so that the Society may not suddenly lose its grant by default.

COMPLETE detailed Lists of the Prizes awarded at the District Exhibitions held in 1884, in Districts Nos. 3 and 5, viz. Yarmouth and New Glasgow, have come

to hand, and are now ready for the Queen's Printer. The Prize Lists of the other Districts have not been received as yet. The officer of the several Committees have been applied to for them, and we hope they will not be delayed. These Prize Lists, with Committees' Reports and Abstracts of Accounts, are required to be printed in the Journals of the House of Assembly for information of the Legislature.

A new method for the extraction of Gold from quartz has been invented that is not unlikely to prove especially applicable to Nova Scotian quartz. Instead of stamping in water, the ore is ground fine and then mercury is forced through the dry powder. If the promises of this process are realized, it will greatly reduce the expense of extraction, and enable miners on a small scale either to grind their own ores by a very simple apparatus, or send them to a large mill where they can be sold by sample as soon as ground, as is done with the Silver ores in Colorado.

The following is from the North Sydney Herald:—

"We hope our Agricultural Societies will take steps at once towards securing the Provincial Exhibition for North We will have the necessary building and hotel accomodation in North Sydney, and will be able to supplement the Central Board's grant of \$4,000 to such an extent that we believe we can hold next year's Provincial Exhibition here with credit to ourselves and the Island of Cape Broton, and satisfaction to the whole Province. What is now required is a combined and determined effort on the part of all the Agricultural Societies on the Island, and we will have the Provincial Exhibition held in North Sydney maxt fall."

C. E. Brown, Esq., Yarmouth, has several seeding Strawberries of 1884, which will fruit next season. One of them is of wonderful size and vigour of plant, sending out large runners, and a mass of roots, different from any sort seen before. It is named Draffan.

THE capabilities of Nova Scotia as an agricultural country is not a theme of yesterday. From times prior to its English occupation up to the delivery of Prof. Sheldon's address to the English farmers in November, 1884, its soils and climate have been heralded to the world as presenting a most promising field for agricultural industry.

In Charlevoix's History of New France. published in Paris before the middle of last century, it is stated that "There is not a country in the world of its extent that more abundantly produceth all the conveniences of life." "Near the harbor of La Haive one single grain of wheat produced 150 pretty long ears of corn, and each of them so loaded with grain that they were forced to enclose all the ears in a ring of iron, and support them by a pole; and that near the same place there was a field of wheat where every grain of the seed, even those that produced the least, put forth eight stalks, every one of which had an ear of at least half a foot long."

The promises given by the results obtained by the early farming of the French peasants; by the eloquent proclamations of the promoters of the country's settlement in the middle of last century; by the stirring appeals of John Young, in the classic letters of Agricola; and by the annual addresses of Lieutenant Governors, English Admirals and Generals, Provincial Secretaries, Members of our Legislature, Mayors of Halifax, and manylminor dignitaries, at the annual exhibitions of the last twenty years; all these promises are full of encouragement, - and yet we are still in a plight that is not creditable to the people, ruled or rulers of the country. The cultivated land bears but a meagre proportion to the profitless woods and wastes, and the annual amount of actual produce falls immeasurably short of the potentiality of teeming agricultural wealth with which all believe our Province to be naturally endowed. kind of crops for which our country is adapted have been again and again discussed; the methods of culture best suiteu to our soils and climate have received the attention of thousands of practical mer, and have been commented upon by careful students of agricultural science; the preparation of composts has been an experimental and theoretical study for more than half a century; the application of marsh rund has been a constant practice engaged in by intelligent cultivaters for a period much larger; every likely kind of live stock has been imported and placed on trial on our farms; even agricultural classes have been formed in some of our schools and colleges, and young farmers have analized soils and manures and feeding materials; practical farmers of mature age and experience have, year after year, in the exhibition hall and prize ring, on the trotting course, in the farmers' club, and at the grange pienic, met to compare their live stock and the produce of their farm fields, and of their own fertile brains: to discuss the effects of drainage, and of almost every kind of land improvement, of stock crossing, of butter and cheese making, of packing apple barrels, and methods of marketing the varied fruits of the soil;—and yet Nova Scotia is still, over large areas, an unproductive country in the agricultural sense.

We do not stop to inquire now what are the causes of this deplorable result. Such an enquiry might even lead to issues that cannot be discussed in the JOURNAL OF AGRICULTURE. But we hope at least to speak of some of them before long.

The question of far greater importance, of immediate importance, as being of practical utility, is: What new leaf has to be turned over to secure a more profitable result?

The answer to this question does not admit of question. We must revert to the commercial principle as the basis of all agricultural improvement.

It is needless to show that drainage, perfect cultivation, superphosphates, composts, guano, nitrate of soda, ammonia salts, mowing machines, tedders, horse forks, combined reapers and binders, steam threshers, pedigree wheat, smut killers, and eternal vigilance, will increase the grain crop,—if grain will not pay its way.

Ensilage may be better than had or roots or grain, or any other feed, but what is the use of ensilage. It cannot be sold at a profit in some maketable form?

