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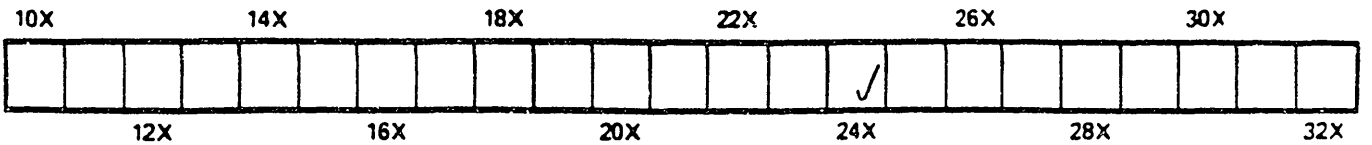

# THE COLONIAL FARMER,

## DEVOTED TO THE AGRICULTURAL INTERESTS OF NOVA-SCOTIA, NEW-BRUNSWICK, AND PRINCE EDWARD'S ISLAND.

VOL. 1. HALIFAX, N. S., FEBRUARY, 1842. NO. 8.


## SECOND ANNUAL REPORT OF THE RESTIGOUCHE AGRICULTURAL SOCIETY.

*January* 4, 1842.

ROBERT FERGUSON, Esq. in the Chair.

In presenting their second Annual Report, the Committee of "*The Restigouche Agricultural Society*" beg leave to take a review of the proceedings of the past year, being the first of experiment agreeably to a Resolution of the Society, of 14th of April, 1840. Premiums were to be awarded on the second Tuesday in April last for the best samples of Grain and Hay Seed, at which time a Show took place, that exceeded the most sanguine expectations of your Committee, and would do credit to any Country.—The Premiums were awarded as follows:

For the best sample of Spring Wheat to John Currie, £1.
For the second best ditto, to Jacob Caldwell, 15*s*.
For the third best ditto, to William Doyle, 10*s*.
For the best two rowed Barley, to John Currie, £1.
For the best four rowed ditto, to Daniel McNish, £1.
For the best Black Oats, to John McNish, £1.
For the second best ditto, to John Douglas, 15*s*.
For the best White ditto, to William Fleming, £1.
For the best sample of Hay Seed, No. 2, to John Currie, 10*s*.
For ditto ditto, to Walter Blair, 10*s*.

The interest manifested by the Farmers generally in the exhibition held that day, encouraged the Society to renew and increase their exertions to further the advancement of Agriculture in the County; with this view it was then resolved that the like Premiums, which were offered last year, should be given for the competition of Grain and Hay Seeds, the production of the present year, under the same rules and regulations; the Show to be held in the Court House, on the second Tuesday in April next: and also that a Cattle Show and Ploughing Match be held in Dalhousie, in October next. In conformity also with the recommendation of your Committee of last year, a portion of the Funds of your Society were appropriated to the importation of such Grass and Grain Seeds as were not to be had in the Country—and a few Sheep of the Leicester breed.

On the 5th of October the Cattle Show took place, when your Committee were gratified at the very respectable and numerous attendance and also the appearance of the Cattle, at which time the following Premiums were awarded:—

For the best 2 year old Heifer, to Walter Blair, £1.
For the best 2 year old Bull, to Donald Fraser, £1 10*s*.
For the best 1 year old ditto, to James Duncan, £1.
For the best 1 year old Heifer, to Donald Fraser, 15*s*.
For the best Calf, to Peter Rigby, 10*s*.
For the best 3 year old Ram, to David Alexander, £1.
For the best 1 year old ditto, to Walter Blair, 10*s*.
For the best Lamb ditto, to William Craig, 10*s*.
For the best 3 year old Ewe, to Walter Blair, £1.
For the best 2 year old ditto, to the same, 15*s*.
For the best 1 year old ditto, to John Ferguson, 10*s*.
For the best Lamb ditto, to Walter Blair, 10*s*.
For the best Hogs, Boar and Sow, to Andrew Barberie, Esq., £2.
For the second best ditto, ditto, to the same, 15*s*.

Immediately after this Exhibition, a sale at Public Auction took place, agreeably to previous advertisement, of the Sheep and Fowls imported, and such quantity of the Grain and Grass Seeds as remained of the last spring's importation; and although they did not realise their first cost, were very generally distributed through the Country. In consequence of the unusual dryness of the season, the Ploughing Match was postponed until the following Tuesday, (the 12th,) when although the number of competitors was not so great as might have been wished, yet from the numerous attendance and interest evinced by the young men, who were spectators much future benefit may reasonably be expected to result. The Premiums were awarded as follows:—

1st Prize to James Breckenridge, £2 10*s*. 2nd Prize to John Douglas, £2. 3d Prize to Patrick Doyle, £1 10*s*.

After which a Public Dinner was given at the Dalhousie Hotel, to the Ploughmen, Judges, and such of the Office Bearers of the Society as honored the Exhibition with their presence

Your Committee are happy in having it in their power to congratulate the Members on the benefit resulting from the influence of the Society, inasmuch as they can state that Agriculturists have been induced to attempt an extended growth of Wheat, Barley, and Black Oats; and although having had to struggle with the difficulty of an unusually dry season, still remunerating crops have rewarded their endeavours, except in those places where the many fires have extended their destroying effects.

Your Committee, in compliance with the 13th Rule of the Constitution of this Society, have taken a view of and examined the state of the Stock of Seeds, (no Implements being yet purchased), in the Society's depository, and find them correspond with the invoices and account sales; independent of which, there are 14 bags, each 196 lbs. of Black oats, ordered from Ireland, but being required to be of the growth of the year, did not reach Port Glasgow in time to be shipped this season, but may be expected by the first vessel in the spring The Secretary has also in hand, a quantity of Black Oats and Barley, the growth of the County.

Your Committee have audited the Accounts of the Secretary and Treasurer, and approve of them, shewing a balance of £143 13*s* 5*d*, which they recommend to be expended in a further importation of Seeds for the ensuing year, particularly a small quantity of Spring Wheat from the continent of Europe, in order that it may be tested in comparison with the growth of this continent and Great Britain; and a few more sheep of the Leicester and South-down breeds; and also for the introduction of some West Highland Cattle—your Committee being assured that the superiority of the purest Ayrshire dairy Stock can be traced to the crossing of the West Highland with the Dutch breed at an early period.

Your Committee are happy to find that the Government had anticipated their suggestions of laying off the waste Crown Lands in a manner suited for Settlers and Emigrants, and that no sooner were 2000 acres surveyed, in lots of 100 acres each, and advertised, than immediate applicants for the same were found; thus evincing the necessity of opening a communication to the interior, and demonstrating the correctness of your Committee's views therein. In fact the demand for Land is far from being supplied; but until roads are opened to the interior, that vast portion of valuable Land must continue in a wilderness state, and the difficulty of access thereto, for the present deter Emigrants from settling thereon. If Legislative means were furnished for laying off and making roads, in the manner formerly pointed out, nothing then would be wanting to constitute the County of Restigouche inferior to no part of the Province of New Brunswick, as an agricultural district.

This being the first year of Agricultural trial, it cannot be expected that any material alteration in the imports could have been effected, your Committee therefore deem it unnecessary to present (as in last year's Report) a statement of the imports into the County for the past year.

Your Committee would again call the attention of the Society to the samples of Marl and Gypsum found in the County; the former upon test, appears to be of superior quality, and abundant in quantity. Although no Premiums have been as yet offered, they are of opinion, inducement should be held out for the purpose of bringing them and composts into use as fertilizers of the soil.

In conclusion, your Committee feel a pleasure in acknowledging the very prompt and valuable services of your Correspondent in Britain, Mr ALEXANDER MCCAW, *Ardlochan*, Ayrshire, in whose Communications much practical information is conveyed, with an interest that proves a sincere desire to be useful: with best wishes for your success—that you may go on and prosper; and that when the ploughs of the British North American Colonies are fairly set in motion, they may be able to supply the Parent State with every thing required in the shape of agricultural produce, and supersede the necessity of applying to her continental neighbours, who do not wear her broad cloths in return.

*Resolved*, That the Report be received, and ordered to be printed.

*Resolved*, That Robert Ferguson, Esq. be re-elected President; Andrew Barberie and Hugh Montgomery, Esqs., Vice Presidents; and Arthur Ritchie, John Montgomery, Robert Ritchie, Joseph Hunter, Esqs., and Mr. David M'Intosh, Committee.

DUGALD STEWART,
*Secretary and Treasurer.*

## P. E. ISLAND CENTRAL AGRICULTURAL SOCIETY.

The following extract from the Annual Report of this Society contains much useful information:

It has been well observed, that the greater part of remarkable improvements in Agriculture have emanated from persons not regularly bred to the calling. When a man displays energy, decision, and superior talent in his own profession, it may be expected that, should Agriculture become the object of his attention, the science will profit by the application of his matured mind.

In retrospection of the past season, your Committee express much thankfulness that, while neighbouring Countries, and our Father-land, have suffered a diminution of many of the productions of the earth, our own favored Garden-spot has maintained about an average increase, enabling us to dispose of our surplus blessings to our less favored neighbors. A dry seed-time was succeeded by seasonable rains in June, which carried out the hay to a fair crop; and, although the latter part of the season was also dry, the retentive nature of the sub-soil, and the friable condition of the surface, enabled vegetation to perfect its productions; which were well secured in favourable harvest weather.

In regard to our present position and future prospects your Committee discern abundant cause for congratulation. Whilst great commercial and manufacturing Countries—most probably from over-production and over-trading, are greatly convulsed in their credit and monetary concerns, this colony stands exempt from such baneful fluctuations. We hear of the storm that is desolating the commercial world, but are mercifully preserved from its ravages—the steady returns of the soil enabling the settler to meet the demands of the merchant, who is thereby placed in a situation to sustain his credit. Here the poor man can support himself, and make continual advances toward independence; whilst the immigrant with capital or income may not only employ himself pleasantly, usefully and profitably, but may possess himself of comforts and luxuries sufficient to render life pleasant in any country.

Our future prospects are cheering, and shew that, whilst the culture of the earth is the most happy, independent, rational, natural employment of man, the productions of the soil are the safest staples he can produce or traffic in.

Enquiries for our produce multiply. Our markets increase. One vessel which arrived late in the season from Boston carried away 7280 bus. Oats, which she obtained at the Queen's Wharf, and completed her loading in the unprecedentedly short period of six days, thus shewing the great advantages resulting from the use of Threshing Machines, as that large amount of grain was threshed out during the six days. Your Committee view the increase of those labor-saving machines with much satisfaction.

Another vessel is expected at Three Rivers, from Britain, when the navigation opens, to take back a cargo of Oats, which are said to be in request in the London Market for seed! Barley is sought for in the United States, &c. &c. Shipbuilding, at present, does not wear a very prosperous aspect, nor lumbering. The decline of these may induce Farmer's in General to devote more of their time to the improvement of Farming.

During the past year many very respectable persons have come among us, to enrich us by their intellectual attainments, by investing their capital, or spending their income. We have room for a great many more, and your Committee would rejoice to witness the tide of immigration, of immigrants of a superior class, set in more abundantly to the shores of this Island.

Two Thousand immigrants have arrived at Charlottetown during the past season. Others at different Ports.

The value of land has greatly risen, making it manifest that the powers of the soil are becoming more known, and better appreciated; while the acknowledged salubrity of its climate, cheapness of provisions, improved society, means of education, and facility of enjoying the privileges of Public Worship, render Prince Edward Island increasingly desirable to the man or family who may desire a social retirement from the busy world, or seek to repair the health, or renew their constitution. Hundreds of British Farmers too, men respectable and desirable, would joyfully come here and invest the remnant of their diminished capitals, were the Colony made more publicly known in Britain.

The improved stock which has been, and will be introduced, must give Farmers more correct notions of the just and desirable proportions of animals, technically called "points," and lead them to breed from the truest forms.

Nothing would tend more to an improved quality of our grain than a regular and steady trade in Oats, &c., to Britain. The merchant or purchaser, would then be obliged to keep a machine and winnow every parcel of grain when delivered to him. He should also fix a price for the standard weight of 36 lbs. per bushel, avowing a certain advance for weight above the standard required by Law, and deducting for deficiencies.

As Labour in all new Countries must be higher in comparison with the price of land, and its productions, it is matter of desire that there may be yet invented a *more simple power* to drive or propel the different machines the Farmer has so great an occasion to make use of, to lessen the cost of labor, save his fodder, and expedite many of his most important operations.

The subject of Live Fences, Compost, and Draining, might have been enforced; and your Committee would not have deemed themselves out of the path of duty had they glanced at the Fisheries.

We hear a complaint of the great abundance of *unemployed* British Capital, and must express astonishment that so great an culpable supineness has been shewn to the unequalled advantages of Prince Edward Island as a grand Fishery Station. The productiveness of the soil could support a large amount of persons who might be engaged in Fishing, Manufactures, and Commerce. We have Timber to construct vessels, and a beautiful expanse of waters, surrounding our happy Isle, teeming with riches, which are appropriated by our more enterprising neighbours; who jeer at, while they profit by, our unaccountable remissness. The complaint is, that there are no openings for the profitable investment of capital—surely, then, there has been a great, general, as well as individual, want of patriotism in failing to make known the real advantages of this Colony for Fishing or other enterprise. What it be credited in other Countries that an Island well peopled, and so situated, should purchase the fish it consumes!!!

It is gratifying to notice, that in addition to the Stock imported by your Committee, the patriotism of private individuals has led to the importation of the following Stock:

A Devonshire Cow, by the Hon. James Peake.

A Leicester Tup, and 2 Ewes, by the Hon. Capt. Swabey.

A Bull of the pure Durham breed (calved in May, 1840.) descended from the celebrated "Comet," 1 Leicester Ram, 6 Ewes and a Tup of the Southdown breed, by Edward C. Haythorne, Esq.

A beautiful Cow, 1 Southdown Tup, and 2 Ewes, also a Berkshire Sow and Boar, by John Grubb, Esq.

A fine Canadian Horse, rising six years old, by Mr. John Hyde.

It is matter of regret that the ad-valorem Impost Duty should continue to be exacted upon the importation of Live Stock, introduced or brought by private persons.

