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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., JUNE, 1841.

NO. 1.

## THE COLONIAL FARMER.

HALIFAX, N. S. JUNE, 1841.

### TO THE FARMERS OF NOVA-SCOTIA.

GENTLEMEN,

The Legislature of this Province, by the passage of the Law which is printed below, seems to contemplate a general and combined movement, on your part, towards the elevation of our Provincial Agriculture. It would appear to be the design to call into existence, and endow with adequate funds, at least one Agricultural Society in each County, while encouragement is held out for even a still further extension of these very useful Institutions. Should you feel disposed to meet the views and expectations of your Representatives, and should those Societies spring up, it is more than probable that they will require some means of public communication with each other—some vehicle for the circulation of their Quarterly and Annual Reports—some Repository of the facts and information which may be furnished, from time to time, by the experience of their members. To meet what I conceive will become a somewhat urgent want on the part of the great body of my countrymen, engaged in the cultivation of the soil, I intend to issue, once a month, such a periodical, as will combine and diffuse that description of information which will be most likely to aid you in the prosecution of your arduous and honorable labours, and which, it is admitted on all hands, can best be furnished through the medium of cheap and well conducted Agricultural publications.

The present sheet has been prepared as a specimen number, and although it may be in many respects inferior, it is hoped that it may be fostered and cherished by you, not for what it is, but for what it may become. To the Agricultural Societies throughout the Province I look for much of that support which is necessary to place the "Colonial Farmer" beyond the possibility of failure, and for that support, free access to its pages at all times, for the publication of their reports and statistics, would seem a sufficient return; and should it be as extensively patronized as I have reason to hope, it is my intention to so improve it, from time to time, as to make it equal if not superior to any similar publication in British America. The work will be edited by Mr. Titus Smith, a Gentleman of standard reputation and extensive practical experience, and will be placed at so low a price as to put it within the reach of every Farmer in Nova Scotia, however limited may be his means.

RICHARD NUGENT.

An Act for the encouragement of Agriculture and Rural Economy in the Province.

Be it enacted, by the Lieutenant Governor, Council and Assembly, That it shall and may be lawful for the Lieutenant Governor, or Commander in Chief for the time, by and with the advice of Her Majesty's Executive Council, to appoint and commission a central Board of Agriculture, at Halifax—consisting of eleven fit and proper persons—of whom seven shall be resident in Halifax, or its vicinity, and one selected from the Eastern, Western and middle divisions of Nova Scotia, and one from Cape Breton, four of whom shall be a quorum—and from time to time as vacancies occur in the Commissioners composing such Board, by revocation, death, resignation, or continued absence from the Province, to supply such vacancies, by new appointments.

And be it enacted, That there shall be granted and paid to the

said Commissioners, out of the public funds of this Province, the sum of Five Hundred Pounds annually, for four years, from and after the passing of this Act—whereof the said Board shall be at liberty to expend a sum not exceeding One Hundred Pounds annually, for the Salary of a Clerk or Secretary, to be appointed by them, and removed at pleasure; and a further sum for their incidental expenses; and shall lay out and expend the balance, during the aforesaid period of four years, in the importation from abroad, of the most improved implements of Husbandry and also of Seeds and Live Stock of various kinds, in the encouraging and circulating of Agricultural Publications, and the diffusion of knowledge on the different branches of Husbandry, and in such other objects, for the Agricultural Improvement of the Province, as the said Board may, from time to time, approve; and that the said Board shall be at liberty to expend the balance on any one or more of such objects, in every year, as their experience and judgment may, from time to time, suggest; and shall exhibit an account of such expenditure to the Legislature in each year, verified by the oath of one of the Members of the said Board, and by proper Vouchers in that behalf.

And be it enacted that the said Board shall be at liberty to dispose of all Implements, Seeds or Live Stock, imported by them, from time to time, in such way as may appear to them most conducive to the general improvement of the Province, either by offering such importations or any of them, for sale in such counties, and on such terms as they may direct, or by distributing the same, or any of them, gratuitously, or placing the same under the charge of any Societies or individuals, whom they may select and on such conditions as they shall from time to time prescribe; and in case such importations or any of them, shall be offered for sale, all instruments or Bonds, that may be directed by the said Board to be taken in respect thereof, shall be in the names of the Commissioners for the time being, and shall be valid and binding on the parties executing the same, for the purposes to be therein declared; and the net proceeds of such sale shall be applied and accounted for by the said Board in manner aforesaid; and until such sales shall be had, all implements, seeds, live stock, or other articles imported by the said Board, shall be accounted the property of the Commissioners for the time being, and be held by them for the purposes of this Act.

And be it enacted, That the said Board shall open and carry on a correspondence with the several Agricultural Societies already formed, or which may be hereafter formed in this Province, and shall aid and direct them, as far as may be required, in prosecuting their several objects, and shall import for the said Societies, out of funds to be provided by them, such implements, seeds, or live stock, as they may respectively want from abroad; and shall likewise inspect and audit the accounts, to be rendered by the several Societies, of the application and expenditure of their funds, as hereafter mentioned, and from the reports to be furnished by the said Societies, and from such other sources of information as may be accessible to the said Board, shall furnish to the Legislature, at every Session, a general Report of the progress of Agriculture throughout the Province, and of the expenditure of all monies granted therefor.

And be it enacted, That it shall and may be lawful for the Lieutenant Governor or Commander in Chief for the time being, to grant his warrant on the Public Treasury of this Province, annually, for the period of four years, from and after the passing of this Act, for the sum of One Thousand Two Hundred and Seventy-five Pounds, being at and after the rate of seventy-five pounds for each of the seventeen counties in this Province, to be applied and expended as hereafter mentioned.

And be it enacted, That the said Board, in each and every year, shall ascertain whether Agricultural Societies that now are, or hereafter may be formed in the several Counties, ought to receive a proportion, and shall likewise determine what proportion, if any, each one of such Societies shall receive out of the aforesaid grant of seventy-five pounds, such proportion to be regulated by the said Board, with reference to the numbers and contributions of the members of each Society, and to its local position and

usefulness, and so as one Society, if there be no more than one, in any of the said Counties, may receive, with the assent and approval of the said Board, the whole of such grant; and that the President and Secretary of each Society shall be entitled to draw out of the Treasury, for the purposes of this Act, the sum that may have been assigned to it as aforesaid by the said Board; Provided always, that no Society shall be entitled to any portion of the said grant which shall not raise annually by private contribution the sum of Ten Pounds at the least; and that not more than three Societies shall receive any proportion of the said grant in any one county; and provided also, that in all cases where a Central County Society, with a branch or branches in the county, shall be formed and approved of by the Central Board, that the said sum of Seventy-five pounds shall be given to the said Central Society for distribution, for the purposes of this Act, in all cases where the sum of Twenty Pounds shall have been raised by the Central Society, and Branch or Branches thereof, jointly, in manner before mentioned.

And be it enacted, That the sums, so assigned and paid to the several Societies, shall be applied and expended by them in the importation of Live Stock, implements or seeds, the offering of judicious premiums, or in such other Agricultural objects and uses, as in the judgment of each Society may be best adapted to its local position and wants; and that such objects may be varied or altered, from time to time, at the discretion of each society; but no part of such sum shall be applied in the expense of managing the said Societies.

And be it enacted, That each one of the said Societies throughout the Province, shall render to the said Board, on or before the thirty-first day of December, in every year, a full and exact account, verified by the oath of the President or Secretary thereof, to be administered by any one of Her Majesty's Justices of the Peace, of the expenditure of the sum so assigned and paid to such Society out of the aforesaid grant; as also of the amount and appropriation of the funds contributed by or belonging to such Society, with a report of its proceedings for the past year; and that any Society which shall neglect or refuse to furnish such account and report, unless excused therefrom by the said Board, shall not be entitled, in any future year, to receive any proportion of the aforesaid grant.

And be it enacted, That this Act shall continue in force for the period of four years, and from thence to the end of the then next Session of the General Assembly.

In accordance with a provision of the above Act, a Central Board of Agriculture has been formed at Halifax, and is now fully in operation. Several of the gentlemen composing this Board, are possessed of some practical knowledge of Agriculture, but time and experience will alone evidence the benefits resulting to the country from their efforts, as much depends upon harmonious action with the County Agricultural Societies. Annexed is the proceedings of their first meeting:—

The Central Board of Agriculture held their first meeting on Thursday the 29th day of April, 1841. Present: Hon. James McNab, William Young, Matthew Richardson, John E. Fairbanks, Thomas Williamson, Edward Allison, Edward Pryor, Junr. Esquires.

Read the Act of Incorporation and Commission by His Excellency the Lieutenant Governor appointing the above gentlemen, residents in Halifax, together with Samuel Chipman, Esq. for the Middle Division, Richard A. Forrestall, Esq., for the Eastern Division, James Holdsworth, Esq., for the Western Division of the Province, and Edward Sutherland, Esq. for Cape Breton, to form a Central Board of Agriculture at Halifax, for the purposes expressed in the act, with all the privileges and powers conferred thereby.

Whereupon it was unanimously resolved, That the Hon. James McNab be the Chairman of the Board.

That William Young, Esq. be the Vice Chairman, and that Edward Allison, Esq. act as Treasurer.

Resolved, That the office of Secretary be offered on trial to Mr. Titus Smith.

Mr. Smith having accepted the appointment.

Resolved, That he attend in the Speaker's room, Province Building, (which has been obtained for the use of the Board) every Tuesday, Thursday and Saturday from 11 to 2 o'clock, p. M.

Resolved, That application be made to Government by the Chairman and Vice Chairman, in such way as may be found most advisable, for having the correspondence of the Board conducted free of postage; and that in the meanwhile the Deputy Postmaster General be requested to keep an account of the postage on all letters to and from the Board, to be paid, if required, out of the funds at its disposal, and that all letters on the business of the Board be addressed to the Secretary.

Resolved, That the leading Farmers in the several Counties be invited to form themselves into Societies conformable to the Act, and to enter into correspondence with the Board who will be happy to receive and consider all such suggestions as may be offered for the improvement of the Provincial husbandry, and to furnish such information or assistance, (by impartations or otherwise) as may be in their power for promoting the views of the several Societies in connection with the Central Board.

Resolved, That the Act of Incorporation and the Minutes of the proceedings of this meeting be inserted in the newspapers, and that 1000 copies of the Act and of said Minutes be struck off for gratuitous distribution.

### TO THE FARMERS OF NOVA-SCOTIA, NEW-BRUNSWICK, AND P. E. ISLAND.

In presenting the first number of the Colonial Farmer, we may be permitted to offer a few words to those whom it is mainly intended to benefit, respecting the object and character of our enterprise.

The progress of knowledge in any country, is dependent mainly upon the encouragement held out for the diffusion of cheap and useful publications, treating of Science, Literature, & Mechanic Arts, and other studies, among the great mass of the population. In Great Britain and the United States, most decided benefits have resulted from a general diffusion of useful knowledge in a cheap form, accessible to the most humble condition in life. The various improvements in the Art of Printing, by the application of machinery and steam, in those countries, by which labour is reduced about one half, and which enable enterprising publishers to supply what seems to be the general want—cheap information, will continue to place within the reach of all, the means of self education and improvement.

The Merchant and the Mechanic of our own Country, have each their several Societies and Institutions for the protection of their interests and the improvement of their minds: the Farmer is alone unthought of, or nearly so. While men of science are bending every energy to the promotion of knowledge among the different classes of the population in the denser communities, having particular reference to the nature and character of their several employments, the peculiarities of the soil, from which we all in common derive our support, or means of existence, and the various methods of tillage, scarcely command a passing thought. Now, it will be readily admitted that our Agriculture is radically defective, and that we are, at least in this particular, many years behind the age. And why is this the case? Has it ever occurred to any of you that it is chargeable to a want of information, and of an acquaintance with the modes and practices which the experience and superior knowledge of older countries have adopted with unbounded success? It is true the writings of an Agricola and a Slick, have done much in arousing the latent energies of Novascotians—in giving them new ideas in the science and practice of Agriculture—the nature and responsibility of their honorable calling, and in infusing a more general spirit of enquiry and research; but their influence is not sufficiently permanent. Periodical information is required, and with a view to meet this apparent want the present work is established. In New-Brunswick, we know of a Gesner, a Bayard, and a Wederburn, they will stimulate by their example

and exertions, the Agriculturalists of our sister Province to renewed efforts in elevating her Agricultural character.

In Great Britain and the United States, cheap publications devoted to the interests of Agriculturalists, have done much for that class of the population. The sphere of their influence has been enlarged—the national character elevated, and the wealth of both countries materially increased. Through the medium of such works, the superior skill of the few operates upon the minds of the many, and the experiments and labour of years are brought home to the understandings of those whose means will not admit of speculation and hazard, to guide them in their practical application of new principles and discoveries. The same sources of information, but to a more limited extent, are within our reach, if we choose to avail ourselves of them, and equally cheering results would follow as a consequence of their adoption.