Potash may yield a larger increase of potatoes, and improve their quality very much, but why use potash saits if potatoes at 20 cents a bushel will not pay for the potash?

Brewers' grains, mangels, and mill feed will promote the flow of milk, but if the butter and cheese cost more to produce than they can be sold for, why buy brewers' grains and mill feed, or grow mangels?

Oil cake will fatten oxen, but if the butcher will not pay enough to meet the oil-cake merchant's pill, why should the farmer be expected to feed oil cake? It is no doubt wrong not to fatten the ox, but, then, when the alternative presents itself of starving the farmer's wife and children (not to speak of himself), the dilemma is apt to crumple the judgment of even a sound scientific agraculturist.

The question that is now really pre- Umberslade, in England, sold 90 head sented to our Nova Scotian agriculturists of good stores by weight at public auc-

is—What produce can we market at a proper?

To answer this question we require the combined experience of all the agriculturists of the Province. If they all sin cerely desire that the question should be answered, they will, of course, every one of them, send us a memo, of the results of their experience.

What crops should be grown, what kind of cattle raised, in what forms their values are to be realized, whether as milk, or butter, or cheese, or beef, or store cattle,—these are questions we reserve until we shall hear from men of experience. Meantime we desire to bring under notice of our readers some very suggestive romarks by Professor Brown, of Guelph, recently published in the London Agricultural Gazette:—

"I think that there has not been any practical business response to the many inquiries from England and Scotland with reference to store cattle from Canada. Every week the question is touched upon in the British press, and as yet cautious colouists have neither said "come" nor "we are coming." Were the United States in a position to open the field, there would not only have been immediate paper reciprocation, but immediate practical action.

"On discussing the various features of this question with the second year and special students here, in the course of our study of some of the aspects of the live stock business, we concluded to let both sides know what we think of the proposal to send cattle to be finished by the British farmer.

"The first thought is the reliability of the market. Is such stock wanted, or is it but a temporary view of men who are known to be seeking everything or anything to relieve a distressed profession? Is it to be the more pasture, or live stock, or ensilage, or equal division of landed property in Britain? We will assume that the demand is both genuine and well founded, however.

"The next position is the price the British farmer is prepared to give for the animal he wants, as without a clear understanding on this point, Canadian breeders are justified in the slowness already imputed, if not in not asking. We understand the want is 1,000 or 1,100 lbs. graded Shorthorn, Hereford, Aberdeen Poll, or Galloway steer of the right type for fattening off in six months—let us say 1,050 lbs. for a standard, delivered at Liverpool or Glasgow. Now, as regards prices there, what are we to believe? Shippers tell us that 80 dols are freely given for this standard, other market quotations say 100 dols, and just the other day Mr. Muntz of Umberslade, in England, sold 90 head of good stores by weight at public auc-

tion, for an average of 71 cents per lb., which would make one store worth stances it is better to take the lower figure of \$0 dols. So much for the one

Then, for Canada, we are at the present moment masters of the position—no opposition and no equal conditions in producing the material, and yet, oddly enough, we do not seem to realise this. But, if we enter into this new trade, can we take the price offered, and what vould be the advantage, if any, or disadvantages to us as a nation?

"We cannot produce a store store, 1,050 lbs., on foot here, when 18 or 20 months old, at less than 40 dols., and we want one cent more per pound to make a certain profit; thus the shipper gets our store for 50 dols. Experience is now plentiful in showing that it costs 20 dol. per head to land the animal at a British port, so that there remains a margin of 10 dols, in bargain-money between the British farmer and the party who takes all risks. Where are we now? It must be admitted that, so far, things look well enough. What would be the effect on our agricultural practice? and first, would it pay better to export our cattle as stores than as ready for the butcher six months afterwards? We have settled the price and profit on stores; and, though the other be better known, in experience it is the easier understood. Suppose that the Canadian farmer keeps this store in place of selling for 50 dols. in September or October. It is stallfed up to May in such a manner as to go out at 1,400 lbs.; to do less would be useless. We think it unwise to advise anything over six cents per pound as the future of our British trade in live stock fit for the shambles, and hence the store in question will, in the hands of the Canadian feeder, fetch 85 dols., or 70 per cent. more than the store price. But to do this there is an absolute cash outlay of 35 dols, which reduces the profit to 50 dols., or actually no more than what we could have got seven months previous. Now, where are we' Is it not obvious, at first sight, that the problem is in favor of selling stores; because we get our money one-third earlier, so that in an ordinary life of 35 years we would live about 45 years, and because there would necessarily be more inducement to live stock breeding, and because it would necessitate more and better pasture for cheap production. On the other hand, there would be serious drawbacks. As Canada must continue a grower of grain, and maintain soil fer ..ity, and as the sale of stores would produce less manure in quantity and value per head, the position must be cautiously handled. Immediate value is not necessarily the best value."