Your Committee had the pleasing duty of executing the resolution of the last General Meeting respecting the Plate which was voted to Mr. David McGill, of Dumfries, who has been the faithful and active agent of this Society, for the last Twelve years. The Plate, consisting of a Tea-pot, Sugar-basin, Milk-ewer, and a quart Jug, were prepared in London, with the following inscription engraved on the principal pieces

"Presented by the Central Agricultural Society of Prince Edward Island, British North America, to Mr. David Macgill, of Dumfries, as a testimony of the high sense they entertain of his valuable services rendered by him to that Institution, 6th January, 1841."

In the month of June last, the Plate was forwarded to Mr. Macgill, who has duly acknowledged its receipt in a Letter dated the 21ts July, 1841, which has been already published.

On the 12th May, your Committee received an importation of Ten Tierces of Red Clover Seed, weighing 4186lbs. 4 Casks have been disposed of, the residue is in store. The past season having been very favorable to the growth and saving of Red Clover, your Committee trust that what has been saved, together with

the stock on hand, will be sufficient to meet the demands of the Farmer; during the past year, your Committee purchased 28601bs. Island growth. At the same time, an importation of 200 sets Wilkie's improved mould plough mounting, weighing 139 cwt was received with an extra quantity of land-sides and sole-plates. Experience having taught your Committee the necessity of securing, by the importation of every pattern of plough mounting, an extra quantity of side pieces, and especially soles, to answer the purpose of necessary repairs.

Your Committee have considered whether it would not be prudent and advisable to discontinue the Grain Show, for the present year, since no public benefit appears to result from those exhibitions beyond that of affording a market for seed grain

Your Committee would here remark, that the produce of the Ayrshire Cattle fully justify the expectations that were formed of them, on their arrival in the Colony nearly three years ago; and they are of opinion, that they are of that description of cattle which are most suitable to this climate, as they appear to thrive remarkably well:

It is with pleasure and thankfulness your Committee have it in their power to announce the receipt of the following liberal donation:

The amiable and highly gifted Countess of Westmorland has forwarded the sum of £10, together with an interesting and useful work on Farming.

Capt. Cumberland has contributed the handsome donation of £5.

Hon Captain Swabey, a Sovereign.

And Hon. C. Young, One Pound.

Daniel Brenan, Esq, when last in England, took some pains to procure some Wirecloth, for wheat flour sifters, and placed the same at the disposal of the Committee. It has been tried by several Millers, but your Committee regret to state that from some unexpected cause, it has not been found to answer the purpose.

Turnips are so invaluable a crop to the Farmer, that your Committee cannot but hope that every individual will strive to the utmost, to realize the greatest quantity his stock of manure will enable him to cultivate. The drill system of husbandry is peculiarly applicable to the culture of this root, particularly the Swede or Ruta Baga Sowing Sulpher on the land with the seed is by many practical men said to prevent the fly.

Mangel Wurtzel, Carrots, and Parsnips, are each and all of them crops of very great value, and much more sure than Turnips, and ought therefore to be grown by every Farmer. For feeding milk kine, or for fattening stock they are equally valuable. The drill system and trench ploughing should be adopted for their culture.

Your Committe beg to direct the attention of the Society to the public spirited conduct of W. W. Irving, Esq., of Bonshaw, who has introduced a number of skilful mechanics, from Scotland, the last season, for the purpose of making the modern Agricultural implements so necessary to the enterprising cultivator of the soil; and your Committee venture to express a hope that this attempt to improve this fine Colony will be responded to by adequate encouragement.

Your Committee consider it very remarkable that although there are two large brewing establishments in Charlottetown, no extensive hopperies are to be found in the Colony; although it is manifest that that profitable plant thrives here most luxuriantly with only ordinary culture, and with the same attention that is bestowed upon the culrure of the Potato, would ensure a much more valuable crop to the grower.

The accounts of the Secretary and Treasurer, for the past year, have been audited by Messrs Henry Longworth, A. Duncan, H. Shearman, and Joseph W. Hodgson, and found to be correct.

The Receipts for the past year amount to £758 12 0, and the disbursements to £644 4 4, leaving a balance in favour of the Secretary of £114 7 8.

Your Committee beg to call the attention of the public in general to the vast importance of Agriculture to this Colony. It is one is the vital principle of the Country. By its encouragement alone can the country "go ahead,"—by it must the rising generation stand or fall. This Colony has been called the Granary of North America—is it in ridicule or in earnest? To look at the small portions of cultivated ground, compared with the vast extent of wilderness and waste land, every spectator must naturally suppose the former. Let every Farmer then strive to rescue the country from such a reproach, and make it what nature has indeed designed it to be, a Country of fertility and happiness, or, without exaggeration, in the language of Holy writ, "a land flowing with milk and honey." Our winters are long, but they are subservient to many useful purposes, and were the powers of the soil fully developed, their length would hardly be felt, so busy would the stall-feeder be with his oxen, his sheep, his pigs, and his poultry. One great want to be noticed throughout the Country, is, the inadequate shelter provided for Cattle during the severity of the winter months, in consequence of which fodder is wasted and manure rendered comparatively worthless, by scattering and exhaling its useful chemical properties. Brother Farmers, press onward! Many difficulties await you in your progress—combat them, and they will flee before you. Our climate is much drier than that of Britain, and our season more steady. Plants thrive here without shelter that in England require hotbeds to bring them to perfection. What then is required? Perseverance! Steady perseverance!! Be not satisfied until you surpass the Mother Country in the growth of every article she is able to produce. Fling mediocrity aside and be foremost among the Colonies of this vast Empire. Blessed with an unrivalled constitution, fostered by a liberal government, our station among the nations is pre-eminently distinguished. Recollect an eminent statesman of old has said, "he is the truest benefactor of mankind who causes two blades of grass to grow where only one grew before."

In conclusion your Committee, feeling that their dearest interests are bound up in the same bundle with the prosperity of P. E. Island, earnestly hope that their successors in office may accomplish much for the benefit of the Farmer, and that every event may be graciously overruled for the common and particular prosperity of every inhabitant of our Country.

Votes of thanks to the Officers of the Society the past year were passed, and the following Gentlemen chosen Officers for the ensuing year:

Hon. John S. Macdonald, *President*
Francis Longworth, sen. Esq, *Vice President.*
John Hyde,
William Douse,
Charles Stewart,
Henry Longworth,
Charles Hazzard,
Alex. Laird,
George Beer, sen.,
Henry Shearman,
John M'Neill, Cavendish,
} *Committee.*

PETER MACGOWAN,
*Secretary & Treasurer.*

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Care of Farming Tools.—We believe it may safely be asserted, that the farmer in a course of years sustains as much loss, or is put to as much expense in procuring tools, by their decay in consequence of needless exposure, as from their actual wear on the farm. How many are the instances in which the farming implements, the plows, harrows, roller, &c., instead of being carefully housed when their use for the year is over, are left in the fields, or peradventure drawn up in battle array in front of the house, occupying a goodly portion of the road, and when covered with snow, forming most convenient places for breaking horses legs, tearing off shoes, &c. &c. Perhaps, in addition to these, are sundry wagons, carts, hay racks, and other necessary things, like the former, exposed to the decay which must result from exposure to the rains, the freezings, thaws and snows of winter. Now, one such season of exposure does more to weaken the wood of these implements, promote decay, and render new purchases needful, than their ordinary wear on the farm, with careful usage, and protection from the weather. As a general rule, it may be remarked that no implement, tool or carriage, of any kind should be exposed when not in use. These not wanted in the winter should be secured from the weather during that time; and so with those not required during the summer season, as sleighs, sleds, &c. The skillful, thrifty farmer is known by his attention to the minor points of agriculture, by his care to save, as well as to acquire; and he who neglects the lesser things cannot fail to find the drawback on his profits large and constant.—*Genesee Farmer.*

## COMPARATIVE VALUE OF HAY, VEGETABLES AND CORN.

I wish briefly to draw the attention of Farmers to the value of hay, compared with other crops, for the feeding of stock. An acre of hay yields one ton and a half of vegetable food. An acre of carrots or Swedish turnips will yield from ten to twenty tons; say fifteen tons, which is by no means an exaggerated estimate. It has been ascertained by experiment, that three working horses, fifteen and a half hands high, consumed at the rate of two hundred and twenty-four pounds of hay per week, or five tons one thousand and forty-eight pounds of hay per year, besides twelve gallons of oats each per week, or seventy eight bushels by the year. An unworked horse consumed at the rate of four and one quarter tons of hay in the year. The produce therefore, of nearly six acres of land is necessary to support a working horse by the year; but half an acre of carrots at six hundred bushels to the acre, with the addition of chopped straw, while the season for their use lasts, will do it as well, if not better. These things do not admit of doubt. They have been subjects of exact trial. It is believed that the value of a bushel of Indian corn in straw and meal, will keep a healthy horse in good condition for a week. An acre of Indian corn which yields sixty bushels, will be ample for the support of a horse through the year. Let the Farmer, then, consider whether it be better to maintain his horse upon the produce of half an acre of carrots, which can be cultivated at an expense not greatly exceeding the expense of half an acre of potatoes, or upon half an acre of ruta baga, which can be raised at a less expense than potatoes, or upon the grain produce of an acre of Indian corn, or on the other hand upon the produce of six acres of his best land in hay and grain; for six acres will hardly do more than to yield nearly six tons of hay and seventy-eight bushels of oats The same economy might be as successfully introduced into the feeding of our neat cattle and sheep.

These facts deserve the particular attention of the Farmers who are desirous of improving their pecuniary condition. It is obvious how much would be gained by the cultivation which is here suggested; how much more stock would be raised: how much the dairy produce might be increased; and how much the means of enriching the land and improving the cultivation would be constantly extending and accumulating. But when we find on a farm of two hundred acres, that the Farmer cultivates only two acres of potatoes, one acre of ruta baga, and perhaps a quarter of an acre of carrots, we call this "getting along," in the common phrase; but we can hardly dignify it with the name of Farming. I am aware that labour of a proper kind is in many cases difficult to be procured, and with our habits, as difficult to be managed, Farming, likewise, can in few situations be successfully managed, unless the Farmer has capital to employ, equal at least to one year's manure and one year's crops. A large portion of our Farmers, also, from the nature of their habits and style of living, are so prosperous and independent, that they have no occasion to extend their cultivation beyond what it now is, in order to meet their wants; and to incur all the trouble, vexation and risk of employing more labor, expending more capital, and increasing their cares. —*Colman's Agri. Survey.*

## PRACTICAL EXAMPLES.

[The following examples of the effects of proper tillage, are taken from a Report of the Kennebec (Me) Agricultural Society. They are worthy the observation of our readers.]

I have about 35 acres of land which I have improved as mowing and tillage this season, besides a piece of meadow on which I cut from six to eight tons of hay annually—from the 35 acres I have taken this season, as near as I can estimate without weighing the whole, 35 tons of hay, 51 bushels oats and peas, 32 do corn, 26 do. wheat, 6½ do. white beans. I have received 27 dollars for squashes and melons, sold over and above what was wanted for home use, and 960 bushels of roots, for which I claim the Society's premium, as the greatest quantity of roots raised on any one farm, all things considered. I should think there had been no more than two thirds of the hay that has been cut on the place consumed on it the four years last past, and it produced as much hay this year as it ever did, and I think the most. RUFUS MOODY.

The crop of ruta bagas, 300 bushels, for which I claim the Society's premium grew on one half acre of ground—soil a yellow, rocky loam, north-westerly exnt, and is so situated that the most part of it receives the wash of my buildings, it had been mowed four years previous to the spring of 1839, when it was ploughed and ten loads of hog manure spread on it, and planted to corn which grew stout, but "jack frost" who came early in autumn injured it much.

I ploughed the ground after the corn was off that fall and again the next spring, and planted it to potatoes without manure, putting in one table spoonful of plaster in each hill, got two hundred bushels of potatoes. Last spring I ploughed the ground and harrowed it thoroughly and spread on to the poorest part of it four loads of fine manure harrowed again and sowed some of the first days of June in drills three feet apart strewing plaster in the drills about one bushel on the half acre; the seed came up quick and they looked well, but the little powder bug so called destroyed them so that I was obliged to sow them again about the twelfth of June, this caused them to be much later.

They grew well until the drought in August and September which injured them much. I hoed them twice and thinned them, as I wanted the plants for my hogs five of which I kept on them five weeks. I harvested three hundred bushels. I think the drought injured them one third.

*Expense of Crop*

| | |
|---|---|
| Ploughing the ground | $1 50 |
| Harrowing do | 1 50 |
| Sowing, one day's work | 1 00 |
| Hauling and spreading manure | 50 |
| Hoeing, four days work | 4 00 |
| Harvesting, three days work | 3 00 |
| Total, | 11 50 |

N. B. The thinning I think took three days more but the plants and the tops cut off when harvesting I think will richly pay for that.

Fayette, November 12th, 1841. NOAH WATSON.

I offer for your consideration one-fourth of an acre of ruta baga turnips. The land was broken up in the fall of 1839, cultivated the next spring with 6 loads of barn yard manure and sown with sugar beets, which produced 80 bushels of beets on the one-fourth of an acre. Last spring it had 6 loads of manure ploughed in, and was sown with ruta baga turnip seed the 10th day of June. They were hoed twice. Harvested the middle of October and produced 200 bushels of turnips, besides what were used by the family previous to gathering.

*Expense of cultivating and harvesting.*

| | |
|---|---|
| Ploughing ground | 43 |
| Sowing and harrowing | 75 |
| Cost of seed | 25 |
| Hoeing twice | 3 00 |
| Harvesting | 2 00 |
| Total expense, | $6 43 |

*Value of Crop.*

| | |
|---|---|
| 200 bushels at 25 cents per bushel | 50 00 |
| Deducting expense, | 6 43 |
| Profit, | $43 57 |

SUMMERS PETTINGILL.

The land on which grew the crop of pumpkins is a clayey loam. Ploughed in the spring, and a little coarse manure put into the hole under the pumpkin seed before planting. Planted at about six feet one way, and ten feet the other way. It was not a large crop. There was seven cart loads. The land measured last night ninety six rods The calves eat of them about three weeks before harvesting. There were 4 calves in number.

Dec. 20, 1841. E. & L. WOOD.