Although it is not our desire to promise too much, yet we cannot help stating our belief that the Farmers of Nova-Scotia, New-Brunswick and Prince Edward Island, would lose nothing and gain much, by supporting the "Colonial Farmer." We are induced to try the experiment; the responsibility is of course our own. We are free from connection with any society, and controlled by no power save the operations of our own mind. Having no connection with the Central Board at Halifax, (and many may suppose we have, from knowing that we petitioned the Legislature for assistance, but which, they should know, was not granted,) we are free to form our own estimate of its usefulness as time and circumstances shall develop, and will endeavor to keep the Agriculturalists of Nova-Scotia advised of its movements, so far as they may come within the sphere of our knowledge.

We invite contributions from practical farmers in each Province, and will take it as a great favor from officers of Agricultural Societies, if they will, from time to time, furnish us with such information as their position places within their reach, and which they may think useful and instructive to the Farmer.

R. N.

**HALIFAX AGRICULTURAL SOCIETY.**—On the 6th ult., the Halifax Agricultural Society met at Dalhousie College. A very flattering Report of the efforts of the Society during the past year, was read, from which we make an extract for the purpose of admonishing the farmers of Nova-Scotia to avail themselves of the advantages to be derived from such associations:—

"While the Committee have been carrying out the objects the society have in view they with regret allude to the apathy with which numbers (who are directly and deeply interested in the successful issue of Agricultural pursuits,) regard this and like institutions, and they now trust that the stimulus held out by the Legislature will not be suffered to languish and pass unheeded. They, therefore, indulge the hope that following the example of other Countries, the Farmers and landed proprietors, will be more disposed in future to lend their aid to promote the true interest of the Province, and leads this Committee to expect that although, the patronage this society has hitherto been supported with (the actual members not exceeding sixty,) has not come up to what they might expect, yet this committee will not close their report without expressing their conviction, that the growing and various interests of the country must continue to be greatly benefited by the fostering care and assistance of associations, permanently established for the special purpose of encouraging the first means of adding to individual as well as public prosperity."

The following gentlemen were elected officers and Committee of Management for the ensuing year:—President, Edward Allison,

Esq.; First Vice President, Edward Pryor, Jun. Esq.; Second Vice President, Mr. John King; Treasurer, Mr. Henry Wright, Senr.; Secretary, William Forsyth; Committee of Management, Messrs. John Longard, John Artz, John Horne, Archibald McCulloch, William Mitchell, Adam Reid, John Kline, Jun.

### KELP AND ROCKWEED.

These substances, when used for manures, differ little from the offal of fish or flesh. Large crops may be raised with these, but the land will not be anything the better the following season. Yet, wherever they can be found in abundance, the land may be enriched by raising hay and potatoes, and feeding cattle and swine, who will furnish a durable manure. Land is made barren for several years by applying too large a quantity of salt, and the same injury has been received from an unskillful use of seaweeds. Even fish and night-oil, if applied in too large quantities have the same effect.

The following rules may be of use to those who are not accustomed to use sea weeds. If Rockweed or Kelp are collected in the Spring for potatoes, let it remain in heaps till it heats and begins to decay; then use it as quickly as possible, or it will soon mostly disappear, as the valuable part of this manure is volatile, and flies off in an aerial state. It may be mixed with grass sods in the Spring, but not more than four weeks before it is used, for heaps of earth will not confine aerial fluids.

Seaweed must not be used on the land where potatoes have been raised with it, the following season, if the manure was collected in the Spring.

It should not be spread upon grass in the Fall.

If collected in the fall, it should be thrown on waste ground, dropping a load in a place, and spreading it a little, to prevent it from heating, and to expose it to have a part of the salt washed away.

There are situations outside of harbours, where, the water being never frozen, the Kelp is driven on shore throughout the winter; this may, after the winter's frost has commenced, be hauled upon the ground designed for potatoes or barley just as it is thrown up, for the salt will be washed away before spring without doing any harm, it being only during the season of vegetation that salt injures the land. Each load should be divided into four small heaps to expose it to the rains. When it has thus been exposed to the winter's rains, it may be used two years in succession. Our farmers of German descent, frequently raise a crop of potatoes, followed the next season by barley and grass seed, manuring for each crop with kelp: the next spring a top dressing of stable manure is given to the ground, carting it on, if possible, while the ground is frozen. This management often gives a good exemplification of their rule of raising a great crop upon a small field.

Seaweeds should never be heaped up with sods or mud in the fall. It will indeed help to rot the sod, but the kelp or rockweed will be almost all lost, as it will fly away in the state of vapour. Eelgrass, with a small mixture of kelp or rockweed, may be heaped up to heat, and in this way made fit for manure, for, by itself, it is useless unless thrown into heaps while green. When potatoes are planted with seaweed the seed should not be put in the same furrow with the manure, for if they touch the salt weed they will not vegetate.

Seaweed deprived of part of its salt by exposure to the winter's rain answers well as a top-dressing for grass. It seems to favour the growth of our variety of Couch on rich land, the Couch being a natural grass of our sea shores, and notwithstanding the preju-

dices against it, an excellent hay, which received no injury from the cold summers and naked winters which have damaged our other grasses. If we had not had so much of this grass on the dykes and richest fields, the cattle must have suffered during the past winter.

Rockweed appears to contain a large proportion of nutritious matter. The pigs kept by the fishermen upon rockweed, soaked in fresh water and boiled with dog fish, grow as fast as those which are fed upon corn. After being kept a year in this manner they are fed with other food for five or six months to deprive the flesh of its fishy taste.

The rockweed is also boiled with potatoes for pigs.

Sheep keep in good order through the winter upon kelp and rockweed without hay, where the saltwater is never frozen. They generally find with it a little Florin grass which grows, on low places where a little seaweed is thrown, the creeping runners of this grass keeping green through the winter near the shore where the snow is blown away.

T. S.

### OFFAL OF FISH.

This is a powerful manure, but like, kelp and rockweed, it is dissipated in the air almost immediately after it decays. For this reason the gibs of Gaspereaux, spring Mackerel, and generally the offal of all kinds of fish caught before the middle of June, is of more value than that which is procured later in the summer. If it is decomposed while the crop is growing, there is but little of it lost, for the leaves of the crop will absorb from the air that which flies off in the state of vapour, but if mixed with earth which is formed into large heaps, a great part will escape, for in the state of an aerial fluid it readily passes through earth. It has been kept through winter without a very great loss, by placing it between layers of peat earth (the black mud soil of our barren swamps), taking care to make the heap on solid earth, not upon turf or stones, and never more than a foot in height. It should be placed on the north side of a wall to shade it from the sun. No stable manure, grass sod, or any substance liable to heat should be mixed with it; the design being to prevent putrefaction and decomposition as much as possible. It is for this reason that it is directed to be laid on the solid ground to prevent the access of air from beneath. If a hot-bed is formed by placing a heap of stable manure upon the ground, it often fails to grow hot unless a considerable quantity is used, but if a foundation is made by a layer of small bushes a single load of manure will readily heat.

This kind of manure must not be used in large quantities. An acre manured with the gibs of 250 barrels of gaspereaux, has yielded 500 bushels of potatoes (Saco whites).

T. S.

### MANURE MADE BY COWS IN SUMMER.

It is a common practice to enclose cows in pens at night, and turn them out to range upon the commons in the morning, occasionally throwing the manure into heaps. A more economical practice is to cover the pen with a layer of sods from ditches or waste ground, and to cart into it a quantity of swamp mud. Every morning the manure should be collected and covered with

\* When animal substances like fish or flesh are putrefying, in contact with lime or potash, a quantity of volatile alkaline salt is separated, which is as caustic as potash, and which will decompose half decayed vegetable matter and make it fit to nourish the crop, but when a far greater portion of the vegetable matter than the crop can consume, is rendered volatile by applying too much of this kind of manure, it will fly away, leaving the ground impoverished. Instances have occurred near Halifax of surprising crops raised, for one year, by over-manuring with dogfish or nightsoil, but they who raised them had the mortification to see the land greatly impoverished for several years.

at least three times its quantity of the swamp mud or peat. If the manure is designed for potatoes on a clayey soil, the mossy turf of the swamp will be found a better material than the peat earth beneath it. It is best that the heap should not be more than fifteen inches in height; the design being to prevent fermentation and putrefaction as much as possible.

In the fall the sods with which the pen was covered should be thrown into a heap, and in the spring both heaps should be turned as soon as they are thawed, for the purpose of making them begin to heat before they are used.

Where cattle have an indifferent pasture the following method has been tried by a farmer who kept eight cows and some young cattle. He fenced an acre of mowing land, dividing it into four parts, in one of which his cattle were penned at night, shifting them every tenth day into another quarter. They were milked early and turned out about sunrise to run in the woods. The manure was collected and covered every morning. His cows made more butter than those of his neighbours who penned their cows where they had nothing to eat, in the proportion of five to three.

In the Spring, the fences being removed, the acre of cowpen was several times ploughed and harrowed, and planted with potatoes without manure, (the heaps being carted off,) and produced a good crop. This man left the Province, and his cattle were sold above the common price, but when treated in a different way were found to be no better than other cows.

T. S.

### CARROTS.

This crop may be grown on most soils that are not wet or very stiff and clayey. The ground that produced 250 bushels of bluenoses or 300 of molhaws (blue potatoes with black upright stems?) will the next season produce a good crop of carrots without manure. They should always be sowed in drills, and sowed early. As soon as the ground is sufficiently dry, it should be twice plowed, harrowed, and then smoothed by going over it with the harrow turned teeth upward. The following substitute for drill machinery may be used in sowing the seed: make a rake with three teeth; the head should be a round stick three feet four inches long, and four inches diameter; the teeth an inch thick, four inches long, and seventeen inches apart; and the handle six or seven feet. This may be used to mark the drills, which should always be in the direction of the wind, to prevent the seed from being blown into the spaces between them. The person who sows the seed, should carry it in a bag fastened before him, and taking a small pinch of seed between the thumb and finger of each hand, and stooping so low as to bring his hands very near the ground, he should walk forward at an ordinary pace, constantly rubbing the seed between his thumbs and fingers, which will make it fall sufficiently even. Should there be occasion to hasten the work, the sower may walk at his utmost speed, provided he increases the rubbing motion, in the same proportion as his steps; the seed is to be covered by walking with the drill between the feet, which are not to be raised from the ground; the work may then be finished by walking up and down the drills, treading upon the small ridge formed in covering the seed. Awkward as this way of sowing may seem, an active man may easily sow an acre in a day in this manner, but as it is rarely sufficiently calm for a whole day, it will generally be advisable to begin sowing as soon as it is light in a calm morning, the sower will be able to drop the seed as fast as the man who draws the rake can mark out the drills, and two hands following may cover the seed.

As soon as the carrots can be readily seen they should be hoed, using a thin cast-steel hoe, and merely scraping the surface.

Should the weather be fair, it will be found generally best to hoe every week, as the ground will then be so clean and loose, that the labour of working it will be trifling. When the carrots are about three inches high, they should be weeded, taking care to never leave them nearer to each other than three inches; always remembering that there are few weeds more injurious to carrots than carrots themselves, when allowed to stand too thick; should the carrots be six inches apart in the drills, they will yield as much as if they were allowed to stand but three inches apart. After they are strongly rooted, the ground between the drills may be hoed with a long-tined fork, for it may be taken for a rule, without exception, that the more light and mellow the soil is kept, the greater will be the proportion of root compared to the tops (or leafy part), not only of carrots, but also of potatoes, beets, or parsnips. They are best taken up with a flat-tined fork, such as is used for digging potatoes.

Carrots are very good for horses, who are supposed to keep their wind better when fed partly on this root, than when fed only with hay and oats. They are also very good for cows at calving time, when it is well known, that some, (particularly the thin ridged-backed breed, that give a large quantity of very thin milk,) cannot bear any considerable allowance of potatoes, as they will at that time purge them so much, that they will fall off in flesh fast, even while giving a considerable quantity of milk.

Swine eat them eagerly either raw or boiled.

The principal advantage of growing carrots is, that the produce of an acre is of as much value to feed horses, as that of two acres of oats, while at the same time they exhaust the land much less.

Besides the common use of carrots in domestic cookery, they are sometimes stewed soft and mashed (the water being allowed first to be nearly all boiled away), then, with the addition of a few cranberries, or a little vinegar, they make a tolerable substitute for apples in making pies, and with the addition of molasses and ginger a near resemblance of the pumpkin pie, not yet forgotten by Novascotians of American descent.

Carrots should be packed in sand or barren soil in a cool part of the cellar: they will then keep till the middle of June.

T. S.

### THISTLES.

This mischievous weed is very troublesome in rich light soils, particularly on limestone land, where it is very difficult to get the better of it, as every piece of a root will vegetate; but the land may be cleared of the roots by the following management: Plant the ground that is full of thistle roots with potatoes, or indian corn; as soon as it appears above ground, hoe, taking care not to leave a single leaf of thistle; repeat the hoeing every second day, and within a fortnight of hot or three weeks of ordinary summer weather, every root will be dead, and the crop will be considerably better than it would have been, had the ground been free from weeds. In the growing season, plants cannot live long without leaves, which are as necessary to them as roots.