During the last twenty years it has been scarcely possible to open an agriculnearly 80 dols. Under these circum- tural paper without encountering an article on strawberries. The strawberry has grown upon the public, hundreds of new varieties have been mised, and almost every phaze in strawberry management, from planting the new, to digging or ploughing up the old beds has been very fully discussed. One matter has been almost entirely overlooked, at least so far as regards any attention to it in a precise scientific way, for all that scientific education claims to do for cultivators is to help them to greater precision. It has been often enough enforced that the strawberry loves a rich soil, well fertilized; but rich in what? fertilized with what? these are questions that have been variously answered by suggested mixtures of this and that, artificial fertilizers, special manures, composts, well decomposed natural material, and the like. We know that all these contain, as a general rule, ammonia, phosphates, potash, and lime salts, etc.; but the precise relations between the strawberry plant and these applications, in the way of demand and supply, has scarcely been touched upon.

The strawberry has become in Nova Scotia an important field crop, not only in the Counties of Kings and Annapolis, so highly favored with enterprising and intelligent cultivators, but also in Sackville District, in Halifax County, in Yarmouth, and in a few other parts of the Province. It is but right therefore to call attention to the chemical composition of the ash of ripe strawberries, as revealed by the recent analysis of D., Munro, of the Downton College*:-

The ripe strawberries was found to contain by weight:-

The first suggestion is one that will occur to the consumer, that, when he purchases half a pound weight of strawberries he gets a little over three-fourths of an ounce of solid material, and more than 7 ounces of water. This liberal supply of the purest and least injurious material that enters our stomachs may be considered rather high in price at 20 or 25 cents a quart, but then the value of a thing is just the money it will bring, and if the consuming public prefer to purchase this commodity in the elegant and luscious form presented by the strawberry grower, and to pay the highest market price for it instead, of buying from the City Corporation the water offered from rusty pipes at a lower price, no great evil can result to the purchaser, and much benefit may be derived by our strawberry growers.

The point, however, which we desire specially to dwell upon is the chemical aspect of strawberry culture. Like other crops the strawberry has its special needs that must be supplied to the soil, and every annual crop of the fruit carried to market takes out of the soil a certain amount of valuable material. What is the nature of that material? what is its amount? and in what form can it be returned to the land at the least possible expense?

All the substances of commercial value taken from the soil by a crop, except ammonia, are found in the ash of the crop after being burnt.

The composition of the ash of ripe strawberries is as follows:-

Silica and insoluble matter	p. c
Containing 11.70 of P ₂ O ₅ ,	
Phosphate of Magnesia trace Carbonate of Potash	4.
Magnesia 2.93	"
Soda 1.29	4.6
Sulphuric Acid (Anhydride SOz) 3.88	••
Undetermined 0.61	• •

100.00 "

Dr. Munro points out, what is evident from the above figures, that in strawberries the whole of the potash exists in combination with organic acid, and the whole of the phosphoric acid as phosphate of lime. The quantity of potash present is very considerable, even when compared with that contained in the grape. Dr. Munro has been informed that, in case strawberries grown with guano in very rich soil, although many blossoms are produced, they do not all set, or, if they do, the fruit is inferior in size and quality to the smaller quantity produced by less vigorous plants grown in poorer soil. The stronger and more highly forced plants are also found to be more liable to mildew.

Considering the benefit often derived by the grape vine from applications of potash manure, it seems possible that a special manure containing a fair proportion of potash would produce good results.

We shall return to this subject. Meantime, if some of our Nova Scotian strawberry growers will kindly send us notes of their experience with different manures, composts and fertilizers, and the results obtained as regards quantity and quality of fruit, it will greatly help us in the attempt to ascertain how far actual practice corresponds with the chemical data so far obtained.

^{*} Chemical News, London, Nov. 14th, 1884, vol. 50, p. 227.

