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# THE COLONIAL FARMER,

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

VOL. 2.

HALIFAX, N. S., DECEMBER 16, 1842.

NO. 12.



## THE COLONIAL FARMER.

HALIFAX, N. S., DECEMBER 16, 1842.

### LAND SURVEYING—LAW-SUITS.

There is so much litigation concerning division lines of property that it would be for the advantage of all proprietors to have a slight knowledge of the art of surveying land, for we frequently see cases brought into the courts which would have been settled without trouble by the parties had they had sufficient knowledge of surveying to have understood the subject in dispute.

All lots of land have at least three sides, and in laying out new land lots are generally planned with four sides, and square corners, like those of a sheet of paper, or pane of glass, whenever it can conveniently be done. These corners are called angles in Surveyors and Navigators language, and square corners are called right angles. Now if we lay two ten feet poles on the floor, parallel to each other, and three feet apart, and then with a single nail at each corner, fasten two yard sticks across from the two ends of one pole to those of the other, and then make the corners square by a carpenters square, it will be a right-angled frame covering thirty feet of the floor, but if it is then racked so much that the corners are not square, it will be an oblique-angled frame, and will cover less than thirty feet, and the more out of square, or oblique these angles are made, the smaller number of feet the frame will cover. It is therefore necessary for the Surveyor to learn to measure the quantity of Angles, to enable him to calculate the quantity of land which the lines enclose. For this purpose a circle is divided into 360 equal parts called degrees, and lines are then supposed to be drawn from a point in the centre of the circle to each of these divisions; and the space between two of these lines is called an angle of one degree; the centre of the circle being the corner, or angular point. Upon the Surveyors compass two opposite points of the circle are marked N and S. (North and South). From N. the degrees are numbered 1, 2, 3, &c. up to 90, to the right, to the letter E. (East); they are also numbered in the same manner from N. to the left to 90 to the letter W. (West). From S. also the degrees are numbered right and left, up to 90, to W. and E. The sights of the Compass are in the direction of the line from N. to S. and in noting the quantity of angles this line is always supposed to be one of the two which form the angle at the centre of the compass. Thus a line which runs five degrees to the right, or East, of North, is marked North five degrees East, and a line which runs one degree to the North of East is marked, North 89 degrees East, and not East-one degree North.

The word "degree" is often used for a measure of length, for all

circles, large or small, being divided into 360 degrees, a degree is often used to express the 360th part of the circumference of the earth measured on a circle of Latitude, that is to say, a line running North and South and passing through the poles of the earth. The length of a degree on this line is nearly 69½ English miles. A degree of Longitude measured on a circle of Longitude, (or line running East and West) at the Equator, is nearly the same length, but the circles of Longitude are parallel to each other, and consequently grow less as the latitude increases. It has frequently occurred that in advertisements of lots of land in our newspapers the meaning of the word "degree" has been strangely changed by improper punctuation. Thus a lot beginning on a road and running Southwest 1¼ miles, then Northwest ¼ mile, and then Northeast 1¼ miles to the road; would be expressed thus in the Surveyors language, "running South 45 degrees West 100 chains; then North 45 degrees West 20 chains; then North 45 degrees East 100 chains, &c." In this description the number of degrees gives the quantity of the angles, but has no connection with the length of the lines; but when, as was the custom some years ago, a point is placed after the word "degree," it alters its meaning to the measure of length, thus, "running South 45 degrees; [about 3000 miles] West 100 chains; then North 45 degrees; West 20 chains; &c." This appears ridiculous to those to whom the surveyors language is familiar, but a much more serious evil has sprung from the same source. We have seen so many errors of much greater importance than false punctuation, in those documents which record the titles to landed property, that we are convinced that no person ought to be employed as a Lawyer's Clerk who has not acquired so much knowledge of surveying as to enable him to understand the descriptions given by Surveyors. We see that in many newspapers and pamphlets where a short sentence is cited in a foreign language, there will hardly be a line without some gross error, the copyist not understanding what he is writing, cannot be guided by the sense as he would be in writing his own language. If the person who is drawing deeds understands what he is writing he will not be more liable to make mistakes in the description of lines of land than in any other part of his work.

The courses of lines noted by Surveyors are those indicated by the Compass, the needle of which does not point exactly North and South on the greater part of the Earth; nor does it any place keep the same direction for a long time. At Halifax the North end of the Needle now points about 18 degrees to the West of North, and since the first settlement of Halifax the North end of the Needle has moved Westward at about the rate of one degree in 16 years. At Windsor it is nearly the same; ditches on the Marshes made upon lines run in the year 1763 will be found to run about 5 degrees to the right of the recorded course. In the Eastern part of the Province the variation, and rate of increase, are greater; in the Western part considerably less. This variation of the Compass has been one source of litigation. A great part of the land in the Province was laid out by persons more than commonly ignorant of their business. At the close of the American Revolution in the year 1783 a great body of new inhabitants came at once into the Province, and lands were assigned to them in almost every part of it; to lay out these lands it became necessary for the Surveyor General to appoint immediately a great number of deputies, who were mostly

not such as he would have chosen, had he possessed the means of choosing, but simply the best he could be found. Few of them had ever practised or studied the art of surveying; and some of them had received very little education of any kind. Not a tenth part of them, there is good reason to believe, were aware that there was any alteration of the variation. The allotments generally had the fronts, and a very short piece of the side lines marked, leaving the grantees to get the survey completed when they thought proper. Some had all their lines run soon after the occupation, and others one only of the side lines. After the lapse of so much time that the needle had moved a degree or more to the left, the Surveyor would be employed to run the other side line which he would do without making any allowance for the increase of variation, and running of course to the left of where he ought to have run, would make the rear of the lot either too broad or too narrow. In many other cases where the marks made in running the first lines had all disappeared, a Surveyor was employed to retrace the division line, which he thought he performed correctly by following the course marked on the plan of the lot, as he neither knew nor suspected that his compass had changed its direction; but it frequently happened that one of the Proprietors would recollect that a certain rock or tree, or other fixed object, which was now left on the right side of the line, was formerly upon the left side, and although he could not find any of the old marks, he would, if a loser by the new line, be positive it was wrong. The party who gained by it would be as positive that it was right, as the Surveyor assured him that he run it in exact conformity to the plan. Many of these cases were taken into the Court, which had been better, because more cheaply, decided by the toss of a shilling: for it was morally impossible that the parties and their Surveyor could make a case intelligible to a Jury, when neither of them understood it themselves.