To hoe so frequently may seem to be too much labour, but recollect, that after the second hoeing, the ground will be like a heap of ashes, and can be very quickly gone over.

In some places, particularly in King's County, thistles grow in the roads, and their seeds being feathered, are spread over the fields by the winds. By adopting the practice of the old low Dutch farmers of Long Island, these seed beds of mischief may be done away with in a way that will be much to the farmers' advantage.

At some leisure time in summer, plough between your fences and the actual road, every place overrun with thistles, mayweed, chamomile, or any other rank weed, and throw your furrows into heaps. In the fall, take up your stable floor and dig out the earth as deep as the colour is changed, 'tis will be found an excellent manure for top-dressing grass land; fill up the spaces with the soil that was ploughed up on the roadside. This should be thrown out early in the spring and formed into a high round heap; after the lapse of a fortnight it should be turned, and within another fortnight it will be fit for use. The farmers who will try this, will, it is believed, find so much advantage in it, that they will not thenceforward allow the mould that washes into low places to remain there long enough to form those beds of weeds, which are anything but ornamental on road sides; and they will thus remove to its proper situation, a material which is sometimes not very wisely used to repair the roads, upon which it ought never to be thrown, for it makes dust in summer and mud in the spring and fall.

T. S.

### BOOK FARMING.

The following excellent remarks we take from an old number of the *Genesee Farmer*; they are from the pen of Willis Gaylord, one of the present Editors of the *Cultivator*.

Next in benefit to agricultural societies, and in a great measure springing from them, is to be placed the influence of agricultural Journals. While their beneficial effects have been almost unnumbered, they have injured no one, and now that their utility has been fully tested by experience, that farmer has been guilty of an unpardonable inattention to his true interests, who neglects to provide himself with a well-conducted journal of this kind. I am sensible there is a prejudice, an inveterate, but most unfounded and untenable prejudice, against what is termed by some of our cultivators, book farming. With such men it is enough to condemn any proposition, or discredit any statement, that it comes from a book or a journal. They reason thus:—Our fathers for a century have been content with thirty bushels of corn, or ten bushels of wheat to an acre, and why should we undertake to be wiser than they? They never heard of a chemical analysis of soils, of turnip culture, of rotation in crops, agricultural books, and why should we bother our heads about such matters? With such reasonings thousands resist all improvement, and rest contented in an ignorance not the less prejudicial because so shamefully prevalent. And what is this book farming, about which such unreasonable notions prevail? A few cultivators of the earth agree to communicate to each other the results of their experience in farming—raising cattle, sheep and hogs—the best modes of preparing and using manure—the most profitable crops and the best modes of raising them—the best breeds and the best modes of fattening animals, and in short, all things of general interest relating to the occupation of a farmer. These results are committed to writing, go through the press and become a book. He who chooses to follow the results of enlightened experience as there detailed, is guilty of book farming. A gentleman who has money, inclination and leisure, following nature as a guide, commences a series of agricultural experiments which result in doubling the means of existence from a given quantity of land, or in other words, make two blades of grass, or two bushels of wheat, grow where but one grew before. Such a man is a benefactor to his country; but, if actuated by a noble regard for the general good, and anxious that all should partake with him in the benefit, he sends a history of his proceedings to a journal, that others may avoid his errors; it is denounced as a mere whim; as nothing but book farming. No matter how important or how valuable the published accounts may be, if they add one-half to the productiveness of a farm, there are many, too many, who scout them as unworthy of notice. If, however, we were required to point but the men who had done the most to advance the agricultural interests of the state or country, who have introduced the most successful methods of raising crops, and improving the soil, we should be obliged to fix on those who are emphatically book farmers; men who were bred to other pursuits, but hav-

relinquished them for the safe, honorable, and in their case, eminently successful cultivation of the soil. It is to such men as Powell, Colman, Huel, Bralley, and the lamented Thomas, that the farmer who wishes to adopt the easiest and most profitable course of farming, must look as guides, and these are the most thorough book farmers in the country. It is time that this unworthy prejudice against that knowledge of farming which may be derived from books was done away—that farmers should not deem themselves so far advanced towards perfection in their pursuits as to be beyond the teachings of recorded experience. We know there are visionaries in agriculture, as well as in every thing else; men who are mere theorists; who from their studies put forth their vague notions and crude ideas as facts, without submitting them to the ordeal of experiment, the test of time. But the practical, well-informed farmer, and such all should be, is not deceived by such fantasies; from the premises laid down, and comparing them with his own experience, he perceives the absurdities to which they lead, and rejects them without hesitation. But the theoretical farmer, who with time, and money, and nature for his guide, submits his ideas to the test of experiment, may obtain results astonishing to himself, and which, when laid before the public, demands its lasting gratitude. To books then we must continue to look for practical instruction in the most approved modes of agriculture. A journal is a reservoir in which is accumulated the experience of ages and the practice of thousands; and to it the young farmer may profitably go for information on a multitude of topics respecting which the inexperienced and uninformed must necessarily be ignorant. To all then who aspire to the honorable title of an intelligent tiller of the soil, we say, take some standard agricultural work—to every present subscriber to the Farmer we say, not only continue your subscription and endeavor to promote its circulation among your neighbours, but become a contributor to its columns, of the results of your farming experience, your success and your failures—preserve the numbers carefully, and see when each volume closes they are well bound—read carefully, compare thoroughly, reduce your knowledge to practice, and you will be singularly unfortunate indeed, if you do not find yourself remunerated ten-fold.

“Of late the organ of acquisitiveness in the Yankee has been very strongly developed; and I could safely say, a tremendous excitement got up in the community, by the introduction of a new potatoe called the Rohan.

We have in Southboro', an Agricultural Society, which meets once in two weeks. The object is to concentrate our agricultural knowledge, and make a common fund of it. At a meeting last winter, the famous rohans came up of course, and one man had planted a pound, another two, another half a peck; they were far fetched and dear bought, I will assure you; but the production was truly wonderful. They had planted them in the richest part of their garden and still added manure, cutting them into thousands of pieces; but as a general thing they did not recommend them to be a good eating potatoe. It was thrown out at the meeting, that the next spring they should plant them in their fields beside their other potatoes, and do by each alike, and report at a meeting next winter, the result of their doings. The report has been made in part; one man said that ten hills of the long reds filled a bushel, and sixteen hills of the rohans produced the same quantity; but he could not compel his hogs to eat the rohans; and the decision was generally that they were not a good eating potatoe.

Now sir, there has been too much speculation of that kind among the agricultural community. A few have made a fortune, but the community have been injured by it; and to view it in another point, it weakens the confidence of the farmers in agricultural journals. And now, while writing, I have my eye upon a new kind of potatoe called the French Perfectionist, only ten cents a piece. Gentlemen, step up, who bids; only a few for sale. Now I ask, have those potatoes been fairly tried before puffed and offered to the public, or is it a *gum-game*. It appears to me to be like this: A introduces a new kind of potatoe, he sells it to B, B sells it to C, and C to D; all want to make money by it. It puts me in mind of the noted striped pig at Dedham, all that went in and saw it, came out some wiping their chops, others laughing, saying “well worth seeing, gentlemen, go in.” Moral.—Never recommend an agricultural production for the sake of speculation, and never till it has been fully tried by the introducer.”—*Yankee Farmer*.

THE ROLLER is in many ways serviceable on a farm, and it is an implement which every farmer, with trifling aid from the smith, may shift to make for himself. It may consist of a log of two or three feet in diameter, and eight or ten feet long, nicely smoothed on the outside, with gudgeons in the centre of the ends, a frame, and tongue and shafts to draw and guide it by. After sowing small grains and grasses, the roller should follow the harrow. It breaks down the clods, smooths the surface, and presses the earth to the seed, and thereby causes more of it to vegetate and grow than otherwise would; for if the earth does not come in close contact with the seed, it remains dry, and is lost. In the spring, as soon as the fields are dry and firm enough to resist the feet of the cattle, the roller is very beneficially applied to meadows and winter grain. At this time the surface of tilled ground is crusted, and generally caked with small fissures, which expose the collar (the part which connects the roots and leaves,) and rots to the drying influence of the sun and winds. The roller breaks and pulverizes the crust, and renders the soil more pervious to heat, and closes the fissures. It is also serviceable in partially covering the crowns of the plants, which induces them to send out new roots and to send up more seed stalks. This effect is particularly noticeable in barley, when the roller is passed over it, after it has become three or four inches high. If winter grain is harrowed in the spring, the roller may follow the harrow.

In rolling grass lands it is necessary to attend in a particular manner to the season, as it cannot be performed to advantage when the surface is either in a too dry or too wet a condition: if too wet, the ground will become poached by the cattle's hoofs; and if too dry, the roller will make little impression in levelling the surface; and it is generally necessary, if the roller be of wood, to add to its weight for grass grounds, by placing stones in the box, which is attached to it for that purpose.

**DRAINING.**—Few expenditures in husbandry are calculated to make better returns than those made in draining, a branch of labor which has had a very limited practice among us, and of which we have yet much to learn. Many of our best lands are permitted to remain in a comparative unproductive state, on account of the water which saturates the surface, or reposes on the subsoil. To render these lands productive, even for arable purposes, it is only necessary, by well conducted and sufficient drains, to collect and carry off the surplus water which falls upon the surface, or rises from springs below. The rationale of draining is briefly this:—Air and heat are essential agents in preparing the food of plants which is deposited in the soil, and they are also necessary for the healthful development of most of the cultivated varieties. These agents are in a measure excluded from the soil by the water. The temperature of a soil, habitually saturated with spring water from beneath the surface, seldom exceeds 55 or 60 degrees at midsummer. Hence the grains and grasses, which require a heat of 80 or 90 degrees to bring them to a high state of excellence, can never thrive in these cold situations, where they find neither the warmth nor the food suited to their habits. But drain these soils, and they become light and porous, pervious to solar and atmospheric influence, the process of vegetable decomposition is accelerated, and a high state of fertility is developed.

#### EFFECTS OF AGRICULTURAL SOCIETIES.

No one can ride through the towns of Winthrop without observing the greater beauty of the farms, and the higher state of cultivation, than prevails generally in the State. This has been in a great measure effected by the Agricultural Society in that town; but in connexion with this there is another cause for a thrifty agriculture, a cotton factory. Do not smile, reader; the factories of the Eastern States have been the impelling and almost the efficient causes of agricultural improvement and the increased value of land. They have furnished the ready home market for the wool, the hides, the fuel, timber, beef, pork, hay, butter, cheese, apples, cider, potatoes, and a great many other vegetables besides eggs, lamb, veal, and a great many other things, most of which cannot be exported because of their perishable nature, and for none of which there is any foreign market to be depended upon. The Agricultural Societies, Agricultural Publications, and the experiment and study of scientific farmers have diffused that knowledge of husbandry which has enabled the farmers to supply, from the same land they before tilled, the increased demand created by the manufacturing cities, towns and villages.—*Kennbec Journal*.

## THE AGRICULTURE OF NOVA-SCOTIA AND NEW BRUNSWICK.

By A. GESNER, F. G. S., PROVINCIAL GEOLOGIST, &amp;c. &amp;c.

It must be obvious to all who duly reflect upon the subject, that in order to arrive at a perfect system of agriculture, a correct knowledge of the soil, and the plants it is capable of producing, are of the first importance to those who pursue the honorable occupation of tilling the ground. In the second place the climate, and the habits and characters of the animals and plants, adapted to it, must receive a due share of consideration. Now these several branches of inquiry, involve in them, a knowledge of the sciences of geology, mineralogy, chemistry, vegetable physiology, botany, and meteorology; by the aid of which, each peculiar branch of husbandry has been improved, almost beyond the highest conception, and within a period comparatively recent. It is also evident that every system of agriculture, must be adapted to the country where it is intended to be practiced, and must have a direct bearing upon each particular point as it is calculated to improve. An excellent system of agriculture for this climate, would be useless in France; and British husbandry cannot, in numerous instances be applied with advantage to North America. Even on the American continent, one system will not apply in all places; and the same plan acted upon in the United States, has been found unsuccessful in these Provinces. Nor are general remarks on agriculture found to be very useful. The system to be followed must belong to the country—it must be brought to the very townships and villages in each district—it must bear upon local facts and circumstances, only to be derived from personal examination, observation, and experience. When the farmers take up a work on agriculture, too often they find it difficult to select anything, that is applicable to their own lands. The reason of this is found in such works not being devoted to the climate, soil, &c., in which they are interested; and therefore any work which will convey to them practical information, in their art, and is applicable to the various situations in which they are located, must prove of inestimable value; for, by such means the agricultural capacities of the country may be increased ten fold, if correct principles are carried out in practice.