OMINATIONS BY OFFICERS OF AGRICULTURAL SOCIETIES OF REPRESENTATIVES TO THE CENTRAL	Colchester County;
	Onslow Ag. Soc
BOARD, DECEMBER, 1884.	Earltown Ag. Soc
	Lower Stewlacko Ag. SocIsrael Longworth.
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No. I.—Halifax and Lunenburg Counties.	Londonderry Ag. Soc
Italifan Country	Brookfield Ag. Soc
Halifax County: Halifax Co. Ag. Soc	Waugh's River Ag. SecIsrael Lougworth.
Dartmonth Ag. Soc	Cumberland County:
Lower Musquodohoit Ag. Soc Major Gen. Laurie.	District 3 Ag. Suc
Upper Musquodohoit Ag. Soc David Archivald.	Middleboro' Ag. Soc Isruel Longworth.
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Muhone Bay Ag. Soc Major-Gen. Lauria.	Mapleton Ag. Soc George W. Forrest, Amhers Parrsboro Ag. Soc
Centroville Ag. Soc	
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I.—Kino's, Queen's and Annapolis.	V.—Pictou, Antigonish, Guysborough.
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Laurie (Spr. Spring) Ag. SocCol. W. E. Starratt. Paradise Ag. SocCol. W. E. Starratt.	Guysborough County:
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Clementsport Ag. Soc	Argyle Ag Soc
0 1 0 4	Milford Haven Ag. Soc
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Liverpool Ag. Soc	VI.—Cape Breton, Richmond, Inverness, Victor
Rempt Ag. Soc	Cape Breton County:
North Queen's (Caledonia) Ag. Soc Col. W. E. Starratt.	
	Sydney Mines Ag. SocJohn McKeen.
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	Sydney Forks Ag. SocJohn McKeen, Matou.
Digby County:	North Sydney Ag. SocJohn McKeen. East Bay Ag. SocJohn McKeen.
Digby Central Ag. Soc Chas. E. Brown, Yarmouth.	Sydney Ag. SocJohn McKeen.
Weymouth Ag. Soc	
Hillsburgh Ag. Soc	Inverness County:
	Mahon and Port Hood Ag. Soc John McKeen.
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Hebron Ag. Soc	
-	Victoria County:
V.—HANTS, COLCHESTER, CUMBERLAND.	St. Ann's (South Gut) Ag. SocJohn McKeen. Buddeck Ag. Soc
Hants County:	Baddeck Ag. Soc
Union of Maitland Ag. SocIsrael Longworth, Truro.	
Newport Ag. Soc	Tre Pay A C MaDanald Dangald mailes Alice
Windsor Ag. Soc.	THE Rev. A. C. McDonald, Bayfield, writes that
Progress Ag. Soc	favourite Ayrshire cow "Alpha," dropped, on 20th Aug a splendid heifer calf.
Shubenacadie Ag. Soc	

To the Editor of the Journal of Agriculture:

In 1883 visiting a friends garden, chiefly of strawberries, thirty-six kinds, I found the ground mulched with rushes, —it seemed perfect—just like so much Canton matting. Not a weed to be seen, and in fruiting season berries unsoiled. He had used rushes, the same lot, for several years; could not conceive of anything better or equal to them either for summer or winter. I had a ton or two of old rushes for bedding in one of my barns, and soon after covered my plot with them, keeping them on during the winter of 1883-84. Before fruiting senson, I was alarmed at seeing a thick growth of strong green points pushing up among the rushes; cleared them all off, and found that I could not have had a better catch if I had sown the seed; and for tenacious, fibrous roots I will back my rush against anything but buttercups and asparagus. I had to scufile the ground repeatedly during the season, burned the rushes, and am trying this winter early cut out straw, but my plot is full of seed of the rush.

Yours,

AMATEUR.

We have received the following card, from which it appears that one of the finest Short Horn Bulls over brought to this part of the world is now for sale. We hope he will full into good hands:—

You requested me to notify you when we wished to dispose of the "Earl of Surrey." We have decided either to sell or exchange. He has proved a good stock getter, very easy kept, and a very fine built animal. Yours,

L. W. ELLIOTT,

Sec'y Clarence Ag'l Society, Co. Annapolis.

A COMMUNICATION of no inconsiderable interest to Apple Growers and Apple Consumers has been published in the Yarmouth Times, from the pen of Charles E. Brown, Esq., who has made the Apple Question one of serious and careful study. He says:—

I enclose herewith a list of the varieties of apples shown at the annual meeting of the County Agricultural Society.

The object sought in the liberal prizes offered, \$50, \$30, \$20, for the correct naming of all the varieties, was to stimulate a knowledge of varieties in growers, dealers and consumers, and to ensure a larger attendance at our annual meeting. Any person who has made a study of the characteristics of varieties of apples, can recognize and identify them, however much they may differ as grown under varying conditions of soil and climate, as readily as ordinary men recognize and name their personal acquaintances, or as the shepherd the individual members of his flock of perhaps several hundred sheep.

The several kinds are numbered alphabetically from A. to Y,—the same number with letters A. B. C. D. being attached to the several plates of the same kind from different localities; the column showing the season of maturity will be valuable for reference as a guide to buyers in purchasing for family consumption.

CHARLES E. BROWN.

M., Michigan—O., Ontario—Mass., Massachusetts—K., Kentville, N. S.—Arn., Annapolls—Y., Yarmouth— G., Orimsby, Ont.—D., Dundas, Ont.—V., Virgil, Ont.—W., Wolfville, N. S.—Fipt., Kemptville, Yarmouth Co.—C., Carleton, Yarmouth Co., N. S.

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CHARLES E. BROWN.

Yarmouth, N. S., 28th Nov., 1894.

A BREEDERS' ASSOCIATION.

To the Editor of the Herald:

Sin,-I am delighted to see that more interest is felt in the promotion of our success as an agricultural people, and I think that the present moment may furnish a favorable opportunity for the formation of a Breeders' Association, or rather for the consideration of that subject. I feel assured that none will dispute the power for good of the labors of the pioneers in the breeding of good stock in this Province. Much as has been done by the aid of the government grants, even more has resulted from the efforts of private individuals. My suggestion is that these breeders should form an Association for the promotion of their interests, and consequently of the interests of the general farmer. Moreover, I would like to see the Breeders of all the Maritime Provinces united in one Association. The territory is not too large, and our geographical connection is really very close.

