

Technical and Bibliographic Notes/Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- ☐ Coloured covers/
Couverture de couleur
- ☐ Covers damaged/
Couverture endommagée
- ☐ Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée
- ☐ Cover title missing/
Le titre de couverture manque
- ☐ Coloured maps/
Cartes géographiques en couleur
- ☐ Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)
- ☐ Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur
- ☒ Bound with other material/
Relié avec d'autres documents
- ☒ Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- ☐ Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- ☒ Additional comments:/
Commentaires supplémentaires:

Continuous pagination.

- ☐ Coloured pages/
Pages de couleur
- ☐ Pages damaged/
Pages endommagées
- ☐ Pages restored and/or laminated/
Pages restaurées et/ou pelliculées
- ☒ Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées
- ☐ Pages detached/
Pages détachées
- ☒ Showthrough/
Transparence
- ☒ Quality of print varies/
Qualité inégale de l'impression
- ☐ Includes supplementary material/
Comprend du matériel supplémentaire
- ☐ Only edition available/
Seule édition disponible
- ☐ Pages wholly or partially obscured by errata slips, tissues, etc., have been refilmed to ensure the best possible image/
Les pages totalement ou partiellement obscurcies par un feuillet d'errata, une pelure, etc., ont été filmées à nouveau de façon à obtenir la meilleure image possible.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
									☒		

THE BRITISH AMERICAN



CULTIVATOR.

"AGRICULTURE NOT ONLY GIVES RICHES TO A NATION, BUT THE ONLY RICHES SHE CAN CALL HER OWN."—Dr. Johnson.

Vol. 2.

TORONTO, MARCH, 1843.

No. 3.



THE CULTIVATOR.

"Agriculture is the great art which every government ought to protect, every proprietor of lands to practice, and every freeman to improve."—Dr. Johnson

TORONTO, MARCH, 1843.

NORMAL SCHOOLS.

A series of resolutions passed at a respectable meeting of the inhabitants of the village of Newmarket and neighbourhood will be seen on another page of this number, the avowed object of which are to establish a Manual Labour School, for the ostensible purpose of properly preparing that class of the young men of the country, who have a desire to take charge of the common schools under the New School Act.

It is a fact, too notorious to be called into question, that the persons who have the charge of four-fifths of the common schools of this country are remarkably illiterate, and in many cases are unqualified to communicate intelligently the elementary principles of the English language. That results detrimental to the rising generation and the prosperity of the country at large, should follow from the employment of such agents, who pretend to teach "the young ideas how to shoot," should not be a matter of astonishment.

The Canadian farmers complain loudly at the indifference manifested by their legislators towards their interests: we assure them that such will be the case, so long as they are represented in Parliament by men of the learned professions, who are not interested particularly in having the produce of the farm rating at prices which remunerate the producer. We know of no means

so cheap, practical, and well adapted to the circumstances of this infant colony, in removing the stumbling blocks which impede the pathway to useful and practical knowledge being imparted to the young men of this country, as that of an efficient *manufactory* for common school teachers. We conceive that Normal Schools, on the manual labour system might be introduced and established on a plan similar to that laid down in the resolutions referred to, at a very trifling expense to the country, which would ultimately *remove* the hindrance spoken of, and prepare the people of this Province for the full enjoyment of their free institutions.

The idea of Manual Labour Schools producing such a great amount of good, may be considered ridiculous in the extreme by men of narrow minds, or those who can only speak of colleges and universities as institutions suitable to prepare men for the higher walks of life; but to such we would say, that many of the brightest men of the present age are what are generally styled self-taught, and a number of the most eminent statesmen of this country were, only a few years since, figuring in the common circles of society.

Very frequently have we heard the young students of law in this city, express themselves in the highest terms, as it regards the respectability of their profession, the importance of keeping up corresponding appearances, and the manner in which they endanger their lives by incessant application to study. as it regards the latter, no difficulty need be apprehended by the students of a manual labour school, as that portion of their time which would be devoted to the several trades practiced at the institution, as well as the agricultural and horticultural departments, would admirably fit their body and mind for the clear and easy reception of the principles of the various arts and sciences which would be embraced in their studies.

Space forbids us for the present to enlarge on this very interesting subject, and in conclusion, would only state, that our Newmarket friends not only merits our sin-

cere thanks but the thanks of the whole community, for the able and spirited manner in which they have brought the subject before our readers. That portion of the Provincial journals who approve of the system, will do us a favour by giving insertion to the resolutions referred to.

PROCEEDINGS OF THE GORE DISTRICT AGRICULTURAL SOCIETY.

We have the pleasure of acknowledging the receipt of a very respectable sheet headed "Agricultural News," being the rules, regulations, proceedings, receipts, and expenditures of the above society during the past year.

While on a tour through the Gore District in the early part of last summer, we availed ourselves of the acquaintance of the leading agriculturists in the several townships of that District, and felt astonished at the laudable spirit of emulation which presented itself to our view. almost every department of agricultural improvement. The farmers appear ambitious and willing and anxious to be instructed in their business, as a proof of this, there are more agricultural papers taken in that District than in any other two districts, and the Agricultural Society numbers upwards of three hundred paying subscribers, an example, we believe, unequalled in any portion of the Province.

If space admitted, we would have copied largely from the "Agricultural News," but for the present we beg to give the following extract which will show the spirit manifested towards our feeble endeavours to elevate the character of Canadian agriculture, and we trust that every Agricultural Society in the Province will aid us in placing a copy of our journal in the hands of each member of such societies on the conditions therein spoken of. The very liberal terms upon which we afford our journal under the new arrangement, which may be seen on the last page, will make it an additional inducement for Societies or Clubs to take a number of copies, which will be forwarded to the address of each subscriber free of postage. [Continued on last page].

SUB-SOIL PLOUGHING.

We notice in the United States agricultural papers that a new era is about to dawn upon the enterprising cultivators of the soil of that country, through a mighty revolution in agriculture that is likely to be produced through the agency of the sub-soil plough: this reminds us of a fallacious document which went the rounds of the same papers only two years since, by which the discovery had been made by a very celebrated French chemist, that ploughing the ground was an unnecessary step to insure a good yield of corn. A mere layer of straw, shavings, or any decomposable substance, laid evenly over the surface, tied down with cords, we presume, was all the management required to warrant a large and profitable yield; and the soil being of so little consequence to the plant, that it was considered that it would vegetate and mature on a *pane of glass* or solid rock, equal to the finest pulverized soils. We are astonished that such articles are tolerated in this enlightened age; but this may be accounted for in part from the fact that nineteen persons out of twenty who write on the subject of agriculture are men of theory, who very probably never saw what they write put into execution, much less practice it. We were told only a few months since, by one of these men who make a livelihood by writing himself into the favourable notice of Canadian farmers—that he positively did not know the difference between an ear of oats and an ear of wheat.

In comparing sub-soil ploughing with the experiment of the French chemist, we do not wish to be understood that no benefit is to be derived from the operation, on the contrary, we are of opinion that much good is likely to result from sub-soiling, but in no way can it be found beneficial unless accompanied with thorough draining.

In introducing or recommending improvements in Canadian agriculture, only such shall receive our countenance that are calculated to bring in their train sure and remunerating profits—all doubtful experiments shall be withheld.

Sub-soil ploughing of itself, is calculated to do more harm than good, but when accompanied with thorough draining is of considerable benefit, and if properly performed is almost a sure preventive of drought. No man who had ever practiced thorough draining, would think of recommending it in this country where labour bears so disproportionate a price to the products of the farm. Thorough draining apart from sub-soil ploughing, would cost at least £6. per acre; and if stone were not in an abundance on the spot, it would even exceed that sum. The average price of cultivated lands in Western Canada does not exceed £5. per acre, and is it likely that a system of farming could be successfully introduced, that would require an expenditure exceeding the prime cost of the farm, to prepare the soil for proper cultivation? To make ourselves perfectly understood on this point, it will be necessary to give a mere outline of what is properly called thorough draining. The drains run most generally parallel with each other, and are from fifteen to twenty feet asunder, and from twenty to thirty inches deep, and filled with small stones within fifteen or twenty inches of the surface, or with draining tiles, then covered with straw or brush-wood, and filled with the surface soil. Sub-soil ploughing, accompanied with this thorough draining, merely consists in the stirring of the sub-soil by

a heavy instrument in the shape of a plough, excepting that no mould-side is wanted. The course to be adopted to carry out the operation, is first to use the common plough, and by which a large furrow of the active soil is to be thrown out, then the sub-soil plough is to follow, and thoroughly break up the understratum or subsoil to the depth of ten inches if possible; then the common plough should follow, and throw as deep a furrow as possible of the active soil, over the last opened furrow of the sub-soil, and so on until the whole work be ended.

By continuing the process of sub-soil ploughing for a series of years, a deep friable mould will be made, which will be equal to the soil produced by the celebrated Irish spade husbandry; but such expensive modes of cultivation are best suited to countries where labourers may be had for sixpence per day, and where wheat is sold for eight or nine shillings per bushel, and we must content ourselves in Canada by practicing such systems of cultivation as are applicable to the peculiar circumstances under which we are placed.

Although thorough draining and sub-soil ploughing are improvements that would not warrant the outlay, in the present infant state of the agriculture of the Province, still less expensive modes may be practiced to drain the land, and give it that desired depth of mould that is necessary to prevent injury to the plant from drought. The following suggested itself to our mind in the fall of 1839, and would have been carried into practice, had not circumstances over which we had no controul, prevented us. The field in question was wheat stubble after summer fallow, which was ploughed with a four by nine inch furrow, in the early part of the month of September. The plan which we intended to have adopted to give the soil a good depth, was to have harrowed the land twice after the above ploughing, and by the first of November to have crossed ploughed it with a furrow six inches deep and twenty inches wide, which would have given the field the appearance of land prepared for the turnip drill. Land prepared in this style would only require once ploughing in the spring to fit it for spring wheat or barley, and would be admirably adapted for laying down to grass seeds. Other cheap and effectual plans may be introduced to attain the same object, which will be noticed in due time through our columns.

In recommending improvements in Canadian husbandry, we trust that the interest we have in the cause in common with our brother-farmers, will be a sufficient check to prevent us urging upon others to practice what we would not be willing to put into practice ourselves. If we occasionally err in our judgment, we would be happy to be corrected by any who may be competent to point out the error.—*Pub.*

FIRE BLIGHT—DISEASE OF PEAR TREES.

We have received a letter from the Niagara District, signed *A Subscriber*, requesting information relative to a disease called fire blight subject to pear trees.

We beg to state for the information of our unknown correspondent, the little we know about the disease, and would consider it a favour were some of our readers to take up the matter, and give such additional facts as would lead to correct conclusions on the subject.

It is generally understood that the fire blight is caused from a small wire worm, that conceals

itself between the bark and the sappy parts of the wood which girdles that portion of the tree, so as to prevent the circulation of the sap. The most simple and natural cure that we have heard recommended is to cut the diseased parts off close to the trunk of the tree, and burn them immediately: an other plan has its admirers and has been practiced with considerable success by a few gentlemen in this city, which is simply done by boring a hole through the trunk of the tree and filling it up with sulphur and plugging it: the odour from the latter would obviously ebb and flow with the sap, by which means, it is said, the insect will leave the tree almost immediately.

The amount of premium offered for an effectual cure for the disease, is a subject with which we are not acquainted, and would therefore refer our correspondent to more competent authority to obtain the desired information.

The information desired about budding and grafting the plum successfully, will be transmitted in the April number in so clear a light that the greatest novice could not err, if the plan we recommend be carefully followed.

The best stocks for plums are produced from blue plum seedlings or from seedlings from any of the cultivated varieties. The suckers which shoot up from the roots of grown trees of the above sorts, if carefully separated from the trunk and planted properly, will be found to answer for stocks.—*Pub.*

WESTERN DISTRICT LITERARY INSTITUTION.

We have this month had the pleasure to receive through the kind attention of Major Lachlan, a Pamphlet neatly got up from the press of H. C. Grant of Sandwich, entitled the "By laws of the Western District Literature Philosophical and Agricultural Association." This association instituted by Gentlemen of the highest respectability, talent and influence, in and around Amherstburgh, has for its object, the endeavour as far as lies in its power by its own efforts and by recommending the formation of similar Associations elsewhere, to demonstrate and *practically* illustrate the inestimable value of scientific and otherwise useful information in every station of society; and to aim at *mutual* instruction in the various arts and sciences and in the ordinary pursuits of life.

Appended to the said By-laws is a copy of the admirable discourse read at the first meeting of the Association on the 23d September last, by Major R. Lachlan the President, wherein after a few introductory observations congratulatory of the occasion, he encourages the Members by a rapid sketch of the rise and progress amid difficulties and discouragements of the various similar Institutions throughout Europe—to perseverance in the good plan so auspiciously commenced, then turning to the transatlantic world, he makes brief mention of the several Literary and Scientific Associations already established in different parts of Canada, "bright spots indeed (he says) in our otherwise clouded horizon—but tending alas, to render the prevailing mental darkness only more apparent."

Our humble attempts to light this superincumbent cloud of darkness as far as in us lies, through the medium of the *Cultivator*, has not been overlooked in his short summary; and we take this occasion to express our acknowledgment for the following flattering remarks relative to our paper,—"and so little, he continues, has a taste for either useful or ornamental Literature been hitherto encouraged or cultivated, that Canadian publications are yet almost unknown, if we except a volume or two of legal reference, a treatise on Canadian Agriculture, one or two works on our Topography and Statistics, two or three Magazine and Reviews, and, that lately commenced meritorious Agricultural Periodical, THE BRITISH AMERICAN CULTIVATOR, to which, every true British Canadian Farmer is found to give every encouragement and support. He then concludes his very able discourse by enlarging on the objects and purpose of the Association and the prospect of their ultimate realization.