The crop of potatoes for which we claim the Society's premium grew on a clayey loam, and was mowed for the three years before 1841. A large quantity of wheat straw was hauled from the barn yard and spread on and ploughed in, in the spring of 1841. It was planted to pink eyed potatoes in drills, and plaster put with the potatoe, about the first of June. There were a few long reds and rohans. The land was measured in the spring and contained two and a half acres, and there was dug about five hundred bushels of potatoes from the piece, and some eaten before by the family.

Dec. 24, 1841. E. & L. WOOD.

I present to your inspection some seed corn which I have raised this year. It was planted the 20th and 29th of May, and was gathered about the first of October. It is the Michigan or Dearborn corn, so called, brought into this state by General Dearborn, about 20 years ago, it is not so early as the Canada corn by 8 or 10 days. My father has planted it about fifteen years, and has never failed of raising good corn, except in 1830, when it was very poor, partly owing to the ground it was planted on, being in a bad situation for corn. I consider it the best variety that I ever planted, for which I claim the Society's premium. EBEN C. SNELL.

Having made an entry for a premium on potatoes, I will endeavour to make a statement of the manner of raising the same. The land on which they were raised is a blackish muddy kind of loam, rather wet, was cropped with the scythe as long as it was worth mowing. In July 1840 it was ploughed, and in the spring of '41 was cross ploughed and planted one half to the red potatoes, and the other half to the white potatoes, (about thirty bushels) in rows about 3 feet apart, hills about 20 inches, with a small shovel full of coarse straw manure and about a spoonful of plaster to the hill, without any other dressing whatever. The work of planting and hoeing was principally done with the plough, and with little expense; I think the whole including the seed was not over 7 cents per bushel. I had from one acre, three hundred and three bushels of potatoes. JOHN HAINS.

Readfield, December 24th, 1841.

## WINTER BUTTER.

There is scarcely one operation of the dairy more important to the farmer, than the manufacture of good butter; and in the winter time experienced dairy women are frequently disappointed in their endeavours to procure it.

The plan now used in my family with perfect and invariable success, was adopted from seeing its practical operation in the winter of 1825, in the family of Dr Jones, of Halifax County, Virginia. Mr Fessenden published an account of it in the first edition of his "Complete Farmer," in 1834.; and having seen many plans recommended in agricultural journals during the present winter for making good butter, of rather an equivocal character to my mind, I feel persuaded that the method now in use by my family would prove a great saving in labour and cream, wherever adopted.

The process is simply this: As soon as your milk is brought in, strain it into tin pans or pails, of a suitable size, and set them upon hot coals, or when convenient, upon a cooling stove, and allow the milk to heat gradually until the temperature is nearly up to boiling heat—from 130° to 150° Farenheit will answer. Then set them away and allow them to stand forty-eight hours. By this time the cream will rise in a thick leathery coat, and in quantity and quality that will surprise any one who has never before made the experiment. Take it off and churn it by stirring it with a wooden paddle, which is our method, or in any other convenient manner, and the butter will be produced immediately, and of the finest quality and flavor. The cream is perfectly seperated from the milk by this method,—perfectly sweet, and there is never any disappointment in the speedy manufacture of the very finest quality of butter; and it gives more butter from the same milk than we have ever been able to obtain in any other way.

Cream may be rendered oily by heating, and the butter entirely spoilt in flavor by heat, at a much lower temperature than I have suggested; but new milk will bear heat to any degree short of boiling, without the least injury to the cream which subsequently rises.

It has made my heart ache to see an industrious woman stand three or four hours over a churn, to be rewarded in the end, perhaps, by an indifferent turn-out of ill-looking butter, of a doubtful flavor, and I trust I may be excused for urging the trial of this method upon every one who may not already become familiar with it. The quantity and quality of the butter will be increased, and the labour of producing it most essentially diminished.

WILLIAM S. WAIT.

N. B. For the convenience of heating milk in vessels adapted to that purpose, it may be well to state the fact for the benefit of those who may not already be acquainted with it, that all the cream will rise from milk as speedily and effectually when set away in a deep pan or pail, as in a shallow vessel,—and the process of skimming rendered more easy and convenient.

Grenville, Ill., Feb. 3, 1841.

## NEW CIDER MILL.

It is thought by many, that if the entire juice of apples could be expressed by the first operation—that of grinding—the cider would, by being put immediately into barrels, become of better quality than that which remains for several days exposed to the action of the atmosphere. Besides, there would be the saving of the tedious process of pressing. With these views a mechanical farmer has invented a machine that will subject the apples to a pressure of 20 000 lbs. between two nearly plain surfaces, in the process of grinding, in addition to passing them through the ordinary crushing mill. In this operation, the apples are carried upward, thus, of course, leaving all the cider below.—*N. Y. Mechanic.*

The immediate separation of the juice from the pomace of the apple may be an advantage in saving time, but it will not, in our opinion, improve the quality of the cider, but have the contrary effect. Immediately after the apples are ground the saccharine fermentation commences, and the cider is much improved by remaining about twelve hours in the pomace. This is the method of making the best cider in the country. The finest that we have ever tasted, which has been in different lots in different sections of the country, was made in this way. The excellent Newark cider, made in Essex county, New Jersey, which sells four times as high as common cider in the city of New York, is made by grinding about twelve hours before pressing, and this delay in extracting the cider is considered indispensable to its excellence.

When a boy we made a small cider mill, and sometimes when there was an immediate want of cider, a few bushels of apples were ground up and pressed out in a few minutes; in such cases, the juice came out white and unchanged. Such cider, whether for immediate use or after fermentation, was much inferior to that which remained in the pomace till after the saccharine fermentation. This fermentation is necessary to the production of good cider, and after it takes place, it is best to check the vinous fermentation if it is to be used as a mild and pleasant drink, for this fermentation produces alcoholic properties, which will intoxicate if the liquor be taken in sufficient quantity.

For making vinegar, the only purpose for which cider is made by many since the glorious temperance reform, the vinous and then the acetous fermentations are necessary. But the vinegar is better by giving age to the cider and allowing these fermentations to come on gradually, instead of hastening them.

By the present mode of making cider, there is no need of exposing the cider several days to the atmosphere, unless very lazy persons are employed in the business.—We once resided in New Jersey, in the region celebrated for the best cider in the world, and in making fine cider, the juice remains twelve hours after grinding, and yet most of the cider is pressed out in twenty-four hours from grinding. The last that runs from the press, as well as the very first, is not reckoned with the fine cider.

We would here observe that besides the process of making, which is considered important, the Newark cider owes much of its excellence to the superior kind of fruit used for this purpose; also to the neat manner of picking the apples, and making the cider, keeping them dry and free from sweating, and grinding at a suitable time. The principal apples used are the Harrison, which is not juicy, but the tree is large and productive. We saw one with one hundred bushels of apples on it. This kind alone, or with one other, is used for fine cider, a mixture of many kinds is never used for this purpose by those who are considered skilful in the business, and are disposed to pursue the best way.—*Farmer's Journal.*

SCHOOLS OF GENIUS.—*Franklin*, who may emphatically be called the American Philosopher, cultivated the knowledge that at length bore him upwards to the temple of Fame, in a Printing office, under many great disadvantages.

*Bowditch*, the celebrated mathematician, studied the principles of this abtruse science in early life, on shipboard, and ever after, in hours snatched from the cares and anxiety of a busy life.

*Sir Richard Arkwright*, who received the honor of Knighthood for his great improvements in, or rather inventions for the spinning of Cotton, and whose beautiful seat upon the Wye, is one of the fairest in England, was a poor barber until he passed his 30th year.

Equal to any of the above, is our own *Elihu Burritt*, known as "the learned blacksmith," who, whilst serving an apprenticeship, and pursuing the laborious duties of his business, has made himself master of fifty languages.—*American paper.*

## TEMPERING EDGE TOOLS.

The art of hardening and tempering steel without risque for the various purposes, to which this most important of all metals is adopted, is so little understood even by many who work in it, that I presume a short communication on the subject would be acceptable. It often happens that tools, on which labor has been bestowed are spoiled in tempering, to the disappointment of the purchaser and to the discredit of the maker. The following directions, which by experience will be found to be correct, are designed to remedy these inconveniences Should you think a correct knowledge of this art of importance to the mechanical part of the community, you will please to give it a place.

Admitting the tool has been properly forged without burning or injuring the steel, in order for a good temper, it should be carefully heated in a fire made with wood or charcoal till it is of a red colour, and then plunged into clean cold water in a perpendicular direction. If the temper is to be that of an edge tool, the steel must then be made bright, by grinding or scouring it on a coarse stone and held over the fire until it is of a deep yellow or straw color. This is the proper temper of edge tools, the most difficult part of which process is, to give the steel the least possible degree of even heat, to give it the greatest possible degree of hardness and strength If the heat is continued beyond this exact degree, the pores of the steel will be so opened as to render it brittle with but a small degree of hardness, should the heat be carried beyond this degree by inattention, or accident, the evil will not be remedied by letting it cool down to this colour before it is cooled in the water; in this case it will be necessary to hammer the tool over again in order to settle the pores of the steel together The greatest care should therefore be taken, in hardening a tool not to heat it too hot, as its goodness depends more on this circumstance than is apprehended. Care should also be taken that it does not remain in the fire after it has acquired a proper heat; as oven without a greater degree of heat, the fire will soon coat it over with a thick scale, which will prevent the water from cooling it so quickly, as is necessary to render it as hard as possible.

The temper of a spring, after it is carefully hardened, is obtained by holding it over the fire with tallow till it blazes and burns off, the burning of the tallow should be continued for a minute or two on those springs which from their use are liable to break. Small springs, and other articles to be tempered spring temper, are more conveniently tempered in a sheet-iron pan or case with tallow, held over the fire until it blazes, when it is to be taken off and carefully shaken while the tallow continues burning.

Saws and many other common tools which require a file to sharpen them, pinions and arbors in clocks and watches, Surgeon's instruments, except those designed for cutting, bayonets, sword blades, gun stocks and various other articles are of this temper.

Iron may be hardened by the process of what is called case-hardening. This is performed by inclosing the iron in an air tight case with charcoal dust and a little salt, and heating the same red hot for one or two hours, and cooling it in clean cold water. The hammers and many other parts of gun locks are hardened in this manner. If the process is properly managed, iron and steel may be hardened without even altering the smooth surface of the instruments, the advantage of which is sufficient to induce the greatest attention in giving it the exact degree of heat. — *Useful Cabinet.*

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SHEEP HUSBANDRY.—According to the best calculations, there are 34,000,000 sheep in the Union. This is an increase of about 5,000,000 within the last three years. These are worth at a fair calculation $70.000,000. About one fifth of all these are found in the single State of New York. These sheep, at three sheep to the acre, would require 11,000,000 acres for their keep, worth $12 per acre; making the amount of $123,000,000 invested in lands.

Aggregate amount invested in sheep husbandry in the United States is:

| | |
|---|---|
| In sheep, | $68,000.000 |
| In land, | 132,000,000 |
| | $200,000,000 |

The annual crop of wool is estimated at 90,000,000 lbs., and worth nearly $40,000,000.—*Albany Cultivator.*

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Agriculture is the most ancient, the most honorable, and the most useful of Arts.

From the Cultivator.

## PREPARATION OF HAMS.

When well preserved, and well cured, there are few articles that are more acceptable at the table than smoked ham, yet it is often so improperly managed that no person possessing any pretension to taste, can swallow it with the least relish. Sometimes the fault is in the animal itself, but much oftener in the salting and smoking; on there, indeed the great excellence of the ham may be said to be depending.

A hog, to furnish the best hams, should not weigh more than 200 lbs. and should be fed on sound food, such as peas, corn, or barley. If he has had some range while feeding, the hams will be so much the better, as the muscular part or lean will be better developed, and more firm, than if closely confined. It is probably owing to these causes (the smallness of the Westphalia and Virginia hams, and the hogs while fattening being allowed to run at large,) that the bacon of these countries is so much superior to most others; although much may be allowed for the mode of preparation and smoking. Where a hog weighs from 300 to 500 pounds, the hams will be so large that the process of salting and smoking is rarely so perfect as to thoroughly permeate the mass of meat, and the consequence will be a large part of the center will be unfit for the table. Large hams require a longer time in curing and in smoking them than is usually allowed; the difference in size between small and large ones not being generally sufficiently considered.

There are many ways of curing hams, each one of which has its advocates, and many of which do not essentially differ from each other. We shall give a few of the processes that have become the most noted, that the farmer may choose the one he shall deem most proper or convenient.

Mr. Shelby's method, as given by him after 20 years practice, is as follows:—" I measure a bushel of salt, spread it upon a table, weigh a pound of saltpetre, pulverize it carefully, and mix thoroughly with the salt. This mixture is sufficient for 1,000 lbs. of small meat or 800 of large, to be well rubbed on every piece, and more especially on the fleshy surface. If the weather is mild and the meat small, four weeks will be long enough for the pieces to be packed; but if the weather is cold and the meat large, it should be taken up at the end of four weeks, well rubbed again with salt in case the first has dissolved, and lie two weeks longer."

The following is the celebrated " Knickerbocker Pickle," it is equally good for beef or hams, and rarely fails, as we know from experience, of producing a good article:—" Take 6 gallons of water, 9 lbs. of good salt, 3 lbs coarse brown sugar, 1 quart molasses, 3 ounces saltpetre, and 1 ounce pearlash; mix and boil the whole well, and skim off all impurities " The meat to which this pickle is to be applied should be slightly rubbed with fine salt and lie one or two days, that the blood may be extracted and drain off; then pack it tight in casks, turn on the cold pickle, and let it remain till sufficiently cured for smoking.

Mr. John Cockrill of Woodland, Ala. in the Southern Cultivator, thus describes his method of curing hams. " My rule is to make a strong tea of red peppers, then to mix salt and hickory ashes, say one-fifth ashes; then moisten the mass with the pepper tea, and rub the hams and shoulders on the skin side with about a tea spoon full of saltpetre to each joint; I then rub in the salt well, then rub the flesh side and pack it with salt, and place the pieces in a trough or tub. I let it remain undisturbed for six weeks; when I knock off the loose salt, take fine pea meal, and rub it completely over the flesh side and hang it in the smoke house. The meal will form a close crust and keep off the skipper fly."