The errors from inattention to the variation were not, *always* very slight ones. We have seen a very long lot, which had a front of eighty rods, reduced to less than forty rods by a survey of this kind.

Local Magnetism has also produced lawsuits and quarrels. The Southern front of the Province rests mostly upon what is called primitive rock, granite, slate, or hard blue whinstone. The granite generally forms the highest hills, but so great a portion of it is nearly bare of soil, that the greater part of the land worth surveying rests upon slate or whinstone.

The slate contains a great quantity of pyrites which is constantly forming vitriol, and in very many places affects the needle, sometimes changing its course as much as ten degrees. The needle is far less frequently affected upon the whinstone, where we have never observed its course changed more than two degrees. There are also in the sandstone and coal districts, argillaceous shales, which contain a vitriolic mineral that affects the needle, Surveyors, knowing nothing, and suspecting nothing of this local magnetism, but believing their compass to be infallible, were accustomed to go forward upon the line which it pointed out, while the thick woods prevented them from perceiving that their line was not straight, and often no error was suspected while the land remained uncleared, until there was occasion to measure the breadth of the lot, when if an error was found which produced a dispute, and Surveyors employed to settle it, they often only increased the confusion: for upon the magnetic rock, although the needle has generally a false direction, yet it is much more affected in some places than others, and we have observed it to change its direction four degrees upon removing the compass only 20 feet, consequently no Surveyor could retrace the line he had just before run, by following

the direction of the compass, unless at every station he placed it on the identical place where it stood before. If, as it sometimes happened, a covetous, litigious man, should quarrel for one of these erroneous lines, several Surveyors would be employed to run it who would all differ from each other, and then, frequently suspect a fault in the compasses, as the real cause of the difficulty did not occur to them; for the English books which many of them had procured to teach themselves the art of surveying, gave them no hint of this local magnetism. A few Surveyors who had been navigators did know something of the variation, but for many years no attention was paid to it.

Although we have been writing for the purpose of giving information to those who do not understand surveying, yet we think it might be useful to some Surveyors to describe the mode in which we have been accustomed to run lines on magnetic ground. First see that your compass is in good order, and that it will point correctly backward and forward; set it very level, direct the sight to some distant object, and note the degree upon which the needle rests; then reverse it, and if the needle rests on the same degree, it is correct; but if it does not, it is most probable the sights will be found to twist, but if they are found to be perpendicular and to range with each other, it will generally be necessary to move one of them so as to bring them into a straight line with the pivot of the needle. Use a straight flagpole with the bark taken off, that its whole length may be visible. Always set a small straight stake directly behind the compass, with a blaze upon it, the centre of which shall be in the line. When you move to another station set the compass with its centre perpendicularly over the place where the flagpole stood. When you find by looking back from the second station to the first, that the needle has changed its direction, look out for the nearest place where you can get a true course. A frozen lake, a wet swamp 30 rods broad, or land resting on granite, will be free from local magnetism, and generally, but not always, that which rests upon whinstone may be trusted. Remember however that slate lying southward from granite or whinstone, will have the surface covered with blocks of those rocks, and that these surface stones are no proof that you are off the slate, as they would be if the slate lay northward from the granite. When you have decided which way to go, note the course from the place of beginning, and run a straight line by the help of your sights, flagpole, and stakes set behind the compass, till you reach ground which is not magnetic, which you may conclude you have done when the needle points the same course at three successive stations. The difference then observed between the directions of the needle at the beginning and end of this line, will be the error at the place of beginning, by allowing for which, you may set off upon the right course, and run a straight line as above directed, without regarding the needle, till you perceive by its course that you have got over the magnetic ground. It is, however, best in all surveying always to look back upon the line every time you set the compass, and on all slate soils, always to leave a stake behind. Where there are high hills, it will be necessary to be four or five chains from the upland upon a lake or wet swamp (a swamp is not to be trusted in a dry time) to avoid the attraction. Lines which have a course between East and Northeast (the general course of the slate) sometimes follow a magnetic band for near a mile.

The old system of leaving the greater part of the surveying to be performed by the grantee occasioned the surveys to be more inaccurate than they would have been had the surveys been previously made at the expence of Government, as they are at present. A great part of our land has a thick underwood, through which it is often impossible to see two rods, or to carry the measuring chain

in a straight line, but as the farmer wished his land to be run as cheaply as possible, and preferred the Surveyor who would run over the most ground in a day, and who required the smallest number of assistants and many lines have been run without employing a flagman, and without clearing away any underwood. The Surveyor steered for a tree, on or near the line. The chainmen measured through the bushes, behind them as they could, and the axemen followed, and blazed the trees—and at the end of the line the Surveyor gave some additional measure, as an allowance for the bends of the chain. Some of these lines are now found too short, others too long. Near Cobiquid an allowance of ten per cent is said to have been made; and a fathom to each chain upon some of the land at Musquodoboit. We have measured a lot there, the lines of which exceeded the distance named in the Grant sixteen per cent. If the original boundaries of such lots should be lost, it would be impossible for a Surveyor to find them by the help of a plan which only gave strict measure. Near Halifax most of the large lots were originally granted with an allowance of at least ten per cent., but there is no difficulty in retracing the lines of these lots, because the length and courses of the lines are correctly given, and upon calculating these, it will be found they contain the allowance: thus a lot which is called 500 acres with allowance for roads, &c. will by calculation be found to contain 550 or 560 acres.

*To be Concluded in No. 13.*

**EXPORTING PROVISIONS.**

Salt Provisions, appear to be the most natural produce of the farms of this Province for the purpose of exportation. We can at present certainly raise Wheat more easily than the inhabitants of New England, but we have reason to fear that it may fail here as it has there, and it is at best, a crop which gives but a small profit to the Farmer.