In calling the attention of our readers to the formation of the above ASSOCIATION, and to the few remarks we have here made, we would strenuously urge on every one to endeavour by his individual influence and exertions, to form a similar Association in his own immediate neighbourhood; to render himself, as it were, a focus, round which, his friends and neighbours impelled by his example, and persuaded by his representations, shall gradually concentrate. Let it not be imagined that the scheme is either useless or impracticable. Some may be deterred by reason of the *hard* name of the thing; but hear what Major Lachlan includes among the details of his Association:—"every thing partaking of the character of statistics, such as sketches of the settlement and progressive improvement of any township, town or village; descriptions of the original features of the country and anecdotes of the first settlers, enumerations of the various crops, the quantities raised, the prices obtained; &c.; notices of the wind and weather, personal memoir; local historical and chronological sketches; topographical or descriptive notes of the features of any part of the Province or District; details regarding the state of agriculture, trade or manufactures—and accounts of new or improved mechanical or other inventions and implements of husbandry in particular. Certainly to some one or more of these subjects, every one is more or less competent, and if each would devote his leisure to the elucidation of those subjects for which he considers himself best qualified, and would urge others to do the same on their parts, what a mass of valuable, and agreeable information might be collected in every neighbourhood. *Parva scintilla fit magnum incendium.* The little spark thus lighted would sooner or later raise a flame of emulation throughout the Province, and Major Lachlan in some one of his future discourses would compare our Canada to the lucid sun with only two here and there a darksome spot or two.—STRIVE AND SUCCEED.—*Pub.*

EXTENSIVE USE OF OXEN.—At the last New-Haven, County Agricultural Society's Fair, there were no less than 1,026 oxen exhibited upon the ground. They were paraded, in 513 yokes, in the form of a hollow square, in a beautiful green in the shape of a parallelogram of 54 by 20 rods, surrounded by double rows of magnificent firs. When thus arranged they covered a space equal to 11 miles in length. Such a sight was truly worth seeing, and we think should teach those farmers who use horses exclusively for farm purposes that they would find their interest in substituting, in part, oxen or mules in their stead. *Con. Farmer.*

AGRICULTURAL REPORT FOR CANADA EAST.

The month of January was, perhaps, the finest that has ever been experienced in this climate. With the exception of a few days, the weather was as fine as we could expect it to be in April, and most of the snow had disappeared from the fields except close to the fences. We do not think this sort of weather the best for Canada, on the contrary, we would wish to see our lands well covered with snow the first of December, and retain that covering to near the first of April. What we understand as a true Canadian winter, will always be found the best and most convenient for us. Thaws in winter injure our means of communication, and our lands are more exposed to severe frost, which is never found to benefit those that are in grass or sown with wheat in the fall. A moderate winter is, however, favourable for the poor, as they do not require so much food, clothing, or fire, of a fine winter, as in one that is very cold. On the 5th Instant, the weather changed to cold, and we have had some severe stormy days, to remind us that the Canadian winter is not yet over, and it is quite possible we shall have a cold day in this and the next month, for every fine day we had in January. Though there is not any great encouragement for farmers at present, yet, as we hope for better times, it is our duty to do all in our power to promote the improvement of agriculture after the example of our fatherland. The making and collecting of manure is the most general work of good farmers at this season. A large supply of this article is essential in any and all improved systems of husbandry. We have made the following selection from Mr. Hannam's Prize Essay to the Netherby Agricultural Society, on manure:—"If we produce a crop of vegetables upon a fertile soil, i. e. one containing the matters required by the plant—that crop takes away from the soil some proportion of that *pabulum* which (we have shown) is necessary to render a soil capable of maintaining vegetable life. If this crop is succeeded by a series, it is obvious that the soil becomes more and more exhausted of these nutritive matters and consequently becomes less and less fertile. Common observation proves the truth of these positions. The use of manure, therefore, is to afford the growing plant a fresh supply of that food which preceding crops have consumed, or which the soil does not contain. If, then, this be the use of manure, if one object of its application be to prevent a decrease in the fertility of the soil it is obvious that it may be applied to another object of still more importance, viz., to increase the fertility of the soil. Thus, if by application to a soil of those matters, which one crop has taken away, we restore it to its original condition, and render it capable of yielding another crop equal to the first, it is evident that by returning to a soil more than the preceding crop has taken away, we improve its original condition, and make it capable of producing still more. "Nothing," said an ancient philosopher, "is more grateful than the earth," and if we make it a principle to return in the shape of manure, more of the matters nutritive to vegetables than we have carried away in the crop, she will vie with us in generosity." This theory of manure is a perfectly correct one. Unless we return constantly to the soil, what will be amply sufficient to replace what a crop takes away, our lands must become exhausted and incapable of yield-

ing profitable crops. Perfect draining is not less necessary for to produce profitable crops than manure. Indeed manure is useless on land that is not sufficiently drained. This fact we have always endeavoured to impress on the minds of our brother-farmers. In the British Isles it now precedes all other improvements of the soil. No improvement is attempted on land that is not drained. No lands would be more improved by draining than the stiff clay lands of Eastern Canada, that never can be profitably cultivated without it. These sort of soils become so saturated with moisture, that when they are dried by the sun, they are so hard as to render them unfit for the tender roots of plants. Plants cannot extend their roots or draw nourishment from a hard soil that is impervious to air and moisture. From what we have seen lately in recommendation of liquid manure, we would most strongly urge farmers to construct cisterns in their stables to collect all the urine of horses and cattle. During the winter months, cattle by being well littered with straw, most of the urine may be imbibed by the straw, but what would remain might run into the cistern. It would not be easy to keep the urine of a large stock in winter, when it could not be applied to the soil, but by littering the cattle well, and having the stables so constructed that no urine would be lost, it might be so managed that all the droppings of the stock might be preserved and carried to the fields. Liebig in his Agricultural Chemistry, says, that one pound weight of human urine will produce a pound of wheat, and if so it must be a most valuable manure. The large quantity of ammonia contained in urine is what makes it so powerful a manure. Few of our farmers have their stables so constructed as to collect the urine of their cattle. Indeed our own stables have this defect, but we expect they will not be long so.

Manure might be immensely increased by constructing proper cisterns and filling them with soil, and allowing this soil to be well saturated with urine, which might be annually emptied, and carried to the fields, and again filled. Compost heaps might also be formed, and when not frozen, they might be wet with the urine. The following mode of collecting materials for a manure heap, might be adopted by farmers who may have such materials. Place a layer, a foot in depth, of bog-stuff, as the foundation for a compost heap; over this a layer six or eight inches deep of road scrapings, or yard scrapings, then a layer of bog stuff, then a foot of rich earth, or that earth which accumulates at the side of drains, or head ridges—then eight inches of road or yard scrapings—bog-stuff, and earth as before, and saturate the whole with urine from the cistern. Lime, if it could be had, should be added in alternate layers with the other materials. The whole turned with the spade, and well incorporated, three or four weeks before using. This sort of compost would be very suitable for top dressing meadows in fall, or for summer follow. We cover our farm-yard annually with earth which we apply as top dressing. We have often recommended to farmers to take care of their ashes for manure, and not to sell one pound of it. We see every day, notwithstanding, carts going about the country, and collecting large quantities of ashes from the farmers for soap manufactures. According to Liebig, the ashes obtained from various kinds of trees, are of very unequal value for this purpose: those from oak-wood are the least, and those from beech the most serviceable. The ashes of oak-wood contain only traces of phosphates, (that is so valuable as a manure for corn,) those of beech the fifth part of their weight, and those of pine and fir from 9 to 15 per cent. Liebig says that with every 100 lbs. of the ashes of beech we supply a

field with phosphoric acid sufficient for the production of 3820 lbs. of straw. The same author recommends the use of bone manure, as they possess 55 per cent of the phosphates of lime and magnesia. He says, "the more finely the bones are reduced to powder, and the more intimately they are mixed with the soil, the more easily are they assimilated." He further states, "the most easy and practical mode of effecting their division is to pour over the bones, in a state of fine powder, half of their weight of sulphuric acid diluted with three or four parts of water, and after they have been digested for some time, to add one hundred parts of water and sprinkle the mixture over the field before the plough, in the same way as any other liquid manure. In a few seconds, the free acids unite with the basis contained in the earth, and a neutral salt is formed in a very fine state of division." This mode of applying this manure is said to cause plants to thrive with great vigour and only 40 lbs. of bone-dust is applied, thus prepared, to the acre. This quantity, however, we consider much less than would be necessary to maintain the fertility of a soil, though it might supply it with all that was required of the phosphates, which is so essential to the production of good wheat and clover; but some other manure should be applied with this quantity of bones. Liebig says again:—"It must be admitted as a principle of agriculture, that those substances which have been removed from the soil must be completely restored to it, and whether this restoration be effected by means of excrement, ashes, or bones, is in a great measure a matter of indifference." This is an established fact that should be remembered by all farmers, and if they act according to this principle, they will never suffer their lands to become exhausted. There is nothing utterly lost or annihilated which the land produces, it only assumes another form. The farmers' care must be to bring back to the soil what it formerly produced, into whatever form it may have been changed after its production. Much of what has originally been produced from the soil is wasted in its new form, by being suffered to remain inactive, and not applying it properly, so that it would directly yield a new production. A very large quantity of manure is thus lost in our Canadian cities and towns. In Montreal in particular, immense quantities of manure goes into the St. Lawrence; and we have constantly witnessed the wasting of excellent manure in filling up streets, &c., &c., when abundance of stone might be had for that purpose convenient and cheap. In England, almost every particle of manure that is made in cities, towns, and villages is carefully preserved and again applied to the soil. Even the drains and sewers contribute to this manure. It is by the careful collection and judicious application of manure, that the fertility of a country under arable culture can alone be maintained. In Eastern Canada we have sufficient proof throughout the country, that this system was never understood or practiced, and the consequence is the exhaustion of the soil and the deficiency of crops. And until the system is changed for a better, we need not expect that profitable crops will be produced. If we leave the soil of Canada to itself, it will produce a most luxuriant forest of beautiful trees; but it would be unreasonable to expect that it would continue to yield us a new produce annually, and that we should rob it of all this produce without returning any part of it to the

soil. Mother earth is very bountiful, but we may exhaust her of all power to be so, by constantly robbing her, and in this way she has been generally treated by her children in Canada. We thought it might not be unacceptable to our Subscribers to submit the foregoing observations respecting manure, at this particular season of the year that most of it is made and collected for future use upon the farm. No improvement can be effected in agriculture without an abundant supply of manure however obtained, and there is now much information in our power as to the means of increasing manure to almost any extent required. We have seen in a late English paper, a plan suggested for constructing barn-threshing floors, with wooden pavements such as those in use in the streets of London. The blocks are penned together; they require no sleepers; but are laid upon a firm cement foundation, thus affording an elastic and improved floor for threshing; and being one solid mass is impervious to rats. The cost might exceed planked floors, but we have no doubt that floors made on the plan proposed would be the best and cheapest in the end. We are happy to have it in our power to state that there is some business doing this winter in Montreal, in preparing pork and hams for the English market, and it is very probable that by the time this pork and hams reach the markets of that country, the prices will be improved, provided there is not a very large supply shipped to England from the United States. If this should be the case, we cannot compete profitably with them—it is folly to expect it. The advantages of free trade in provisions has had a long trial with us, and we certainly cannot show any proofs that we prospered much by its means. We might now make the experiment what a restricted trade might produce to us, and encourage and protect our own industry. If we do not become more prosperous under protection and encouragement than we have been under the operation of free trade, our case is indeed a hopeless one, and the country not worth living in.

Cote St. Paul, 21st February, 1843.

MONTREAL MARKETS.

FEBRUARY, 1843.

Agricultural produce of every description has been extremely low in the markets of Canada East for the last three months. The price of Butcher's meat has advanced a shade latterly, but is still low. Pork was for 15s. to 17s. 6d. per 100 lbs., but is now about 20s. Beef is also higher than it was at the time of our last Report. Good beef sells for 17s. 6d. to 25s. per 100 lbs., inferior 12s. 6d. to 15s. per 100 lbs. The retail price of beef is from 2d. to 4d. per lb., and of pork from 2d. to 3d. per lb., or perhaps a little over occasionally. Good mutton about 4d. per lb., inferior about half that price. Veal of good quality 3d. to 3½d. per lb., inferior 1s. 3d. to 3s. 9d. per quarter. Geese from 1s. 8d. to 2s. 6d.; Turkeys from 1s. 8d. to 3s. 4. each; Fowls 1s. to 1s. 3d. per couple. Fresh butter from 7½d. to 9d. per lb. Salt from 5d. to 6d. per lb. Cheese 2d. to 4d. per lb. The market is abundantly supplied with all these articles, and with vegetables and fruit that are sold cheap. The grain market has not been so low for several years. Wheat very little in market, and at 4s. 3d. to 4s. 6d. per minut. Barley from 1s. 10½d. to 2s. 6d.; Oats from 8d. to 1s.; Rye 2s. Buckwheat 2s.; Peas 1s. 8d. to 2s.; Indira corn 2s. to 2s. 3s.; Flax seed 2s. to 2s. per minut; Oatmeal from 6s. to 6s. 6d. per 112 lbs. Fine

flour per barrel from 20s. to 21s. 6d.; Coarse per cwt, 11s. Potatoes 10d. to 1s. 3d. per minut. Hay 10s. to 15s. per 1,600 lbs.; Straw 7s. 6d. to 9s. per 1,200 lbs., and hay and straw often remain over unsold for two or three days; and hence the whole price obtained for it is not sufficient to pay the expenses of sale, weighing, turnpike, &c. The farmer has to weigh and pay every day it is kept over unsold, and this charge alone takes a considerable proportion of the price of a load kept over two or three days, or perhaps more, and this we consider an unwarrantable charge, when the price of the article is so extremely low. Once paying, what is certainly a high charge for weighing, ought to satisfy the demands of our city authorities, and if a poor farmer could not sell his load the first day, he should not be charged for weighing the second or third day. Indeed if the price of hay was even remunerating we do not think a second, third, or fourth charge for weighing the same load a just one, or one that ought to be demanded. The farmer as the purchaser and consumer of goods that pay city taxes, contributes his proportion to those taxes, and therefore he should not be taxed directly and heavily for the weighing his hay and straw to support city expenditure. There is another very great drawback to the sellers of hay and straw in the Montreal market: the buyers seldom come to market, or at least do not often buy until late in the evening, however low the price. Hence, both men and horses are worn out by cold and fatigue, and the day is generally expired before their hay is off their hands, and perhaps they have a distance of from twelve to thirty miles to go home. This waste of time, and cause of great injury to men and horses, might be avoided by a regulation to close the market at two or three o'clock in the afternoon, and all hay and straw not then sold, to be put up for the next day. This may be said, would be an arbitrary regulation, but it certainly would not be more so than some other regulations that we might name, and it would have this recommendation, that it would be favourable to farmers, their servants, and horses. Few of the other classes in Montreal, would wish to suffer the same exposure for eight or ten hours of the coldest days, and in the most exposed situation within the city. When it would be understood that the market would be closed at a certain hour, the buyer and seller would prepare for this, and do business in proper time. We are confident that the waste of time, injury to horses, and expenses in taverns, that are the consequence of the present mode of doing business in our hay and straw market, is a loss to the farmer this year of low prices, of more than one-third of the whole amount he receives for what he sells. Unless there is some regulation to cure this evil, it never will cure itself, because the buyers of hay and straw may consider it will be for their interest that matters should continue as at present.