Whoever has travelled even a few miles over the country, or has cultivated a farm in any quarter, will have observed the different kinds of soils, sometimes occupying even a single acre; each of these requires different management. By chemical analysis, such elements as are wanting may be supplied. And such as are noxious may be discovered, and science will supply in many instances, that, which years of practice has failed to find out. The application of science to agriculture can be extended through all its departments, and can be rendered eminently useful in the forest and the field.

With these views the writer has, during the last fifteen years, visited almost every portion of the two Provinces; and has now in his possession upwards of two hundred specimens of soils, from different quarters, and the different mineral and vegetable manures of the country. A number of these have been submitted to chemical analysis, and their constituent elements have been separated. It will, however, be unnecessary to give even an outline of his labors in these enquiries, as the extensive notes taken by him on these subjects, would require careful arrangement before they are laid before the public.

In collecting the different plants of Nova Scotia and New Brunswick, his observations have been directed to such species of wild indigenous grasses, as might become useful by cultivation on

the mowing ground and in the pasture. A number of the wild fruits may also, by proper management, become objects of considerable interest, and utility. But of all the wild animals there is not one which could be profitably employed for labor.

In agriculture, the first and most important consideration is the soil, and the means whereby it can be fertilized, should it be naturally meagre, or impoverished by mingled or long continued cropping. It therefore becomes necessary to institute a careful inquiry into its properties, and the means by which it can be rendered productive. This part of the subject will be first brought under consideration.

All the different kinds of soils in every part of the world have had their origin in the rocks, the solid frame work of the globe. The rocks for the present purpose may be divided into two great classes. One of these classes has been formed by the agency of heat, and the other by the operations of water. Each of these classes are again divided into groups, or formations, which frequently differ from each other in chemical composition; and, consequently, by disintegration afford different kinds of soils. It is from these circumstances, that in the same county or district, one tract is composed of one kind of soil, and in another a different kind exists, according to the nature of the rocks, from which each have been derived. If, for example, we examine the soil occupying the great valley between the north and south mountains of Annapolis and King's Counties, in the districts of Truro, Onslow, Londonderry, and parts of Pictou and Cumberland; and if our observations are extended into New Brunswick, parts of Westmoreland, King's, Queen's, and large tracts in other counties, will be found to consist of a light red, or claret-colored soil, which is generally very productive. This same soil will be *gyssaceous* at some places, and marly at others; but it is very different from the stiff plastic clays of the slate rocks, in both Provinces, and also from the felspathic soils of the North Mountains, and extensive tracts occupying parts of the county of St. John and Charlotte in New Brunswick. All these differ from the peler sands of Aylesford, and large areas on the eastern shores of the Provinces, as much as they do from the alluvium of the great valley of the St. John, and the marshes of the Basin of Mines and Tantamarre.

These and other divisions of the soils to be mentioned more fully hereafter, must be considered apart from the local variations already noticed; and require a somewhat different plan of cultivation, and a modification in the manure is often necessary, to bring them to shine to their most productive condition. To apply manure or lime where calcium is abundant,—to apply gypsum in districts where it abounds, or dress lands with aluminous mud, where clay is the principal ingredient in the soil, would be to render such soils less productive, while the same applications under other circumstances would greatly improve the crops.

Upon a closer inspection it will be seen that the indigenous plants, including the stately forests of the country, have arranged themselves in families, or groups, on the several kinds of soil covering the different rocky formations; and thus nature has given a hint to the agriculturalist, which he may improve by planting each kind of grain or vegetable upon its favorite ground.

The surface of the earth as it is now seen, presents an assemblage of apparently heterogeneous substances, thrown together in great confusion; but, upon inspection, these substances will be found placed in regular order; having been produced by causes which have long since ceased to act. First the naked rock will be seen protruding through the soil, or lifting itself into lofty mountain ranges, where its nakedness seems to defy the arm of industry, and



the art of the husbandman; but even now the operations of heat, frost, moisture and other meteoric agents, are constantly reducing the stony mass, and forming a soil; which, if not retained in the shallow basins of the table land and slopes, is carried downwards to the vallies, to render them more favorable to the production of plants. Then there are found collections of rounded masses of rock, called boulders, as unproductive as the solid mountain cliff. But the attention will be arrested by extensive beds of gravel, sand and clay, above which there is a thin covering called the soil, differing only from the general deposit beneath, in being reduced to a firm state, and by containing the remains of plants that have flourished upon it. Again there are extensive deposits of alluvial matter, which are collecting every day from the disintegration of the rocks and previously formed beds. These afford the most fertile soils. The more freely mineral matter is divided, the better it is adapted to vegetation, and it may be laid down as a general rule, that the more recent the production of the earth's chemical and mechanical agents are, the better they are fitted for the support of vegetables. The greater the number of changes mineral matter has undergone, the better it is fitted for the purposes of cultivation; and those operations which have reduced it, to its finest and most pliable state, have contributed most to its adaptation to agriculture.

It is evident that the whole surface of these Provinces, at some former period in the earth's history, has been submerged beneath the ocean, and exposed to violent currents of water. By the action of these currents, the rocks have been broken and transported in boulders, gravel and sand. The beds of clay and finer materials, have been produced by more tranquil causes; or the falling of sediment thus produced. The extensive operations of these currents could be proved were it necessary in a work like the present.

From the above causes the *detrital* deposits and soil are not always confined to the surfaces of the rocks whence they were derived; but are frequently spread abroad, over other rocks, and as the softer varieties, or those that are capable of affording the most fertile soils, have been most readily acted upon and distributed, the fertility of the surface of the earth, has been greatly increased, and the hard and unyielding strata, have been covered over with rich diluvial matter. In the neighbourhood of the Grand Lake, at Sussex Vale, Westmoreland, and along the eastern side of New Brunswick; also in the counties of Hants, Pictou and Cumberland, in Nova Scotia, the red and claret-colored soil, derived from the new red sandstone, has been scattered over rocks that would have yielded a covering far less productive, and favorable to vegetation. The direction of the currents which have produced these effects, can in many situations be ascertained. In general they have proceeded from the North towards the South; there are however some local variations from this general result.

By this same diluvial current of water, the ingredients of different rocks have been indiscriminately mixed together, and a great variety in the composition of the soil has been the result. From the decomposition of granite, sand, clay, lime, magnesia and potash, would be the result; but frequently these mineral substances have been transported to great distances, and mixed with the constituents of other disintegrated masses; while the granite itself has been partially covered with the *detritus* of other formations. The beds of abraded matter produced by the action of mighty currents, at periods far remote are called *diluvial*, while those that are now forming by the action of water, are called *alluvial*. The sandy Plains of Aylesford and along the eastern shores of both Provinces, belong to the former deposits, while the Great Marshes of West-

moreland and the Basin of Mines belong to the latter. But there are other causes which greatly modify the arable covering of the earth, and the character of the soil frequently depends upon the quantity of animal and vegetable matter it contains. All these circumstances must receive due consideration, when the soil is submitted to that examination from which alone the best mode of increasing its fertility can be adopted.

The productions of the earth likewise depend in some degree upon the nature of the subsoil, or the strata upon which it reposes. Sometimes it rests on collections of pebbles or sand, which from being porous allows the water to escape freely. In dry seasons fields of this description will be unproductive from the lack of moisture. It may also be situated on beds of clay, which will not allow the water to descend, and therefore too much moisture will be present.

Many of the sandy soils owe their fertility to the subsoil, on account of its retentive nature, and clay will often be rendered productive by the influence of a substratum of sand or gravel. All mineral, animal, and vegetable matter, when exposed to the operations of the various chemical agents, undergo important changes; and these changes are influenced by frost, heat, moisture, &c., and thus it may be explained why it is necessary to change the crop from year to year, especially as the plants themselves exercise some controul over the soil.

Having given these few general remarks, in regard to the soils of the Provinces, each particular district will be next considered but these must be reserved for another chapter.

#### MANAGEMENT OF COWS KEPT FOR THE DAIRY.

The following article on the Management of Cows, kept for the Dairy, is extracted from a work entitled "A Treatise on the Theory and Practice of Agriculture in Canada, &c." by William Evans, Secretary to the Montreal Agricultural Society.

Milk cows are kept for the manufacture of butter and cheese, for the suckling of calves for the butcher, and for the immediate use of milk. Where butter and cheese are the principal objects, such cows should always be chosen as are known to afford the best milk and cream, and in the largest quantity, of whatever breed they may be. But the weight of butter to be made from a given number of cows must always depend on a variety of contingent circumstances, such as the size and goodness of the beast, the kind and quantity of the food, and the distance of time from calving. As to the first, it need scarcely be mentioned that a large cow will generally give a greater store of milk for a month or two after calving than one of a smaller size; though cows of equal size differ as to the quantity of cream produced from the milk of each; it is, therefore, on those cows whose milk is not only in large abundance, but which from a peculiar inherent richness, yields a thick cream, that the butter dairyman is to place his chief dependence; and when a cow is deficient in either of these, she should be parted with, and her place supplied by one more proper for this use. As to the second particular, namely, the kind and quality of the food; those who would wish to profit by a dairy, ought to provide for their cows hay of a superior goodness, to be given them in the depth of winter, and this in an unlimited degree, that they may always feed till they are perfectly satisfied.

The profit of dairy cows depends very much on the goodness of the pasture, and the suitableness of the stock. The sales of Buckinghamshire and Oxfordshire, are said to produce the sweetest butter in England; and though the grass on other lands should be equally luxuriant, the cow of the same breed, and the cream in like abundance, yet it is found a decided preference still remains in favour of the vale-fed cows; for, as a fattening beast will on rich land thrive much quicker than on thin soils, though the herbage be much shorter on the former than on the poor ground, so will cows give a larger store of milk, and that of a more nutritious quality, when fed on deep fertile meadows, than if depastured on those of inferior goodness of quality. Great care should be taken

not in over stock pastures. Milch cows should always have a full bite of close, short, fine grass. In England, long overgrown grass is found to give a rank flavour to the cheese and butter, and is avoided.

Cows should be kept constantly in good condition, as if they are ever suffered to become very lean, and that in the winter season, it is impossible that they can be brought to afford a large quantity of milk, by getting them into perfect condition in the summer months. Where cows are lean at the period of calving, no management afterwards is ever capable of bringing them to afford for that season anything near the proportion of milk that they would have done if they had been supported in proper condition during the winter. Food of the most nourishing and succulent kinds should, therefore, be given in suitable proportion in the cold inclement months, and the animals should be kept warm, and well supplied with pure water. If cows are kept in good condition, they may be milked to within a very short period of their calving, say a month or two at most. When cows are expected shortly to calve, they ought to be lodged at night in a separate house sufficiently large, for a week previous to calving, as it may be the means of saving the life of the calf, perhaps of the dam.

A milch cow is in her prime at four or five years old, and will generally continue in a good milking state till ten years old, or upwards; but this depends much upon the constitution of the animal. Cows should not be kept longer than they yield profitable returns for the food they consume. Cows of large size will yield a great store of milk on pastures where the grass is in sufficient abundance, but as these large cows require a more ample provision than would fall to their share on the generality of farms in Canada, it would seem that they should not be kept by farmers whose lands are not of the most fertile kind; for, on ordinary keep, a small cow will yield a fairer profit than one of a large breed, which, being even in England only fit for the best kind of land and the most luxuriant pastures, would be starved, where a Canadian cow would find an ample supply of food.

Those who would have the greatest advantage from cows, either as calf-feeders, milk-sellers, or dairy-men near towns, should always have a bull to run with the herd. Bulls should seldom be kept longer than five or six years old; after this age, they are apt to contract vicious dispositions, and become very unmanageable. Whenever this happens, they should immediately be castrated, and put to fatten. In the vicinity of towns, cows kept for milk may be fed with brewer's or distiller's grains, from half a bushel to one bushel per day. To mix these grains with bran or pollard, at the rate of two gallons of grains, to one gallon of bran, will be a good method. Three gallons of this mixture wet with warm water, will make a good feed for a cow, and two or three such feeds in a day will be amply sufficient. It will answer a good purpose to mix chaff, or cut hay with grains, and if the chaff or cut hay could be steamed conveniently, previous to mixing it with the grains, it would make it much more valuable food. If potatoes are given, they should be steamed. Potatoes are more useful for fattening cattle, than for milch cows. Carrots or beets, are good for milk, and may be given to cows, at the rate of one bushel a day, with a feed of grains or bran at mid day. With a sufficient quantity of good hay, cows with this feeding will yield abundance of milk, provided they are a good kind for milk. Bran, or ground oats, or barley, or Indian corn-meal, unsifted, may be substituted for grains if they cannot be conveniently had. Three gallons of bran, or one gallon and a half of the unsifted meal, will be sufficient for a cow in the day, made into a mash with warm water. These will give more and richer cream, than the grains will do. Farmers at a distance from town will not require to feed store stock so highly. The inferior grain, chaff, potatoes and carrots, will afford him ample food for his stock, by managing judiciously, and boiling or steaming this inferior grain, chaff, &c., which may be mixed with cut hay or straw. In all situations, it is most essential that the cows should be kept warm and clean, and be regularly attended to in feeding, milking, &c. Farmers should endeavor to turn the cows out to grass in spring in good condition, in order that they may "start well," for if cows are not in good condition when turned out to grass, it is a long time before they get into full milk.