As a grazing country Nova Scotia is superior to New England. We are less affected by droughts, and the degree of heat that is most favorable to the production of grain, diminishes the crop of grass. New land in the Genesee country used to produce as large crops of grass as the Ohio intervals, but not more than half as much corn. Our immense marshes on the Bay of Fundy will always give support to a great number of cattle, and whenever the farmers will attempt it, they can make great quantities of the adjoining upland nearly equal to the dyked Marshes by manuring with the red mud of the rivers, of which there is enough, and to spare.

There are some who think that we have not more Beef and Pork than our towns and fisheries can consume, but should a market be found, our present produce can soon be doubled. But if we mean to succeed in exporting salt provisions we must have among us, what we lack at present, the trade of a Salter. It is vain to expect that every farmer and grocer will understand the art of curing and packing salt provisions, or that they can do it as cheaply as the Salter by trade, who has an establishment properly fitted for the business.

It is necessary that the first specimen of a new export should be a first rate article, for there will always be interested persons who will attempt to crush the business. When flour was first exported from the American Colonies to London, the Mealmen raised a subscription among themselves to put a stop to the business, they would not offer nearly the common price of English flour for it, discovering so many faults in it, and using such technical language, that they almost convinced the Americans of its inferiority in spite of the evidence of their own senses. Knowing their wheat to be whiter than the English, they then introduced new machinery into their mills, and finally produced that beautiful superfine flour, of

which we have not now for many years seen a specimen. The mealmen still condemned it, but individuals purchased single barrels; its great superiority to English flour became publicly known; and it was no longer sold at a loss. An American millwright was then sent for, and a Mill which cost £80,000 erected near London upon the American model, which for a time supplied the Metropolis, but after several unsuccessful attempts, to set it on fire, it was finally burnt within a year.

Beef designed for exportation must be well fattened, and it will always be found more for the farmers interest to sell fat cattle, than to sell the materials with which they are fattened, for in the former case he will have the manure which is necessary to keep his farm in heart, and one load of the manure of stall-fed cattle is always worth two of that of the stock cattle.

Swine when allowed a proper proportion of litter, sods, or peat in their pens, while fattening, make a greater quantity of manure in proportion to the food they consume, than other stock; for it is hardly possible to prevent the manure of horses and horned cattle from growing so hot that a considerable portion of it is dissipated in an aerial state, while the pigs manure is little liable to fermentation. The man whose expences always exceed his income will finally spend his estate; and the Farmer who constantly takes from his soil in crops, more than he returns to it in manure will wear out his land, but the produce of the dairy, and salt provisions, are never procured, without making at the same time a considerable quantity of manure, a quantity always exceeding what will be produced by raising grain for market, and the farmer should always take into consideration, not only the present profit of a particular kind of produce, but also the effect that it will have in impoverishing or fertilizing his land. We have too often seen persons lay up money for their children "to their hurt," but he that has increased the fertility of the soil he has cultivated, has done something to make the world better than he found it, and will be justly entitled to the gratitude of posterity.

*Consumption of Meat in London. From Youatt.*

There were sold in Smithfield—in 1732, 76,210 cattle, 514,700 sheep; in 1830, 159,907 cattle, 1,287,070 sheep.

The average weight of carcasses—in 1710, cattle 370 lb, calves 50 lb, sheep and lambs 28 lb; in 1830, cattle 656 lb, calves 144 lb, pigs 96 lb, sheep and lambs 90 lb.

We may now form some not very inaccurate idea of the amount of this branch of the provision trade in London.

	Average weight.	No. of lbs. consumed.
Cattle.....	159,907	656 lb 104,898,993
Sheep, &c..	1,287,070	90 115,836,300
Pigs.....	254,672	96 24,448,512
Calves.....	22,500	144 3,240,000

Number of pounds of meat consumed, 248,423,804. This estimated at the average price of 6d. would be £6,210,595 2s. At 8d. it would produce £8,268,293 9s. 4d., exclusive of bacon, hams, and all salted provisions brought from a distance, (the importation of Irish bacon and hams into Great Britain is 500,000 cwt.) and also fish and poultry. This calculation will enable us to determine another curious question—What is the average quantity of meat consumed by each individual in the course of a year? If we divide the gross number of pounds, 248,423,804, by 1,450,000, the estimated number of inhabitants in London and its environs, the quotient will be 170, or each individual consumes nearly half a pound of meat every day. This is a very high calculation compared with that of Paris, where each person is supposed to consume but 80 lbs. in the year; and Brussels where 89 lbs. form the allotment of each; but ours is a meat eating population, and composed chiefly of Protestants: and when we remember that this includes the bones as well as the meat, half a pound per day is not too much to allow to each person.

It should be remembered that a great part of the food of the inhabitants of the continent of Europe, is composed of vegetables, seasoned, instead of meat, in France, Flanders and Germany, with cold-seed oil, of which an immense quantity is used; and in Spain and Italy, with olive oil.

## BLACK ASH.

This is a valuable tree for several purposes, although it makes very poor fuel. Flat hoops made from the heart of this tree will generally last as long as the staves, upon casks that are kept in damp cellars; rails split from the large trees are also very durable. As this tree is more easily cleft than any other that we have, it answers well for staves for dry casks, where it grows large. The bark of the Black Ash upon trees two feet diameter is often nearly an inch thick, and very strong, and was formerly highly valued by the Six Nation, or Iroquois Indians. The boards with which they covered their houses were made by splitting the pines with wedges, and then shaving these rough clefts, which cost them a great deal of labor, but the inside work was mostly made with the Ash bark which they dried in a kind of press that flattened it, when it became nearly as strong as boards. Often a temporary canoe was made in a few hours, sufficient to carry an Indian family and their loads of dried venison; by climbing a large Ash, and stripping off the bark for twelve or fourteen feet, sewing up the two ends, and stretching it into the proper shape by short pieces of wood placed crosswise.