GOOD ADVICE.—If your coat is comfortable, wear it two or three months longer; no matter if the gloss is off. If you have no wife, get one; if you have, God bless her; stay at home with her, instead of spending your evenings in expensive fooleries. Be honest, frugal, plain—seek content and happiness at home—be industrious and persevering; and our word for it, if you are in debt you will soon get out of it; if your circumstances are now embarrassed, they will soon become easy, no matter who may be President, or what may be the price of stocks. —*Boo. Cul.*

PREPARATION OF HAMS OR BACON
FOR THE BRITISH MARKET.

It is somewhat remarkable that Canadian pork has been an article comparatively unknown in the British market until the present season, which may be accounted for in part from the careless manner in which it was cured: by that means it was thought only useful for sailors and convicts and for similar purposes, and was very seldom exhibited in the market for the use of the citizens.

Much credit is due to the Montreal Board of Trade for their judicious and seasonable remarks on the proper preparation of meat for the British market, which example we trust will be followed by other similar bodies.

In order that the Canadian farmers may reap the full advantage of the new trade which is about being opened to them for the article of meat, an entire revolution must take place in their mode of farming and feeding. We are aware that to effect this, that much time will be required, as but few of our farmers really understand their best interests, owing to their means of education being limited, and consequently an ardent desire for improvement is but little known or appreciated by the mass. Although the process of bringing about so desirable a change, may be attended with some little annoyance on our part, yet we do not feel daunted in making the attempt: and we feel satisfied that as soon as the British Government are apprised of the fact, that the Canadians are prepared to supply their market with salted provisions of a superior quality, that so soon will they admit the article on the same conditions that we receive their manufactured goods. In recommending modes for feeding and curing beef and pork, we trust we will be guided by the dictates of common sense, and that nothing will be recommended but what will be found profitably practical. In our last, we gave our opinions under the head of "*Berkshire Hogs*," respecting the best and most profitable breeds for the farmers to engraft on their native swine, and would beg to give a few hints in the present number about properly curing and drying hams and shoulders, which if acted upon will give an article equal to the best English hams.

Hams cut for the British market should be of an oval shape, and the shoulders may be made to imitate the hams as nearly as possible. They should be cured in the following manner:—To one hundred weight of meat, add one ounce of saltpetre, four ounces of brown sugar, and one peck of the best Liverpool salt, at three different applications; in ten or twelve days it will be sufficiently cured for hanging up. No rubbing is required as some foolishly suppose; the only necessary precautions to be used are cleanliness, security from frost, close attention to the packing of one piece snugly upon another, and the application of the due proportion of each of the ingredients as above specified. Many prefer salting their hams in casks, but the plan we prefer is to salt them on a few planks, raised a little from the ground floor of a dry and wholesome cellar, which gives the blood and that portion of the salt which is not required for the purpose of curing the meat, an opportunity to escape. If salted in tubs and attended to, and taken out of the brine at the time mentioned, the difference in the two plans will be very slight. We recommend that the old plan of allowing hams and shoulders to lay in the brine for eight or ten weeks should be abandoned, which of itself is

enough to destroy all the flavour or juices that ever were in the meat.

We have seen large quantities of pork, including whole sides, cured as above recommended, which is a *fac simile* of the English mode: and if we are to be customers of theirs we must prepare our article to suit their taste. It is not unusual to see in that country, in some of the large bacon curing establishments, thirty or forty tons piled on the floors undergoing the curing process. In applying the curing ingredients as we have cursorily described, the meat is laid up into lots or piles, and when each of the application of the same is used, the one heap takes the place of the other, and the upper pieces are laid on the floor and *visa versa*, and so on until the whole be ready for hanging up.

It is considered a difficult matter to keep dried hams or bacon from becoming rancid or rusted during the summer months. Various modes have been practised to prevent this difficulty with considerable success, such as packing in layers of fresh charcoal, and wood ashes, and others prefer whitewashing with newly slacked lime; but the plan we suggest as worthy of a trial, will prevent the rust and will keep the meat as fresh and as clean as when taken down from the hooks.

Hogs slaughtered in the months of October and November may be cured in the style already mentioned, and then be hung up in the upper apartment of a building which will admit of a free ventilation of pure air, which is the only necessary element to dry meat. In our humble opinion the drying of bacon over kitchen fires or warm rooms, is the principal cause of rust.

Hams and shoulders for exportation should be inclosed in sacks, made of cheap factory cotton or linen, which should be coated with a composition of lime, ashes, rock or Liverpool salt, which will keep insects of every description from injuring them.

If any of our readers have their doubts as to the efficacy of our plan, we trust at least they will give it a trial on a small scale, and we will go bail for the results, if the whole plan be honestly followed out; and if any feel competent to recommend a plan more likely to please their customers, and be at the same time fraught with greater advantages to the colonist, we hope they will not fail in forwarding us such for the benefit of the readers of this journal and the Province at large.

GRAND PROVINCIAL SHOW.

In a former number of this journal we promised our readers that we would give our views relative to the contemplated Grand Show of Cattle and Farming Implements, that has been spoken of as a means of giving an additional stimulus to the breeders of stock in this Province, but to do justice to the subject and the spirited gentlemen who have recommended it, we fear we would make the columns of THE CULTIVATOR offensive to some of the would be great men that take the most prominent part in managing the County and District Cattle Shows, and would therefore for the present beg to withhold them. We have, notwithstanding, five District Agricultural Societies in our "mind's eye," that are officered by the right kind of men that would take an interest in infusing a "go a-head" spirit of rivalry among the farmers of their respective districts; and if we should ever have the pleasure of witnessing the grand performance, we an-

ticipate greater things from those five districts than all the remainder of the Province beside.

As a specimen of the spirit manifested by one of the above societies, we give below an extract from a letter which we received only a few days since from their very zealous and enterprising Secretary, who, by the way, is a practical homespun farmer. In speaking of the support which should be given in aid of our feeble exertions, in removing the cloud of darkness from this our native land. He says:—"I have the satisfaction to state that our Society appear willing to patronize your efforts to the extent of their ability, not only by sending your paper *gratis* to all subscribers of ten shillings or upwards, but also have passed resolutions to oblige their committees, who have been or may be appointed to execute any trust for the society, to report the same in writing and communicate freely and fully all useful information connected with the duties assigned them, and that official and other members would be expected to communicate to you for publication, in their own simple way, whatever they might think would be of an advantage to themselves and their brother farmers to practice. In order to brighten up their memories on the subject, the society recommend the formation or organization of Farmers' Clubs or Societies on a small scale, in different neighbourhoods throughout the district, the objects of which will be to discuss matters and things connected with practical farming."

If this kind of spirit were promulgated by similar societies throughout the Province, Canada would then be in a fair way of earning the high and glorious appellation of "an English County."

We assure the esteemed friend from whom we have borrowed, for public use, unauthorizedly the above extract, that nothing would give us greater pleasure than to further the interests of the Farming Clubs which are about being organized in his district, and any doubtful questions that may arise in any of their discussions, we would be happy to give our opinion. As for the plain simple style spoken of, we would say the plainer, the better, if the communications contain practical facts that would prove useful and instructive to the mass of our readers.

We strenuously advise the organization of similar Clubs throughout the whole Province, and we flatter ourselves that the benefits derived will be of an incalculable value to every person who interests himself in the matter. A series of questions will be proposed by us from time to time, which will open a field for useful discussion for such Clubs.

TO CORRESPONDENTS.—A communication from Belleville has been received, signed "A Reader," and another from Hamilton over the signature of "A Free Trader," which will receive due attention in the April number.

The articles promised in our last, on "Wheat Culture or Preventive of Rust," have been unavoidably crowded out of the present number.

The Wood Engraver has been absent from town for some time past, which accounts for the absence of engravings, he has, however, returned, and our journal will be in future illustrated with useful engravings.

AGRICULTURAL IMPROVEMENT

BY THE EDUCATION OF THOSE WHO ARE
ENGAGED IN IT AS A PROFESSION,

BY WILLIAM EVANS,

AUTHOR OF THE TREATISE ON AGRICULTURE,
&c. &c. &c.

LETTER III.

I shall commence this number with an extract from an excellent work, *Wilder-spin's Early Discipline*:—"A strange idea is entertained by many, that education unfits persons for labour, and renders them dissatisfied with their condition in life. But what would be said, were any of the powers of the body in a certain case disused? Suppose a man were to place a bandage over his right eye—to tie up one of his hands—or to attach a ponderous weight to one of his legs—and, when asked the cause, were to reply: that the glance of that eye might make him covetous—that his hand might pick his neighbour's pocket—or that his feet might carry him into evil company—might it not be fairly replied, that his members were given to use, and not to abuse—that their abuse is no argument against their use, and that this suspension of their action was just as contrary to the wise and benevolent purpose of the CREATOR, as their wrong and guilty application? And does this reasoning fail when applied to the mind? Is not the unemployed mental faculties as opposed to the advantage of the individual as the unused physical power? Can the difference between mind and matter overturn the extraordinary principles of reasoning and of morals? Besides, how is man to be prepared for the duties he has to discharge? By mere attention to his body? Impossible. The mind must be enlightened and disciplined; and if this be neglected, the man rises but little in character above the beasts that perish, and is wholly unprepared for that state to which he ought to have aspired." In these ideas I most cordially concur, and I steadfastly believe that there is no means of teaching men to know themselves, what they are capable of doing, what they ought to do, and how they can best accomplish what they have to do, than by a useful education, constantly exercised during life, at every fitting opportunity, by good reading. If this be not the surest means to establish right principles in man—to instruct him in his duty—to make him industrious in his calling—ambitious to provide for himself, and all those who have claims on his protection, as much of reasonable enjoyment as possible—in fact, to teach him to do all that he may have to do, better than he could have done, without education, it is in vain that we should go to school, or waste our time at "Book-learning."

THE CREATOR AND GIVER OF ALL GOOD, has endowed man with faculties suitable to his condition, and though these faculties may not be given in equal measure to all, or in some cases, from accidental circumstances, may not be so full or perfect in one

as in another, yet, with, I believe, few exceptions, the faculties are capable of being improved by a proper education, to suit our circumstances, and enable every man who exercise them properly, to fill his station in society, with credit to himself, and if not in all cases, with advantage to the community, at least, without injury to them. We know by experience, that all men do not possess equal natural abilities, and cannot attain to the same degree of knowledge by education, but most men may acquire what is necessary to enable him to perform all his duties with satisfaction to himself and others.

It has often been observed to me, that education was by no means necessary to a farmer who followed the plough, and had to join constantly in all the other labours of agriculture; that it did not require much reading to instruct men to plough, to dig, to sow, to plant, or harvest. It is true, an uneducated man may perform all these works as a machine might do, but he is not capable, in all cases, and under every circumstance, of understanding the most proper and judicious mode of executing these works, and of doing all that ought to be done, so that the most favourable results shall be obtained at the least possible expense of labour or risk to the safety of the crops. A farmer who employs labourers, and is himself practically educated and qualified to direct the labour of others in every department of agriculture to the best advantage, may have his work done in the most perfect manner, notwithstanding that there should not be one of those he employed who understood the alphabet. He might direct and move them as he would a machine, though they should be perfectly ignorant of every thing connected with the art of agriculture, except the knowledge of labour which they had learned by imitation. But, let us suppose, that the person who has to direct the labour of others on his farm is uneducated, and not even well instructed in the practice of agriculture—has never had an opportunity of reading, or hearing of the valuable information that has been published on the improvement of the art of agriculture, the breeding and management of stock, and various other matters connected with his profession. How can such a man be qualified to guide himself, or direct others to profit or advantage? *It cannot be, nor never has been.*

After a good deal of observation, and some experience, in the Old Country and in Canada, I am fully persuaded that it is necessary to understand perfectly the theory and practice of agriculture, in order to practice the art properly, and at the same time, with the advantage it is capable of. A man of capital, though he should be ignorant of the practical part of farming, may, by employing qualified farm-servants, have all the work executed in the most scientific style; but I have reason to believe that this kind of farming is not the most profitable in this, or in any other country. I look upon farming as a regular profession that

requires to be understood theoretically and practically. and those who will practice it without being duly qualified, may expect that success that a man would have in any other profession, of the theory and practice of which he was wholly ignorant. There may be exceptions to this general rule, but I believe "they are few and far between."