From the same.

#### OATS.

The oat is a very useful grain, and the climate and soil of Canada are not unfavourable to its culture, notwithstanding the heat of

the summer. It may be cultivated both as a bread corn, and as horse food. Of all grains it is the easiest of culture, growing almost in any soil that admits of being ploughed and harrowed. The varieties of oats are very numerous.

The different varieties of oats cultivated here have been already described, and the farmer may choose from them the variety that will be suitable for his soil. The seed of oats of the best quality is so easy procured that it must be the farmer's own fault if he sows any other. Farmers in parts of England have been known to be at the pains to select the choicest grain in order to get into the best seed; they get them picked out by hand by women.

The soil for oats may be of any kind whatever, from the stiffest clays to moss or bog, provided it be laid sufficiently dry. If the season be moderately moist, poor, sandy or gravelly soils will produce a crop of oats of the common white or black varieties. The most suitable climate for oats is one rather cool and moist. When very dry and warm, the panicles are very apt to get so dry and contracted that they cease to convey sufficient nourishment to the ears, which in that case never become plump, but thick husked, long awned, and unproductive in meal. This is sometimes the case in Canada, and the best remedy is early sowing. Oats are not so exhausting to the soil in a moist, as in a very dry climate. The best oats, both in quality and quantity, are those which succeed grass, on newly broken up lands; no kind of grain seems better qualified by nature for foraging upon grass land than oats; as a full crop is obtained in the first instance, and the land left in good order for succeeding crops. Oats should always be sowed on land not rich enough for wheat or barley, and will pay better on such lands than a crop of wheat or barley, that is much below an average.

The season for sowing oats should be as early as the farmer can sow them after the wheat is sowed. Much depends on early sowing, that the plants may be covering the soil before the time of extreme heat of summer. Oats that are not sowed before the 21st of May, might as well be left unsown, and summer fallow the land. Late sowed oats will sometimes succeed when the summers are cool and moist, and no early frosts in autumn; but if the summers are very hot and dry, they are nearly a failure; or if there are early frosts in autumn before they are perfectly ripe, they are of little value. The quantity of seed is generally about two bushels to the acre; but on good soils, if the seed is sound, and sowed in time, a less quantity will answer. The after culture of oats, is only the weeding of it before the flower stalks begin to shoot up.

In harvesting oats, they are often cut down by the scythe, and carried loose to the barn. When oats are a good crop, I should always recommend to bind them in sheaves, and set them up in stooks, as wheat and barley are managed; it is the safest mode and will much facilitate the process of threshing. Oats should generally be cut before they are dead ripe, to prevent the shedding of the grain, and to increase the value of the straw as fodder, may rarely get damaged, or waste under the harvest process in this climate, if cut at the proper time, and bound in small sheaves.

#### BARLEY.

Barley, though less calculated for a bread corn than rye, may be considered as next in value to wheat. In Sweden and Lapland, it is more cultivated than any other grain, on account of its requiring to be so short a period in the soil; sometimes no longer than six weeks, and seldom more than seven or seven and a half. In Spain and Sicily, they have two crops a year on the same soil; one is sowed in autumn and ripens in May, and the other is sown in May, and is reaped in autumn. Barley is a tender grain, and easily hurt in the stages of its growth, or harvesting. The climate of Canada is very favourable for the cultivation of this grain in all stages of its progress until brought to the barn or stackyard.

There are several varieties, if not different species, of barley. The variety generally cultivated in Canada is the square or four rowed, because it is considered the most productive, and is not objected to by the brewers. The two-rowed, or long-eared barley, is partially grown in the country, and produces a beautiful sample, and brings a higher price than the four rowed. The seed of the naked barley, or wheat barley, has been introduced. This grain is considered by some as nothing else than spelt wheat, which it greatly resembles. I cannot say with what success it has been cultivated.

In choosing from any particular variety, the best grain for sowing is that which is free from blackness at the tail, and is of a pale, lively, yellow colour, intermixed with a white, brightish cast; and

if the rind be a little shrivelled, it is so much the better, as it shows that it has sweated in the mow, and is a sure indication that its coat is thin. The husk of thick-rinded barley being too stiff to shrink, will lie smooth and hollow, even when the flour is shrunk from it within. The necessity of a change of seed from time to time, by sowing that of the growth of a different soil, as it has been before observed, is in no instance more evident than in the culture of this grain, which otherwise becomes coarser and coarser every year. But in this, as in all other grains, the utmost care should be taken that the seed is full bodied.

The best soil for barley is a light rich loam, finely pulverized. It will not grow in perfection on a very sandy, or soft soil, nor on strong clays, that are most suitable for wheat. It will succeed very well on light soil, if the situation lie warm and dry. It is generally sown in Canada after potatoes or other green crops, or naked, fallow.

The best season for sowing barley will be the beginning of May, or sooner if the weather is favourable and the soil in a good state. A correspondent of the Bath Society, England, gives the following experiment:—"I soaked my seed barley in the black water taken from a reservoir which constantly received the draining of my dung heap and stables. As the light corn floated on the top, I skimmed it off, and let the rest stand 24 hours. On taking it from the water, I mixed the seed grain with a sufficient quantity of sifted wood ashes, to make it spread regularly, and sowed three fields with it. The produce was 60 bushels to the acre, of good, clean barley, without any small or green corn or weeds, at harvest. No person in this country had better grain." The same person goes on to say he sowed barley without steeping, the same year, and the crop was much deficient in every way compared to what was produced from the steeped seed.

There is considerable advantage in steeping, as it promotes the germination of the seed; it also procures an equal germination, and consequently an equal ripening, and getting the start of weeds. The following directions are given for steeping the seed in clean water. First, take about one-third of the contents of each sack of seed barley, to allow for the swelling of the grain; lay the sacks with the grain to steep in clear water; let it be covered with it for at least twenty-four hours; when the ground is very dry, and no likelihood of rain for ten days, it is better to lie thirty-six hours. Sow the grain wet from steeping without any addition. The seed will scatter well, as clear water has no tenacity; only the sower must put in a third or fourth more seed in bulk than is usual of dry grain, as the grain is swelled in that proportion. Harrow it in as quickly as possible after it is sown; and though not necessary, give it the benefit of a fresh furrow if convenient.

The quantity of seed sometimes sown in Canada is near two bushels to the acre. One bushel and a half, or perhaps less, might be sufficient on soils well prepared; however, it is considered that thin sowing of barley is a disadvantage, for the following reasons. If the early part of the season be dry, the plants will not only be stunted in their growth, but will not send out offsets; and, if rain fall afterward, the plants will begin to stool, and send out a number of young shoots, and these young shoots cannot be expected to arrive at perfect maturity with the early shoots; consequently an unequal sample will be produced, and the grain will be for the most part of an inferior quality. Good judges, therefore, think it preferable to sow a quantity of seed sufficient to ensure a full crop, without depending on its sending out offsets, that the crop grows and ripens more equally when this is done, and the sample of grain is uniformly good.

Barley is ripe when the reddish colour on the ear is gone off, or when the ears droop or fall, as it were double towards the straw. In harvesting of barley, it requires more care than any other winter crops, owing to the brittleness of the straw; after it has reached a certain period it must be cut down, as when it is suffered to stand too long, much loss is sustained by the breaking of the heads. On that account, it should be cut at a time when the grain is soft, and the straw retains a great proportion of its natural juices; consequently it will require a long time in the field before either the grain is hardened or the straw sufficiently dry. If put into a stack or barn sooner than it is in a proper state of dryness, it will be apt to heat, and greatly lessen the value of the grain. Barley may be cut down with the cradle scythe, and it will generally be found best to bind it in sheaves as it is cut, and set it up in shocks or stools.

Barley is rather more difficult to thresh than other grain. They

have in England, what is called a hand hummelling machine, for taking off the awns of the barley, and every farmer who cultivates the grain should have one. The produce of barley in Canada on well prepared soils, and in favourable seasons, is very little short of the produce obtained in England. From twenty to forty bushels the acre is raised, and I have even heard of a larger produce. The average produce of Middlesex, England, is about 1570 pounds of grain, and 2590 pounds of straw, to the acre of barley.

Barley is applied to various uses besides malting, and making whiskey and beer. It is dressed into pot and pearl barley; the first by grinding off the husks, and the pearl barley is produced by carrying the operation so far as to produce roundness in the kernel. These are used in soups, gruels, and medicinal drinks. Barley meal is ground like oat meal, or flour; the coarser sort, with the bran, may be used for fattening live stock, especially pigs and poultry; but the fine bolted barley flour, mixed with wheat and rye flour, in the proportion of two of barley to one of wheat, and one of rye flour, are said to make a light and very agreeable loaf of bread. The finest of the barley flour without any mixture, will make good bread, much preferable to that made from the flour of Indian corn.

The produce of barley in flour, should be twelve pounds of flour from fourteen pounds of clear grain. the straw is chiefly used for litter and manure; it is not very valuable for fodder. The diseases of barley are few, chiefly smut, which has been already described.

### TURNIPS.

Turnips and clover are considered the two main pillars of the best courses of British husbandry, as preserving the fertility of the soil for producing grain, improving the breed of cattle and sheep, and affording a regular supply of butcher's meat all the year. That such is the fact, there cannot be any doubt; but, there is as little doubt that the turnip system can never be introduced with equal success or profit, into Canada. The climate is unsuitable, and probably ever will continue so, for the extensive cultivation of turnips, or for keeping them in a safe and good state after they were produced.

A cool, moist and temperate climate is the most desirable for turnips. Ireland produces larger turnips than any part of the British Isles. I have seen two turnips taken from a field the first week of October, and exhibited before the Farming Society of Ireland, that weighed 42 pounds each. Von Thuer says that turnips grown in the fields of Germany, seldom exceed half a pound weight each, and that all his care could not raise one at Magglen beyond 14 pounds. In France and Italy they are still less. They are found of no size in the rapid climate of Russia or Sweden. I have not seen them of any great size here; and from the ravages of the turnip fly, and the frequent dry seasons, a turnip crop is the most certain that can be sown. On new lands in the woods, or moss lands with abundance of ashes, a crop may be had, but not of great bulk. Swedish turnips, with proper culture, might produce tolerable crops, and would keep better than any other. The yellow Aberdeen, and yellow Dutch turnips, are next to the Swedish for their hardiness, and nutritive qualities, and keep much better than the white. The Swedish and yellow turnips, are much used for work horses in Britain, as food, with hay or straw.

The land requires to be well pulverized and perfectly clean for turnips. When it is in that state of preparation, the drills may be opened with the plough to receive the manure, in the same way, and at about the same width between the rows, as for potatoes, from 17 to 30 inches. The manure is then carted out and spread in the drills, in as regular a manner as possible. When the manure is spread, it is covered with the plough, splitting each ridgelet in two, and forming a new ridgelet over the manure. The land being formed into ridgelets in this manner, is ready to receive the seed. This is sown on the tops of the ridgelets, by machines of various forms.

The most simple of these is the Northumberland one-row turnip drill. It has two wheels which run in the hollows on each side of the drill or ridgelet to be sown, by which the sower is enabled to keep the row exactly in the centre of the drill. The seed is put into a tin cylinder through an aperture which opens and shuts for the purpose; from this the seed drops as it moves, through small equidistant holes made in it, into a tin tube, by which it is conveyed ground. Immediately before this tube is a hollow coulter of iron, sharp before, which encloses the forepart of the tin tube, and makes a track in the ground from one to two inches deep, into which the

seed drops. This simple apparatus is mounted on light wheels, and has a light wooden frame work, having two shafts behind, by which the workmen holds and keeps it steady in its course. It is generally attached by a rope to a tight wooden roller, that rolls two drills at a time, and is drawn by a horse. This drill barrow has a small roller attached to it behind the coulter and tube, which will press in and cover the seed when worked by a man, without a horse or roller, but the ridgelets must be previously rolled.

Many modes of preparing the seed to prevent the ravages of the fly, have been proposed, but hitherto without any great success. Mixing with radish seed has been adopted, as the fly is known to prefer the radish to the turnip. Steeping the seed for 24 hours in very strong tobacco water, in which the tobacco has been boiled, is also said to prevent the fly from injuring the young plants, until they get the rough leaf. But in very dry seasons, such as 1834, no remedy yet known will effectually prevent the ravages of the fly in Canada, on old cultivated lands. It is necessary in all cases to sow this seed thick, as the plants are so much exposed to contingencies.