The following is one of the easiest and most expeditious methods of curing and smoking hams, and we know makes a very respectable article. Take a good tight barrel, white oak is the best, take out one head, and invert it over a pan or kettle in which a smoke of hard wood chips, or cobs, is to be kept up for eight or ten days. Water must be kept on the head of the barrel to prevent it from drying. A pickle is made of six gallons of water, twelve pounds of salt, twelve ounces of saltpetre and two quarts of molasses, dissolved together in a kettle, boiled, and the scum taken off. The hams are packed in the barrel, the brine, cold, is turned on to them, and in one week the hams are fit for use.

What is termed the Virginia mode, or in some places, the dry method of curing, as the hams do not lie in pickle at all, is as follows:—for each ham take a spoonfull of saltpetre, (a large tea spoon will do,) pulverize it finely and apply it; rub each piece with salt well on both sides, and pack them in hogsheads with holes

bored in the bottom to let off the brine. Let them remain five or six weeks; then take them out, brush off the salt, rub each well with hickory ashes, and hang each piece in the smoke house.

The celebrated pickle called the Empress of Russia's Brine, and much used in Europe for curing hams:—Six pounds of common salt, two pounds of powdered loaf sugar, three ounces of saltpetre, and three gallons of spring water, are boiled together, skimmed, and when quite cold, poured over the meat, every part of which must be kept constantly covered. In this pickle hams of medium size are cured for smoking in two weeks.

A process which gives good hams, and is called the Jersey mode of curing, is as follows:—To every 80 lbs. of ham, take 4 ounces of sugar, 3 ounces of saltpetre, and 1 pint of fine salt. Powder and mix them finely. Rub the hams well with this mixture, and lay them on planks for two days. Then pack them in casks, adding 2 quarts of salt to every 80 lbs. of ham. In fifteen days they may be taken to the smoke house.

Much of the goodness of a ham is depending on the manner in which it is smoked or dried. If the process is carried forward too rapidly, if the meat is not at a sufficient distance from the fire; if from any cause, such as want of ventilation, dampness of smoke house, &c. the meat is kept moist on the surface, and in a wet or dripping state, it is idle to expect good or fine flavored hams. In Virginia, the best hams are not considered thoroughly smoked in less time than two months, not keeping a smoke under them day and night for this time, but making a good smoke under them every morning, or daily. In this way they are cured by the smoke gradually and thoroughly. Indeed the great art in smoking seems to consist in drying the meat by the smoke and not by heat. Hams may be smoked in a much less time than this, but they will not be of as fine a quality, nor will they keep as well. Nothing but materials that will produce smoke free from all unpleasant odors, should be used for smoking hams. Hickory or maple, are first rate; oak or ash will do very well; and the cobs of sound, well cured Indian corn make a good penetrating smoke. Hams are frequently injured by being exposed to too much heat in the process of smoking. To avoid this, at Hamburg, the smoking establishments for both hams and beef, are in the upper stories of three or four story buildings, and the fire for producing the smoke is in the basement part of the building. The smoke is conducted in tubes, and every precaution is used that the smoke shall be thoroughly cooled in its passage. In hanging up hams for smoking, care must be taken that they do not touch each other, and they should invariably be suspended, so that the small part of the ham shall be down; as this will prevent the escape of the juices by dripping.

Various methods have been recommended for the preservation of hams, such as packing them in hay, cut straw, the tow of flax, ashes, fine charcoal, and many other ways. The great object is to keep them cool and dry, and away from flies. Tow will effectually exclude flies; charcoal assists greatly in preserving them sweet; and ashes secure their dryness; but all these plans are open to the objection of making the ham dirty, or leaving it liable to mould. The best method, in all respects, we have known, is to place each ham in a bag of cotton cloth, closely tied up and hung up in a close and dark smoke house. Flies will not infest any place from which light is wholly excluded, and if a smoke is made under them once a week, it will greatly aid their preservation. As a security against flies, some of the establishments that produce hams of fine quality, are in the habit, while the process of smoking is going on, of throwing a few red peppers upon the fire once or twice a week; and a few burnt occasionally in the smoke house, while the hams remain in it, will kill, it is said, all flies that may have found their way into it.

## FALLING OFF OF CLOVER CROPS.

For a long period after the introduction of the artificial grasses into Scotland, excessive crops of clover and rye-grass were reaped from those fields which bore the appellation of croft-lands, and which were uniformly in a very inferior condition. At that period, 300 stones of hay per acre were considered no extraordinary crop, and even 400 stones have been taken from an acre. Neither potatoes nor turnips were in cultivation at that period; the grass seeds were generally sown with the wheat or barley crop, mostly with barley, after peas, the manure being always applied to the wheat or barley. After the introduction of potatoes and turnips, however, a revolution in the system of Farming immediately commenced, and in all light soils these crops were generally substituted for peas, as a preparatory cleaning crop, after which the grass seeds were sown with the following crop of grain. In a few succeeding courses of rotations after this system had commenced, we find complaints made of a falling off in the clover crops; and down to the present day, under certain modes of management, the complaint has been increasing, that the clover, when often repeated on any soil, degenerates and diminishes in its produce. Many farms, indeed, where 300 stones were no uncommon crop formerly, do not now yield, even in the most favourable seasons, above from 100 to 150 stones, and in bad seasons 60 stones per acre is all that they can produce.

At this calculation, on a farm where only 20 acres of clover and rye-grass are cultivated, the falling off of say 200 stones of hay per acre, will amount to the large deficiency of 4000 stones in the year, which, at only six pence per stone, amounts to £100! This deficiency is a strong inducement for both landlord and tenant to make every exertion to remedy the evil, not only as regards the loss of this large sum, but to prevent that consequent deterioration which the soil must unavoidably experience from the falling off in a crop which is ever found to enrich instead of exhausting the soil. In Sir John Sinclair's Husbandry of Scotland, the estimate of the hay now produced on some of the best Farms of East Lothian, is 200 stones per acre; and it is gratifying that industry and the method of cropping, as connected with the nature of these soils, have been able to continue this average produce, although in these fine soils and climate the clover crop in hay could not be less than 300 or 400 stones per acre when first introduced. In most of the turnip soils in Scotland, where the four shift rotation is persisted in, without pasturage, a general complaint is made of their fertility decreasing, and by some individuals it is affirmed, that in the production of clover and the other green and grain crops, the soil is becoming comparatively barren. Others, again, from a more philosophical and discriminating mode of practice, have been fortunate in discovering both positive and partial remedies for the evil.

As all the other experiments had nearly a corresponding result, we need not detail them. But we shall endeavour to illustrate this interesting and curious question, from the effects of tillage and cropping on old rich grass lands, possessing, it may be said, a purely virgin soil. The excellence of the various crops in the first rotation must strike the most common observer. The second rotation will be little inferior; but the third will show symptoms of falling off; in the fourth rotation this will be still more evident; and the fifth will bring the land to the torpid state we are now treating of. Its produce of clover and rye-grass, in the first and second rotations, would in all probability have amounted to at least three hundred stones of hay per acre, according to the nature of the season; and in the fifth rotation, the weight of the hay would be down to the very deficient crop usually complained of. These are facts which require no proof, although this might be easily found. But to rectify this complaint, were the land laid down to pasture in the fifth rotation, and continued in it for a period of not less than four years, nearly the same rate of fertility would again be the result. We shall only cite one incontrovertible instance of the regenerating influence of pasturage upon old worn-out tillage-soils, on the farm of Saughton, three miles from Edinburgh. The system of farming upon it was of the most liberal description, and for a number of years Mr. Dods, the tenant, found the happiest results from his liberality. His farm being conducted in the four-shift rotation, at last gave way, and in spite of the most liberal manuring, became more and more unproductive. Attached to a system which had made his fortune, he thought of no change to cure the evil; and at the end of his tack, against the wish of the proprietor, he gave up his farm in disgust. Mr Binnie, an opulent grazier, got the farm on lease, and with all expedition laid it down to pasturage. Nothing could exceed the produce of grass; and when again broken up for tillage, all the fertility which his predecessor had experienced, was fully realised.

Alternate pasturage, indeed, upon all these worn-out soils, is a valuable remedy for curing the evil. Sir John Sinclair says, "he considers the want of pasturage as the point on which the great bulk of Scotch farmers are defective; and from the advantage he has seen derived from pasturing tillage-land, he is decidedly of opinion, that if a full third of the county of East Lothian were kept in pasturage, as much grain would be raised as at present, with the advantage of all the additional stock that could be maintained upon such an extended pasturage. He desires it to be understood, how-

ever, that this grass should form a part of the farm under the convertible system, not as permanent pasture." Mr. Browne of Markle states, that on a farm of five hundred acres, sixty acres in pasture grass is found to answer very well. This extent of perennial pasture is broken up by the plough in four years, to the great benefit of the rest of the farm, yielding then abundant crops of corn, and requiring little manure for several years. This alternation of pasturage and tillage keeps the soil in a perpetual state of healthy vigour, which the most liberal course of arable culture could never produce.

Many farmers, on purpose to prolong the rotations, and prevent the too frequent repetitions of the clover crop, substitute a crop of peas or tares after the barley, sowing the clover after the wheat or barley in the next rotation, which makes the time between the two clover crops to be seven, instead of four years. The crop of peas they consider as by no means remunerative, yet, from the additional crop of clover reaped in the second rotation, they find themselves compensated for the deficiency in the peas. The opinion of Sir John Sinclair is in confirmation of this practice: he says, "Mr. Andrew of Tillilumb, near Perth, finds that if clover is cultivated only once in eight years, the produce is not only about double, but the succeeding crop of oats is better by two bolls per acre." From this it seems, that the falling off in the clover crop arises either from the soil being too porous, occasioned by over exertion and tillage, from too frequent repetitions of green crops, from an antipathy existing between turnips and clover, or from clover being too often grown on the same soil. From the facts given above, it is quite obvious that all these causes admit of a positive remedy. The over-porosity of the soil, and the pernicious effects of the turnip are cured by sheep eating the turnips on the soil. In these two instances, whether a crop of peas is substituted for a crop of turnips or a crop of clover, in every alternate rotation, it appears that a good crop of clover will be obtained. The advisable mode to be followed by farmers in regard to the subject of rotations, cannot be better given than in the language of Sir John Sinclair.

"Every farmer must be aware, in fixing on his rotations, that it is necessary for him to ascertain not only the various articles for the production of which his farm is suitable, and which are likely to yield him the greatest profit, but also the succession in which those articles ought to be raised, so as not to diminish the fertility of the soil."

We might here take notice of a plant amongst which clover invariably succeeds, not only in its seedling stage, but also in the following year's crop, namely, lint or flax. No person can dispute this fact, although the cause of it is not easily ascertained. It is a circumstance both curious and interesting, how a plant will grow luxuriantly in company with one species, and cannot be made to grow, on any account, with another. Plants, like animals, derive nourishment from the decay of each other; and it is an interesting research to examine minutely the relation which one plant bears to another, and to the soil they are destined to live on. We shall now point a few more remedies for the falling off in the clover crop, when the ground is kept in constant tillage; and these are, deep ploughing, summer fallowing, and surface applications.

In the present improved mode of tillage, deep ploughing is seldom given, although, when the soil is of considerable depth, it is attended with the most valuable consequences to the clover crops. Sir John Sinclair remarks, "that deep ploughing, by bringing up a new mould, is peculiarly favourable to clover, turnips, beans and potatoes, and without that advantage, these crops must diminish in quantity, quality, and value. Sensible of the benefits to be derived from deep ploughing to these crops, many of the tenantry of the Lothians are going over the whole of their farms in a course of trench ploughing. Some of them have a number of men working behind the ploughs, digging up the under mould and throwing it upon the top of the ploughed furrow, by which means the trenching is effectual in turning up a new and fresh mould, and the hardness below the ordinary furrow depth, occasioned by the repeated trampling of the horses and friction of the plough, is completely removed, giving a free scope for the roots of the plants to extend themselves, the effects of which have proved most valuable to the clover, and indeed to all the crops. It may be, in a great measure from the effects of turning up the virgin soil, as well as from the destruction of the slugs, that a naked summer fallow is always found to produce a much better crop of clover than the same quality of land will do after turnips. In proof of this, Sir John Sinclair remarks, "that clover and rye-grass is always a sure crop, when the land has been previously prepared with a well-managed summer fallow." He again remarks: "Mr Wood of Milrigg, from many years' experience, has found that there is little or no danger of clover succeeding every fourth or fifth year, providing a complete summer fallow intervenes between the clover crops. But if green crops are to serve as substitute for the fallow, he has found in that case, on the same field, the clover give way, when it succeeded on the fallow part of the ground, the green crop roots taking away that nourishment which is necessary for the support of the clover plants. He could clearly see that it was for the farmer's interest to make any sacrifice to ensure red clover. It is probably the new earth, turned up by the operation of following, which renders the clover plant so successful." Sir Humphrey Davy says, "In rich clay soils the furrow can scarcely be too deep, and even on sands, unless the subsoil contains some substance noxious to vegetables." As it would be useless to cite any more evidence to show the value of deep ploughing, or a naked summer fallow, as a remedy for the falling off in the clover crops, when the land is to be kept in a state of constant tillage, we shall now proceed to point out the benefits of surface applications to produce the same effects.