Good management in husbandry, is that which will produce annually, from a given quantity of land, the greatest or most valuable product, at the least expense, and at the same time not exhaust the soil. This is what I understand to be profitable and successful farming, both for the individual and for the whole community. A farmer, under such circumstances, will have it in his power, with all those who are dependant on him, to enjoy a larger portion of the comforts and conveniences of life, than those who raise only a scanty produce; and being able to purchase and consume more of the necessities and conveniences of life, he contributes towards the profits of other classes not agricultural. A farmer who can thus successfully practice his art, may well consider himself at the head of all other professions, *in usefulness in every way*, because he furnishes the means by which alone commerce and every other business is carried on. Were farmers only to produce what was necessary for the support of their own class, no other trade or profession could exist in the world. Is it desirable then, that every agriculturist should be capable of practicing his profession in the most perfect and profitable manner, so that land and stock shall yield the largest returns, that judicious cultivation and management will give? If this is "devoutly to be wished," the only way to accomplish it is, by encouraging and promoting useful education among the agricultural class by every possible means.

By reading the many excellent works on agriculture, that are published in Britain, France, the Netherlands, and other places, farmers will be able, with their practical experience, to attain a useful knowledge of their profession. And by reading other good books, they will make themselves acquainted with men and things, of other countries, their manners and habits; and thus they will obtain by degrees a perfect knowledge of what they ought to do, in every circumstance, and how to do it. I know it is by such means they will acquire a taste for improved agriculture, and for the reasonable enjoyments of life, without which, improvement will never advance one step. Persons may feel very well content with their situation and circumstances, and want none of the actual necessities of existence. But the question is, could their situation and circumstances be improved, and what are considered the means of happiness augmented, by a better and more perfect knowledge of their profession, which they might attain? I would almost say, that it was *sinful* for persons so circumstanced to remain contented, if they were sensible of the fact, that their condition was

perfectly capable of being infinitely improved, for their own very great advantage, and also for that of the whole community. An abundant production obtained from the earth by judicious agriculture, will, in every country, except, perhaps in Ireland, be followed by an increased consumption of the necessaries, conveniences, and elegancies of life; and, I believe, this is a state of things anxiously desired, by all who inhabit this earth, and who enjoy the advantages of education. Yes, I would say, it is the main-spring of all their exertions.

Excluding from this question, every consideration of profit, of pounds, shillings, and pence, which might result from the improvement of agriculture through the education of those engaged in it as a profession, I would take leave to say, that there is not so favourable an opportunity for men in any other profession or employment, to enjoy the real pleasures, that education, science, and the study of nature in the works of PROVIDENCE afford, as that which is almost constantly in the power of the agriculturist. Why should he not then be able to avail himself of these opportunities, by qualifying himself to enjoy them? Is it because his employment is occasionally laborious, that he should not be educated like other men, or that education would not produce so much benefit, delight, and pleasure to him, as to those who reside in cities and towns? Is the mind of the farmer less capable of cultivation and improvement by education than the minds of other men? Mind is the man, and the man must be what he knoweth, and his value to himself, to his friends, and to society will be proportioned to the quantity of good fruits produced from the right exercise of his knowledge. Is not knowledge then worth seeking for, and greatly to be desired? Most earnestly do I wish that it was in my power to persuade those whom I address that it is so, and to think seriously on these matters, in which they are deeply interested. If the uneducated were only made sensible of the disadvantages they labour under from this want, in many respects, as well as that occasioned by a defective system of agricultural management, they would be sure to endeavour to provide a remedy for this evil, that the rising generation should not suffer for want of useful instruction, as all those must do that are now without education, and too far advanced in years to obtain it.

IMPORTANCE OF WARMTH IN FEEDING CATTLE.—At the Clithero Agricultural Meeting last week, Dr. Garstaug, of Clithero, read a communication from Professor Playfair, and we have been favoured with the following extracts from it:—"Heat is, therefore, an equivalent for food, and by a knowledge of this fact, we may economise the latter very considerably. We know that cattle fatten much more slowly in winter than in summer, the reason being that part of the food is expended in the production of the necessary heat. Lord Ducie was kind enough to communicate to me an experiment of his in which 100 sheep were fed in the open air, and another 100 in the

same space with sheds to retire into at pleasure. The first lot eat 25 lbs. of Swedes per day; the latter only 20 lbs. Although this lot, with 5 lbs. a day less, had gained on an average 2 lbs. per sheep more than the last at the conclusion of the experiment. I may also refer to Mr. Childer's beautiful experiments, as recounted in the Journal of the Royal Agricultural Society. By this post I have received a letter from General Sir H. Elphinstone, describing the remarkable success on his land of certain chemical manures which I recommended him to try. He had for example, a soil which was considered incapable of maturing the grains of wheat. We found the soil destitute of magnesia, a substance which the grains require. He, therefore, manured the land with equal parts Epsom salts (sulphate of magnesia) and nitrate of potash, and obtained a fine crop, which is very full in the ear. The straw was small, like all other wheats this year, which is owing to the deficiency of rain to dissolve the silicate of potash from the soil; this being necessary to form substance for the straw.—*Eng. paper.*

WINTER MANAGEMENT OF BEES.

Some persons leave their bees out without any protection during the cold season, others have a shed open in front. In either way they are liable to losses which might be avoided with good management. Large swarms generally produce warmth enough to protect them in severe weather, yet they are liable to injury or destruction by exposure.

By snow and ice the door of the hive becomes stopped up and the bees are suffocated. Feeble swarms suffer by severe cold, as they produce but little heat. The perspiration that is continually passing off from them, gathers around them on the hive and comb and freezes there. The bees keep in a close body and eat the honey that is near them, but they will not venture out in the cold region.

Sometimes they move upward, if there be not frost on the comb above them, and eat the honey as they go in a small space to the top, and then starve with a plenty of honey. We lost several swarms in this way, as we ascertained by close inspection, before we were aware of this danger.

When the bee-house is open in front, the sun shines on the hives in a warm day, revives the bees, they fly out, become chilled, fall on the snow and cannot recover. In this way thousands are lost for want of a little care. Sometimes the perspiration from the bees runs down to the bottom and there finding a colder region freezes and stops up the door and the bees die for want of air.

We will now point out a remedy for these evils. In the first place, there should be a hole for ventilation, some distance from the bottom of the hive; in that place it will not be so likely to be stopped up with ice. A better way than this, though attended with more trouble, is to place under them a box eight or ten inches high, or higher, with a door at the bottom for ventilation, as at the bottom of the hive. This will give them more air, and the perspiration will run down below the bees, and prevent that moisture which is caused by its being confined to the hive; and this way gives a supply of air. See that the box is so well fitted to the hive, and the door and ventilation so small as not to admit mice—not even small ones.

Board up the house closely, in order to keep it warm and dark, and prevent the admission of snow. Then the sun will not

shine on the hives to revive the bees, so that they will not be likely to come out of their hives, especially if the house be made rather dark. In this state they should remain till warm weather in the spring, when they can fly out in safety.

Small swarms that are liable to suffer with the cold, and those that have but little honey, may be wintered in good condition by burying in the ground, when they might perish by reason of the cold, or starve on the scanty allowance, if kept above ground.

In burying bees, choose a place where the soil is sandy or gravelly, that it may continue dry, and dig a hole, so that the whole hive may be buried below the regions of the frost. Lay some straw in the bottom of the hole, then place the hive, without the bottom board, over the straw, and elevated 8 or 12 inches above it. Then put straw round the lower part of the hive, and the earth should be dug away, so that the straw may be 8 or 10 inches thick round this part of the hive, and lay the straw up so high that it will continue around the bottom after the earth is thrown upon it. Then throw in the earth, and heap it up over the hive, so that it will throw off the water. Let the bees remain till it is sufficiently warm for them to go out, and when taken out place them immediately on a board, and close the door till they can be placed on the stand; else the bees will fly out in a short time, and you must wait till they go back.

A bee-master informs us that he has practiced this way with excellent success. The bees eat not half so much honey as they do in the usual way; some swarms eat not more than three or four pounds in a winter, and they come out in fine condition. As they are in the dark and not liable to the changes of the weather, they lie in a dormant state. He says that he has bought light swarms in the fall for only one dollar each, as they had only a few pounds of honey, and by burying them they have wintered well and done well in the ensuing season.

Some writer, Thatcher, we believe, says that from experiments this is found to be an excellent method, though it is contrary to reason, in depriving the bees of pure air. We consider the plan founded on reason. It gives the bees a proper degree of warmth, and an even temperature, and they are free from all the various changes and noise of this ever-varying and busy noisy world, so that they rest in peace, quiet, and comfort, like a bear in his den, till the season of work arrives, when, refreshed and vigorous from their long rest, they come forth to their labours. A small swarm generally has a good cant room in their hive, there is a space below the hive, and they have the advantages of the air in the straw, and there is doubtless a circulation of air in the earth; and as the bees are still, they require less air for respiration. So we think this system of winter management is founded on reason, as well as supported by facts. And by following it, bees will be a great deal more profitable.—*Boston Farmers' Journal.*

TO CURE A BURN.—A Quakeress preacher in New York, was so successful in curing burns, that many of the lower class supposed her possessed of the power of working miracles. The following is the receipt for the medicine:—Take one ounce of beeswax with four ounces of Burgundy pitch, simmered together in an earthen vessel, in as much sweet oil as will soften them into the consistency of salve when cool. Stir the liquid when taken from the fire, till quite cool. Keep it from the air in a tight box or

jar. When used, spread it thinly on a cloth and apply it to the part injured. Open the burn with a needle to let out the water till it heals.—*Ams. Far.*

UNBURNT BRICK HOUSES.

We received a few days since a note from a friend of ours, who resides in the Brock District, in which he desires further information relative to the mode of constructing the above cheap, durable, and warm houses. We heartily respond to the call, and take pleasure in not only answering his inquiries, but will give such additional facts as suggest to our mind at the present moment; and if any other inquiries are made by the same, or any other respectable party, on the above or in fact any other subject upon which we feel competent to give correct and satisfactory answers, we would take a pleasure in disposing of them in the same way.

The bricks referred to for the construction of the inside walls and chimneys, may be made almost any size to suit the taste and convenience of the builder, but the dimensions we gave in our last are decidedly the most preferable; and are sometimes used for outside walls when the building is not more than one story high. The whole of the chimneys for two story houses may be built with unburnt brick, excepting the fire places as high as the mantel-pieces, and the portion of the chimneys that project above the roof, providing that the roof joining on to it be made so that it will not admit any water to reach the clay.

The principal object of bond timber is to attach fixtures to the wall, such as varandas, door and window sills, base and surbase, &c.; and no danger need be apprehended respecting their rotting, as the walls would have to be made impervious to water to insure their durability. It is obvious when wood is thus secured from that devouring element, that it would remain sound for centuries.

Two story houses require four pieces of timber at least four inches thick, sawn or hewn out the exact length and width of the building, which should be laid into the wall for the rafters of the varanda to rest upon, and should be laid about one inch within the outer edge of the wall. The rafters of the varanda should be attached to the lower edge of these timbers, and they as well as all other outside bond timber, should be lathed with ordinary lathing, and by this precaution the plastering will remain as sound on the timber as on any portion of the building.

October is the best month in the year for plastering outside walls, as it would be dried principally by the air, which would make the process more slow and perfect.

Dr. Drury, an English gentleman, built a house on his farm on Yonge-street, twelve miles from this city, in the summer of 1836, which was neither plastered or protected with a varanda until the fall of 1838, and the wall to all appearance is as sound as

the hardest granite. This building is fifty feet long, thirty-six feet wide, and proportionably high, and certainly has the most imposing and respectable exterior show of any farm building in the Home District.

We do not recommend this description of buildings to be raised very high in the wall, although but little apprehension need be entertained, if at least one experienced workman be employed about the job.

A false notion has gained ground with many respecting the tempering of the clay, in supposing that but little care need be bestowed to that department of the business; whereas nearly the same minuteness should be observed as for burnt brick, with the exception that small stone or gravel do not materially injure them, and therefore need not be separated from it.

We highly recommend unburnt brick for the construction of sheds and stables for stock, and for every description of out buildings that are desirable for the comfort of man and beast.

HARD TIMES.

Scarcely a letter reaches us from our Agents, but greatly complains about the hardness of the times, the scarcity of money, and the unwillingness of the farmers parting with so small a sum for so useful a journal, as ours evidently must be to every man, who would practice even a tithe of what we recommend. We have made the cause of all these calamities a subject of studious investigation, and we flatter ourselves, have discovered a remedy.

As a conductor of an agricultural journal we are forced to acknowledge, that in order to point out a full remedy for the diseased state of the Province, that subjects foreign to the avowed policy of our publication would necessarily have to be discussed—these, however, will have to be dismissed from our columns, in order that our humble sheet may not be offensive to the most fastidious mind.

In pointing out evils which have existed among civilized beings from time immemorial, plainness and conciseness must be practiced by the writer, and indeed are indispensably necessary to effect the desired reformation. This style will be practiced by us, so that we may be understood by the common class of farmers and mechanics, and will also be of that character that will warrant our articles being not only read and appreciated by these classes, but we trust practiced; and when once properly practiced in all their bearings, the benefit will be theirs.

From what we have remarked, our readers may possibly anticipate a series of articles arranged under the appropriate heading "*Remedy for the Times*;" but we would remind them that this will not be the case. We have concluded, to devote in future, the larger proportion of this paper to the all-important question; and every article of

ours, as well as selected, will, we trust, be admirably calculated to aid in bringing about a new and healthy state of things in this important colony.