Along the valley of the Connecticut formerly, an extra price was paid to the Coopers for beer barrels and meat barrels hooped with heart of Ash, and wooden bowls made from Nutmeg Knot were also highly prized and kept in families for more than one generation. The Nutmeg Knot is an excrescence which grows upon the Ash, in form resembling those that grow upon our Yellow Birch, but of a very different substance, for the Birch knot has a crooked grain, and pieces of it can be cleft, but no appearance of fibres can be found in the nutmeg knot, nor can it be cleft in one direction more easily than in another; it therefore made excellent milk bowls which could be dried by the fire, or in the sun without any risk of cracking. A large knot of this kind was always accounted a prize, and as many bowls were made from it as possible, by turning a smaller bowl from the "core" left in turning the first, &c. When fresh from the lathe this substance exactly resembles the nutmeg, and it was probably from this material that the celebrated wooden nutmegs were made.

## TRICK OF EATING CLOTHES.

The calf that is to be raised should not be tied up or tethered with a rope of hemp or flax; he will always suck it, and may learn the bad habit of eating clothing. There have been cows and oxen sometimes kept till they had destroyed more than their carcasses would pay for, and sometimes, though much more rarely than might be expected, the beast has been injured by this strange food; but we have known an ox who had swallowed a number of linen waistcoats with their buttons, who always kept in good health. These creatures have a ravenous appetite for linen and cotton. We have known an instance, when in a cold windy day, a pane of glass being accidentally broken in a window, a woman stopped the hole with a cotton gown, which was immediately taken out by a cow that was standing in the road. The woman run out and followed the cow, who having often been cleft upon such occasions, (as she had long been in the habit of playing the mischief among the clothes that were hung out to dry) started off and ran at full speed nearly a quarter of a mile, and before the woman came up to her she had swallowed the whole of the gown.

## EARTH FOR CATTLE IN WINTER.

Remember that animal who live upon grass, always swallow a portion of earth with their food, and that it is necessary to their health; as their vegetable food is very liable to become acid: it is probably corrected by the clay, magnesia, or potash in the earth.

Horses willingly drink clayey water, or that which bores from a bog, but dislike that which has run for some distance on a vitriolish slaty soil. When the ground is covered with snow, cows that run in the woods will eat dry earth from the roots of windfallen trees, and the sucking calf that is confined will always eat earth, if within his reach. It is a good practice when the ground is covered with snow, to keep lumps of dry clay where cattle can come at them, as horses, cows, and sheep at such times are generally fond of eating it. Roots that are fed to cattle when the ground is covered with snow should not be washed, and there will be little danger of the health of a horse that is well used in winter, if he is allowed a peck of unwashed carrots once or twice a week. We would not, however, recommend giving potatoes to horses generally; they agree well enough with some hardy horses, but to many they will do more harm than good. If a horse fed with potatoes is observed to be restless, and to turn his head round frequently and look at his side, no more should be given him.

## CALVING.

Cows that calve in winter should always have an allowance of short feed given them as soon as they begin to spring bag. The stable in which they are put when expected to calve, should be kept very clean, and littered with clean straw, and when calving they may be cautiously looked at, but should never be disturbed, unless there should be reason to suspect that something is wrong. As soon as a cow has calved she should have a large bucket of warm water mixed with three or four quarts of bran, and then be left entirely alone for a considerable time, as many a cow has been prevented from cleaning by persons running to see the calf, as the fear that it will be hurt generally makes her get up and move about when she ought to lie still. The cow should never be prevented from eating the cleaning, and licking her calf. We know there are some whimsical opinions upon this point entertained by some persons, but they should be banished to the ages of ignorance where they originated, being of a piece with, though less mischievous than the superstition which forbids an infant to suck its mother's milk till it is three or four days old. Nature needs not the assistance of any other old woman. She makes no mistakes in her directions.

For the Colonial Farmer.

MR. EDITOR,

Dear Sir—The General Meeting of the Dartmouth Agricultural Society, which was looked forward to with so much interest in this district, took place on Saturday the 19th November, and as had been expected the meeting was well attended and the proceedings proved highly interesting.

The meeting took place at eleven o'clock, and after appointing Committees to examine the Cattle, Grain, &c. the Report of the Committee previously appointed, to examine the crops of Potatoes and Turnips was read and passed—by which it appeared that they had awarded the first premium of forty shillings to Mr. James Lawlor for the best half acre of potatoes, the quantity raised being by estimation of the committee 640 bushels per acre; and the second premium of twenty shillings to Mr. Philip Brown, the quantity per acre raised by him being, by estimation of the committee 660 bushels—and that they had awarded a premium of forty shillings to Mr. John Settle for the first half acre of turnips.

The report of the ploughing match on the 5th October was then read and passed, and the meeting adjourned to the field where the cattle were exhibited. This part of the proceedings afforded a high degree of interest from the fact of this being the first attempt which has ever been made in the district to institute a Cattle Show.

and so successful has it proved that the Society intend renewing them annually at least, and will probably endeavour to institute a Monthly Cattle Show should there appear a prospect of sustaining them effectually. The number of Cattle, Sheep, Hogs, &c. on the ground was very considerable, some of them having been brought for the purpose of competing for the premiums offered by the Society, and others for the purpose of sale, and the latter were principally disposed of on the ground at fair prices.

The meeting then re-assembled and having received the reports of the several committees awarded the remaining premiums as follows:

For the best 5 bushels wheat,	Mr. Andrew Shiels,	£2 0 0
Price of the wheat at 12s. 6d. 3/4 bushel,		3 2 6
For the second best do do	Mr. John Jamieson,	1 0 0
Price, at 12s. 6d. 3/4 bushel,		3 2 6
For the best 5 bushels oats,	Mr. Philip Brown,	1 10 0
Price, at 4s. 3/4 bushel,		1 0 0
For the second best do do	Mr. James Lawlor,	1 0 0
Price, at 4s. 3/4 bushel,		1 0 0
For the best yearling heifer,	J. E. Fairbanks, Esq.	1 0 0
For the heaviest and fattest hog,	Mr. Robert Currie,	1 0 0
For the best ewe lamb,	" Peter Currie,	0 10 0
For the best bull,	" Andrew Shiels,	2 10 0
For the best ram,	" George Tulloch,	1 5 0
For the best breeding sow,	A. Farquharson, Esq.	1 0 0

£21 0 0

Making in all the sum of £33 10s. distributed by the Society in premiums during the present season.