Surface applications are now administered on an extensive scale all around Edinburgh, for the sole purpose of procuring an abundant crop of clover and rye-grass. Soot is one of the ingredients which is applied to the greatest extent, and it has uniformly the effect of strengthening and forwarding the crop. Liquid manures are also extensively used, and the urine of the cows is collected with great care, for the purpose of being applied to the soil. The effects of liquid manures upon clover grass have been already pointed out in the section Manures, and little need be said upon them here. Liquid manures are much more lasting in their effects, and, from our own experience of their application, they seem better adapted for clover than soot. Saltpetre is likewise much used, and forms an excellent top-dressing for seedling grasses. It is by such means as these that the Agriculturists of the Netherlands have been able to keep up the fertility of their lands, in the cultivation of clover, through time immemorial; and those, therefore, who neglect such measures, have themselves to blame when their clover crops fail. The whole of the Agriculture of the Netherlands rests upon the cultivation of clover, which is sown with every kind of grain, but, as in this country, it grows most luxuriantly when sown with flax. The clover too unfrequently yields a heavy crop the first year, two and even three abundant crops the second, and if allowed to stand another year will yield a good crop, and afterwards be excellent pasture for cattle, till ploughed up to receive wheat seed, which usually follows it. It may be supposed that the land of Flanders is naturally so rich as to be adapted for the growth of clover; but this is not the case; the soil of that country, when left to itself, produces only heath and fir, and its fertilization has been brought about by a series of expensive and laborious operations. How is it that, with all our boasted improvement in Agriculture, although the clover is but of comparatively recent introduction into this country, the amount of its produce, even on our best soils, should be so inferior to theirs? Let us follow their system, and, in all probability, we will be as successful in its cultivation as they are. The top-dressings applied to their clover consist of liquid manure and peat ashes, the effects of which are highly spoken of by all who have witnessed Belgian husbandry.—*Jackson's Treaties on Agriculture.*

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Relief of Choked Cattle.—Believing the fact is not generally understood, that ruta bagas seldom need cutting or slicing, I would state that for three years past, I have in no case cut them for anything having good teeth. Sheep eat them decidedly better when fed whole, and cattle never choke on them. When I practiced cutting, scores of cattle were sometimes choked in a season; and here permit me to remark, that when such an accident occurs, I use a flexible rod about four feet long, three-fourths of an inch in diameter; wind a wad of tow, the size of a hen's egg, around the butt end; tie a rag tightly over it, grease it and push gently down the throat. To keep the mouth open take a piece of hard wood, one foot long, four inches wide, one inch thick, bring the ends to a point, bore a hole one and a half inches diameter through the center, push through the mouth, turn on the edge and pass the rod through the hole. I have never failed in any instance in thus giving effectual and permanent relief. With such an apparatus at hand, five minutes is sufficient to relieve the worst cases. S. W.

Whalen's Store, Nov. 15, 1841.

## HORSES—ORIGIN OF THE MORGAN BREED.

I will now endeavour to point out what appear to be the chief points of distinction between the Morgan breed and the horses of Norman French descent, produced in Canada. Let me premise that a great variety of races exists in the Canadian breed, yet all clearly impressed with a certain general character. The broad, courageous looking head, with the ears far apart, thick neck, general stoutness of frame, full breast and strong shoulders, with a round or fleshy croup; the low set muscles and large sinews, with those tough feet, that know not disease, are distinguishing marks of the French Canadian horse. The shagginess or abundance of hair in the mane and tail and on the legs, are much owing to the severity of the climate, with the manner of rearing the animals, and may be expected in a great measure to disappear under good cultivation, long before the innate excellencies and peculiarities will perceptibly change.

The Morgan horse does not partake of all these marks in common with the Canadian. The clear and deep toned bay color, too, which prevails in the Morgan, is rare among Canadian horses. It occurs in individuals; but, unless characteristic of the race for a long period of time, it could hardly be supposed that this color would so generally occur as it does in the Morgan horses of the present day. Peculiarities produced by a single cross are apt to wear away in a few generations, unless maintained by a careful selection on the part of the breeder. If, then, (supposing the Morgan horse to have come from Canada,) his color was an accidental variety, it would not have so generally marked his numerous offspring, unless great pains were taken to preserve it by selection, which has not been the case. It appears evident, from the prevalence of this color through several successive generations, as well as the similar descent of various qualities, which are authenticated as having belonged to the first known sire, that the Morgan horse, whatever may have been its origin, was of one pure stock; that is, that he was not cross bred, or produced by the union of two different breeds: for in that case, there must have been a greater variety in his progeny, some running to one family and some to the other, whereas a remarkable similiarity is known to prevail in all of this race. And here we may notice that the breeder is apt to find an essential difference in the two races: the Morgan, crossed or mixed with the various common breeds, inclines to retain its peculiar characteristics and its small size in the offspring for many generations while all the French Canadian races, though not larger for the most part than the Morgan, when used as a cross, increase the size of the progeny, and frequently assimilate so that the blood can only be recognized by a practiced observer, in the great developement and robustness of form, and the courage, spirit, and aptness to thrive, which are commonly reckoned as constitutional health.

The Morgan differs essentially from the Canadian horses in their action or mode of travelling. A Morgan horse glides over the ground eight or nine miles an hour, with such easy movements of his legs, that one would think they only felt relieved when so employed; the Canadian, when he has speed, seems to go by main strength, every stride arising plainly from a purposed exertion of his powerful muscles.

Another principal dissimilarity is in the endurance of the feet; and here the Canadian horse has all the advantage. The Morgan appears to be subject, as much as equally strong constitutioned horses of any breed, to founder and other diseases of the feet, while with the Canadian such ailments are less known, perhaps, than with any other breed in the world. There are numbers of horses in Canada that, under a mass of shaggy hair, possess dry, sinewy legs, on which the severest service never raises a wind-gall. The legs of the Morgan, though destitute of long hair, have this excellent conformation in a very high degree.

The Morgan is a great traveller, an untiring all day horse, but seldom a very fast trotter or galloper, and less frequently a perfect saddle horse. The Canadian, if he has the power of rapid locomotion, inclines for the most part to put forth his energies only for a short time, and then to take a leisurely gait, as if a slight sense of fatigue overbalanced the alacrity of his nervous system. There are, however, splendid exceptions to this description, horses that, with no light load behind them, will travel eighty and even ninety miles in a day. Some of the lighter footed Canadian horses too, are very pleasant under the saddle, though in general the weight of the neck and uprightness of the shoulder disqualify them for this use. The head of the Morgan, though not less energetic, is somewhat dissimilar to that of the Canadian. The ears of one are upright, of the other more apart. The head of the Canadian horse is broader at the upper part than that of the other. Each has a great breadth between the eyes, which is considered a sure indication of energy in an animal. The Morgan has the best open nostril for wind and bottom, more like that of the race horse; and the whole of the muzzle, as well as the eye and ear, indicate more breeding, or a longer period of cultivation, than those of the Canadian. There is a difference of shape observable throughout the whole figure. The Morgan is long in the side, but always short on the back, and strong and beautiful in the loins. His fine shoulder, too, differs from that of the Canadian horse. It is deep, well sloped, comparatively thin at the top and heavy at the bottom, serving, conjointly with a wide chest and the forelegs set far apart, to give the horse an appearance of strength and endurance scarcely to be looked for in one of his spirit and fleetness.

The high crested neck and thick wavy tail of the Morgan, show much of the character of some races of the Canadian.

Whether the Morgan be a scion of the Canadian stock, or be derived from the Dutch or some other breed which has disappeared in the United States, appears to be a question of some importance to those who would make good selections in order to improve the breed of horses; and whoever can throw any light upon the subject, will gratify a large portion of your readers by making known his information through the Cultivator. If the French Canadian did not supply the Morgan, I, for one, should be glad to learn what other breed has ever been known upon this continent that could boast such excellent qualities for common service as are universally admitted to distinguish both of these breeds.

GEORGE BARNARD.

*Sherbrooke, L. C., Oct. 25, 1841.*

## EXTRACT OF A LETTER FROM A FATHER TO HIS SON.

Waste not your time at political meetings. They are generally got up by the interested and indolent—the office seeker and the parasite. These meetings, if often frequented, lead to bad habits, and too frequently associate you with bad company; take you from your business and your family, and inflame passions which are at war at once with your quiet and prosperity in life. Look about you, and take warning from the condition of meddling officious politicians, who neglect their own to take care of the public concerns. I subjoin for your instruction as well as amusement, the soliloquy and plea of a noisy politician, whose prototype may be found in almost every town and village.

Peter Brush was in a dilapidated condition—out at the elbows—out at the knees—out of pockets—out of spirits, and out in the street—an "out and outer" in every respect. He sat upon the curb stone leaning his head upon his hand, his elbows being placed upon a stepping stone. Mr. Brush had for some time been silent, absorbed in deep thought, which he relieved at intervals by spitting through his teeth forlornly into the gutter. At length heaving a deep sigh he spoke.—"They used to tell me put not your trust in Princes, and I hav'nt. None of them never wanted to borrow nothing of me, and I never see any of them to borrow nothing of them. Princes! pooh! Put not yours trust in Politicianers! them's my sentiments. There's no two mediums about that. Hav'nt I been serving my country these five years like a patriot; going to meetings and huzzaing my daylights out, and getting as blue as blazes; hav'nt I blocked the windows, got licked fifty times, carried I dont know how many black eyes and broken noses for the good of the commonwealth, and the purity of our illegal rights—and all for what? Why for nix. If any good has come out of it, the country has put the whole of it in her pocket, and swindled me out of my earnings. I can't get no office! Republics *is* ungrateful, I'm swaggered *if they aint!* "*Come with me*" said Charley, helping him along. "I'll take care of you"; But what made you a politicianer—hav'nt you got a trade? "Trade! yes; but what's a trade when a feller's got a soul—a whole soul. Trade! I love my country, and wanted an office—I did'nt care what, if it was fat and easy. I wanted to take care of my country, and I wanted my country to take care of me. Head work is the trade I'm made for—talking, that's my line. Talking in the oyster cellars—in the bar rooms, any where; I can talk all day, only stopping for meals and to wet my whistle. But parties is all alike, I've been on all sides—tried 'em and know—none of 'em gave me any thing, and I've a great mind to knock off and call it half a day.—*Am. Pap.*


# THE COLONIAL FARMER.

HALIFAX, N. S., FEBRUARY, 1842.


## FIRST REPORT OF THE CENTRAL AGRICULTURAL BOARD.

The Central Board of Agriculture, established at Halifax, in pursuance of the Act of last Session, beg leave to report, for the information of the Legislature, a general outline of their proceedings since their organization in the end of April,—the results achieved, impeded as they have unavoidably been by the difficulties incident to the working of a new system,—and their intentions and sphere of enterprise in the future.

Having been commissioned by His Excellency the Lieutenant-Governor, they held their first Meeting on the 29th of that month, and elected the Hon. James McNab the Chairman of the Board, the Hon. William Young Vice Chairman, Edward Allison, Esq., Treasurer, and Mr. Titus Smith, Secretary on trial.

At that time but three or four Agricultural Societies existed in the Province, those useful Institutions, which had flourished in the different Counties under the auspices of the former Central Board, having for the most part languished and died away.

Impressed with a thorough conviction, founded on the experience of all other Countries, that a wholesome impulse could not be communicated, nor the aids of science imparted, to the Agriculturists of the Province, without the agency of Local Societies; the Board, as their first step, invited and urged their formation, and offered to enter into correspondence with the leading farmers in every section of the Province, and to furnish such information and assistance (by importations or otherwise) as might be in the power of the Board for promoting their views and stimulating their exertions.

By the publication of their minutes from time to time in the newspapers, and a pretty extensive correspondence opened with patriotic and public spirited individuals, the Board are gratified in being able to report, that a spirit of enquiry, combined with an anxious desire of improvement has been very generally aroused, and that Societies have been formed and are in correspondence with the Board in all the Counties but one; so that the whole Province may be considered as organised, and many of the most intelligent and practical farmers are evincing a warm interest in our success. Central Societies are in operation in the Counties of Annapolis, Digby, Sydney, Guysborough, Cape Breton, Inverness, and Richmond. There are three Societies in each of the Counties of Halifax and Pictou; four in each of the Counties of Kings and Cumberland; two in each of the Counties of Colchester, Hants, and Lunenburg; and one each in Queens County and Shelburne. After the most of these had been founded, the Board proceeded on the 17th of July, in terms of the Act, to apportion among them the sums of £75 granted to each County, and they annex a copy of their minutes on that day as the best illustration of the spirit in which they carried into effect the discretionary power confided to them. They are happy to state that their decisions have been cheerfully acquiesced in, and as they furnished satisfactory explanations in the few cases in which remonstrances were made to them, a feeling of cordial good will has been maintained between the Societies and the Board, without which the many difficulties incident to a new experiment could scarcely have been surmounted. Above all it is gratifying to report that in no instance has their anxiety to carry out the purposes of the Act, or their disposition to do equal and impartial justice been questioned, or even brought into suspicion. Although they are sensible that errors have been committed, and that some things might have been better managed with the aid of the experience they have since acquired, they are pleased to acknowledge that they have found in the Societies, as they anticipate in the Legislature, a generous inclination to give them credit for upright intentions, and to estimate more highly perhaps than it deserves, the pains they have bestowed on the discharge of their public duty. The experience they have gained is, indeed, of great value and will enable them to prosecute their plans in future with energy and fewer risks of accident or failure. In the Appendix to this report they annex a Schedule of the sums appropriated to the various Societies, and are prepared to exhibit an account with each of them, shewing what proportion has been expended or remains under their controul.