Although certain features of the times are remarkable in their nature and effects; and the commercial and agricultural embarrassment and distress are greater than they have been in the Province during the last twenty-five years, yet we should be thankful that we are not in a worse condition.

The Canadian agriculturist is in a truly enviable position when compared with the same class in the United States. The spirit of speculation has run so high within the last few years in that country, that it has, in some states of the Union, become a rare thing to find a farmer "free and independent"—or in other words, his freehold property unencumbered. Independent of this fact, the taxes direct and indirect are three times as great as ours; and the currency is so deranged, that the mass of the bank promissory notes are like so many filthy rags. The picture we have drawn, although correct to the very letter, might be considered by a prejudiced mind rather exaggerated, to convince such that we are not actuated by any improper motive, we beg to give an extract from a journal of a high and indisputable character published on the spot. A correspondent of *The St. Louis Republican*, writes under date of the 11th of January last:—

"The Secretary of State appeared within the bar of the House, and read to that body a communication from the Governor, urging upon the Legislature the immediate necessity of action in regard to the finances of the State. He affirmed that for want of means, it was with the utmost difficulty that necessary supplies could be procured for the two branches of the Legislature, and when they were, it was at most exorbitant prices. Wood which he stated could be purchased for one dollar and seventy-five cents cash, the State now had to pay three dollars and a half for; candles, which for money could be procured at thirty-seven cents per pound, now cost the State one dollar, and other things at the same proportion: all arising from the fact that there was nothing but auditors' warrants to pay them with. He also stated that it was with the greatest difficulty that money enough could be procured to pay the postage on letters addressed to the Executive department, and entreated that some action might be had in regard to the finances of the state at once."

We think that we have clearly shown that Canada is not in a worse condition than her neighbouring States; and in our next will make some allusions to the present state of the farming interests in Great Britain, and compare the difficulties which the English farmer have to surmount in comparison with the farming classes in this Province.

Mr. PORE.—The expletive Pope generally used by way of oath was "God mend me." One day, in a dispute with a hackney coachman, he made use of this expression—"Mend you!" (said the coachman) it would not be half the trouble to make a new one.

For The Cultivator.

Resolutions passed at a public meeting of the inhabitants of Newmarket and its vicinity, held at the Christian Meeting House on the nineteenth ult.

1st. That we are of opinion that the best interests of society, the advancement of sound practical knowledge, the promotion of health, and the preservation of morals, equally demand at this time an extension of the basis of public education among the labouring youth of our country.

2nd. That for the attainment of these objects, vitally important to the harmonious action of our free institutions, and the welfare of all those under their controul, we are of opinion that the manual labouring principle combines advantages decidedly superior to any other as regards economy, practicability, and efficiency for the end in view.

3rd. That institutions founded on this principle are capable of opening the portals of science to all without distinction, the poor as well as the rich almost without fee or reward, and as a means of preparing teachers, properly qualified to supply the demands of our common schools which are notoriously lamentably deficient, would be at this time incalculably valuable, if founded in every district of our country.

4th. That we are of opinion that the public funds of the Province could not be applied to a more noble and praiseworthy object than the encouragement of such institutions—institutions which are capable of placing within the reach of the labouring youth of our country, the means of acquiring a much more extensive, scientific, and practically useful education than has ever yet been within the power of the labouring community either in ancient or modern times; and which affords almost the only facilities for introducing the aids of science, and philosophy into the daily operations of industry, while by fostering a noble and generous spirit of improvement, they contribute to moral and intellectual elevation, and at the same time give dignity to labour and the mechanical arts.

5th. That deeply impressed with these views this meeting will use every endeavour to establish an institution on the Manual Labouring Principle in this vicinity, and that the style and designation of said institution shall be "The Canada Union Manual Labour Institution."

6th. That the course of instruction pursued in the said institution shall embrace the usual routine of a liberal school education, and in addition thereto will be taught the natural and mechanical sciences, including the laws of animal and vegetable life, Geology, Chemistry, Botany, Physiology, Natural and Experimental Philosophy, Scientific Agriculture, the laws of mechanical science, including the use, combination, mode of action, &c.; of the mechanical powers and their capacity for aiding the daily operations of industry, the whole will

form a system in which our mechanics, artisans, and farmers old and young will be equally improved, benefited and delighted.

7th. That for the accomplishment of the various ends of said institution, shall be provided—1st. Suitable buildings for the accommodations of the students and the necessary officers of the establishment. 2nd. A suitable Cabinet and apparatus for the purpose of experiment and illustration. 3rd. The necessary workshops and tools for the business of the mechanical department. 4th. A farm of not less than 200 acres for the practice and developement of the principles of scientific agriculture, including every thing that relates to cropping, draining, fencing, raising of stock, analization of soils, vegetable chemistry, horticulture, &c.; in this department the design will be to exhibit science as the handmaid of profit and economy, and to form a model that may be safely imitated.

8th. That for the purpose of carrying into effect the foregoing objects and of giving efficiency thereto, a sum of not less than Three Thousand Pounds will be required, and that Books of Subscription shall be immediately opened, and a petition to the Legislature prepared, soliciting the aid of that body in raising the said sum; and that George Lount, Esqr., M. P. Empey, Esqr., and Dr. Hunter shall be the committee for preparing the said petition.

9th. That the government of the said institution shall be by Seven Directors, elected by Trustees, who have been previously elected by the Stockholders of each Township.

10th. That any person subscribing five shillings shall be a stockholder, and entitled to purchase a scholarship, also to vote in the election of trustees; that the price of each scholarship shall be two pounds per annum, and that the proceeds thereof are to be applied to the payment of the Superintendent and Teachers.

11th. That every person subscribing two pounds shall be eligible to be elected a trustee and to purchase two scholarships; and any one subscribing five pounds may be elected a director and have the privilege of purchasing three scholarships: all subscriptions from one to five pounds to be paid in three annual instalments.

12th. Persons subscribing ten pounds to be life trustees and entitled to life scholarship without further payment, payable in four annual instalments; and persons subscribing twenty-five pounds or upwards to be life directors, and entitled to act with those chosen by the trustees, and in addition thereto to have three life scholarships without further payments: all sums over ten pounds to be paid in five annual instalments.

13th. All privileges of scholarship to be transferable, and in case of the death of any life director before the expiration of twenty years from the opening of the institution, their privileges are secured to their families for that period.

14th. That on a certain day in each year after the first two, the stockholders of each township shall meet and elect one trustee, but in case of there being a less number than ten stockholders in any one township, they shall vote in the adjoining township.

15th. That the trustees shall meet annually (except the first two years), in one or more convenient places in each District to be named by the President of the Board of Directors, and shall elect by ballot the directors for the ensuing year; that they shall appoint a Chairman and Secretary from among themselves at such meetings; and that it shall be the duty of these officers to transmit the state of the poll to the President of the Board of Directors to be by him communicated to the board, and that all elections of the officers of this institution shall be by ballot.

16th. That the duty of the first Board of Directors shall be to choose a suitable location for the institution, engage the necessary quantity of land, determine the extent and construction of buildings, provide materials, enter into contracts, issue orders for collecting subscriptions, engage the Superintendent and Teachers, and put every thing connected with the institution into operation.

17th. That the Students in this institution will be required to labour diligently not to exceed five hours per day, and that the only compensation of such labour will be board and washing and instruction at least six hours more.

18th. That no person can receive the benefit of the institution, but such as are stockholders and have purchased one or more scholarships.

19th. That three of the Board of Directors shall be a quorum, and the oldest present shall preside as chairman in the absence of the President, and that the Board shall have power to form its By-laws for the regulation of the institution.

20th. That a temporary Board of Directors shall be chosen at the first general meeting, and continue in office until there shall be sufficient subscriptions obtained to authorize the commencement of operations; that they shall have power to appoint agents to obtain subscriptions, and when a sufficient sum has been subscribed to issue orders for electing trustees in the different townships, and also for directing the meetings of such trustees to elect the directors.

21st. That every one entrusted with the funds of this institution shall give ample security for the same, and that no collections will be authorized till a sufficiency has been subscribed to ensure the success of the institution.

The brine in which cucumbers have been preserved, is said to be fatally poisonous to cattle and hogs. One of our citizens a few weeks back lost a cow from her having eaten a great quantity of pickles which had been thrown out in an exposed situation.



To the Editor of The British American Cultivator

MONTREAL, January, 1843.

DEAR SIR,

If it be an object of the first importance to the wealth, strength, and prosperity of a nation, that its agriculture should be fostered and advanced to its utmost capable extent of perfection, and I believe no person of common intelligence ever denied it; then it necessarily follows that it is the duty of every man, who wishes well to his country, whatever may be his rank, station, or employment, to contribute as far as it may be in his power to its promotion and encouragement, and to the removal of any obstructions or impediments which may retard its success: it might seem preposterous and presumptuous perhaps to many thus to reiterate what has been so often advanced and proved by the wisest and most patriotic men of every country, but unhappily, like many other important things in this life that are universally admitted to be true, men are too subject to forget or neglect them, and hence the utility, nay the necessity of repetition which may do good, and certainly never can do harm. In my last communication, or rather request, I alluded briefly to the too high rate of wages given to farm-servants and labourers as being one of the great drawbacks to agriculture, tending to depress it, if not wholly to discourage any attempt to cultivate land to advantage for private profit or public benefit, and the object of my present letter, should you deem it not unworthy of insertion in your valuable paper, is to call the attention of farm-owners and land proprietors, to the necessity of coming to some reasonable determination upon this part of farm expenditure, not only for the sake of the future-labourer as of his employer, for from the little experience I have had, it appears obvious to me that under so great and constant an outlay of money, it would be more advantageous to allow the land to remain uncultivated, and thus a great mass of labourers be thrown out of employ, and the hopes and expectations of the emigrant frustrated, rather than give such enormous and ruinous wages as are asked, and but too universally, and often too readily given, and wholly unknown in the mother country. This I am inclined to believe is generally felt, and it is full time that some method should be devised, and generally and speedily adopted to remedy an evil which in the end, for the reasons before expressed must prove equally injurious to the proprietors as to the labouring class itself, and to the country generally. Far be it from me to

write or do any thing that could be considered as unjust towards so necessary and useful a class of men as farm-servants and labourers, I wish them well and that they should receive an adequate remuneration for their labour, and am desirous of employing as many of them as my means and the extent of my farm will justify, and that may be necessary to carry on the improved system of agriculture, for such I conceive to be my duty as a member of society, and that as a landholder I should endeavour to raise as much possible produce from the soil as can be obtained from it, but it never entered into the head of any but a madman, that as a land proprietor he should ruin himself by neglecting to adopt that just (not niggardly) economy is his farm arrangements and expenditures, without which neither the public nor himself would be eventually benefited. I have been ever the friend of the emigrant, and many, very many of my fellow-subjects from the British Isles, within the last forty years, have been fed, housed, and supported by me, I shall say nothing as to the results, as it would be a selfish digression from my object in now addressing you, it is enough to say it ended in a complete sacrifice of my means and in other respects afforded me but little satisfaction. There can be little doubt that the emigration of well disposed and active labourers to this country may, under proper regulations, be productive of equal benefit to the emigrant and the landholder and consequently to the Province at large, and I am convinced that there is ample employment to be found for them, if they are really industrious and will be content with moderate wages; nor am I inclined to think that emigrants experience so much distress on landing in Canada, as some from an excess of charity are inclined to believe; it cannot however be matter of surprise if among the great number that yearly reach our shore some instances of destitution should occur, loudly calling for the aid of a benevolent and generous public, but beyond these, the best charity that can be exercised is to give them the correct and wholesome advice they so much need, (if they will attend to it), or employment if you have any to give them, and then it will not be long before they will demand the wages of a first rate servant or they will quit you, expecting no doubt to realize their golden and visionary dreams of sudden acquired wealth and independence, and will go where they think they must obtain what they style decent wages, which it may be remarked is always above six dollars a month and their board, six dollars and board not being esteemed decent; and yet there are none of them I have met with whose services were worth that sum, for whatever may be their representations to the contrary, it will be found they have every thing to learn, and with but a few exceptions they are below mediocrity, neglect their

work, or, at best, perform it in a careless manner; with such the watchful eye of the master is constantly required not only to urge them to work but to instruct them how to perform it, that is if he would avoid great loss and a great deal of vexation. The extravagant ideas and expectations which are generally entertained by the labouring class who emigrate to Canada, whether created in their minds before they leave home, or on their arrival here, are for the most part the cause of the high wages demanded, and it is known that many of them will remain idle until the last moment, that is until pinched by absolute want, and even beg, rather than work for moderate and reasonable wages, and such as a farmer or land proprietor can afford to give, and even which the emigrant never could have thought of much less obtained in his own country: it is however natural to suppose that if they found that others were receiving high wages, that they would expect and demand the same, this however obviously arises from the imprudence and folly of the employer who gives such wages, which he ought to know are far beyond the value of the services to be rendered even in prosperous times, but how much more when from so many adverse circumstances the prices of all farm produce are so ruinously low, and so discouraging to the efforts of the agriculturist. Moreover there is evidently a covetous and selfish principle which strongly pervades nine-tenths of the labouring class, a sense of duty to their employer or the obligation to serve him diligently therefore do not enter into their consideration, nor do they discover any solicitude for the interest of their employers; an instance lately occurred which may explain my meaning better than any reasoning upon the subject. A man was engaged to work on a farm of one of our landholders at the high rate of ten dollars a month and his board, he had three stout fellows from his own country engaged to assist him, but of course at less wages, after some weeks the three assistants were all paid off and discharged, the complaint being that when he was not with them, which I fear was often the case, they did not work, and moreover one of them was heard to say to his companions that he had no idea of fagging where another was to get all the credit; and such appeared to be the sentiment and determination of the whole three; other labourers were in consequence employed and the work went on, or should have done so, at last the result of the season proved that the foreman was no better than the others, was shy of, and adverse to, hard work, or indeed of constant work of any kind, and the interest of his employer did not seem to be more a consideration with him than with those who had been discharged, he was then notified that during the winter months his employer could not afford to give him the same high