At this moment I shall not attempt to indicate the work which would fall upon the officers of such an Association; of that there will be ample opportunity to speak. My object in writing is to elicit the opinions of those in Nova Scotia, New Brunswick and Prince Edward Island, who are endeavoring to substitute pure bred and graded stock for the mongrels which are at present to be found on so many of our farms.

A. C. Bell.

New Glasgow, Dec. 16th.

Mr. Bell's suggestion of the desirability of forming a Breeders' Association for the Maritime Provinces is an admirable one. In the present state of affairs, with three different Herd Registers, and probably three different standards of registration, in Nova Scotia, New Brunswick and Prince Edward Island; two Government Stock Farms, competing with private breeders; and a strong feeling among many farmers in favor of fresh importations, and consequent want of appreciation of the Thoroughbred Stock raised in the country,-it is not to be expected that our Stock will improve so rapidly, . or that breeders will exert themselves so much, as would be the case under more favorable and encouraging circumstances. What is really wanted is, that our breeders should join heartily together; engage in friendly intercourse in all that relates to the science, practice and commerce of breeding; discuss points of pedigree and management; strive to raise the character of our Stock, and make its merits known in likely markets; and generally make such enquiries and investigations, both of a scientific and business kind, as are needed to guide the

Provincial and Dominion Governments in their efforts to promote the interests Hitherto our breeders of the farmer. have been too isolated, and have been working on independent, in some cases opposing, lines. A Breeders' Association might be expected to do away with listlessness, and induce our breeders to make a long pull, a strong pull, and a pull all together.

MR. G. F. FRANKLAND, who had gone to England to see the true state of the Old Country Cattle markets, gave the results of his visit to a reporter of the Globe:-

" Many changes have taken place, both in regard to freights and prices in England. In 1874, cattle could be bought in Canada in large numbers at \$4 and \$4.50 per hundred, and the buyers could sell these cattle in England at from 81d. to 97d, per pound. The shipper in the early times was under much more expense than at the present time. He had to pay from £5 to £7 freight on each earease, whereas he has now only to pay from £2 to £3. Besides this he had to provide wooden stalls out of his own packet, and these were very poor accommodation, at best. Now the Companies provide iron stalls which are firm and are not at the mercy of a storm. He then had to provide his own food and pay the expenses of his men. This is not the case at present. Formerly upon landing the cattle there was no accommodation for them. Now they have yards and accommolation for the cattle in nearly every port in England, Ireland and Scotland. Although the shippers have all these advantages at the present time, yet the trade is now carried on at a loss, while under the old state of affairs there was money in the business. At that time some of the shippers were not slow in informing the Canadians of the true inwardness of the case, and as a consequence the trade has been constantly increasing up to the present time. Canadian shippers have lost last year over two million dollars. This loss may be divided amongst several shippers, but there are one or two firms which no doubt lost the greater part of it. Yet it was claimed by those who wished to get Wyoming cattle through Canada that the markets in the Old Country were good at present. The fact is that the demand now for meat in the Old Country very little exceeds the supply. There is first the supply of carcases of mutton from Australia. A large number of cattle were also received from those ports of the European continent which had clean bills of health. With these facts there is coupled the almost entire absence of disease among the cattle in Great Britain, all of which duce the price of meat. These facts indicate that either there must be a falling off in the number of cattle shipped from Canada or a lowering of the price of Canadian cattle."

WE find the following in the Country Gentleman, of Albany, U. S. A. :-

"Since some of us Nova Scotians allowed a few of the best of the St. Lambert family to slip away from us at very low figures, we have taken more interest in looking up the breeding of our Jerseys, and in our small town here quite a number own some good ones. One of them has made a complete convert of myself-so much so that I am ready to believe anything I hear about them. Without being asked, as it were, she made in one week 181 lbs. of butter, and the following week 23 lbs. She was "let up," to be bred to Oscar of St. Lambert, a double grandson of Stoke Pegis 3d.

Our hay crop was only fair this season; potatoes not half a crop; turnips very poor. Some of our more advanced farm ers have built siloes and grown corn to fill them. I am not sure that the game is worth the candle in this climate. One kind of fodder, thought much of here, and grown by many stockmen, is oats, tares and peas, mixed—a larger proportion of tares or vetches than either oats or peas in the mixture; on ordinarily good land, four tons to the acre is not an unusual yield when dried and ready to be put away for winter feed. I never notice anything in your paper about this particular kind of fodder. If not grown some one should try it who grows green fodder for summer soiling. It is just what cattle like, and causes a generous milk flow.

Farming is looking up with us; better stock and farming implements are to be seen, and a better class of men are taking hold of farming, and endeavoring to carry it out on business principles."

New Glasgow, N. S., Dec. 6.

[What variety of Pea is grown for

And where can the Seed be obtained? Ed. J. of A.

WE regret that the following note was not published earlier :-

Yarmouth, 18th Nov.