The following are the weights of the Wheat and Oats offered in competition, and it is a gratifying fact that its superior quality is principally owing to the efforts of the Society in obtaining seed wheat in the Spring.

Specimen raised by J. E. Fairbanks, Esq.	82 lb	13 oz.
" " Mr. James Lawlor,	67	9
" " Mr. John Robertson,	64	12
" " do	64	6
" " A. Farquharson, Esq.	65	0
" " do	65	
" " Mr. John Jamieson,	66	3
" " Mr. Andrew Shiels,	66	7

The weights of the Oats are as follows:

Specimen offered by Mr. Philip Brown,	43 lb	8 oz.
" " Mr. James Lawlor,	45	5
" " A. Farquharson, Esq.	42	2

The Society, after examining and passing the accounts of the Treasurer, then proceeded to the election of office-bearers, when it was unanimously

**Resolved**—That the President, Secretary, and the other officers for the past year be requested to continue in office during the ensuing year.

The meeting was occupied from eleven o'clock till the close of the day in the most interesting manner, and even then part of the business was necessarily postponed for want of time. The business was conducted as usual with harmony and good feeling, and without undue rivalry, and although the competition for the premiums was keen and anxious, even those who were unsuccessful in obtaining them bore their disappointment with the greatest good humour and departed highly gratified with the proceedings of the day.

I remain, your obedient servant,

ALEX. JAMES, Secretary.

\* The weight was estimated by the American half-bushel.

ADDRESS

Delivered at the Annual November meeting of the Western Cornwall Agricultural Society, by a young man who is stated to have had but very limited opportunities of acquiring information.

There are but few men who are not ambitious of distinguishing themselves in the nation or country in which they live, and of attaining a degree of consideration among those with whom they converse. There is a grandeur and respect which the meanest and the most insignificant part of mankind endeavour to procure in the little circle of their friends and acquaintances. For the accomplishing of this, and perhaps for no other reason, we find that mankind have divided themselves into different classes or grades, which are distinguished by different appellations, so that each might move unmolested in its own sphere. For one of those classes to intrude upon the rights or privileges of another, or even to mingle with them in their festive circle, was once looked upon as an offence not soon to be forgiven nor easily forgotten.

It is true that a lower grade might have been pleased to have those who had assumed a pre-eminence over them condescend so much as sometimes to honor them with their august presence. Such is the disposition of man (I do not say that this disposition is inherent in him) that he loves to have greatness even if it be usurped, and will condescend to mingle with inferiority to secure it. But it were needless for me as well as irrelevant to the subject on which I am now engaged, to enumerate all the whims, caprices and prejudices, that have so long existed, suffice it to say, that their being thus divided has been prejudicial to the interests of the community, and the most important question is to which of these classes ought the pre-eminence to be given, which of them ought to stand highest in the estimation of the world, as being most conducive to the strength and happiness of the country of which they constitute a part. I need not wait for an answer, nor need I be at a loss to anticipate the one that I shall readily receive, the Agriculturist is now admitted as the first on the list. But let us turn our attention for a short time to years that have passed and gone, and see in what light the Farmer has been viewed, and what kind of an opinion he as well as others have had of his occupation. Has his occupation been looked upon as the most honorable, the most noble calling in which man could be engaged, has he himself been willing to acknowledge that he obtained a livelihood by the sweat of his brow? Ah no! too frequently has it been the case that when by these honorable means men have acquired a little wealth, they have, as if ashamed of their occupation, renounced it, bartered away their little earnings for goods, entered the mercantile line of business, and after a time fallen from a comparative state of independence to that of penury. Too often has it been the case that when the Agriculturist has by accident mingled with the society of those that call themselves honorable he has wished that his occupation might be kept a secret, he dare not avow that for a maintenance he wielded the axe, swung the scythe, or followed the plough—to acknowledge himself a Farmer would have been as repulsive to his feelings as it would have been obnoxious to the ostentation of grandeur, and to be called a tiller of the ground was an insult that demanded immediate reparation. But happily for mankind those days of false grandeur and insignificant pride are rapidly passing away, and the too long infatuated and self-deceived inhabitants of Nova-Scotia are beginning to get their eyes open to their true interests, the clouds of darkness and superstition that have so long enveloped the minds of the people, are now beginning to disperse, and the genial sunshine of peace and plenty now begins to pour forth its benignant rays with unremitting splendour. Agriculture is already beginning to be looked upon as not only the most noble employment in which man can be engaged,

but also as the only means by which all other classes can hold their standing in the community and be supported; no longer is the former viewed with the keen eye of contempt and derision, but with complacency and delight is he received into all classes of society, and looked upon, I had almost said, with an eye of envy.

His occupation is now viewed as the only earthly source from which true contentment and unalloyed happiness can be derived, and when contrasted with that which others pursue, is truly an enviable one, he stands aloof from the many dangers that are incident to those who follow other professions for a maintenance, and enjoys felicities which the others would rejoice to anticipate, nay, even kings although surrounded with splendour, equipage, and the thousands of willing subjects that do homage to them, would gladly resign the false and ostentatious eclat of the court for the more calm quiet and sequestered abode of the husbandman, could they but for one day enjoy the satisfaction that such affords. The General may seek for applause and happiness from the field of carnage and bloodshed, but how often does he exclaim in the language of Pompey, when he was invested with the honour of commander-in-chief over the Roman Legions, "Shall I ever escape from the enemy that pursues me, and return with content and tranquility to the enjoyment of rural solitude with my wife and children." The Senator may seek for happiness in the Legislative Hall, but he too is often disappointed in his expectations, for he stands on a precipice from which his constituents may soon hurl him into the abyss below. The Physician must be ready at every ones call, nor does he know when night comes whether he shall enjoy the sweet slumbers of undisturbed sleep.