As one of the principal objects of the Board was the importation of improved breeds of Stock, and several of the Societies expressed a desire to have their Funds in whole or in part expended in that way, the Board proceeded, shortly after formation, to consider the most advisable mode of having the animals they required selected and shipped. Having no agent on whom they could rely in the Mother Country, they would have felt themselves embarrassed in issuing an order to a stranger, but were relieved of this difficulty when they learned that George R. Young, Esq. was about to embark for England, and, on being applied to, professed himself willing, out of regard to the Agricultural interests of the Province, to undertake the task. They annex a copy of the instructions furnished to Mr. Young, which were followed up by frequent correspondence with him while in London, and were satisfactorily and amply fulfilled. They annex two Letters from Mr. Young, giving an account of his mission, and of the difficulties and anxiety in which it involved him, and containing some suggestions deserving the attentive consideration of the Legislature. In these Letters, and the Letters accompanying them from eminent Breeders, the Plates and Books referred to, which are accessible to the Societies, will enable them to instruct the Board, and give precise orders, for the future, for whatever Stock they may require. They annex also a list of the Stock imported throughout the year, at an expence exceeding One Thousand Pounds, Currency, besides a Stallion from Canada, which was purchased for the Board by the Hon. Michael Tobin, Senr., and cost about £100. These importations have suggested to the Board many useful hints for their future guidance. They do not hesitate to avow their opinion that the orders of the last year were sent too late, too short a time was afforded for purchase, and some of the Stock was shipped at a period of the year too far advanced. They would be disposed to import from Great Britain hereafter only in the spring, or early in the summer, and in large roomy vessels direct from the Thames, Clyde or Mersey, so as to lessen the chance of mortality or disease; and unless the Legislature should authorise the purchase of some of the more choice specimens, which can only be had at what may be accounted extravagant prices, the Board would order animals of handsome shape, and presenting good points, without being so solicitous for pure blood and pedigrees from the best Breeders, which the dealers in Stock estimate so highly at home, but we cannot so well afford in this Country. The Bulls and Heifers they imported were highly prized, and brought what were accounted very large prices at the public sale held in October. The Sheep were many of them perfect models, and there can scarcely be finer animals than those which are wintering in the neighbourhood, having arrived too late for trans-shipment. The Boars and Pigs from England were procured from a first rate Breeder, and came highly recommended, which a trial of their qualities will doubtless justify, though their appearance was far from prepossessing; while the Pigs from Boston were evidently of a very superior kind; and as they are close at hand, and can be landed here in prime order at the cost of £9. a pair, the Board would recommend to the Societies a liberal importation, so that this valuable breed may be naturalised in every County in the Province. They intended at one time to have appropriated a part of their Funds to the importation of an English Stallion; but finding that, even with the specific grant at the disposal of His Excellency the Lieutenant-Governor, there was not enough to procure a first rate animal, they thought it better to postpone it till the meeting of the Legislature, in order that they may be guided by the sense of the Country, and ascertain whether it will be judicious to import, for Agricultural purposes, a Suffolk Punch or Clydesdale Horse, the latter of which the Board earnestly recommend, because superior animals can be got at a comparatively moderate price, say from £60 to £80, Sterling, and their merits have been tested both here and in Prince Edward's Island. They would suggest, also, the propriety of granting a further sum, in addition to the amount placed, in 1830, at the dis-

posal of His Excellency the Lieutenant-Governor, for the importation of what is called a Leicester Hunter, an animal which cannot be bought, of superior quality, under £250, Sterling.

Upon the subject of Stock, they recommend an examination of the annexed Plates;—the two volumes of Lowes Illustrations and Plates of the Domestic Animals of Great Britain, also annexed; and three volumes on Cattle, Sheep and Horses, published by the Society for the Diffusion of Useful Knowledge, which they have procured from London. These may be seen on application to the Secretary, and give full information as to the best breeds, their character, qualities and value. In this sphere of enterprise the Province is susceptible of vast improvement, and they trust, before the term of the Board has expired, to be the means of introducing the finest breeds for which England is so justly celebrated, and which, in the last twenty years, have added millions to the annual produce of the Kingdom.

They annex in the appendix the accounts of the cost, sale or other disposition of the Stock imported, and of the monies that have passed through their hands. They will likewise lay on the Table of the Assembly for the inspection of the Legislature, all the reports that have been sent in by the Societies, and regret that some few of them are deficient. Those from Horton, Cornwallis and Guysborough contain valuable hints, and are intended, with some of the others, for publication in the Colonial Farmer.

The establishment of this excellent Agricultural paper is another pleasing feature of the by-gone year. As the Board are authorized to expend a part of the sum at their disposal in the encouragement and circulation of Agricultural publications, they conceived that they could not appropriate £50 of it more wisely, than in subscribing for 250 copies of the Farmer to be distributed gratuitously, and trust they will be able this year to afford a moderate sum to the Mechanic and Farmer published at Pictou, and which is also a very useful Agricultural Journal. They refer with great satisfaction to several excellent original Essays and details of experiments from gentlemen devoted to Agricultural pursuits, which have appeared in these papers, and trust the laudable spirit thus exhibited will be persevered in and copied by others of equal talent. They ordered also from Scotland 200 copies of Jackson's admirable work on Agriculture and Dairy Husbandry, containing the modern scientific views, and the best recent practice and improvements, at the moderate price of 3s. 4d. ℔ copy, and as they offered for every copy ordered by a Local Society and paid for out of its founds, to furnish an equal number of copies at the expense of the Board, a considerable proportion of these have been distributed; and the Board flatter themselves with the belief that they have thus been the means of circulating much useful information, and diffusing the elements of sound knowledge among the farming classes at a small expense.

They have likewise imported from Boston and shipped for various Societies a number of improved implements, which were exposed to public view in the Hall of the Province Building for some weeks, and may be had in any quantity and at moderate prices. They are pleased also to learn that it is in contemplation to establish a shop for the sale of Agricultural Implements in Halifax—but they are satisfied from the information they have attained that the Board and the Local Societies have before them a wide field of exertion in introducing the best implements used in other countries so as to render labour more efficient—in other words, to do more work with the same amount of physical strength—and to render the soil, by suitable tillage, fitted to yield a more abundant return.

In laying before the Legislature this detail of their past labours the errors committed and the experience acquired—for the Board feel it due to themselves to act with perfect openess and candour, they think it right to accompany it with a brief sketch of their future plans, and the improvements which may yet be introduced, as the spirit with which they are animated be responded to by the Legislature and the Country.

And *first*, be it remarked, that the Board are sensible that the correspondence with the local societies has not hitherto been conducted with the regularity and efficiency they deserved. The wishes of the Board themselves have not been followed up in this respect and without entering into further explanation, they beg to say that they intend to place this department under a different system, and so exclude for the future all reasonable grounds of complaint

*Second*, they intend to add to their importations of Stock,—but, guided by past experience they mean to send their orders, so that their Agents at the different shipping ports may have abundant time and opportunity to select the Animals they order, not from the first breeders only, who always demand very high prices, but from the Stocks of substantial farmers, where, they have assurance, animals of first rate quality and good *points*, may be procured at comparatively moderate prices. These must be shipped in large vessels early in the season, and bargains may be perhaps made with the owners of vessels here for the freight. They wish it to be understood that they have no desire to interfere with the Local Societies, if they can make suitable arrangements for the importation of Stock from their own funds, and will be ready, at all times through their Secretary, to afford them every aid and whatever information and references they may require.

*Third*, They mean, during the ensuing season to devote a sum to the introduction of new and better seeds, and specimens of approved Agricultural Implements. They have been prosecuting extensive enquiries on these subjects, and have acquired a considerable amount of practical and useful information.

To these different objects the Board are prepared to give their immediate and earnest attention; and as they can have no desire except to elevate the Provincial Agriculture, to dignify the pursuit and to promote the general good, they trust that the Members of the Legislature will be ready to assist them with their counsel and experience. They will of course be less liable to run into mistakes if controuled and guided by the combined intelligence of the Province.

In the Reports before submitted to the Legislature *Statistics* have been referred to, to shew the important effect which the improvement of Agriculture has upon national wealth. They refer to the Report from the Committee of Agriculture contained in the Journals and laid before this House in 1839. By returns lately laid before the Imperial Parliament, it is calculated that the consumption of Agricultural produce per head in Great Britain is equal to £8 sterling. In this Province it must be at least as much, for the people live better and consume a larger quantity of Agricultural produce. Taking it, however, at the same rate, that is £10 currency, and the population of Nova-Scotia at 200,000 souls, the gross annual value of the Agricultural produce of the Province must be equal to about two million of pounds—more than the gross amount of all our imports! The Board however are sensible that to ascertain the actual condition of the local agriculture, in what points it is most defective, and in what encouragement is most required, it would be important to have returns of the Stock, Crops and Produce from every County and District, and they have it in intention, as soon as the return can be made practicable, to suggest the preparation of these returns to the Local Societies; and thus to be enabled to submit to the Legislature at some future, and they trust, at no very distant time, a tabular view of the Statistics of our Agriculture, supplied by the zeal and talent of the Local Societies.

However cheering this prospect may be to the friends of Agricultural improvement, from the kindly feeling extended to the operations of the Board throughout the Province, it is undoubted that the practice of our Agriculture is infinitely inferior to that of the best cultivated districts of the old world, and especially to that of England; and yet it is admitted by men of the first skill and of acknowledged patriotism, that the Agriculture of England, with all its recent improvements and advancement, is yet in comparative infancy; and that there are projects and discoveries now proposed, and in the course of experiment, likely to give an entirely new impulse and destiny to the landed interest and the tillers of the soil. The Board give two extracts, and but two, in the Appendix, out of a volume they might refer to in proof of this position—the first from the address for 1839 of the Central Agricultural Society of Great Britain and Ireland, instituted in London in 1835; and the second from the brilliant speech delivered before the Royal Agricultural Association of England, by Lord Stanley on the 22d July last at Liverpool, at its public dinner, where 3000 gentlemen sat down to table at one time.

If this field of boundless enquiry and exertion is open in England—if so much there remains to be done—it is surely our duty to follow at a humble distance, and as we cannot imitate at least to keep a watchful eye upon the improvements and discoveries effected, and by circulating them abroad to induce our best farmers gradually to copy them and thus raise their fields into a pattern to be admired and followed.

The Board annex to this Report the Publications collected this season for their use of the Highland Society of Scotland, of the Royal English Agricultural Society founded in London, and of the Improvement Society of Ireland—their list of premiums—the

prizes offered for improved specimens of Stock—new seeds—implements—manures—draining—the application of Steam to Agricultural labour—and the whole wide circle of the arts bearing upon Agricultural production and industry. With these three great National Associations they have opened correspondence and are placed upon their lists of Corresponding Members. The beneficial influence of the first of these upon the Agriculture of Scotland is too well known to require illustration. It numbers now some 3000 Members, that of England has 5000 Members, including the Nobility, the Landed Gentlemen, Professors and other classes, who all, with the requisite wealth and energy, combine for the one generous and patriotic purpose of honouring Agriculture as a science, and raising its occupations to their just value and importance in the creation of national wealth. Both of these Associations have of late years adopted the principle of centralization first introduced into Germany, and in place of holding their annual shows continually in the vicinities of London, Edinburgh, or Dublin, and thus confining competition to one favoured locality, have held them in the principal cities of the Sister Kingdoms and thus made their Institutions *national* and circulated the spirit which sustains them, the experiments made under their auspices, and the enthusiasm and rivalry their prizes are intended to excite and foster, from one end of the country to the other. It would be entirely premature and beyond the present circumstances of the Province to refer to these great examples as fit for imitation here. The Board are aware they can only be useful by confining their attention to practical objects, which the sober sense of the Legislature and the country approves of, and will support them in promulgating. They will attempt nothing to raise extravagant hopes, or which will excite opposition or hostility; but as these Agricultural celebrations have been found to be eminently useful wherever they have been introduced—as they are conducted in the neighbouring States by societies with funds not equal to those under their control, and in districts where the farming classes are certainly *not* superior, if equal, to those of Nova-Scotia, in point of wealth, intelligence and spirit—the Board have now to enquire if the friends of Agriculture would deem it expedient for them to introduce an Annual Meeting under the direction of this Board—to be held for example in different years at Windsor, Kentville, Annapolis, Amherst, Pictou, or other locations if deemed more suitable, in order to centralize and yet to extend Agricultural competition—to introduce the best breeds of Stock, Seeds or Improvements of one district into all,—to give a farmer of distinction in his own County a Provincial reputation, and above all to confer here upon the successful labours of the Plough, and the skill and science they require, the dignity and importance freely awarded to them in other countries, and to which they are in truth pre-eminently entitled.

They submit these views to the country, expecting them to receive a candid consideration, and trusting that their exertions will be responded to in a spirit of kind and cordial co-operation—for without this they are satisfied they may design and labour in vain.

Halifax, February 12, 1842.

## APPENDIX.

*Copy of a Letter addressed, by the Chairman and Vice-Chairman, to George R. Young, Esqr.*

*Halifax, June 5th*, 1841.

Dear Sir,—We beg to enclose the copy of a Resolution *unanimously* passed by the Central Board of Agriculture, and have to solicit your best attention while in Great Britain to the selection and shipment of the Stock ordered by the Board, as appears by their printed minutes of the 1st instant. All of these are entrusted to your care except the Leicester Hunter, for the importation of which they have made other arrangements. The necessary funds will be placed in London at your disposal to enable you to carry the wishes of the Board into effect. It will be necessary in selecting the different descriptions of Stock that you do not exceed the Currency sums named for each kind, including the expences of shipment and provender, and it would be desirable to get the parties from whom you purchase to deliver them safe and free of expence to the shipping agent you may fix upon either at Greenock or Liverpool.

As the Board is constituted for a period of years, and may not again have the opportunity of employing an agent in whose judgement and desire to promote the agricultural interests they could place as implicit confidence as in your own, they are anxious to establish a correspondence with trustworthy respectable persons from whom they could order in future such Stock, Implements and Seeds as they may require, with the assurance that their orders would be executed with fidelity and uprightness. You will be pleased therefore to arrange for an Agency in both England and Scotland, with whom the Board can enter into correspondence for the purpose. All your proceedings within the scope of the accompanying Minutes and Resolutions, and of this letter, the Board will cheerfully confirm, and will be highly gratified if your attention to their wishes prove the means, as they confidently anticipate, of securing important benefits to the Agriculture of the Province.

We are, dear sir, yours very truly,

Signed— { James McNab, Chairman.
{ William Young, Vice-Chairman.

To George R. Young, Esq.

*Copy of a Letter addressed to George R. Young, Esq. by Edward Allison, Esq. pursuant to a Resolution passed at the Board.*

George R. Young, Esq.

Dear Sir,—Since the order was handed you by Chairman of our Central Board we have received several communications from Societies in different sections of the Province, some of them requesting that we should add to our order for Stock the animals that you will find enumerated at foot. You will please keep in view that the value given is Currency, and intended to include expence of importation—say, the cost of the Animals at Halifax. The Windsor Society want a yearling Bull and Heifer of the pure West Highland breed. The Society at Aylesford, a South Down Ram, no age given, a yearling or two year old would be advisable. Antigonish (Central Society), one hundred pounds currency to be expended in the purchase of Sheep, in the proportion of 4 rams to 1 ewe; age not to be less than two or more than four years. The description is left to the Central Board, and perhaps it would be well to send two or three kinds, such as in your judgment would be most suitable for that section of the country. I think that the long-wooled sheep would be most approved of, as our farmers seem to think more of the quantity (weight of fleece) than quality of wool. A Farmer from Horton has imported this year a Ewe and Ram that have sheared nearly thirty pounds (say 12 lb and 17 lb). From the description I have had of them, think them Leicester, (not new Leicester or Dishley). Should your judgement approve of them it would be well I think to include some of them among those you purchase. The Cheviot too is a hardy sheep, and although not as heavy as South Down, New Leicester, &c. I think would be well calculated for some parts of our Province.—Society at Port Hood; fifty pounds value in Sheep and Swine, in proportion of one pig to ten sheep; males only ordered. Of pigs we have ordered Berkshire and Chinese from the United States. The "Essex half black" are highly recommended; and from the character given to the Woburn pig I should like to see both of these varieties introduced into the Province. In offering to purchase the Stock for us, I fear you have not considered the troublesome office you were undertaking. Your recompence will be in conferring, I hope, a lasting benefit upon this Province.