The period of sowing may be from the 1st of June, for Swedish turnips, which should be sowed early, to the 10th of July. If the crop be intended for selling in market, for the table, the more rapid its growth, the more tender and better they will be found for cooking. Turnips long in growing will not cook well, but will be tough and sticky. Turnips require great care in hoeing and weeding, and should not be nearer to each other in the rows than eight or ten inches. Swedish turnips may be transplanted in moist weather, where blanks appear in the rows.

In Norfolk, the best county in England for turnips, one acre of the best is considered only sufficient to feed 100 sheep for a week. The produce of turnips sowed broad cast, varies in England from five to fifteen tons to the acre, and the last is reckoned a good crop. The white globe turnip drilled, generally produces in the north of England, from 25 to 30 tons per acre, equal to about 1000 or 1200 bushels; the yellow and Swedish a few tons less. The produce of turnips in nutritive matter, as proved by Sir H. Davy, was 42 parts in 1000; Swedish 64 parts in 1000. According to Von Thier, 100 pound of turnips are equal to 22 pounds of hay; and an ox to get fat on turnips, ought to have one-third of its weight daily. In England, an ox of 60 stone will require one acre of turnips of thirty tons produce, to make him fat; this quantity will be sufficient for 10 sheep. Mr. Young says, a beast will eat from a third to one-half his own weight of turnips daily, with a portion of hay or straw.

Turnips cannot be preserved in Canada, unless in root houses or cellars; and with the exception of Swedish turnips, they will not keep even in cellars if a large quantity is put together, without heating and spoiling. The following is the opinion given in the Supplement to the Code of Agriculture, on storing turnips in England.

"The storing of turnips is attended with too much labour and risk to be of much advantage in the greater part of the kingdom. Common turnips are never stored in any great quantity; though sometimes a portion is drawn and formed into heaps, like potatoe camps, and lightly covered over with straw, or preserved for some time under a shed; on these occasions, before storing up, the shaws or leaves, and the tap roots must be cut off and removed, to prevent heating and rotting. The heaps must not be covered with earth like potatoes, for in that case their complete destruction is inevitable. This root contains too much water to be preserved any length of time in a fresh and palatable state, after being removed from the ground; and though the loss in seasons, unusually severe, particularly in the white globe variety, is commonly very great, it is probable that a regular system of storing the whole, or greater part of the crop every season would, upon an average of years, be attended with still greater loss; besides the labour and expenses, where turnips are cultivated extensively, would be intolerable."

It is well known that turnips exposed to one night's severe frost in Canada, will be deprived of a great portion of their best qualities, and are thereby rendered totally unfit to be cooked for the table. They are of such a soft and watery nature, that if put together in any considerable quantity in cellars, they are inevitably destroyed. And supposing they might be kept safely in cellars or root houses, as potatoes are kept, in large quantities, what farmer could find room for as much as would be necessary to feed a few cattle, at the rate of 10 or 1200 bushels for one animal? All farmers who understand stall-feeding cattle on turnips, are well aware,

that it is only by giving them as much as they can eat, they can be fattened on that food to profit.

From a Supplement to the same.

RETURNS WHICH MAY BE OBTAINED FROM AGRICULTURE IN DIFFERENT SECTIONS OF BRITISH AMERICA.

I fear that under this head I could not be able to offer very satisfactory general estimates, and probably were I to attempt it, those who would read them, should they at any future time find by their own practical experience that they could not realize my estimates, might accuse me of having led them astray. I shall, therefore, confine myself to offering a few remarks that may sufficiently show what the returns from a given quantity of land might be, managed judiciously, by an active and attentive farmer. I will suppose a farm of one hundred acres of good land, all arable, to be situated within a day's journey of Montreal or any other of the principal Cities of British America (say within 15 to 50 miles, or not to exceed this) with suitable buildings for the occupancy of a farmer. That the land should be managed on a plan of convertible husbandry and regular rotation of crops, one-third in tillage, one-third in meadow, and one-third in pasture, taking up eleven acres of grass land for tillage, and seeding down for meadow eleven acres of what may be in tillage annually. Of the land in tillage, one-third should be under green crop, and all that was not, to be in summer fallow, and two-thirds under grain, of wheat, oats, barley, rye and peas, or either of them, that the soil will be most suitable for, seeding down with timothy and clover, eleven acres annually. On a farm of this size, from 12 to 15 milch cows might be kept, and three horses would be sufficient to work it, if the soil was not very strong and heavy, but if it should be so, a yoke of oxen or perhaps more, should be kept in place of one of the horses. If the farm had a good soil, and was managed properly by observing a regular rotation of crops and manuring, it would maintain amply the stock I have named, and perhaps more, and allow of 33 acres being in tillage constantly. From this management the following returns might be obtained:

11 acres of wheat at 20 bushels the acre, or of barley at 30 bushels to the acre, of which one acre was to be allowed for seed and other waste, either crop might be of equal value one at 5s. and the other at 3s. 4d. the bushel, would be	£50 0 0
11 acres of oats and peas, oats 30 bushels the acre, and peas 20, the price of one 2s. and the other 3s. the bushel, would be after allowing for seed, &c.	30 0 0
11 acres of potatoes, carrots, turnips and Indian corn, potatoes 200 bushels the acre, and either of the other crops would, if good, be of equal value with potatoes, at 1s. the bushel after allowing for seed, &c.	100 0 0

The actual value of produce from 33 acres in tillage would be £180 0 0

But if a family and servants had to be maintained, there could not be more than two-thirds of the produce of wheat or barley sold; one-third would be required for to furnish bread to a family of eight or ten persons, including servants, if required to work the farm. The produce of oats or peas would also be necessary for the support of the horses, for family use, and for a help to feed swine. If any of the peas could be spared they might be sold, and make up for some other deficiency. The green crop should be applied to feeding cattle and hogs, if a convenient market could not be had for potatoes at one shilling the bushel. By judicious management in feeding stock, never giving the potatoes to them in a raw state, one shilling a bushel might be realized for them.

I refer the reader to my Agricultural Treatise for more particular directions as to the best mode of feeding cattle with potatoes &c. The hay raised on 33 acres of good meadow would support the regular stock on the farm, and afford sufficient surplus for feeding a few head of cattle, with the vegetables, or could be sold. Should oxen be kept on the farm, they should be fattened and sold off every year, and lean ones bought in. As many more cattle as there would be feeding for, might be purchased late in the fall and fattened on the produce of the green crops, and hay if not disposed of to better profit. The disposable produce might then stand as follows:

11 acres of land in wheat or barley, if in wheat, the one-third would be necessary for the family of eight or ten persons; and if in barley, one-third of the produce would be required to purchase wheat or flour for the use of the family. This would leave two-thirds to be disposed of, which might be estimated at	£33 0 0
The produce of 12 cows in butter and cheese, over what would be required for moderate family use, might be £6 for each cow, at the lowest,	60 0 0
10 calves fattened and sold at five or six weeks old, for from 5 to 6 dollars each,	12 10 0
2 calves might be raised annually, and two cows from the stock fattened for family use. The produce of 11 acres of vegetables properly applied, leaving one acre for family use, would pay	100 0 0

Annual produce of 100 acres of land, £205 10 0

Together with supplying a family of eight or ten persons with farm produce for their own food, including beef, pork, milk, butter, &c.

If any item of my estimate should prove deficient, another may make up for it. The hay crop will make up for the green crop if estimated too high, as it will be more than sufficient for the regular stock.

If the farmer should not have sufficient working persons in his own family, the hire of two men and one woman must be taken from the above. One man at £20, another at £15, and a woman at £12 and about £10 for extra work in harvest time, which make £57. This wages will only apply to Lower-Canada; in the Upper Province it will be fully a third or a fourth more. Food I suppose to be provided from the farm exclusive of the above produce, as I include the necessary number of servants in the family, of eight or ten persons. A larger family will require a larger expenditure. It would be right to allow for wear and tear of implements; blacksmith, firewood, and casualties, suppose £28 10s. which would leave the nett proceeds that might be realized from 100 acres of land, stocked with cattle and necessary implements, about £110. Out of this the farmer's family would have to provide clothes, and luxuries not produced on the farm. An industrious family, if able to work, would save the wages of servants, and might supply wine and cider of their own manufacture at trifling expense; their soap and candles, and perhaps part of their clothing. Much can be effected by those who are industriously disposed.

I do not think it very necessary to value the whole produce that might be annually created on a farm of 100 acres, because the food of those employed in its cultivation must of course be taken from it, as well as the support of horses and cattle. I have left the straw out of the estimate to supply manure, and the hay to feed the stock of horses and cattle. Should the family consist of a smaller number than eight or ten persons, their expenditure will be so much less, and will allow of the nett proceeds to be of greater amount. I have for my own satisfaction calculated the gross returns that might be possible to obtain from 100 acres of good land, well managed, and including every species of produce (except the pasture, which is consumed by the cattle that give the milk, butter and cheese,) I believe it might amount to from £350 to £400 annually, or from £3 10s. to £4 the acre. Out of this amount all the expenses of production, interest of capital, &c. would have to be charged. On farms near a market, a more valuable produce might certainly be realized, but I think it would be well for a stranger not to expect to exceed this estimate much, and if he should, he may fairly attribute it to his own superior skill, management and industry. The cost of production may vary considerably from the soil being better and more easily worked, and more particularly from the skill and industry of the farmer applied to its management. If a total gross produce of £350 to £400 or more be obtained from 100 acres of land, the less expenditure that will be directly incurred to produce it, the greater amount of profit it will give the farmer, so that the nett amount of profit will depend upon these circumstances.

The waste of the dairy and the inferior grain should be allowed to go to the feeding of pork, and would greatly contribute to increase the amount which I have stated might be obtained from the produce of the green crops applied to feeding stock. All my estimates are made, as what I would expect to be produced by agricultural skill, industry and good management of qualified farmers. For those who do not understand farming, and want

industry and good management, I would not attempt to estimate. If such should become farmers, they will have to abide the results, which they may be assured will be favourable or unfavourable in proportion to the skill they are able to acquire, and the industry and judicious management they apply to the cultivation of their lands and stock.

On farms situated more than a day's journey, or 50 miles from a good market, the vealing of calves will not be very profitable, unless there is means of water communication, or by railroad. A different mode of management should then be adopted with regard to calves. A less number of milch cows might be kept, and more stock raised and sold. Heifers at two years old, well kept, and having calves at that age, would sell well. Steers, at three years old, sold fat, would pay, provided they had been properly kept and fattened. The value of produce might and will vary in some degree in consequence of the situation being more or less convenient to market; but if the farm be judiciously managed, and the rearing and feeding of stock be carefully attended to, the difference will not be so great as persons might imagine. Of course, the system of management that should be pursued on a farm near a good market, would not be suitable on one at a great distance from market, and the skilful farmer will be able to calculate the advantages and disadvantages of situation, and turn all to good purposes, will avail himself of the advantage that proximity to a good market will afford, and will endeavour to adopt the best remedy that is practicable to meet the inconvenience of being far from market. I am confident that in most situations in British America, good arable, meadow, and pasture land, well managed and properly stocked, will give an annual gross produce of from three to four pounds per acre, and under very favourable circumstances perhaps more. From the information I have given before, I hope there will not be much difficulty felt, in ascertaining the cost of production. If labour has to be paid for, it must be charged; and the expense of keeping working cattle, fat cattle, and milch cows, in every way, except when at pasture, which I set no separate value upon, will also have to be deducted from the gross produce obtained from land and stock.

Should farms be well adapted for the keeping of sheep, I believe they would be found as profitable to the farmer as any other stock, provided they are properly kept, and that the farmer makes it his regular business. There is a great saving of labour on a farm stocked with sheep. I have in my Agricultural Treatise given the best information in my power in regard to the keeping of sheep. I know that this particular stock, should by all means be increased in these provinces, that there is nothing in the climate or soil unfavourable to their cultivation if the farmer will manage them properly in breeding, feed them sufficiently, and provide suitable house shelter for them in winter. The latter may be considered by the farmer from the British Isles to be very troublesome, not accustomed to provide house shelter for his sheep in those countries, but he must now recollect he is in a different country, and climate, and though he may have to house his sheep, and hand feed them for four or five months in the year, yet he will be able to enjoy many advantages he had not before he came here, which will more than make amends for any extra trouble he will have with his sheep. There is no branch of husbandry, that does not require its own share of care, and attention, and the farmer who would expect to have exemption from this in carrying on his business, does not understand it; and is utterly unfit to be a farmer. In a cold climate great care and sufficient shelter is necessary for sheep at the lambing time, or a great part of the profits may be lost, in the loss of the lambs. By having suitable sheep houses which need not be very expensive, the lambs may all be saved, and this with sufficient food, will insure the profit of sheep stock, in British America.

The average price of stock may be ascertained from the tables I have given of the moveable property in each province. The prices of implements are also given. The farmer can have no difficulty in estimating the cost of stock and implements. The price of cleared farms with buildings on them, will vary from three pounds to ten or twelve pounds the acre, according to the situation, the buildings, and quality of the soil. Partially cleared farms, with buildings, can be had for much less. In all the provinces, farms can be had, for less money than was expended upon them in clearing and improvements.