The Merchant's life is one that is fraught with care and anxiety. If he has ships at sea he knows not how soon the boisterous winds and dashing waves may consign them to the deep. Wearisome nights and troublesome days are appointed for him. But the Farmer—"Oh, knew he but the happiness of mine," &c. &c.

Do but see the sunshine of contentment how benignant it beams forth on his cheerful countenance, to him the loud sounding winds bring no alarm; his property is not entrusted to the deceitful sea, but is based on a foundation that the winds cannot move, even on the firm earth. With equal gratitude does he receive from the hand of God the summer heat, and the winters cold, spring's vernal showers, and autumn's boisterous winds.

The dull unvaried jargon and tiresome rounds of city compliments with their monotonous sound salute not his ear: happy and contented with his occupation, he has no wish to enter those temples of false delight, and can with placid emotion exclaim in the language of the Poet

"I envy none their pageantry and show  
I envy none the gilding of their woe,  
Give me, Indulgent God, with mind serene  
And guiltless heart to range the sylvan scene," &c.

Spring, Summer, Autumn, and Winter, each in its turn, may fill his heart with new delights and give him a new impulse to adore the God of Nature as being the only source from which all his blessings flow. Joyfully in the spring does he cast the seed into the ground, relying on the promise that the Harvest shall not be withheld, Thankfully in autumn does he gather in the yellow sheaves, conscious at the same time that he reaps not where he has not sown, nor gathers where he has not sowed. With what calmness and placidity can he look back on the surrounding scenery and see in each plant, each spike of grass, and in each shoot of grain the work of an Almighty hand. Truly

His life is, "an easy, quiet and serene retreat,  
A harmless life that knows not how to cheat," &c.

None can so sensibly appreciate the beauties of the opening spring when all nature begins to recover herself as does the Agriculturist; and by none can the sweet overflowings of gladness which diffuse themselves through the heart be so justly felt as by him—do not all things tend to show us that this was the way in which it was originally intended man should get his living.

"In the sweat of thy brow or thy face shalt thou eat bread," was the sentence pronounced on man after he had disobeyed the divine command, and most willingly does the contented Agriculturist toil under the sentence nor think it a hard one: though the land was cursed and the thistle and thorn were to spring up yet to the industrious husbandman is this curse suspended, and he reaps the full reward of his labour.

But there is another source beside labouring with the hands from which the farmer may obtain benefits, or that may render him happy in the chequered scene of life through which he has to pass, man has a mind never inactive that is endued with reason, the ennobling faculty of the soul, the cultivating of which is a source of unequalled pleasure.

Holding the plough, felling the trees, or cutting down the grain requires not the active energies of the mind; it is physical strength and not mental that is required in labour, and it is an absurd idea that too many have imbibed that labour unfits the mind for study. Even the most profound and occult study will shine better in the few snatches of time that the busy man gets, than it will in all the listless and loitering hours of him who has nothing to do.

The pursuits of literature are no ways incompatible with the pursuits of husbandry, neither is it unnecessary, as some have unwittingly affirmed, that the Agriculturist should have knowledge, for with him rather than many others, is knowledge Power, the practice of a profession is certainly more inimical to the pursuit of literature, than that of husbandry, and it is my opinion that whoever would woo the honours of the Muses must bid farewell to professional eminence. But the Farmer may follow both the practice of husbandry and the pursuits of literature, and each pursuit instead of being detrimental shall be found to be subservient to the progress of the other. To none can a knowledge of some of the arts and sciences be of greater utility than to the practical Farmer. The science of Chemistry is almost indispensable to him who would be a systematic and scientific Farmer. But the old and inveterate prejudices which have so long existed have prevented the Farmer from giving heed to those things that would have promoted intellectual and fundamental interest. But happy, yea, thrice happy be the people, and more especially for the farming class, these prejudices are beginning to subside, the clouds of darkness that have so long been suspended over Nova Scotia have already begun to disappear—and she is becoming illumined with the light of knowledge. It is well known that the scale by which these prejudices were graduated was formed in the ages of ignorance, when Military Commanders and members of the learned professions, engrossed all the wealth, honor and freedom of the Country—and husbandmen were serfs. The pathway to power now leads through the pursuits of Agriculture. Go not to the field of carnage for fame; seek not for the honours that title or equipage can bestow on you for it is but mockery; an empty bauble that cannot satisfy; it is in substance no better than a puff of empty air, and may be compared to a transient gleam of sunshine that now bursts forth from behind the clouds and shines with dazzling splendour—but anon, an intervening cloud obscures it from the sight. Seek not professional eminence nor indulge yourself in the frivolous hope of distinguishing yourself in the Mercantile life. But follow with renewed energy this lawful, this noble, this honourable calling Agriculture;

not ashamed to have it known that for a livelihood you wield the implements of husbandry, for most assuredly it is the way the God of Nature intended man should get his living. It is a pursuit that will bring you wealth, confer honours, and bestow happiness as you as lasting as the solid earth on which you move. I say again revere the plough. You shall reap if you faint not.

From the New York Observer.

### GIVE AS YE HAVE RECEIVED.

The various blessings we enjoy  
Are all a solemn trust,  
Which heaven designed us to employ  
As stewards just;  
For land and sea, the treasure there,  
And things—a countless throng—  
That see his light and breathe his air,  
To him belong.

Is wealth conferred?—are fertile fields?  
Call not that wealth thine own;  
Think not that land its harvest yields  
For thee alone.  
Nay, look around. What numbers sigh  
In want of daily bread!  
Why let the curse of them that die  
Fall on thy head?

Hath bounteous heaven, upon thy mind,  
Bestowed superior parts  
To sway an influence o'er mankind  
And rule their hearts?  
Sad, sad will be that spirit's doom,  
Whose powers are leagued with wrong,  
And lure, through guilt, to endless gloom,  
Th' unwary throng.