F. A.

The weather continues very mild and pleasant, rarely a freezing night; crops all secured safely, and upon the whole I judge a fair return for the season's labor. Prices have not gone very low here; potatoes not under 35 cents, and that only for a short time; oats 50 cents, &c., &c. A cargo of P. E. Island oats, 7,000 causes have combined to materially re- bushels, selling here now at 43 cents are at farming too much land, instead of

the finest carge of oats ever brought here. White, very plump and heavy, weigh 45 pounds per shook bushel. I tried to find if they were known by any special name, but could get only White outs. Should be valuable for seed in the spring.

Ox several occasions we have quoted from the addresses and writings of Professor Sheldon, of Downton College, on Dairy and other matters. He was one of the British Association party who visited the Agricultural Districts of Nova Scotia with General Lauric. Since his return to England Professor Sheldon has been giving his impressions of our coun-The London Canadian Gazette gives a report of one of his speeches, which has been partially reprinted in the Halifax Morning Herald :--

"In Nova Scotia I was particularly struck in many parts by the magnificent quality of the soil, especially along the inlets of the Bay of Fundy, and in the neighborhood of Amherst, Windsor, Port Williams, and Kentville. In these districts I saw some excellent land, and in particular some very fine pastures and One mondow was pointed ineadows. out to me by the farmer who drove me round, which was sold ton years ago at a price of no less than 400 dols. (£80) per acre. This seems hardly credible, but I believe the land would be found to be amongst the best in the world. The area of land of this character is, of course, practically limited, but there is in reality a good deal which, judged in regard to depth and quality of soil, will certainly rank amongst the finest to be found anywhere. With an English climate, such land would be worth £150 per acre; in fact, I know of land not so good as it which has been sold in England at that price. I was also very much struck by the suitability of Nova Scotia for fruit growing. The apple growing districts of Windsor, Port Williams, and in the Annapolis Valley are certainly unsurpassed in any country, and I am told that from Annapolis alone some 900,000 bushels of apples are shipped annually. One farmer—Mr. Starr—took me to see his orchard, consisting of six acres. I saw the fruit crop on it, and was told that these six acres would bring him in one thousand dollars' worth of apples clear. That would be about £33 per acre. In addition to this he grew a very large crop of potatoes under the apple-trees, and had had this year an enormous yield, averaging, to the best of my recollection, about 200 bushels, or five tons to the acre, all being apparently of excellent quality.

'Generally speaking,' said the professor, 'the agricultural features of Nova Scotia are capable of very considerable improvement. The farmers seem to aim rather cultivating a small area well. The stock requires to be greatly improved, particularly the cattle; but there is no doubt the farmers in Nova Scotia can do very well if they like. They have everything in their favor.

"The mineral deposits in Nova Scotia are very striking and very valuable. Coal, as you know, exists in large quantities. I cannot give you exact figures from memory, but the coal is certainly of good quality and sells at the low rate of \$2 a ton. Mining is, and will, to a still larger extent, ultimately become a great industry in Nova Scotia. In addition to coal, gold mining is also carried on, and a good deal of gold is obtained in some localities. The auriferous districts cover a very large area indeed. Then there are also phosphate mines, which are very useful for agricultural purposes, though the farmers do not take so much advantage of them as they might, and the phosphates are consequently chiefly sent to the States. I heard that the exports amount to something like 60,000 tons annually, or over 1,000 a week. Ultimately these phosphates will prove of very great value indeed from an agricultural standpoint, as they will provide a very useful and cheap fertilizer.

The classes of English immigrants who should go to Nova Scotia are twofold. A number of comparatively poor immigrants might go as the Danes went, and if they could obtain a grant of land from the provincial government, set to work to clear it, cultivate it, and raise crops and stock upon it. In the end they would probably become comfortably off as a direct result of their own exertions. Of course it would require some little time, some few years of regular work, but there is no doubt that the result would be satisfactory, and that it is a result which can be pretty confidently predicted beforehand. The other classes would be English farmers possessed of capital of from £200 to £1000. These would be able to take up farms which have been more or less cultivated, and on which are houses, sheds, and buildings, and they might set to work at once to clear other land around them. This clearing would provide work in the winter, when all purely agricultural operations are necessarily at a standstill, and in this manner English farmers of this class would start on very favorable terms. They could gradually go on enlarging the area of cultivable land, and they could at the same time improve that which had already been cleared, and has been for some years under cultivation.

"There is no doubt that a man can get along faster in the North-west than he will in the Lower Provinces if he embarks in grain growing simply, as the latter are ! published in the papers, that Indian | by the proprietors of the paper for the

not so well adopted for it as they are for stock-raising. Hence, farmers who prefer to depend mainly on wheat should go to the North-west, while those who prefer stock-farming would find greater advantages in the Lower Provinces, and many Englishmen have a strong fancy for this pursuit. Then, again, for those who appreciate a beautiful country, there is no comparison whatever between the two regions; the hilly, well-wooded country of New Brunswick is much more in keeping with that of England, and is more pleasing to English tastes. For the reasons stated my opinion is, therefore, that the Lower Provinces ought to arrest a considerable portion of the emigration to Canada, and that these portions of the Dominion offer many advantages which are not well understood in this country. Very little information has been published respecting them, and the Northwest is far better understood by Englishmen."