I do not see that there would be much inducement to capitalists to purchase farms in British America except for their own occupation, with a view to stock and farm them for their own profit,

Farms cannot be readily let at an annual rent equal to the interest of the purchase money unless they are purchased under very favourable circumstances at Sheriff's sale, or that the seller is obliged to sell. The Provinces afford so great a facility to almost every man that has any capital to purchase a farm, and be a proprietor of land, that few are much inclined to pay high rents for land on lease, and I think they are perfectly right. It may be possible that in some cases it would be prudent and profitable for a stranger coming to the country, with considerable agricultural skill, and a very limited capital, to hire a farm for a few years in preference to going to settle in the woods, but he will have this disadvantage to encounter, that he will seldom get a farm to hire that has been under good management, because those that have been so, will not often be offered to let, and if he rents a worn out farm on a short lease, (and he cannot get any other) it will be only at the expiration of his lease that the farm will be in condition to make him some returns. In consequence of these circumstances, hiring farms is not a plan I would be much inclined to recommend, and the same circumstances prevent high rents being attainable for lands by those who would purchase lands with a view of letting them to tenants on lease. There can be no doubt but money invested in the purchase of lands, will be safe, and pay well at no distant period, but at the present the returns from capital so invested will not be great, from the reasons I have stated.

The preference that most persons will feel to be proprietors of land, to holding them on lease, will bring more purchasers for property into the market, and this is another cause which raises the value of property so as not to yield a rent proportioned to the purchase money. But there are none of these circumstances that should deter agriculturists from purchasing farms in any of the Provinces for their own occupancy. The farmer who will purchase land, can do so at fair value, and if he understands his business, he will very soon bring it into such a state of production as will pay the interest of his capital invested in the purchase, as well as the improvements, provided these improvements are judicious, and necessary, and calculated to increase production. By the term "improvements" as applied here, I mean, works that are useful and necessary for the farmer's comfort and convenience, for the good management of his stock and crops, and putting the land into that state, that it will yield an abundant, and excellent produce. Expenditure on any other objects by the farmer, I do not look upon as improvements in the way I use the term here.

I am sorry I could not give more full information under this head, for the satisfaction of strangers.

### THE GARDEN.

If a snug well kept kitchen garden is not an infallible proof of thrift, when seen near a farm-house, it is a pretty certain indication of comfort and good sense. It shows that the owner is well to live, and intends to live well, so far as his labor and his lands can conduce to good living: for it will not be denied, that the farm and the garden may be made to produce, not only the substantial, but a great many of the luxuries of life—we mean those luxuries which, while they are grateful to the senses, neither pall the appetite, vitiate the taste, impair the health, nor corrupt the morals of those who partake of them. Some consider the productions of the garden as constituting a necessary part of human food. So the man of the forest would tell us, that bread is an unnecessary article of food—the Abyssinian, that it is unnecessary to cook our meat—and many of the inhabitants of Asia would insist, that it is impious to indulge in the use of animal food at all. But as none of these opinions are suited to our age and country, there is no need of combatting them. The pleasures and benefits of a garden are so manifest, that none who have once enjoyed them are willing voluntarily to do without them. To have a succession of delicious fruits, plucked at maturity from the vines which one has planted and reared;—and to partake daily of fresh gathered vegetables from one's garden, the product of his labour, promotive alike of health and pleasure, are no mean gratifications; and yet they are privileges, we are too sorry to say, which, though all can enjoy, but few, comparatively, at present, do participate in.

Let us enumerate some of the good things, conducive alike to health and innocent gratification, which a garden may be made to produce with very little expense. Our perennial products, which require very little care after they are once established. We will name, of fruits, the strawberry, (for these will be smothered by the grass on a well conducted farm,) the currant, gooseberry, plum,

pear, quince, grape, and, in situations where they will thrive, the apricot and peach. But of fruits, we would have none but the best sorts; for the best are as cheap as the worst, are as easily cultivated, and are infinitely more healthy and grateful. These, if well selected, will give a succession of fruit from June to November, and in a preserved state during the year. Plants to begin with will cost from three to five dollars. They may be multiplied, by grafting, budding, &c. by the boys or men of the family, without any expense. The trees should be so arranged as to shade as little as possible the grounds that are to be tilled. Half a dozen roots of the pie-plant (rhubarb) will furnish abundant materials for pies and tarts, little if any inferior to the gooseberry, from April to July, or until the fruit is sufficiently advanced to supply its place. These should be planted two feet apart in good soil. A bed of forty by three and a half feet will supply the table with delicious asparagus, during a part of April, and the whole of May and June, if kept in good order. For this the ground should be dug deep and made rich. The seed, which will cost a shilling, should be sown in drills ten or twelve inches apart, about the first of May; the bed should be kept free from weeds, and the ground forked in the spring. The third year it will be fit to cut. Or, roots may be bought at fifty cents the hundred, which will give a crop the second year. Plant them six inches apart in the drills. About two hundred and fifty plants will fill a bed of the given dimensions. Among the perennials, we may also class some medicinal plants and sweet herbs which are useful and necessary in the economy of a family, such as sage, thyme, hyssop, balm, rue, tansy, wormwood, &c. which it requires ten times the labour to beg from our more provident neighbours that it does to raise in our garden. The annual products, which go towards subsisting a family, and which are seldom produced but in the garden, are numerous, as the onion, beet, carrot, parsnip, cabbage, peas, beans, pot herbs, sallads, radishes, squash, cucumber, melon, &c. Some of these are in use most of the season, and most of them afford valuable winter stores.

These productions of the garden which we have named, and the list might be greatly extended, are all useful in the economy of a family, they afford a grateful variety, and tend to lessen, in no inconsiderable degree, the quantity of more solid and expensive food, which would be required without them—and yet they may all be produced in sufficient quantities for an ordinary family, upon a quarter of an acre of ground, and without seriously abstracting from the ordinary labors of the farm. A garden is truly a matter of economy in a pecuniary point of view; but when we add to this consideration, the comfort and pleasure which it affords, we are persuaded we are in the line of duty, in commending the subject to the particular consideration of our readers.

It is not our purpose at present to prescribe rules for laying out or managing a garden; yet we cannot forbear to suggest, that the first step should be, to enclose it with a good substantial fence, and to keep that at all times in repair, so as effectually to exclude hoof and hog. We have said nothing of the sale of the surplus products of a garden, although hardly any location is without a market for such products; nor have we noticed the ornamental department; because the wife or daughters will see to this—they will have their shrubbery and their flower border.—*Cultivator.*

### POTATOES.

The object of farmers generally is, to plant those varieties which will give the greatest yield, without regard to flavor or nutritious properties. This is wrong. Potatoes differ one-half in the nourishment they afford to domestic animals, as well as to man; and the eating of a good thing, may be as grateful to the brute as to the man. It has been ascertained by chemical tests, that one hundred parts of a good potatoe contain twenty-eight per cent. or twenty-eight parts, of nutritious matter, and that one hundred parts of some poor varieties contain not more than fourteen parts of nutritious matter. The man or the brute, therefore, that eats 100 lbs. of poor potatoes, swallows 86 lbs. of water and ligneous matter which does not contribute in the least to nourish the body, nor to promote health. If the crop is to be consumed in the family, or on the farm, there is a propriety, on the score of economy, in selecting good sorts, though these do not yield more than half as many bushels as the poor sorts do. But the difference in product seldom, if ever, exceeds a quarter. For market, the difference between good and bad potatoes is, or ought to be, a quarter; and it will be, when the buyer knows how to appreciate and to distinguish the difference. The best varieties of potatoes now in vogue, are

the kidneys, or foxites, the pink-eyes, the Mercers, and the Sault St. Marie.

The potato requires, with us, a rich, moist and cool soil; that part at least in which the tubers form to be loose, so that the stolens may penetrate, and the potatoes swell, without much obstruction. A clover ley, and long manure, are particularly beneficial to the crop. They should not be planted so close that the tops shall exclude the sun from the soil. Three feet in drills, or two and a half in hills, is near enough for ordinary varieties. Nor is it beneficial to earth them after the tubers have begun to form, as this removes the roots too far from the surface, and causes a new set of stolens to issue. Stolens are the roots on which the potatoes form, and are distinct from those which penetrate deep, and supply food to the plant. But all weeds should be carefully destroyed; as one of these if suffered to ripen its seed, takes as much nourishment and moisture from the ground as a stem of the potatoes. This crop should not be planted twice on the same ground in succession, as the second year the product will be greatly diminished.—*Cultivator*

A very successful cultivator in Scotland states that it is of great importance never to take sets from potatoes of which any part is decayed. Though the eye may be taken from the other side, which looks good, the whole potato is affected by that which is decayed. No potatoes should be used for sets which are not such as you would put upon the table. Cultivating potatoes by seed, from plants raised as above, is also recommended.—*Magazine of Domestic Economy.*

#### DISEASES OF SHEEP.

The diseases of this most useful animal are but little attended to; numbers die that might be saved by medicine, if shepherds knew what was proper to give them.

**Foot-rot** is a most troublesome and difficult disease to cure. Put the sheep in a dry fold; clear the dirt from between her claws with an old tooth brush; apply to the parts affected with a wooden skewer or feather, butter of antimony, and let the sheep remain an hour in the fold. Or, apply a paste, made of equal quantities of blue vitrol, gun powder and train oil.

**Scab**.—The most effectual remedy is the mercurial ointment, to be had ready made at all the druggists; which is also good for sore heads, caused by the fly, or for inagots.

**Gurry**.—One small tea-spoonful of turpentine, and four table-spoonful of salt and water—one dose is often sufficient. Or, Peruvian bark, ginger-root, and prepared chalk—one drachm—in warm gruel, with a table-spoonful of gin or brandy. If a severe case, a tea-spoonful of tincture of opium.

If a sheep that is fat, or nearly so, appears to be off from its food, for some days, from some internal complaint, the safest plan is to have it killed.

**Scouring of young lambs**.—Ginger and rhubarb, one tea-spoonful, in warm gruel, with ten drops of laudanum, or tincture of opium, will dose a score of lambs, about three quarters of a year old. Many flocks of lambs having been kept very short of food during a late dry summer numbers died from eating the young succinet grass which sprung up when the rain came.

**Ewes injured in lambing**.—Apply to the parts warm water, and after, warm fresh grease; and then outside, some known good oils; give a drachm of Peruvian bark and ginger in gruel, new milk warm, made of linseed and oat-meal; add a table-spoonful of gin or brandy, and treacle.

**To prevent the fly**.—A powder composed of white lead and wine arsenic, to be shaken on with an old pepper box; it is to be had ready prepared of any druggist.

**Ticks on Lambs**.—When sheep have been shorn, the ticks, with which they are apt to abound, seek shelter in the fleeces of the lambs, or are destroyed by the shorn sheep. They are often so numerous upon the lambs as not only greatly to annoy them, but seriously to injure their health and their growth. The following effectual method to destroy them, has been detailed to us by Judge Postwick, of Delaware county, whose statement may be implicitly relied on.

Finding his lambs, in former years very much injured by ticks he procured 4 lbs. of tobacco, boiled it in water,—put the strained liquor into a half-hogshead tub, diluted it with water till he found, on trial that it had just sufficient strength to kill the ticks in a minute or two, placed an empty kettle by the side of the tub, and

when cold, proceeded to apply it to the lambs, in the manner following: One man took the lamb by his fore legs and head, and plunged it into the liquid, leaving only his head out—he next raised it and held it over the empty kettle, when a second man pressed out of the fleeco all the liquid which would flow into the kettle. This completed the operation. The liquor was then turned from the kettle into the tub, and the operation repeated upon the rest of the young flock. In shearing the present year the Judge discovered but two ticks upon his entire flock.

#### THINGS A FARMER SHOULD NOT DO.

A farmer should never undertake to cultivate more land than he can do thoroughly—half tilled land is growing poorer—well tilled land is constantly improving.

A farmer should never keep more cattle, horses, sheep or hogs, than he can keep in good order; an animal in high order the first of December, is already half wintered.

A farmer should never depend on his neighbour for what he can, by care and good management, produce on his own farm; he should never beg fruit while he can plant trees, or borrow tools when he can make or buy; a high authority has said, the borrower is a servant to the lender.

The farmer should never be so immersed in political matters, as to forget to sow his wheat, dig his potatoes and bank up his cellar; nor should he be so inattentive to them as to remain ignorant of those great questions of national and state policy which will always agitate more or less a free people.

A farmer should never be ashamed of his calling; we know that no man can be entirely independent, yet the farmer should remember that if any one can be said to possess that enviable distinction, he is the man.

No farmer should allow the reproach of neglecting education to lie against himself or family; if knowledge is power, the beginning of it should be early and deeply laid in the district school.

A farmer should never use ardent spirit as a drink; if, while undergoing severe fatigue, and the hard labours of the summer, he would enjoy robust health, let him be temperate in all things.