wages, and six dollars per month were offered him during the winter, he said he was aware the produce of the farm would not pay the expense of working it, and yet at the same time spurned at the idea of taking the proposed reduced wages, observing inconsistently that for his part he did not think ten dollars per month at all too much, although he just before admitted that he knew the farm would not repay such wages. Ashamed, I presume, of being considered either from incapacity or idleness an unprofitable servant, he observed to a person afterwards that he never knew a farm so badly managed, no doubt wishing to insinuate that L. had been interfered with when he had in truth been left wholly to himself, and every thing he deemed necessary or required for the cultivation of the farm was without delay provided, even things which he never brought into use. His employer, fully satisfied that the farm had been mismanaged, as the foreman had incautiously declared, was therefore not sorry to part with one who with so much boast at the outset, had completely proved himself inefficient. All this may appear mysterious to some who might naturally inquire where was the employer, and why did he not discover and timely remedy any deficiencies, the truth must be told, the employer was not a farmer, and was otherwise employed; he thought her had a treasure, so many were the rare and good qualifications the foreman laid claim to, and it was not until the close of the season, that is after harvest, that the employer discovered that the man to whom he had confided the management of his farm, although honest and sober, was indolent, self-sufficient, inadequate, careless, and without method, and his fall mornings passed not in the field but in pacing about leisurely with a pipe in his mouth and his hands in his breeches pockets, waiting for a substantial breakfast to rouse him to something like active exertion. I have myself been much deceived in the labourers I have generally employed to work my farm to advantage, impressed as I had been with the idea that emigrants of that class had suffered so much in the old country from a want of employment and consequent poor living, and that many from their infancy had been accustomed to a scanty allowance of the poorest food; I expected to find them humble, industrious, thankful, and moderate in their demands, but experience has taught me, that although the above facts, upon which I built my expectations were true, yet these men were discontented, unreasonable, ungrateful, and ready to find fault with every thing, and though not required to do more than ordinary work, necessary even to keep them in health, they often complained of what they termed too hard work, and were withal very dainty in regard to their food, indeed most of them are of so unsteady and roving a disposition, that they do not appear

to know when they are well off, or aware of the importance of having a quiet and comfortable home, continued employment, and a kind employer; and the consequence is, and as might naturally be expected, that after changing from place to place and obtaining only occasional employment, even at high wages, yet after a lapse of two or three years they find themselves worse off than when they landed in America, penniless and in rags, while at the same time a steady and contented farm-servant will have, within that period, deposited in the Savings Bank from £30. to £40., and is at the same time possessed of a good stock of wearing apparel. Notwithstanding, however, all that I have before stated, I am persuaded that that class of emigrants, namely, labourers and farm-servants, might with just and proper management, prove a valuable acquisition to our population, although unhappily from necessity and want of employment they may have acquired bad and idle habits in their native land, which they find it afterwards difficult to overcome, they therefore overrate their services and easily persuade themselves they have made wonderful exertions, when in reality they may not have done more than one half the labour that a servant of industrious habits will accomplish: we know, however, that the class of emigrants to which my observations apply, has had the virtue and fortitude to conquer one bad habit, and that most of those who of late have emigrated to Canada no longer indulge in the use of ardent spirits, and are honest; they should therefore be encouraged, though not spoiled, but treated with becoming consideration, not certainly overworked, but required to do as much as a faithful servant can and ought to do, and indeed in no country is a hired servant on a farm better, or so well off as in Canada; he is well fed and comfortably housed, has Sundays and Holidays to attend divine worship, and if faithful and diligent will obtain the esteem and good wishes of his employer and family, and being removed from those temptations to be found in most other situations, he may with moderate wages, after a small deduction for wearing apparel, be able in a few years to save a sufficient sum to form an establishment for himself, having gained an experience and knowledge of the climate and resources of the country, and acquired not only a degree of skill but a habit of industry, all obtained during such service — advantages from which he was in a great measure debarred in his native land, and which his happy change has afforded him. It is now high time Mr. Editor that I had brought my observations to a close, they having been already I fear, extended too far and put your patience to a trial, to conclude therefore I would recommend to all farmers and landholders to come to a proper understanding, in order to fix a just and reasonable rate of wages, to which rate when established all should scrupulously adhere, in order that it may not afterwards afford a pretext for demanding too high wages; that such are given

by Mr. —. In fixing such rate of wages the interest of both parties ought undoubtedly to be duly weighed and considered, that a reciprocity of advantage may prevail, without which all hopes of an extended cultivation of the soil must be abandoned: the servant must not be allowed what would inevitably impoverish his employer, nor on the other hand the employer become rich by oppressing or by underrating the value of the labour of his servants, it may be therefore a delicate conclusion; but this every man of common intelligence and experience must admit that if labour is too high and out of proportion to the value of farm produce, the agriculture of the country cannot be advanced but must retrograde. At all times happy to be corrected where I have erred, and to receive the instruction I may be found to need, it will afford me much gratification if at your convenience you would indulge the public with your own views of the subject of this letter, and also your opinion what kind of fare you would recommend to be provided for farm-servants at their several meals, such as in your estimation an employer ought to furnish and a farm-servant ought to be content with; and now apologising for having occupied so much of your valuable time, I subscribe myself your obliged friend and well-wisher,

A FARMER.

To the Editor of The British American Cultivator.

SIR,

Having observed with much satisfaction, and I trust some profit, the very interesting manner in which you have collected and laid before the public the doings of Agricultural Societies; the granting of Premiums; the state of the Crops; the Markets, &c., for the purpose of exciting a generous emulation among farmers for the general benefit of agriculture, by your leave I will furnish you with a chapter on these subjects.

1st. PREMIUMS.—I obtained a premium some time since, and like other people I wish to make it known, and as it will not get out by the Agricultural Society I must tell it myself. In October last, I took a lot of wool about 400 lbs. weight, to the West Flamboro' factory, to exchange about four-fifths of it for cloth upon the factory terms, and on returning a short time after, the manufacturer freely, voluntarily, and of his own assent made a present of several yards of his best flannel, at the same time saying my lot of wool, using his own expression, was the best handled lot of wool he had ever seen in America, although he had seen finer. Now, if I should inform you the means by which it became so, it may be of use to some body. As to the fineness of wool, I formerly improved my stock for that purpose, until the carders and manufacturers could do nothing with it but spoil it, I therefore abated that branch of improvement. Since, however, the manufacturers tell me they have machinery that will work wool of any fineness. But the secret is this, I

carefully watch the growth of all sorts of burs through the summer and pull them up, and spare no pains nor distance to place them in a situation where they can do no harm, so that I may venture to say my sheep are kept free from them. I extend this labour and precaution not only to the fields but to my wood lands, as far as my sheep and cattle are allowed to range. The whole time occupied in the summer season does not cost more than two or three days of my own labour. The next point to observe in having a well handled lot of wool, is to keep the sheep in good condition by giving them plenty of feed, and by never housing them in close pens winter or summer, and by clipping off all dirty tag locks when they make their first appearance.

In my travels about the country, I have been astonished to see the prevailing carelessness among farmers in allowing burs to grow in front of their own farms, in the fields and sometimes to the very front of their dwellings. Of course in such cases, sheep, cattle, and horses are completely covered with this pest to the tidy farmers, and the wool is not only uncomfortable to the sheep, but is of but little value and is very destructive of machinery in its manufacture; and all this results from the want of two or three days work of some useless old man or little boy, annually bestowed to this department of farming.

Now for a few remarks on the crops:—I have been during the past season, through nearly all parts of the Gore District. Some portions of the crop is abundant; oats far exceeds the usual average; hay rather short on clay lands, but abundant where plastered; barley good; potatoes middling; wheat, the ready money article and great staple, very variable, in some places full and good, and in others much hurt from early drought and late rains. The earliest sown is the best both of winter and summer wheat, and great complaints of smut in many places. In the early part of last December I passed through West Flamboro', Puslench, and Guelph townships; part of this route is thinly settled. The rear of Puslench is of a very fine quality of land, so is the approaches to the town of Guelph excellent. Farms in this vicinity are of the first quality, although there was rather a falling off in the crops the last season both in quantity and quality, owing perhaps to the heavy frosts which were prevalent in the early part of last summer. After passing through rather a rough part of the country and bad roads, I arrived at the beautifully situated and pleasant and flourishing town of Guelph 27 miles from Dundas, and 30 from Wellington Square.

On my return I passed through a corner of Eramosa, and through Nasaguawa and Nelson's to Wellington Square. Some parts of the route are beautiful, some rough, and

bad roads as in Flamboro' and Puslench, and the same complaints about the wheat crops.

With regard to smut, I got rid of it after trying every other experiment, by changing the seed, which I procured from a soil different from mine and of farmers who never grew smut, chess, or cockle. I change my seed as above every two years, and the result is that I am never troubled with any of the calamities mentioned in the foregoing remarks.

The farmers not only complain of the falling short in their calculations respecting the yield of their crops, but they only obtain one-half the price for their wheat, flour, beef, pork, wool, mutton, butter, cheese or any thing else their farms may produce, in consequence of the carelessness practiced in the routine of the management of their farms and crops.

Whoever will be at the trouble to investigate the matter, will find that although the country is amply supplied with provisions of every description, and a considerable quantity to spare, that the amount of several important articles of agricultural productions are diminishing rather than increasing. There is such a rage for American wheat by Canadian millers, and our markets are so completely glutted with American beef, pork, mutton, cheese, and every other United States agricultural production, that the farmers are obliged to desist growing those products for the market, to the same extent that they formerly did, owing to the fact that the great disparity between the prices of labour and the products from the farm, would not admit of hiring labourers.

The Gore District is abundantly well stocked with horned cattle, swine, and sheep, and might have exported this present season three times the amount of salted provisions, had the prices been such as would have remunerated the producer.

With respect to sheep, the country is full of them, so that the manufacturers are entirely over stocked with wool. There was a sale of three hundred sheep in this township last fall, which was advertised long before the sale, and they sold upon credit at 2-4 to 4-4½ per head: notwithstanding this, I am safe in saying, that there has passed up to the Gore District during the last three months of 1842, not less than 4,000 sheep purchased in the United States. In Hamilton market mutton has been sold out of farmers waggons at from 1s. 3d. to 1s. 10d. per quarter, and beef has been actually sold at from 6s. to 9s. per 100 lbs., so that beef, mutton, and cheese are sold generally in our markets at prices much lower than the duties which the Canadian farmers would have to pay, before they could get the same description of articles admitted into the United States market.

The American Government protects their farmers against all foreign competition, and we are comparatively neglected by the speculating jobbers who stand at the head of our government: and to make the matter still worse, it is said the Banks discount very little, and how can they when they have to meet the mercantile trade and the provision market. It is thought that the Currency Law has had some share in bringing about the general depression; let that be as it may, so long as the interests of a few speculators are made paramount to the interests of the many farmers and other producers, so long will British America be unable to supply the British markets with provisions, in exchange for the heavy importations of British manufactured goods which arrive at our shores yearly.

I am, Sir,

Yours' respectfully,

JOHN WILSON.

SALT FLEET, 30th Jan, 1843.

To the Editor of The British American Cultivator.
SIR,

As the season for planting that useful root the potatoe, is fast approaching, I beg leave to offer a few simple but hope not inappropriate remarks on the culture of that inestimable vegetable—those remarks having been acquired from actual experience. I shall now and at all other times confine myself to real facts. In the spring of 1840, I purchased at Toronto, two pounds of Rohan potatoes for fifteenpence. I planted them on the 4th of June in new land, which yielded 160 lbs. of very large potatoes. On the following year 1841, I prepared a small plot of new land equal to 17 perches, (i. e.) one perch over a tenth of a statute acre, which I also planted about the same time with similar seed, and produced 55½ bushels of very large potatoes. Last year owing to the cold spring frosts and subsequently summer drought, I had not so heavy a crop. I shall now state my mode of cultivation:—I first prepared the land by a very good harrowing; then put in the seed after the manner of planting Indian corn, but opening the ground something deeper. In each hill, which are to be three feet apart, I drop three sets, which are to be immediately covered in, and so to remain until the plants are sufficiently high to receive partial earthing, which done, a second and last earthing is performed, when the plants are sufficiently matured for that purpose. This plan I consider the most judicious as regards the bulk of crop and improvement of the soil: it also destroys all weeds. I now recommend the Rohan potatoe for extensive planting, being the most prolific I have ever met with, and from a year or two's planting in this climate becomes acclimated and an excellent potatoe for table use.

Should you deem the above worthy a place in your widely circulated and excellent journal insert it.

I remain, truly your's,

EDMUND RYALL.

Oro, February 18th, 1843.

To the Honourable the Legislative Assembly,
 &c., &c., &c.

The Petition of the Freeholders and Inhabitant Householders of the Township of Carradoc in the London District:

HUMBLY SHEWETH,

That your Petitioners are (with at most half a dozen exceptions) wholly and absolutely dependent for their support upon their avocation as agriculturists, in which many have embarked considerable money capital.

That your Petitioners presume it requires no proof from them to establish the fact that the vast majority, say nine-tenths, of the whole population of the Province are in like circumstances.

That the present low prices of agricultural produce, unnaturally conjoined with a very indifferent harvest, at least in the article of wheat, are ruinously destructive of their present prosperity and future hopes.

That your Petitioners cannot but attribute the deterioration of their productions, in a great measure, to the unrestricted admission of grain and cattle from a foreign country in which such high duties are levied, on the agricultural products of other nations, as amount in many cases, to an absolute prohibition.