Are friends around thee?—Many roam  
Afar from all that's dear;  
Go, dry amidst thy cheerful home  
The stranger's tear.  
And some their lonely vigils keep  
Around the dying bed,  
Go, blend thy tears with those that weep  
For kindred dead.

And dost thou breathe of Freedom's air,  
Rejoiced in her light?  
Dost thy free spirit bound to share  
The realm of Right?  
And canst thou hear unmoved the wail,  
The anguish of th' oppressed?  
And shall the captive's mournful tale  
Not move thy breast?

But oh, if thou indeed hast known  
What joys Religion hath—  
If heaven's eternal light is thrown  
Upon thy path  
Wilt thou not strive that all around  
May lift their dying eyes,  
And see, amidst the gloom profound,  
That Day star rise?

As freely we have all received,  
So let us others bless;  
By grief assuaged, and want relieved,  
Our thanks express;  
Remembering, what we now enjoy  
Is all a solemn trust,  
Which heaven requires us to employ  
As stewards just.

Marion, Penn.

J. M. B.

From the American Agriculturist.

### IMPROVEMENT OF SANDY SOILS.

The Hon. W. Clark, of Northampton, has been the great pioneer in the improvement of sandy soils, and from the successful results he has achieved we may fairly class him among the great agricultural reformers of the present day. He has already given to the public the theory of his operations, which we hope to find room to lay before our readers at some future time. Our object now is simply to give his practice, and after our farmers have begun the good work of reclaiming their almost barren wastes, it will be a pleasure for them to look into the *modus operandi*, and see the reason of their success. There are three essential features in this practice, and the simultaneous adoption of each is essential to effect the desired object. The first is the frequent and thorough use of the roller; the second, a constant covering of crops on the ground; the third is the introduction of clover and grass as a fertilizer. To illustrate this, we give the history of a single field of some forty acres of worn-out sandy soil, in the vicinity of N. This field was purchased by Mr. C. some eight or ten years since for nine dollars per acre, while the fertile bottom lands, on the other side of the town, would sell readily for \$160 to \$200. His object was first to get a crop of corn if possible, and the land being too poor for this, he carried on to it a moderate quantity of peat or swamp muck, which was found in the low places on the same field. We may observe in passing, this peat and muck exist to an almost unlimited extent throughout New England, and we consider it of vastly more intrinsic value to the community than all the gold mines that have dazzled the eyes of our Southern neighbors for the last fifteen years. With this dressing, say of fifteen to thirty loads to the acre, the whole cost of which consists simply in digging and throwing into heaps, to be drained, and acted on by the atmosphere, after which it is carried either by carts or sleds in winter on to the adjacent ground; the land is then ploughed, and whatever scurf, sand, grass, rushes, mosses, pusseys and briars there may be on the land are turned under, and such is the digestibility of the soil, all these raw materials are at once converted into humus or guano as food for the required plants. This sandy soil has the stomach of an ostrich, and if it cannot, as that voracious biped has the credit of doing, digest old shoes, iron spikes, and junk bottles, it can dissolve and convert into vegetable chyle, whatever organized matter is given to it. The effect of this comparatively slight dressing yielded a first crop of some thirty bushels of corn to the acre, enough to pay for the first cost of the land, and the whole expense of producing it. But while the corn was growing, say from the 20th of July to the 10th of August, rye with red and white clover seed was sown, and the corn being so planted as to admit of harrowing two ways, or even four if necessary, it was well got in with the harrow, and the ground being amply protected by the corn during the sultry weather of this season, the new seed took a vigorous start, and as soon as the corn was somewhat matured, it was cut and carried off the ground, and the new growth then had the entire possession. The roller was then thoroughly applied, as also in the following spring. The early sowing gives strength to the roots of both rye and clover, and renders hazard of winter killing either, especially the clover, much less. When from any cause he is prevented from sowing the clover early, it is omitted till early in the following spring; a postponement that should be avoided when possible, as it thus loses a year's time, requiring another season to mature. The rye is cut the following summer, when the clover is suffered to remain, shedding its seed upon the ground for a successive crop. The following season, if in a proper condition, it is again put into corn or rye according to its fertility, and the course is again renewed. The land, however, usually requires an additional season in clover, and sometimes more, to give the requisite fertility. Mr. C. showed us a field, which from the originally poor condition described, without the addition of any manure or peat or muck, has produced him five crops in seven years, the last, which he had but just taken off, yielding seventeen bushels to the acre. This, it will be readily admitted, is a large crop for poor land, and much beyond the average yield in New England. The growth of the clover on this field, of this spring's sowing, was promising in the highest degree, and as evenly set as in the best land, giving every promise of a large crop the next season, which of course is designed to be added to the soil for its future improvement. When the land is first put into use, (for Mr. C. has several other similar fields which have been variously treated, though always on the same principles,) and it is too poor to produce a paying crop of corn, and he has not time to



the muck, he turns under the surface vegetation, and puts on a crop of clover, always accompanying this with the clover, and after the year's crop from this last, he never fails in a fair yield of corn. On a field thus treated, without any dressing of muck, he got twenty seven bushels of corn per acre for the first crop, and after an interval of another season, obtained thirty three bushels on the same land, showing a decided increase in the productiveness of the soil. A slight dressing of plaster is generally, though not always, used, and never exceeds half a bushel to the acre. Mr. C. admits that more plaster might be useful, we think that one to two bushels per acre would be applied with decided advantage, but it is purchased at a high price, about \$10 per ton, and as economy and a self-sustaining policy has been a prominent principle in this system, this is all that has thus far been afforded. The muck would in all cases be a valuable, remunerating addition, but this he has not always the time to give, and at the price he has paid for his land, he can afford to leave it once in two or three years. In clover, by which it is renovated, and for the present perhaps this may be the most judicious plan. As lands become dearer, however, which they are rapidly doing under this management, they being now worth \$20 to \$30 per acre, of no better quality than such as he bought a few years since at \$8 to \$12, the policy of manuring will become more expedient, though the rapidly improving nature of this system will give greater efficacy to the clover crop as a fertilizer.