After alluding to the valuable fisheries of Nova Scotia, and to the abundance of wild fruits in New Brunswick- for the latter of which a great market exists in the United States-Professor Sheldon referred again to the ignorance prevailing in England respecting the Maritime Provinces. "I feel convinced myself," he remarked, "that these Provinces only require to be known to Englishmen to attract a considerable emigration; and I certainly think it would be expedient for the Provincial Government to circulate reliable information in the British isles. Up to the present little or nothing has been done in that direction. This is a great advertising age; advertising is one of the most powerful levers that can be employed to help any enterprise. That remark applies quite as much to countries as to business undertakings, and especially to countries, like Canada, which are anxious to get as many emigrants as possible. Therefore it seems to me that if these Provinces really wish to get their share of emigration from the Old Country, they must take some action to make their resources as well known as the resources of Ontario and Manitoba are already. And it this were done I am sure the results obtained would be satisfactory to them."

THE following remarks from an English paper, which we find quoted in the Colchester Sun, will indicate the view taken by English farmers on the question of Store Stock from Canada, discussed from a Canadian point of view in another article. It does not necessarily follow that the English view is the correct one; on the contrary, as regards Nova Scotia, the maize meal argument fails entirely, for we have observed from market rates

Corn can be purchased in London at a lower price, usually, than at Halifax. But our Province has great undeveloped resources in pasturage for young stock, and milk being so much less valuable here than in England we can afford better to rear calves:

"Speaking about prices of stock reminds me that I got a Toronto newspaper two or three posts back in which was a lengthy letter marked for my reading. The object of the letter was to prove to Canadian farmers that it would pay them much better to send stores when of a good grade, to England than to keep them and make them fat before sending them. The writer made this quite plain on paper by figures, but I very much doubt that it would prove so in practice. We import from the other side of the Atlantic a considerable quantity of cattle food. If we imported lean cattle from Canada, we should also have to import food with which to feed them and make them fat. Speaking from memory, I believe it takes nearly eight stones of maize meal to make one stone of beef. If the eight stones of maize meal can be bought here at the same cost as one stone of beef, then there could not be much doubt that it would be better to bring the lean animal and the food to feed it with than to fatten the animal in Canada, and bring the carcase here. There is the additional fact to be taken into consideration that beef fed in this country is worth something more per stone than imported beef. But, after all, I very much doubt the correctness of the conclusions at which the writer of the letter in question has Mr. Barelay, the member for arrived. Forfarshire, has for a considerable time been advocating the importation of store stock, but without much headway. The risk of importing disease, it is contended, would be greatly increased by large importations of stock of this kind.

"After all, such proposals to feed ourselves are preposterously ridiculous when viewed in the light that there is nothing to prevent us rearing at home as many cattle as would amply supply our wants. As a very general rule, the small farmer goes in for keeping cows and making butter for market, whereas the large farmer, whose occupation might swallow up half a dozen small farms, keeps no more cows than are sufficient to supply his household with milk and butter. must be understood that I am speaking in general terms. Large farmers for several years have been very much depending in getting store cattle from Ireland."

THE Eastern Chronicle announces, with regret, that various circumstances have caused delay in awarding the prize offered

best essay on The BEST METHOD OF BRING-ING UP THE CONDITION OF OUR PARMS WITH THE MATERIAL AT OUR DISPOSAL ON THE FARM ITSELF. The decision of the adjudicators is given below :-

The undersigned having been requested ‡ to act as adjudicators on the essays forwarded in competition for the prize on "The best method of bringing up the condition of our Farms with the material at our disposal on the farm itself," beg leave to report that we have carefully examined the said Essays, which numbered eleven in all. We have found several of them highly creditable to our farming population, to which the authors plainly belong, both as showing the effort they are making to improve in their profession, and also the ability to express | themselves on paper; but we regard Numbers 5 and 8 as the best, and of nearly equal merit. The latter shows the most literary finish, but the former though more homely in style, we deem the best suited to the object for which the competition has been invited, and, therefore, agree in awarding it the prize.

New Glasgow, 15th Dec., 1884.

George Patterson. HARRY TOWNSEND.

BARRELS.

On the envelopes containing the names of the writers being opened, No. 5 was found to be by Mr. John McKay, of Riverton, and No. 8 by Rev. A. C. Mc-Donald of Bayfield. The Eastern Chronicle congratulates their young friend on his success, and will next week publish his essay either in whole or part.

Messus. Kreiing & Hunt's Apple Catalogues show the following sales at Public Auction made by them of Nova Scotian, Canadian, and American Apples, in London :-

November	ISth.	1883.