That without entering upon the general soundness of the principles of free trade, your Petitioners humbly present it as their opinion that its advocates must be strangely infatuated who would attempt to hold it up as a guide to this country in its present circumstances; at any rate it can be characterized as nothing short of madness to talk of free trade and reciprocity between us and a nation whose policy is, avowedly and practically, in direct hostility to these principles; and whose interest is, in fact, and in the very nature of things, opposed to ours as an agricultural community.

That your Petitioners cannot too strongly deprecate the doctrine, that the interests of a few firms engaged in the carrying and flouring trades, is paramount in importance to that of the remainder, or rather of the great body, of the people of this corn-growing country; and they consider that so long as these trades have the uncontrolled power of importing foreign grain, and transmitting it as Colonial produce to Great Britain; they are most materially injuring the Canadian farmer by clandestinely facilitating the disposal of the products of his great natural rival, and forestalling him in the ONLY market open to him.*

That your Petitioners trust your Honourable House will be guided by that true and sound axiom, most especially applicable to this Province, that the agricultural interest forms the basis upon which rests the prosperity of every class of the community, and that in the exercise of this safe and sure policy your Honourable House will be pleased to impose such duties on foreign grain, flour, live stock, fresh and salt meat, and other agricultural produce, as will afford the Canadian farmer a full protection from the rivalry of the United States in the home market.

And your Petitioners as in duty, &c.

CARRADOC, January 2nd, 1843.

*NOTE. Imports into Great Britain of Foreign Grain from the 20th of December to 3rd January. From Canada, 3,969 Qrs. wheat and 7,360 bbls. flour. United States, 9 barrels flour!!! Why this difference? The American produce is brought to Canada and thence transmitted as Canadian; thus evading the duty which for the period quoted was on wheat: Foreign 20s.; Canadian 5s.; Flour foreign, 12s. 3d.; Canadian 3s.

To the Editor of The British American Cultivator.

SIR,

I transmit you a copy of a Petition to the two Houses of Legislature which was unanimously adopted at the annual meeting of this township, and as a fitting illustration of the evils of which it complains I will mention a case of recent occurrence.

The week before last a large drove of oxen containing at least seventy head were brought across from Ohio and driven to London. The owner endeavoured to get rid of them along the road, offering them at 10 dollars a head; as he said he was afraid that when he arrived in London he should be obliged to sell at a loss. Not, however, meeting with customers, owing to the poverty of the country, he proceeded to London and disposed of them. On his return he met with one of the persons to whom he had previously offered his choice of the drove at the above mentioned price, and a conversation ensued; in which the drover stated that he had done better than he expected, for that he had obtained \$9! a head for the lot; and all he had paid for them was \$5!! each. "And," said he, shaking his valise, "I have got the price of them here, in specie, for which I can buy as many more as I choose, and at any price I have a mind to offer; and I shall be back here with another drove in a few weeks." Being asked if the expense of driving did not eat up the profit, he said, "No for he fed them principally on oats which, on the other side of the lines, only cost him six cents a bushel!"

I will not repeat some other prices at which he stated various articles could be purchased in the States for specie, as they are so incredibly low that the very mention of them might subject me to the imputation of making a case. But, I will simply ask our legislators, millers, and carriers, upon what principle of fairness or policy are the people (i. e. the farmers) of this country to be made fellow sufferers with the victims of that over driven and fictitious system of speculation, alias, go-a-headativeness, the miserable effects of which the Americans are now enduring.

It is to be hoped that by a constitutional combination of moral energy and firmness the farmers will force upon the Legislature, the prompt and grave consideration of a subject in which, it must be apparent, the vital interest of the country is involved.

I will not at present trespass further on your valuable space, but if the subject is not taken up, as I wish it may, by abler hands, I will shortly again address you; or through you my brother-farmers, on this important topic.

I remain, Sir,

Your obedient servant,

F. JONES.

CARRADOC, 14th February, 1843.

To the Editor of The British American Cultivator

SIR,

I beg to enclose you a printed statement of the affairs of the Gore District Agricultural Society, from which you will perceive that the society is flourishing, its funds on the increase, and the efforts of many individuals in this section of the Province to increase its usefulness unabated. This society is still in its infancy, and its management is susceptible of great improvement, more particularly in matters relating to good arable farming; and I trust the time is not far distant, when premiums will be offered for the best managed farm, that best drained, best fenced, &c., &c., at present the premiums are confined to the best stock, the best samples of grain, and the best domestic manufactures.

A very convenient alteration has been made in the Cattle Shows by holding them alternately in different townships, instead of having them as formerly always in one and the same place; this arrangement, it is expected, will induce many to become members of the society who have hitherto stood aloof.

A difficulty occurs in arranging the premiums for neat cattle, on account of imported stock and their descendants, as well as crosses between them and native cattle; some of the members being desirous of making no distinction, but to give the premium to the best animal of whatever breed, whilst others wish to class the pure bred stock and even the half breeds. For my own part I think the latter plan best (though perhaps you can inform the public what is the practice in other societies), inasmuch as half bred Durhams have invariably taken the prize whenever exhibited against native stock. This class of stock is now becoming very numerous, and there are some splendid specimens in this District sired by one of Mr. Wingfield's (the importer of Mr. Howitt's stock) bulls *Rodney*, reared by Mr. Wetenhall, and sold by him to the Durham Agricultural Society, (see Albany Cultivator, vol. 8, page 194, article "Welling-ton and Gore Agricultural Societies"); also some fine animals sired by Mr. Wm. Davis' bull *Remus*, a 'walking mountain,' bred by the Hon. A. Fergusson, of Woodhill.

I believe there are only three individuals in the Gore District, who possess pure bred imported Short Horn Cows and Heifers, viz., the Hon. A. Fergusson, Mr. Wetenhall, Warden of the District, and Col. Burrows of Brantford; but there are no less than eleven different stands of pure bred bulls, viz., one in Trafalgar, two in Nelson, one in East Flamborough, one in West Flamborough, two in Dumfries, two in Brantford, one in Glandford, and one in Barton. By pure bred animals I mean those only that can be traced to the Herd Book on the side of both sire and dam. All the above animals are such. You will thus observe that, whilst the pure herds are confined to a very few individuals, pure bred bulls are making their way into every township, and thus that the breed of cattle in this District will be materially changed in the course of a few years.

I am aware that many owners of pure stock deprecate the idea of crossing, but with every respect to those gentlemen I beg to differ with them in opinion, and I venture to prophecy that many years will not elapse before inhabitants in this District will possess breeds in every respect equal to the best imported cattle, and that too without purchasing pure bred cows or heifers. I own that this process is slow, and that the readiest plan is to procure pure bred females, particularly as thus the want of pedigree and loss arising therefrom will be obviated; but still I maintain that any farmer who will select his best cows, and have them served by a good pure bred bull, and put his heifers so raised also to a pure bred bull, and thus continue step by step to approach the pure breed, will eventually have animals equal to the best imported Short Horns; the fact is that attempts to breed between crosses having generally failed, an idea is entertained that the first crosses only is valuable—but the fault lies with the breeder, who, in his ignorance, makes use of a half bred bull, instead of continually improving his stock by the services of one pure bred, according to the plan suggested above. In support of this opinion I refer to Rev. Henry Berry's pamphlet on Short Horns. I am, Sir, your well-wisher,
 HAMILTON, 23rd Feb., 1843. B. A.

DUTIES OF FARMERS.

Among the many duties which devolve upon farmers, there is none of higher importance or to which is attached a greater share of responsibility, than that of affording to the rising generation the means of instruction, and the facilities for cultivating the mind. It is in vain that we talk of improving the soil and elevating the standard of agriculture in this country, while the youth, the sons and daughters of farmers, are denied the privileges of education and moral culture, which every sound and thinking mind will admit are necessary to enable them to pursue their avocations with pleasure and profit, and to discharge in a proper manner their duty in the various relations of life.

The subject of education in schools, is of vast importance to farmers, and may with propriety be discussed in an agricultural journal; but we intend in this article only to point out some of the errors and omissions of duty with which many farmers are chargeable in the education and training of those who are soon to enter upon the stage of action, and to whom the agricultural interest must look for its friends and advocates. Education does not consist solely in the knowledge gained at schools. The history of some of our most eminent men shows that individual exertion, when aided and encouraged by parental advice and aid, may be the means of acquiring a degree of knowledge and of reaching a position which the mere advantages of school could never afford. We here repeat, what we have often in effect said, that self-culture is more neglected among farmers than any other class of persons. It is time that there was a reform in this respect, and we are happy in being able to say that there is evidence of its commencement, in the desire of agricultural reading, which pervades to some extent the youth of this country. It is the duty of those having the care of youth, to encourage the first appearance of these desires, as to form permanent habits, and a disposition for investigation, which always leads to valuable results. That father, who, when his son discovers evidences of a fondness for agricultural pursuits and an inclination to store his mind with that information which may be derived from the experience and writings of others, withholds the means of gratifying these inclinations, places himself in an unenviable position and can blame no one but himself, if his son does not pursue that course of conduct which he could desire. The youthful mind is never inactive, and if it is thwarted from its laudable inclination, will be very likely to engage in the pursuit of objects which it would be wiser to avoid. There is no subject in which the mind of young men can with more propriety be employed than in the improvement of agriculture, and we think the judgement of our readers will coincide with ours, when we say that the surest means of leading the mind to an investigation of agricultural science, and the best means of accomplishing objects or improvement, is to place before them publications which have for their aim the good of agricultural interest. Often have we heard the boy of twelve or fifteen years, urge his father to subscribe for an agricultural paper, which could be had for fifty cents or a dollar a year, promising to read it attentively, and in some instances to work out and earn the subscription money, while the father would utterly refuse to allow him the privilege of storing his mind with information, which might be the means of adding greatly to his usefulness, and prevent him from acquiring habits of dissipation and idleness.

And why is this refused? Simply because it will cost a few shillings a year, while as many dollars would perhaps be freely expended on objects which can be of no possible advantage to the youthful mind. There are hundreds of such cases even in this enlightened community, and we wish in a respectful manner to call the attention of such individuals to the subject, and to show them the nature of the responsibility which they have thus voluntarily assumed. If we would elevate the character of the farmer, we must enlist the feelings of the youth, thus enabling them well to act their part in the duties to which they will be called. Where is the man who is willing to stand in the way of improvement, by keeping as far as his influence goes, the sons and daughters of farmers, ignorant of the means of improvement which shall be extended to them in their youth. Every opportunity should be embraced to impress upon young persons the advantages, as well as the respectability of agricultural pursuits.

When we hear a young lady, and the daughter of a farmer say with an air of confidence that she cares nothing for the interests of agriculture, and that she feels far greater interest in attending balls, and dancing schools, than in reading publications devoted to the improvement of the business in which her parents have obtained an honest living, and perhaps amassed a fortune, we generally conclude that although the parents may know very well how to take care of dollars and cents, they must have neglected the education of their children, and are accountable for a violation of duty not only to their family, but to the circle in which the children are to move. We have heard young ladies openly avow the above sentiments, and have felt pained on account of their ignorance, while they supposed themselves well informed, and well educated. We are happy, however, to say that a very great portion of the females among the agricultural portion of the community, exert all their influence in favour of rural pursuits, and that much of the spirit of improvement, which is now every where witnessed as well as a great proportion of the interest which is manifested in agricultural exhibitions, may be fairly attributed to the influence of females. Let fathers and mothers discharge their duty in a proper manner, and educate their children so as to encourage rather than repress a fondness for agricultural pursuits, and the time will soon come when agriculture, instead of being looked upon with disdain, will engage the attention of the young and hold a high place among the occupations of life.

It is too often the case in this country, that young men instead of relying on their own powers of mind, to investigate the different and varied subjects connected with agricultural pursuits, rely solely on the knowledge which their father can impart, and never dream of turning aside from the track which others have pursued before them.

We recollect on one occasion meeting with a farmer whom we invited to subscribe for our journal, and inquiring the price and the objects of the paper, he inquired of his son, a young man of perhaps sixteen or eighteen years, if he would like to have an agricultural paper, to which he replied that he wanted a paper that had funny stories in it. On our remarking that a knowledge of agricultural pursuits, was of far greater consequence to a young man than a perusal of funny stories, he very promptly answered, "I can learn enough about farming from Dad." We fear that this opinion is far too prevalent among the sons of farmers in this country, and that they rely more on Dad

than on their own exertions. We ask farmers, and the friends of agriculture, to think of these things, and see whether their duty does not require that they place within the reach of the youth in their charge, information which shall enable them not only to make a proper choice of business, but which will qualify them for the proper discharge of the business of their choice.—*Central New-York Farmer.*

AGRICULTURE STATISTICS.—From an examination of the Marshall's Returns at the last United States Census, it appears—That the State of Ohio, raised more Wheat than any other State in the Union—exceeding Pennsylvania by about 8,000,000 bushels; and Pennsylvania exceeds New-York about 2,000,000 bushels; Virginia about 1,500,000 less than New-York. New-York, however, exceeds Pennsylvania in Rye, about 3,000,000 bushels—Indian Corn, 2,800,000 bushels—Oats more than 2,000,000 bushels—Buckwheat, 300,000 bushels—Barley, 2,200,000 bushels—Potatoes, 21,000,000 bushels—Wool, 1,000,000 lbs.—Hay, nearly 2,000,000 tons—Sugar, over 8,000,000 pounds and products of the dairy, upwards of \$8,000,000 dollars. The State of Tennessee raised 42,000,000 bushels of Corn, exceeding any other State in the Union. North-Carolina, 34,500,000—Virginia, 34,000,000—Illinois, 23,000,000—Michigan, 22,000,000—Alabama, 18,000,000.

Of neat Cattle, New-York possesses 2,642,433, Pennsylvania, 1,146,418; Ohio, 1,003,313. Of Sheep, New-York, has 5,331,225; Pennsylvania, 3,396,431; Ohio, 1,963,957; Vermont, 1,393,420; Virginia, 1,230,736.