It is surprising to see the elevated hills and barren plains, that so lately exhibited nothing but a crawling sand, by the operations of the clover roots in this otherwise impracticable material, gradually changing its inhospitable character to a firmly connected mass, showing a future since that would gratify the most practised eye. Mr. Clark acknowledges his surprise at the facility with which the clover takes, and attributes it mainly to the use of the roller. We are inclined to concede much to that instrument, but think for his name and other clover he is greatly indebted to the plaster. Of this we have more to say hereafter.

We observed the woodchucks, who are arrant epicures and gourmands in their selection of esculents, and especially of sweet and abundant clover fields, are thoroughly colonized over all the fields of Mr. C. They follow him, as our politicians do the successful candidate of executive dispensations for John Randolph's seven principles, the five leaves and two fishes. They snuff his green patches of trefoils, and instantly abandon the poverty-stricken fields of his unthrifty neighbors. His crop of woodchucks, though not as important as the shoe crop at Lynn may soon be well worth the harvesting.

Mr. C. has not pursued this cultivation sufficiently long to have matured a system of rotation, which, however, he virtually practices with some variations, from his own judgment. A little more experience will enable him to determine, whether a crop can be taken more advantageously every second or every third year; but we are satisfied with a moderate dressing for the corn, the rotation might be of three years duration, affording alternately corn, rye, and clover, the last to be added entire when dry, to the soil, for its improvement. Green crops are never used as improvers, they always being allowed to mature before turning under. Plaster should always be added, unless ashes or lime can be more economically applied; but the former is limited in supply, and the latter is to be had only at a price which will effectually prevent its use in this region.

Here, then, we have a system for reclaiming barren wastes within every one's reach; costing nothing, and yielding a great deal; and if this were rightly carried into practice, how soon should we see the naked sand banks, that exist, to a greater or less extent, everywhere between the Alleghenias and Atlantic, converted into verdant, luxuriant fields. Yet for the want of the application and steady perseverance in this plain, straightforward, simple course, how many will continue to live on in ignorant poverty, when they might with less toil, and the use of a moderate share of intelligence, have a competency. A single bar left down in this practice, lets in the whole herd of Pharaoh's lean kine. Without the roller and plaster you get no clover; if you cut off the clover when grown, you get no subsequent crops; or if you crop too closely or rapidly, the clover-bearing properties of the soil are exhausted, and new manures, or years of idle, wasteful fallow are necessary to resuscitate it; whereas, by a careful observance of the above plan, the ground is constantly and profitably at work, bearing its burdens on equitable shares, giving one-half or two-thirds to you, and reserving the remainder to itself, to enable it to continue the supply. Though

Mr. C. does not connect any grazing or stock feeding with the operations, it is easy to see how it can most advantageously and profitably be associated with them. Cattle and sheep can be put on to the rye fields both in the fall and spring, when sufficient wheat and stout to justify it, and when well sodded over with clover, what more mutually advantageous to cattle and land than such copartnership.

We must add a word for the benefit of such of our readers as have no sandy or sterile soils, nothing but virgin fertility, has been enumerated to be exhausted. We beg all such to consider the principles for reclaiming, are the principles for preserving such that no land is so rich but that it can be exhausted, unless by judicious managements, and that there is more profit in sustaining their fertility in the highest condition of fertility, than by a wasteful system of cropping, first to reduce them, to be resuscitated again by some painful efforts, or abandoned to posterity to be gradually reclaimed by the sure, though diuturn operations of nature, to waste its fertility in which they might easily have been preserved.

There are some particular advantages that attach to the tillage of light sandy soils. They require the least possible effort to plow and harrow, and these operations can be performed at an early season when not frozen, no season is too wet, or too early for them. They require no underdraining, and the food for vegetation in whatever shape it is added, however crude and indigestible, immediately converted into pabulum for the required crop. The amount of corn and rye afforded per acre would not satisfy a Western farmer, and very properly too, but he must recollect that the prices seldom exceed one-half of those obtained at the East, rye corn being worth usually sixty to ninety cents per bushel, and straw and stalks go far towards meeting the costs of culture. The luxuries also of good buildings, which are always to be had for less than east, good roads, schools, and churches, and all the comforts of a matured and well ordered society are at hand, and are cogent reasons for reconciling the reflecting mind to the absence of that superabundant fertility which so universally characterizes the West.

RECIPES

**TO DYE WOOL BLUE.**—Put into the copper 40 gallons water, potash, 6lb bran, and 3lb madder—make it boil. Grind 6lb Indigo fine in water, and put it in and stir it carefully. On the vat, place a slow fire about it, stir it every twelve hours, 48 hours, or when it is green with coppery flakes, or blue sea is fit for use.—Wet the wool in warm water, squeeze, plunge it and keep it moving, often airing it, till it is deep enough. When the dye grows weak add a little more potash, madder and bran. *Berthollet.*

**BEST BLACK ON WOOL.**—Dye deep blue; then well washed. 50lb of wool, take 8lb logwood and 8lb of galls powdered; put it in a bag for 12 hours. Put one-third the liquor into a boiler, with one pound of verdigris; work the wool in this very hot but not boiling for 2 hours—take it out, add another third of 4lb coppers; let it cool half an hour, then put in the stuff, work it for an hour, then spread it to air; add the last third, in ten pounds dried sumach leaves, make it boil; put in cold water, and 1lb coppers. Work the stuff in it one hour, then wash, air, and put it in again for an hour—wash till the water is clear, and then put it in a moderately warm yellow dye with weld.—*Berthollet.*

**BLUE FOR COTTON AND LINEN.**—1 part indigo, 2 parts copper and 2 lime, (fresh burnt, and of the best quality.) Grind the indigo fine with water, then mix all in cold water, stir it for 24 hours, then let it stand two days. Dip the yarn in the dye, wring it, repeat this three or four times, and bring it put to dry it will be a light blue. If this work is repeated the two following mornings it will be a dark blue, a very bright colour, but not so durable. Much depends on the goodness of the lime, which should be white and very strong.—Ed. C. F.

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