Nova Scotian Apples, ex Australia	1516
Canadian, ex Escalona	485
American, ex Durham City	195
November 25th,	
Nova Scotian, ex York City	1960
American, ex Sarmatian	こいり
" ex City of Berlin	
American, ex Saturation	91

The following arrivals of Apples at Liverpool from Nova Scotia are noticed in Messrs. Green & Whineray's circulars:

Nov. 1st, 1884-per Nova Scotian from	
Halifax	
Nov. 15th per Hanoverian from Halifax	130
" 29th-per Caspian from Halifax	463
Total arrivals of Canadian and American	
Apples at Liverpool this season to	31 COO
29th November	21,503

Prices have not varied much from quotations given in last number of the JOURNAL OF AGRICULTURE.

Belcher's Farmers' Almanack for 1885. Halifax: McAlpino & Barnes. Sold by all Bookselfers in the Province. Price, 12 cents.

Belcher's Farmers' Almanack has been a Household Book in the Province so long, and has been so familiar to the eyes of successive generations, that to point i out its merits to the people of Nova Scotta would be like a clumsy attempt to whitewash the Gilded Lily of Japan. We content ourselves, therefore with merely announcing, for the information of our readers, that the Almanack for 1885, fully stored with all the information likely to be required during the year for the purposes of business and pleasure, and contact generally with the outer world, is now published and for sale. In this edition the facts and figures appear to be amplified, and in some cases are more concisely arranged than in previous issues. The full local obituary notes in Calendar form a new feature. The foot notes on Farming will remind our Agriculturists of the special work to be some in each month of the year.

Gillisvale, Inverness County, \ August 26th, 1884.

DEAR SIR,-I am requested by the Society to correspond with you in order to ascertain, if possible, where to procure "Thoroughbred Bulls" and Rams, Dur ham or Ayrshire "Bulls" preferred. The Society probably would need no less than 10 Rams and 5 Bulls. As for the sheep, I have no names for the different grades, but will entirely leave it to your own judgment which kind would be the most suitable. Would you be pleased to publish in the September number of the JOURNAL that the Strathlorne Agricultural Society want to buy no less than 10 Rams (the grade or name of sheep I would lead to yourself to say), the best kind of improved sheep obtainable in Nova Scotia.

A. J. GILLIS, Secretary Strathlorne Ag'l Society. [See advertisement in this number.]

[ADVERTISEMENT.]

ATTENTION is directed to the prizes offered for competition by the Canada Chemical Manure and Fertilizer Company of Rothsay, New Brunswick. They offer in money-first competition open to all farmers in New Brunswick-\$50, \$40, \$30, \$20, \$10, for the best half-acre of potatoes, and the same for turnips; and \$20 for the best acre of oats. Entries to be made by the 15th January, 1885. Second competition is confined to all the Agricultural Societies of the Maritime Provinces; \$30 to be given to each society for the best quarter of an acre of potatoes; \$50 to each Province, to be competed for by the winner of each society prizes, and \$50 to be competed for by the three winners from the Provinces,

so as to determine the best yield in Maritime Provinces. This strengthens the hands of all agricultural societies, and will be probably followed up by further prizes if advantage is taken of this liberal offer. The object is to stimulate farmers to raise large crops on small areas instead of running over so much land as they now do. A series of prizes is also arranged for those who may not be within reach of a society. This competition has grown out of the late one at Kingston, Kings Co., held by the Union Society where excellent results were obtained from a similar course. It is surprising what can be raised off a small piece of land by high cultivation, as has been proved by the experiments of the Rural New York Farm, which has some three hundred acres devoted to this purpose. As our people must see the importance of farming and farming to a profit, we hope the competition may be a keen one and shall look anxiously for the result. The judges will be appointed in each district by the local society and for the Maritime prize the Provincial Board of Agriculture of N.B. will be asked to name judges.

Advertisements.

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

"No advertisements, except official notices from recognized Agricultural Societies, shall be inserted in the Journal of Agriculture in future, unless Prepaid at rate of 60 cents each insertion for advertisements not exceeding ten lines, and five cents for each additional line."

\$2,000 CASH **PRIZES**

Are offered to the various Agricultural Societies of New Brunswick, Nova Scotia, and Princo Edward Island; also, prizes to all Farmers in New Brunswick,

Best Yield of Roots, &c., Next Year.

Entries to be made by the 15th January, 1885. For further particulars apply, by letter, to the SECRETARY, Canada's Chemical Manuro and Fertilizer Company. Rothsay, Now Brunswick.

WANTED TO PURCHASE.

By Earltown Agricultural Society, a Thorough Bred Short Horn Durham Bull.

JOHN ROSS, President. ALEX. S. ROSS, Secretary.

For Sale.

By the Waugh River Agricultural Society, the Short Horn Durham Bull, BRIGHAM YOUNG, No. 61, four years old, very quiet, a sure stock-getter; would exchange for a Jersey or Ayrshire Bull, no reasonable offer refused.

D. NELSON, Secretary.

FOR SALE.

Grade Dorsetshire Down Ram Lambs.

ready for service:

ONE THOROUGHBRED DITTO:

Also, young Berkshire Pigs. ARTHUR F. GURNEY, Wick House, near Truro.

The JOURNAL OF AGRICULTURE

-is published monthly by-A. & W. MACKINLAY, No. 10, GRANVILLE STREET, HALIFAX, NOVA SCOTIA.