I am, my dear Sir, yours very truly,

(Signed) Edward Allison.

The Society at Colchester are desirous of trying Winter Wheat, and wish us to Import from Scotland 10 bushels. Please to have this procured of the most approved kind and sent per Acadian, or first vessel from the Clyde. Yours,

(Signed) E. Allison.

*Extract from Lord Stanley's Speech, at the great Dinner of the Royal Agricultural Society of England.*

"But, gentlemen, I would be very far from saying that this was the main object, that this was the principal advantage; upon the contrary I say it is a very minor portion, a very inferior object, a very secondary consideration for the Agricultural Society of England, the exhibition of stock, and of the improved produce of cattle which they exhibited in the show yard. One great object, I hope, may be accomplished by this exhibition. I know how incompetent I am upon this subject to offer any advice (cries of no, no,) or opinion, but I know in this neighbourhood—and I doubt not it is the same in many parts of the country—that a great and grievous error prevails among the farmers of preferring, when they are breeding, either horses, or bulls, or rams, whose services may be obtained at a cheap rate, rather than choosing an animal of the greatest merit and quality. (Hear, hear.) I would ven-

ure to say that a more fatal error cannot be committed. (Hear.) It is the strongest illustration that I know of the "penny wise and pound foolish." (Hear, hear.) It is the saving, in the first instance, of a few paltry shillings which makes the difference, and it is the incurring of the whole after expense of breeding, in reference to which those few shillings are as nothing, the result of one, being, that after all your expence, you obtain a worthless, and in the other a valuable produce. (Hear, hear.) But, gentlemen, I have said that I considered the exhibition of stock to be a very second-rate consideration in the objects contemplated by the Royal Society of Agriculture. I have said that I believe it, in reference to its possible capabilities, to be yet in its infancy; and I am firmly persuaded, that the man who should at this time form a correct estimate of those improvements in the capabilities of our productions, which I believe will be seen within a century hence, would be deemed not a rational calculator, but a visionary enthusiast, and a man who speculated upon impossibilities. (Hear, hear.) Why, gentlemen, the practice of agriculture, not many years ago, would hardly have been dignified with the name of a Science. It would have been considered as such an easy sort of manner to obtain a provision, that it might be taken up and carried on by any upon the good old humdrum principles which they had seen adopted by their fathers and grandfathers, carried on with the rudest machinery, with the least possible economy of labor and expense, but producing possibly what it had produced for years and centuries before, and that what was good enough for their fathers and grandfathers was good enough for them. (Hear, and laughter.) Gentlemen, I hope a better time has come, that in the capabilities of the soil, and in the means of agriculture, what did satisfy our fathers and our grandfathers, will not satisfy us, (hear, hear.) and if that satisfies us, it will not satisfy our children and our grand children. (Applause.) I hold it to be one of the most important points connected with this great assembly, that it was just at the period at which the spirit of enquiry and improvement commenced to take deep roots in the minds of the agricultural population—that at that precise and most favourable moment, my noble friend Earl Spencer (loud cheers) whom I now see near me—a name which I perceive you agree with me in thinking never could be mentioned without respect and cordial approbation (cheering) in an assembly of Englishmen who knew how to value sound practical sense, the most intense and universal benevolence, and the soundest and strictest integrity. (Cheers.) It was at that fortunate moment that my noble friend conceived the project of instituting the English Agricultural Society, and of extending thereby the benefits of useful information and of mutual competition throughout a larger sphere than had ever formerly been attempted in this country. (Cheers.) Gentlemen, even in our most ordinary farming operations, is it not a subject for regret upon one hand, but is it not also a subject upon which we may derive hope for the future upon the other, that though much has been done—and I do not deny that very much has been done within the last twenty years—yet much remains undone, and yet to be accomplished—that in the departments of science as connected with agriculture much remains yet not only to be made known, but even to be explored and investigated? (Cheers.) Take the very simplest operation—take that which is the foundation of all agricultural improvement—take that without which outlay is thrown away, and is better not laid out at all—examine generally the state of England, and of these parts, I believe I may say of England generally, I know I may speak it with regret and shame of my own and some of the neighboring counties—I venture to say that watercourses choked up—drains imperfectly constructed, if constructed at all—combined with a soil of natural tenacity and extreme retentiveness, overflowing the whole with a superabundance of moisture, diminish to an extent, that would hardly be credible, the productiveness of the soil. They extend over a large surface of ground, and contribute, in my conscientious belief, to alter the very character of the climate, if not of the atmosphere itself; and while they diminish the productiveness of the soil, retard also the maturing and injure the quality of the crops. The man would be thought to have conferred no trifling benefit on this country, who should add one bushel to the quantity of wheat produced by each acre of the wheat lands of England; yet I am confident I speak within compass when I say there are hundreds of thousand of acres which are capable, by improved cultivation and attention to drainage, of producing five, ten, or fifteen bushels per acre more than they do. And is it not of importance that we should see what may be achieved without any extraordinary means, but by the ordinary exercise of that knowledge, which if we do not all possess, is within the power of all to acquire? I am aware that the process of draining is an expensive process, requiring an outlay of capital, which, if we were to take the total of even a single County in England, would strike every man as something marvellous, and almost appalling; and yet I am satisfied of this, that while no landlord could expect a tenant to engage in operations so expensive without his concurrence, and without his bearing, let me add, even the principal portion of the original outlay; yet that there is no bank in the whole country, no commercial speculation, no investment, so safe, so sure, so profitable, as that in which even borrowed capital may be engaged by investing it under the ground of your own soil. Now, gentlemen, next to drainage, in point of importance, probably, would follow the subject of manures. Upon this, then, much is there for all to learn. How much is science gradually adding to our stock of information; how much may practice add to the means of composing, and the advantageous employment of all those substances which tend to fertilize the earth. Yet gentlemen, ordinary as this may perhaps seem, how very great are the doubts, how very many are the problems, which yet remain to be solved, and which require the investigations of the highest branches of science, which call in to the aid of practical agriculture the most refined philosophical speculation, in order to ascertain in what manner, and in what proportions (having regard to the chemical affinities of the soil, and the particular time, as connected with these proportions) they should be applied, the manner in which they must be economised, and the mode in which their fertilising powers may be increased

Let men, then, learn the apparently humble, but really vital subject of the application of manures to the lands of this country And, gentlemen, if upon the surface we are yet in some doubt, if even day by day science is discovering fresh manures applicable to different soils, and rules for applying them in different cases, if within the last two months a manure wholly new, and hitherto unheard of, has been imported into this very part for the advantage of English Agriculturists—if a manure which is the deposit of seafowls in the Islands of the Pacific Ocean, has been with advantage, and with probable profit imported to fertilize the fields of England, what a field does this open for future speculation and further inquiry;—if even upon the surface we have this much to learn, who shall say what fresh investigations may discover in the hitherto untried relations between the various subsoils in this country, and in their action upon the superincumbent soil above them. Here is a field wholly new, almost untrodden, almost uninvestigated and yet it is a field which promises largely in its practical results, the practice being attended by the theoretic investigations of men of the most learning and science in the country. I pass by many other topics—ordinary topics—upon which much has been done no doubt, but upon which how much remains to be done? The due selection of seeds, the investigation of those mysterious laws of nature by which not only a due rotation of crops appears to be carried on, but by which, after a certain cycle of years it appears evident that an alteration in the accustomed rotation becomes necessary. I pass by these topics; I pass by the selection of the best seeds; I pass by the application of the best manures to the most fitting soil; but I ask you again to turn your attention to the immense advances that have been made, and to the immense advances which yet remain to be made in the application of mechanical power to diminish labour, reduce expense, and facilitate the cultivation of the soil. I hold it to be one of the most encouraging symptoms of the present day that men of the highest eminence for mechanical genius, and for mechanical talent, have applied themselves with great and deserved success, to the improvement of those implements of husbandry, which in former times were considered capable of little or no improvement, but which by these improvements, by the saving of labour and expence I am confident are capable of adding enormously to the productive powers of this great country. Gentlemen, I do not speak of those diseases which are incidental to cattle, to Stock of every description, and to the vegetable productions of the soil; but is there not much to learn in the history of these? I can hardly call them less than plagues—by which the farmers hopes are liable to be blighted year after year—the wire-worm, the fly, and all the various plagues, which after the best application of industry, may blast and defeat his expectations. I have thus passed summarily over some principal topics, yet see what a field is opened! Agriculture not a science! Why there is hardly a science that is not handmaid and subservient to the promotion of Agriculture! Zoology, Botany, Geology, Chemistry in a most essential and competent degree, me-

chanical science, are all connected with it, but the great practical problem which this country has to solve, is that of giving the speediest return to the cultivator, and of producing the largest amount of produce at the smallest proportionate expence. But, you will say, in what way is the Royal Agricultural Society of England to assist us in this case? Much in every way. It collects from every quarter, information from practical, and advice from scientific and theoretical men, and while there is no man so high in the walks of science that he can think himself degraded by applying his talents and mind to a subject of such general interest to the country, so there is no man so humble, on so small a scale, or in so low a situation that he may not confer a signal benefit to the country, if he will only communicate to the Royal Agricultural Society of England, fully and entirely, all the circumstances and the results of any proportion of his own practical experience in his own line."

*Extract from the Address of the Central Agricultural Society of Great Britain and Ireland.*

"The gross annual Agricultural produce of the United Kingdom may be estimated at about £200,000,000, which may be doubled; and the gross annual expense of cultivation, exclusive of rent, at about £100,000,000, which may be reduced one half. Col. Le Couteur in his 'Treatise on the varieties, properties, and classification of Wheat,' is of opinion that by proper attention to the selection of farinaceous sorts, it is possible to produce an increase in the annual value of the Wheat Crop of the British Isles, to the extent of £18,900,000. Mr. Kinberly estimates that his new manure will effect an economy in that department of husbandry to the yearly value of at least £11,000,000. The application of Captain Rudkins machine, and the consequences of its adoption, will realize a saving of some millions yearly in the collection of the spirit duties. It is calculated that the amount of the available manure conveyed by the sewerage of London yearly into the Thames is 1,405,897 tons, which will be saved and rendered valuable for Agricultural purposes. The consolidation of the Turnpike Roads, and making the conveyance of persons and parcels, as well as letters, a source of revenue to the state would effect a saving of from five to eight millions yearly. Under the very numerous and important experiments of Mr. Rigg, for analyzing soils, ascertaining the food of plants, advantages to Agriculture will arise to an incalculable amount. The substitution of mechanical for brute labour in processes of husbandry, will also effect savings, and increase manual labour to a very great extent. Since the appointment of the subcommittee on Political Economy, the Westminster Reviewers have considered it proper to suspend the dissemination of their baneful theories; and there has been a split among their leading authorities. These are some of the grounds upon which the Central Agricultural Society claim the support of the Landlords and of the Farmers of England."

[For Letter of George R. Young, Esq., of September 1, 1841, see No. 6, page 15.]

*London, September* 17, 1841.

Gentlemen,—I have now to enclose to you the rest of the Invoices of the Sheep and Pigs shipped, to complete the Orders sent; and I give on the sheet annexed the number and kinds belonging to the different Societies. I annex also a description of Pedigrees from Mr. Hobbs, and a Letter from Mr. Forbes, conveying his opinion of the different Stock; and have thus placed before you the materials to enable you to judge of the execution of the present Orders, and to guide your operations for the future. I need scarcely impress upon you, that, in this first importation of Stock, errors may have been committed—some of the Breeds may not be approved of,—the voyage may injure the points and effect the value of some of the specimens,—not possessing the requisite skill myself, I have been compelled to rely on the judgment of others; but, notwithstanding these difficulties, I trust that the information and experience acquired, will enable you to act, in future, with decision, to give precise orders and limits for the Stock required, and to avoid the errors which may now have been committed.

All the orders sent have been executed, with the exception of the Suffolk Punch, and the yearling Bull and Heifer, of the West Highland breed, for the Society at Windsor. Both of these orders came too late for execution this fall. That for the Stallion did not reach till after the Ship Prince George had sailed, and the two subsequent vessels from London were too small to convey, with safety, an animal of this kind. Arrangements have been made to procure one in the Spring; and I annex a correspondence held with two respectable Horse Dealers on the subject. Mr. Hobbs offers what he calls a pure Colt for £50; but I would recommend your giving an order to Mr. Markwell, to allow him to go to the extent of £90 or £100. Sterling, and to obtain a superior animal. The order should be given as soon as possible, in order that he may have time to purchase such an Horse as will meet his own approval, and at the period when they are cheapest. The Highland Cattle were ordered from Messrs. Kidstone, of Glasgow, to be shipped by the Acadian, but the order did not reach them until they had made other arrangements for a deck-load; they can be ordered for the spring.

As the order for the Guysborough Society was sent without limits as to price, I thought it best to purchase the Sheep required *from the best Breeders, and to pay for choice specimens.* The Leicester and Dishley are the same. I saw Mr. Hobbs in person, who is now the first Breeder in England, of this variety, and in giving him the order for three Rams, at Ten Guineas each, and five Ewes, at Five Guineas, he engaged to send the *pick* of his extensive flock. Some of the Rams exhibited by him in London, far surpassed any idea I before had of the beauty and perfection to which these animals could be reared. The price paid for these Rams is about double that paid for the others;—but I have no doubt that the Society at Guysborough will not regret the expenditure of their Funds for animals of such symmetry, size, and pure blood.