A farmer never should refuse a fair price for any thing he wishes to sell.

A farmer should never allow his wood-house to be emptied of wood during the summer months; if he does, when winter comes, in addition to cold fingers, he must expect to encounter the chilling looks of his wife, and perhaps be compelled, in a series of lectures, to learn, that the man who burns green wood has not mastered the A B C of domestic economy.

A farmer should never allow his windows to be filled with red cloaks, tattered coats, and old hats; if he does, he will most assuredly acquire the reputation of a man who carries long at the whiskey, leaving his wife and children to freeze or starve at home.

There are three things of which the man who aims at the character of a prosperous farmer will never be niggardly, manure, tillage and seed; and there are three things of which he never will be too liberal, promises, time and credit.—*Genesee Farmer.*

**RAISING DUCKS AND TURKEYS**.—In the *Agriculturist* of last year appeared two articles, one on the best mode of raising ducks, and the other, on turkeys. Two seasons have since passed away, and the writer of this has been enabled to test the efficacy of those directions; and in every instance that has come under his knowledge, they have been attended with perfect success. The directions for raising ducks, were to feed them on animal food and keep them dry. Individuals who have adopted this plan, have sent to our markets from 500 to 700 ducks of the finest kinds, and they have had no diseases among them, and found no difficulty in raising them.

Two or three individuals who tried the experiment of driving their turkeys, when young, to a distance from the house, where the greatest number of insects were to be found, and feeding and housing them in the manner directed in the *Agriculturist*, have stated, that they have raised from 100 to 300 turkeys, and have pronounced it to be a method, which of all others, they believed to be best calculated to be attended with success.—*Southern Agriculturist.*

It is better to bind men by kind, offices than by fear.

## NEW-BRUNSWICK AGRICULTURIST.

We have received the first number of the New Brunswick Agriculturist, edited by Dr. Bayard. The Directors of the Agricultural and Horticultural Society of the County of St. John having voted the half of their funds to assist in its establishment. The following extracts will give an idea of the design of this publication:—"This periodical will contain all the interesting local matter obtainable in these provinces; together with suitable extracts from the latest and most approved works in Great Britain and the United States; and every effort will be made to secure useful information."

"The New Brunswick Agriculturist will comprise 24 pages octavo—neatly printed on good paper, at the moderate price of five shillings annually, payable in advance—and published the first week in every month. And if it should receive encouraging circulation sufficient to warrant any increase in its size, each monthly number shall contain from 82 to 48 pages.

The Editor of the New Brunswick Agriculturist has read with much pleasure the announcement of Agricultural Periodicals in Nova Scotia, and he sincerely hopes that the zeal and abilities of their enterprising Editors will excite corresponding efforts in those for whom their exertions are made. The New Brunswick Agriculturist enters the field not as an opponent, but as a fellow labourer in the common cause; and as the respective periodicals are published at a very reduced price, and within the reach of every farmer, it is hoped that every farmer will encourage and support these simultaneous undertakings, as each of them will contribute to his scientific and practical knowledge. Our provinces have long wanted such efforts in behalf of the Agriculturist; and it is to be regretted that the spirit which was kindled by the laudable efforts of the talented friend of Agriculture, the late and lamented John Young, Esq. of Halifax, so soon subsided. The example was worthy of a better following, and the cause of Agriculture in our Provinces of a more enduring zeal." "In conducting this Periodical, we may here observe, that we propose to devote a large portion of the early numbers to the General Principles of Agriculture; as a *subsoil*, if we may be allowed the metaphor; upon which, those who are unacquainted with them, may rest their practical knowledge, experiments and suggestions."

It is cheering thus to see an attention to the improvement of Agriculture springing up about us, for all are aware that we are far behind our mother country in the practice of this most useful of all arts. But what others know we can learn, and most certainly shall learn, if we go about it in earnest, with a determination that we will learn. The English in the days of Elizabeth supposed themselves to be good farmers: They were far in advance of their old German forefathers, who lived in wigwams, and supported themselves by keeping cattle, hunting, and plundering their neighbours. London market was supplied with turnips and carrots from Holland. The bread of England was made from a mixture of barley and beans, for they had discovered that the climate was unfavorable to wheat. The fertile tracts were cultivated, and the grass which grew spontaneously was mowed. As the sandy districts were too poor for cultivation they were used to pasture a few sheep. Where there were no natural meadows the cattle had to support themselves in winter by browsing upon bushes; and petitions were presented to Parliament complaining of the establishment of forges which consumed all the 'loppings and croppings, the sole winter food of their cattle.' During the civil war some gentlemen, who, for political reasons, were obliged to absent themselves from their native country, observing the immense difference

between the produce of the sandy land of Flanders, and that of England, conceived that it might be owing to the different mode of culture, and when they returned they brought with them some Flemish farmers. From them they learned that marl might be found in sandy districts, and they soon discovered considerable quantities. This was spread upon the sand. Compost heaps were then formed by making a hollow place into which all the wash from the house and stables might run, and lining the bottom with clay. This was filled with quantities of earth dug up near the barn and house, with mould from the bottoms of hills, and the scourings of ditches, mixed with the manure of their cattle. With this compost they manured the marled ground, raised a great crop of turnips, followed by two crops of clover and ryegrass, and a crop of wheat. The English saw with astonishment that hay could be raised on dry land, and that their own soil produced as good turnips as that of Holland. As the value of the land was greatly increased, the new mode of farming spread rapidly, and before the lapse of many years it was calculated that the benefit derived from it had overbalanced all the damage received from the civil war. It was, it is true, attacked by writers who maintained that it would ruin the farmers, by making corn and cattle so plenty that they would fall to half price. But notwithstanding this sagacious reasoning, it has continued to progress, and the population now supported by the surplus produce of the soil of Britain above what it yielded at the time when this remarkable change was introduced by the patriotism of a few gentlemen, and the skill of a few Dutchmen, would alone make a great nation. With this example before us, we say to our fellow-labourers, Go on and prosper. Let your industry, zeal, and perseverance be commensurate to the importance of the object you have in view, the improvement of the art which furnishes the materials for the food and clothing of the greater part of the human race.

T. S.

## HOME.

The following anecdote, if not thought very important, has one qualification which some anecdotes lack. It is true. Nearly forty years ago a young man came into a small French Settlement in the Western part of the Province upon a Holiday, when the inhabitants were just leaving their little Chapel. As several of them spoke English badly, they were rather shy of conversing with him, till they found he could speak their language, when they became very sociable. After some conversation, a woman, who spoke good English with the accent of Connecticut, said to him, "you are an American; why are you here? Your Country is better than this." He replied, "I might ask you the same question, for you must have been here since I was." "Ah," said she; "I have a better reason for being here than you have; I was born here; yonder point of white rocks is the first thing I remember; on this stoney beach beside us, I used to play when I could first run about; here my father and mother were born, and here their bones lie. Here were their parents born; and here their bones lie; and here I always intended mine should lie. I was carried from here very young, and carried to a much richer country where every body lives as they cannot live here, I was placed with people as kind and as good as can be found in the world, but I never forgot my home, and always intended to return to it. I was old before I could get back, but I took the first opportunity that I thought I could succeed, and have come back, knowing that I was to live upon fish and potatoes for the rest of my days, and to live happier than I can on any other place on earth, for this is my home."

T. S.



### MINUTES OF THE CENTRAL BOARD OF AGRICULTURE.

At a Meeting of the Central Board of Agriculture, held in the Province Building 16th May, 1841.—Present: the Hon. James McNab, William Young, John E. Fairbanks, Thos. Williamson, Edward Allison, Edward Pryor, Jr., Matthew Richardson, Esqrs.

Read a letter from the Rev. John Stewart, announcing the formation of an Agricultural Society at New Glasgow, and asking information on various points, from the Central Board. Read the draught of a reply thereto, which was directed to be sent.

Read the draught of a Circular to the different Societies now formed, and to the Members of Assembly and others in the Counties where no Societies are as yet organized, and directed that they should be sent, along with twenty copies of the Act and Minutes of the first Meeting.

Ordered, That two Sacks of the Early Angus and Sandy Oats, lately imported, be shipped immediately to the New Glasgow Agricultural Society.

A Treatise on Agriculture and Dairy Husbandry, by Mr. Jackson, the author of various prize essays of the Highland Agricultural Society of Scotland, published last July by Messrs. Chambers, of Edinburgh, having been communicated to the Board:—

*Resolved*, That this work, containing a vast body of Scientific and practical information, conveyed in a perspicuous and pleasing style, and derived from the most approved authors, the Board earnestly recommend it for the use of the Societies.

*Resolved*, That as the work is published at the moderate price of 2s. 3d. Sterling, and may be imported, plainly and strongly bound at 3s. 4d. currency per copy, the Board will send for 200 copies, and for every copy ordered by any Society, and paid for out of its funds, will furnish an equal number of copies at the expense of the Board, to be distributed by such Societies.

*Resolved*, That the Secretary be requested to prepare and insert in the Newspapers, under the direction of the Board, a review of the above work, comprising the most striking passages applicable to our condition, and interspersed with such observations as his own experience and familiar acquaintance with the Provincial Agriculture may suggest.

*Resolved*, That the Secretary be requested to prepare and insert in the Newspapers, under the direction of the Board, a set of rules for the organization and management of an Agricultural Society; and which the new Societies about to be formed may adopt if they think fit with such modifications as their local position may recommend, it being the desire and object of the Board, to inspire in the farming classes a spirit of unanimity and of combined and vigorous action, for their own improvement, and the advance of the Provincial Agriculture.

*Resolved*, That it be recommended to the Societies and Farmers in the several Counties, to form themselves into a Central County Society, with a branch or branches, conformably to the Act, so as the sum of Seventy-five Pounds, annually assigned to each County, may not be split up into parts, but enable the Central Society, with such further sum as may be raised by private contributions, to import through the agency of the Board, or otherwise, a considerable amount of Live Stock, Implements, or Seeds, and to promote the improvement of the County on an extensive and combined system.

The Meeting then adjourned to the first Saturday of June.

### DRILLING MATCH.

The Annual Drilling Match under direction of the Committee of the Halifax Agricultural Society, took place on Tuesday afternoon, the 25th instant, in Mr. John Kline, Sen.'s field, near his residence. The land being in excellent *till*, and the weather *fine*, a good opportunity was afforded to the competitors for testing their skill with every advantage, and the Committee observe, with satisfaction, the spirited manner in which the Ploughmen on the Peninsula availed themselves of it. Nine teams having come on the ground, and the necessary arrangements being completed, the competitors began the work at 3 o'clock, and progressed with lively interest, each ploughman exerting his utmost care and skill to out-do his neighbor. In a little over an hour and a half, the different competitors finished the quantity of work assigned to them.

And the Committee having ascertained that the rules of competition had been duly complied with, the judges, Messrs. Henry Walker, and — Brennan, were called upon to award the Prizes. After patient and minute inspection, they handed their decision to the Secretary, as follows:

#### First Class—Five Ploughs.

First Prize, Ten Dollars,	- - -	William Mitchell.
Second " Six "	- - -	John Winters.
Third " Four "	- - -	William Kline.

#### Second Class—Four Ploughs.

First Prize, Eight Dollars,	- - -	Arch. McCulloch, Jr.
Second " Four "	- - -	Conrad Kline.
Third " Two "	- - -	William Kline.

The prizes were distributed to the successful Ploughmen, by the first Vice President of the Society, Edward Pryor, Jr. Esq., who duly complimented them upon the superiority of their work, and expressed a hope that success in the present instance, would stimulate them to still further exertion in perfecting themselves in skillful management of the Plough, and all other operations likely to improve Agriculture on the Peninsula of Halifax.—*Com.*

A resolution thanking WILLIAM YOUNG, Esq. Vice Chairman of the Central Board of Agriculture, for his zealous and efficient services for the encouragement of Agriculture throughout the Province, was passed unanimously by the Halifax Agricultural Society, at their late Annual Meeting; a copy of the Resolution was forwarded to Mr. Young, by the Society's President, Edward Allison, Esq. to which Mr. Y. made a suitable and highly creditable reply. The want of room prevents our giving the correspondence in this number.

As an apology for the omission in this number of Plates, &c., we would observe, that we had hoped the importance of the subject would have procured some aid from the Legislature. Being disappointed in this, we leave it to the Farmers to judge whether it is for their interest to support a publication of a kind, which has been very useful to their class, in other countries.

THE "COLONIAL FARMER," being now fairly before the public, we have concluded not to publish another number—until our Prospectuses now scattered over the Province, are sent in,—when this is done, we shall be better able to judge what amount of support we would receive—and can then determine whether to go on with the work or not.

All letters relative to the "Colonial Farmer," must be directed to The Publisher.

G's note came to hand. We are much obliged.

### "THE COLONIAL FARMER,"

TITUS SMITH, EDITOR; R. NUGENT, PROPRIETOR,

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