I annex the Letters received from Scotland, in answer to the enquiries conducted there, to ascertain the prices of the Stock required from that quarter. I trust the Board will convey to Richard Kidston, Esq., of Glasgow, some expression of their thanks for the anxiety he has manifested to obtain the precise and accurate information he has been kind enough to furnish.

As to Stallions, I would beg to submit that, from all the information I have been able to obtain, I am led to believe that the Clydesdale Horse is the best suited for us. The Suffolk Punch is a heavier, truer, and slower Horse, admirably fitted for the massive wains and waggons used in English Agriculture, for the transport of manures, lime, vegetables, &c. &c., and for the heavy waggons and loads seen in Liverpool and London; but the Clydesdale is lighter, more docile, swifter, and therefore better fitted for our ploughs and roads. To enable the Board to judge of the comparative merits of the two Breeds, I have bought a set of Low's Pictures of Work Horses, accompanied by descriptions. This spendid Work consists of ten numbers, each containing four plates, and may be bought for £8. I have taken the liberty of bringing only two—one illustrative of the Sheep sent, and the other of Horses, but I am positive that the Board, and each of the County Local Societies, would find the purchase of this a judicious appropriation of their Funds. It gives an accurate idea of the character and points of every Breed of Horses, Cattle, Sheep and Pigs, now raised in the United Kingdom; and each Society, or each Member, would be able from them to select the kind best fitted for their own localities. It is to be remarked, that there is no County in the Province which does not possess districts fitted for Breeds of the most opposite qualities. A new work, of great promise, called Johnson's Dictionary of Agriculture, is now in the course of publication, in monthly parts, at 5*s*, each. It is to be finished in ten numbers. I have bought the first number as a specimen, that the Board may examine it, and see if it is entitled to their recommendation.

As I anticipated in my last letter, very satisfactory replies have been received, both from the Highland Society of Scotland and the Royal A. Improvement Society of Ireland. I annex the circular letters addressed to two Secretaries of these Societies, and the replies sent. The papers trasmitted by them will enable you and the province to comprehend the influences of rank, talent and money applied for the improvement of the Agriculture of the United Kingdom; and satisfy you, that the sphere of exertion opened to the Board is as honorable as it is useful; and that no application of the public funds, and no service under the care of the Legislature, if pursued with zeal and fidelity, is likely to exercise so extensive and useful and influence over the resources and happiness of the province.

For the importation of seeds and implements, two agencies are opened, in whose hands any orders sent will be faithfully executed. Messrs Flowers, Gibbs & Co., Piccadilly, London, are the seedmen of the Royal E. Agricultural Society. Their lists and prices are annexed. For seeds and implements—and of the latter those

in use in Scotland are undoubtedly the best fitted for Nova Scotia —I am advised to recommend Messrs. W. Drummond & Sons, of Stirling. I annex a catalogue and history of their establishment and Museum. I saw one of the firm at Liverpool, and he assured me, that although the goods would be made up for shipment at Stirling, they would send them to Glasgow by the Canal at an expence so trivial as to add little to the price.

In conclusion, I beg to recommend earnestly to your attention, the plan proposed by the Improvement Society of Ireland, to introduce Agricultural Schools and Colleges, so as to train young men up to the practice of the most improved and scientific systems of Agriculture. (p. 12, pamphlet annexed.)

I refer here to the passage in the first Report of the Society annexed. In a province like ours, where so much of the wealth and happiness depends on the productiveness of the soil, no scheme is more entitled to the attention of the Board and the Legislature than the introduction of some system by which our young men may enjoy the advantages of a pattern farm, and a regular course of scientific lectures on the different branches of Agriculture. Difficulties will be felt in the first instance, but these can be overcome; and the harvest which will be reaped from such a plan will be an ample recompense for the energy and outlay it will require.

I should have been glad had this important agency been entrusted to another of more skill and extensive knowledge than myself; but I beg to assure you that I have acted as faithfully for the Board as if these funds had been my own; and that I seek for no reward except the approval of those who feel an equal interest with myself in seeing the Agriculture of Nova Scotia rise to the high and prosperous destiny which I believe awaits it.

I have the honor to be,
Yohr obedient servant,
GEO. R. YOUNG.

To the Hon. *J. McNab* and *Wm. Young*,
Esq., President and Vice President of
the Central Society of Agriculture, &c.
Halifax.

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*Extract from the first Report of the Royal Agricultural Improvement Society of Ireland.*

Agricultural College.—As a final measure for effecting these different objects, your Committee beg leave to recommend the formation of an Establishment of a Collegiate nature, in the form of an Agricultural School or College, on an extensive scale, for the education of farmers' sons in all the different branches of Husbandry, so as to qualify them hereafter as practical farmers in different parts of the country. The want of an Institution of this kind, in some central part of the country, has long been felt in Ireland; and it is conceived that no more favourable opportunity has occurred than the present, of forming it under the immediate auspices of the Society.

Your Committee do not feel it advisable to enter into the details of this Institution; but it is suggested that the students should be employed in tilling the land, as farmers or agricultural labourers; in practising all the different improvements of modern husbandry—the succession and rotation of crops, the feeding and care of cattle, the draining of land, &c.—and all the other duties incident to agricultural life, and the practice of husbandry.

That they be also instructed, in their leisure hours, in the elementary principles of surveying, engineering, mensuration, and veterinary science, or treatment of animals, &c. so far as may be applicable to their future pursuits; and it is conceived that a knowledge of what is called agricultural chemistry, or the nature of manures, alkalies, and salts of different kinds, and their effects upon the soil, and all vegetable productions, may be imparted to them to a certain extent, with great effect and benefit.

The most strict and accurate accounts should also be kept of the expenditure and of the produce in the different departments, so as to ascertain to a certainty, the actual working of the different systems, to serve as an unerring guide or authority upon the subject. A journal should also be kept, and the proceedings of the institution carefully taken down and published, including the results of the different trials and experiments during the year. It is conceived that a document of this kind could be made a most useful and valuable record, and highly beneficial to the promotion of practical agriculture throughout the country.

It is also conceived that an establishment like this, with the labour of the students upon it, paying to a certain amount for their board, ought not only to support itself, but also to realise a very considerable profit; and if the project should be successful in this instance, where the principle of such schools would have the fairest trial, they may afterwards be extended to each of the four Provinces, according to circumstances. This, however, is the limit to which it is conceived the Society should apply itself, in the first instance, in respect of model farms, agricultural schools, &c., or such institutions for promoting practical or scientific knowledge for the purpose of agricultural improvements. it being the recommendation of the Committee to confine itself to the formation of one large establishment of the kind at the commencement.

Your Committee do not contemplate that the funds of this Society should be applied, under any circumstances, to the foundation of such an establishment; but they are of opinion that when its benefits are known and fully appreciated, the most ample means will be forthcoming for its institution and support, by raising the necessary sum, by shares or debentures, or otherwise, according to circumstances They conceive also, that when thus recommended by this Society, and established under its immediate direction, it will be sure to obtain the confidence of the public; and they now suggest the propriety of referring the subject to the consideration of a Sub-Committee, to inquire into the best means of carrying this desirable object into immediate effect, and to report as speedily as possible on the subject.

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*Cornwallis, January*, 1842.

Sir—The following officers were elected, at the Annual Meeting of the Cornwallis Agricultural Society, for the ensuing year, viz.:

John C. Hall, Esq. *President.*
H. L. Dickey, Esq. *1st Vice-President.*
Mr. A. C. Starritt, *2d Vice-President.*
C. C. Hamilton, M. D. *Secretary and Treasurer.*

*Committee:*—George Lockwood, Esq.; Messrs. James Eaton, C. W. Rathburn, Ward Eaton, Isaac Dewolfe, Charles Dickey, Agustus Tupper.

C. C. Hamilton, Secretary.

To the Editor of the Colonial Farmer.

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[For the Colonial Farmer.]

## KILL OR CURE.

I should like to know how to cure my cattle from being lousy before the lice kill them. Can the Colonial Farmer tell me how to effectually rout this little army of vermin or blood-thirsty tyrants, that think they can ride upon the backs and trample on the necks of those that are far greater and more noble than themselves or any of their race.

Tobacco does not appear to be sufficient either to slaughter or disperse the invaders; although one would think it sufficiently nauseous and disagreeable to disgust any thing, but I am inclined to think that (although this is the best use can be made of it, and perhaps the most it is fit for,) yet these high-minded little riders know too much about common sense and their own feelings to take enough to bring them down, unless by some means they are literally forced to it; for they do not appear to be as fond of rolling a quid of tobacco as a sweet morsel under their tongues as some two legged animals are. And now if you can inform me how to get rid of this part of my stock, (although the greatest part in number) and direct me how to do away with this annoyance, I will endeavour to follow your advice, and try to kill or cure this crawling evil.

A receipt that may be relied upon would, I suppose, be very acceptable to all, but particularly to one of your

SUBSCRIBERS.

*Lower Stewiacke.*

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Grown Cattle who are strong and in good order are in little danger from lice. They will spread upon the fattest young calves, and upon calves eight months old who are in what is called good case. If cattle have become poor, these vermin cannot be eradi-

cated without considerable labour Their stable should be kept very clean and well littered; the cattle should be well rubbed every day with a worn out wool card. If they do not go to the sh[illegible] of the salt water, salt should be given them every week, and a large heaped spoonful of flour of sulphur should be given to each beast three times a week. The stable should not be very close and warm, for well fed cattle often get very lean in a close hot stable.

If the dung of the cattle is hard and dry, they are growing leaner, and in this case it will be difficult to destroy the vermin till they are better fed. A small quantity of potatoes, turnips, or mangel wurtzel will in this case be very useful. When these cannot be afforded, they should be fed once a day with hay cut and scalded, a practice very common among the Germans, and which saves a great deal of hay. When the cattle begin to thrive, the vermin may be quickly destroyed. For the blue lice, melt a gill of tar or turpentine, with a pint of cod oil, mix a quarter of a pound of flour of sulphur with it, and rub on a little with a painters' brush wherever the skin is covered with lice. Every third day this should be repeated, and if the cattle are thriving, the vermin will soon be mastered. For the red lice, the cod oil frequently applied will be sufficient, without any mixture. It is the general custom to allow hay to stand till it is too old for cows that are to be fed entirely upon it. If Timothy and Clover are cut before they flower, the hay will keep cows in good order, and will fatten the cattle who have been reared upon browse, but many cows grow very poor with a plentiful supply of hay which had been allowed to stand till the seed was nearly ripe. The last cut hay should be given to the horses. EDITOR.

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On Friday, the 18th instant, (the day after the gale,) at the Dutch Village, there was so much salt attached to the glass of windows facing West and North-West, that no object could be distinctly seen through them. It was also perceptible upon those facing the South-west, but in a smaller quantity. Upon the same day the bushes near the Birch Cove Lakes were observed to be sparkling with salt. During the gale the wind was nearly South-west, but the salt water must have fallen with the last rain squalls after the wind had changed to the West. This shower of sea-water must have been brought for not less than fifteen miles over land.

Many years ago we had a gale from the South-west more violent than that of last week: it was attended with frequent squalls of rain. The next morning was very calm, the sky being overcast with a black cloud. A little before sunrise a small shower fell, the clouds broke and disappeared, and we had a fine sunny day. When the wet from the shower had all dried off from the bushes, the smoth-barked sprouts of the white maple appeared sparkling with salt, which could be tasted on every twig, although it was visible only on those which had very smooth bark. An armful of twigs was washed in fresh water, which was evaporated, and gave about an ounce of salt. I went up the road as far as the Lodge, and then followed the bushy ground near the North West Arm to Point Pleasant—the bushes every where were salted alike. Since that time I have often observed that the twigs tasted of salt after a southerly gale attended with squalls of rain. It has been observed that gypsum is generally useless as a manure within twenty five miles of the sea. This appears to be about the distance to which the sea-water is frequently thrown by gales of wind Upon this strip where gypsum is useless, wood ashes is a very useful manure. But in inland situations where gypsum is useful, ashes is less valuable. Perhaps attention to these circumstances may enable the Chemist to throw some light upon the way in which gypsum operates upon the soil or the plant. T. S.

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## CHILD-BED FEVER.

This dangerous disease has in some seasons appeared to be epidemic. Not far from forty years ago it was very frequent both in France and England, and in a great proportion of the cases the patients died. Many pamphlets were published at this time in those countries upon the cause of the disease; the French and English physicians having formed opposite theories to account for it. Unfortunately however, neither party had discovered a successful mode of treating it. In the Hotel Dieu (a very large hospital in Paris, used as a lying-in hospital by poor women) two hundred women had died of this Fever in less than three months when M. Doucet, a physician who was attending the hospital, happening to be present at the moment when a woman was attacked with the fever, immediately gave her a gentle emetic of Ipecacuanha; she was better the next day, and he repeated the emetic. The woman recovered. As it was the only instance he had observed in which any medicine had manifestly proved useful, he treated all the subsequent cases in the same way, and every woman recovered. When this practice had been tried upon nearly two hundred he drew up a report which was printed by order of the Government, and a copy sent to every commune (parish) in France. He gave decoctions of Flax seed and Scorzonera for drink. The most important part of this treatment appears to be the *giving an emetic at the onset of the disease.*

Many years since, the writer, then a boy, and his father, who when young had studied Physic, were living in a country where Agues were very frequent. They tried many experiments upon themselves to ascertain the effect of certain medicines, and found that an emetic taken at the commencement of the ague fit, invariably cured the disease—but if it were taken after the lapse of two hours or more, it always failed; and that emetics taken for ten days in succession, upon that part of the day in which there was no fever greatly diminished the violence of the fits, but did not put a stop to them. The Child-bed Fever generally begins within three days after the woman is confined, often attended with shivering—always with pain and soreness of the stomach. As it will generally in the country, and often in town, be impossible to procure a doctor till the proper time for taking the medicine has gone by, it would certainly be prudent for every one to have in the house one or two doses of Ipecacuanha whenever there is a possibility that it may be wanted.

The Scorzonera mentioned above is little known, or cultivated in this Province, except by a few families of German descent, who generally call it Black root, or Stretching root. Dandelions might be substituted for it, having nearly the same qualities.

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☞ We beg to apologise for the late appearance of this number of our paper. We delayed putting it to press for the purpose of laying before our readers the Report of the Central Board of Agriculture. Much useful matter, original and selected, has been crowded out.

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