In the products of the Orchard, New-York and Vermont have nearly double the amount of any other State—the former being to the amount of \$1,737,357; the latter \$1,169,287.

There are many other items which we intend to give hereafter. The resources of our country are abundant. If our citizens will only economize—purchase no more foreign articles than are absolutely necessary for their wants—the time will soon arrive, when the pressure which is so heavily felt, will pass away. We must return to a system of economy in every department of life. Frugality and industry are absolutely necessary to the prosperity of this country. We must learn to live more within ourselves, if we would be prepared for exigencies, such as we now witness.—*Id.*

INDUSTRY.—Every young man should remember that the world always has and always will honor industry. The vulgar and useless idler whose energies of mind and body are rusting for want of exercise—the mistaken being who pursues amusement as a relief to his enervated muscles or engages in exercises that produce no useful end, may look with scorn on the smutty laborer engaged in his toil. But his scorn is praise. His contempt is an honor. Honest industry will secure the respect of the wise and the good among men, and yield the rich fruit of an easy conscience and give that hearty self respect which is above all price. Toil on then young men Be diligent in business. Improve the heart and the mind and you will find the well-spring of enjoyment in your own souls and secure the confidence and respect of all those whose respect is worth an effort to obtain.

MAXIM OF HEALTH.—Sir William Temple says:—"The only way for a rich man to be healthy is to live as if he was poor, using exercise and observing abstinence."

PROGNOSTICS OF THE WEATHER.

PROGNOSTICS FURNISHED BY THE HEAVENLY BODIES.

1. *Observations of the Sun.*—*Signs of the Wind.*—The sun rises pale and remains red; his disc is very large; he appears with a red sky at the north; he maintains the colour of blood; he remains pale, with one or more obscure circles or red rays; he appears concave or hollow. When the sun seems divided or is accompanied by a parheliion, it indicates a great storm.

Signs of Rain.—The sun is obscure and as it were bathed in water; he rises red, or with black stripes mingled with his rays, or becomes blackish; he is placed above a thick cloud; he rises surrounded with a red sky in the east. Sudden rains are never of long; but when the sky is changed gradually, and the sun, moon and stars are obscured by little and little, it rains generally for six hours.

Signs of Fair Weather.—The sun rises clear, and the sky has been so during the night; the clouds which surround him at his rising take their course to the west, or indeed he is environed by a circle, provided that the circle is at equal distances on all sides; then we may expect weather constantly fair; he sets amidst red clouds, whence this popular saying, that "a red evening and a gray morning are sure signs of a fair day."

2. *Observations of the Moon.*—*Signs of the Wind.*—The moon appears very large; she puts on a reddish colour; her horns are pointed and blackish; she is surrounded by a distinct and reddish circle. If the circle is double or broken it is the sign of a tempest. At the new moon there is often a change of wind.

Signs of Rain.—Her disc is pale; the extremities of her crescent are blunted. The circle around the moon attended by a south wind, portends rain the next day. When the wind is south and the moon is visible only the fourth night, it portends much rain for the month.

Signs of the Weather.—The spots on the moon are very visible; a brilliant circle surrounds her when full. If her horns are sharp the fourth day, it will be fair till the full moon. Her discovery brilliant three days before the change or the full moon, always denotes fair weather. After each new and full moon, there is often rain followed by fair weather.

3. *Observations of the Stars.*—*Signs of Rain.*—They appear large and pale; their twinkling is imperceptible, or they are encircled. In summer when the wind blows from the east and the stars appear larger than usual, then look out for sudden rain.

Signs of Fair Weather and Cold.—The stars appear in great numbers, are brilliant and sparkle with the brightest lustre.—*From the Farm House of the XIXth Century.*

CAUTION TO MILLERS.—Under this head we find an appalling story, which may interest some of our millers to peruse.—*New-York paper.*

"Recently a Miller near Mobile, for some purpose or other, poured several pounds of melted lead in the eye of the runner stone. The lead becoming loose and working between the stones, was ground up with the corn. The meal was consumed on the plantation of Mr. James G. Lyon, and a number of his negroes were poisoned by it, some of whom died, while others were palsied and altogether hopeless. It is said to be a common thing for millers to use lead in this way, and the misfortune just related ought to be a sufficient warning against it. A similar accident occurred recently in Europe."

THE ORCHARD.

In this department there is but little to be done during the winter. The fences should be kept in repair, to prevent cattle or sheep running into them. Should the snow fall deep, and remain long on the ground, it is well to go through young orchards, and tread the snow hard about the trees, which will prevent the mice from making their nests at the root, and gnawing the bark therefrom. Should it happen, that any tree becomes so injured, by biting in a few pieces, in the spring, they may be saved. Directions for this, will be given previous to the season for doing it.

It is the practice with many, to prune their orchards during the winter; this should never be allowed, unless for the purpose of removing diseased wood, eggs of insects, &c. When large limbs are cut from trees, the young growth protrudes from between the bark, and wood much sooner when the limbs are taken off after the trees have leaved out, than when taken off in the winter.

With regard to pruning, I would say, be careful: as there are nine orchards and nurseries injured by over-pruning, to one that suffers for the want of it.

The cause for injudicious pruning, is the mistaken idea that many have, that trees derive all their nourishment from the ground, and that by taken off a large proportion of the top, the remainder will receive all the nourishment, that the whole top did before pruning. This is not correct; as by far the greatest proportion of the woody, or carbonaceous matter, is taken from the atmosphere, by the leaves, and although the roots may continue to furnish the same quantity of water, in the form of sap, as they did before the top was diminished; yet for the want of leaves to elaborate and furnish carbon, in due proportion for the process, there is not that quantity of wood formed, as when more of the leaves are allowed to remain; hence, nurseries over-trimmed, we see that the young trees have not sufficient wood, in the form of body, for their height, which often renders them worthless.—But more of this anon.

As winter is a convenient season for collecting cions for those who are wishing to improve the quality of their fruit, either in their gardens or orchards and premising that there at least a few of our readers that are not familiar with every part of the operation, we will give such directions as will enable them to attend to this part of the business themselves.

Cions should be cut, in all cases where it is convenient, from bearing trees; as in that case, there is less danger of mistake as to the quality of fruit. The part selected, should be the last season's growth, where it is of fair size, and well ripened, and cut with about one inch of the preceding year's wood. When cut, they should be carefully tied into bundles, and a label attached to each, marked with a pencil and notches, or with notches alone, to denote the variety. When collected, they may be placed, in a perpendicular position, with their but inserted into the ground, about an inch; or where large quantities are wanted, they may be buried in a pit, in a dry, sandy soil, dug from one to two feet, as the nature of the case may require; the cions to be laid in horizontally; the pit first covered with a board, and to the depth of from six to eight inches, with earth. Cions, well secured in this way, may be kept until the second season.

The kinds of fruit commonly cultivated, by grafting, are Apples, Pears, Quinces, Plums and Cherries. There are others that are grafted, but not so directly interesting to the farmer.

In collecting cions, many run into error, and appear to act upon the principle, that the value of their orchard will be in proportion to the number of varieties introduced. By selecting about twenty varieties of our most valuable apples, a suit may be so arranged that a constant supply, of both sweet and sour, may be had at all seasons, and these again may be proportioned to the wants of the cultivator, and the market for which they are designed.

I will give a list of such apples as I am acquainted with, which I would recommend for cultivation in the Northern States, with a description of the qualities of fruit, growth of tree, and

the various names by which I have known them designated in different localities. This will be continued in subsequent numbers, including Apples, Pears, Plums, Cherries and Quinces; and although it may not in all cases correspond with all publications on this subject, it will enable those desirous of improving their fruit, to find them in most of our apple-growing districts.

Junetting or Juneating.—This is the first apple that ripens with us, that has many qualities. The fruit is below medium size; its color at maturity, pale yellow; its form, globular, somewhat compressed; its flesh, tender, juicy, but rather acid, yet pleasant. It ripens early in August. The trees are of moderate growth and size, forming a flat, compact top; limbs, destitute of spurs as a few of the buds, except at the extremity of the shoot, ever push out; consequently the trees are indifferent bearers, producing fruit only at the extremity of the preceding year's growth; the limbs also starting from the same joint with a straight growth, forming between them acute angles; by this peculiarity, the trees are readily distinguished from any others. I have seen four distinct varieties of this kind of apples; all possessing the same general family characteristics, as to growth, time of ripening, &c., yet all different.

Golden Sweet or Golden Pippin.—This apple, which we do not find described in any publication, is extensively cultivated in Western New-York. It ripens early in August. The fruit is not over medium size, oblong, smooth skin, green until ripe, when it changes to a greenish yellow; flesh, tender, juicy, and pleasantly sweet. The tree is a free grower, limbs inclining to horizontal; young wood covered with down, somewhat resembling the wood of the Rhode Island Greening. The tree is a fine bearer, and should be found in every collection.

Baugh, or German Baugh.—One of our most delicious, early apples. It ripens from the middle of September. The fruit varying much in size, from below medium to very large; shape, conical, and remarkably fair; colour, pale yellow, with a slight blush on the sunny side; flesh, white, tender, juicy, pleasantly sweet. Tree of moderate growth; limbs, covered with a light yellow bark, turning from an horizontal to an upright direction, forming a close, globular shaped top. The tree, a steady but moderate bearer.

Belle et Bonne, Summer Pearmain, or Ricer Apple.—This is an apple somewhat extensively cultivated in Western New-York, and is certainly one of our best early autumn apples. It commences ripening in August, and continues through the month of September. The fruit is above medium size, rather flat in shape, the eye and stem sunken, skin smooth, and streaked with dull red, on a pale yellow ground; flesh, uncommonly tender, juicy, and pleasantly acid. The tree of free growth, limbs inclining to horizontal, with but few spurs; yet the tree is a fair bearer.

Red Bell-flower.—This is one of the very largest apples we have. Its shape is conical, measuring three and three-fourth inches, in length, and four in breadth, or diameter. Its colour is a fine scarlet, on a yellow ground. Flesh when ripe, very tender, and pleasantly acid, but not very compact, as an apple of the above dimensions will only weigh about one pound. It ripens late in September and early in October, and on account of its size it is considered by many, a great addition to the dessert. The tree grows freely, with an upright top, and is a fair bearer.

Red and Green Sweeting.—This apple is of a large size, often measuring from twelve to thirteen inches in circumference. Its shape is conical, measuring with an uneven surface. Colour, striped with red and green; flesh soft, not compact, but pleasantly sweet; is fine for the dessert, and baking; it ripens in September. The tree is a strong, upright grower, but not the most prolific. As this apple ripens at the same time with the Red Bell-flower, to which it bears a strong resemblance, the two, when sent to the table, make a great show. This is a fine apple for baking.

Queen.—This fruit is above the medium size, its colour striped with red and yellow; its flesh, a little inclined to yellow; it is tender, juicy, and pleasantly sweet, will ripen

September and will keep into October. It is a delicious fruit. In some points this apple, cultivated in Western New York, does not agree with the description given by Cox, of the summer Queen, yet I conclude it must be the same apple. I have never noticed any inequalities about the eye. It ripens with us in the month of September, and may be kept until October. The tree is of vigorous growth, and a constant bearer.

Too's Indian Rare-Ripe.—This is a fine, large, conical-shaped fruit, of a yellow colour, with a fine blush on the sunny side; flesh, white, juicy, and remarkably tender, so much so, that it frequently breaks in pieces, in falling from the tree. Flavour, briskly acid, but pleasant. The tree is of an upright, thrifty growth; the young wood, covered, with a redish bark, and remarkably hard.

Orange Sweeting.—The following description. I copy from Kenrick's Orchardist: "The fruit is rather large; flattened in its base and summit; the colour, yellow, or orange; flesh, very sweet and excellent. It ripens in September, and will keep till December. This fruit is in high estimation in Providence, R. I., where it is brought in sloops, from Hartford, Connecticut.

Holland Pippin or Fall Pippin.—In describing this apple, I would remark, that there are a number of apples called pippins, all large, and somewhat similar in appearance but this can be distinguished from the others, by its smooth skin, and greasy feel. The colour of the apple before ripe, is a full green, and has upon the skin, patches of black, or what is often called mildew; when ripe, a full yellow; flesh, white, tender, juicy, and of a pleasant sub-acid flavour. The tree grows with a large, upright limbs, covered with a smooth, dark-coloured bark. The fruit ripens in October, and will keep till the middle of January.—*True Genesee Farmer.*

[Continued from first page].

The Secretary James S. Wettenhall, Esqr., in his address to the Township Directors, remarks thus:—"The Secretary calls the attention of those who subscribe or are intending to subscribe to THE BRITISH AMERICAN CULTIVATOR, that he will receive their subscriptions, and the extra copies allowed to him as agent, will be handed over gratuitously for the benefit of the Society—for instance:—

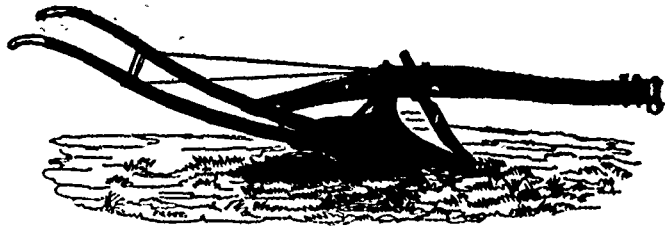
6	Subscribers	will give \$	1	} For the benefit of the Society.
13	Do.	Do.	3	
70	Do.	Do.	20	
150	Do.	Do.	50	

And as Government gives two dollars for every one (dollar) subscribed; 70 members getting their agricultural paper through the Secretary, the society would benefit \$60, a large sum at no cost and but little trouble. Were each Director also to receive subscriptions and pass them over to the Secretary, a considerable amount might by them be got for the benefit of the society. The papers subscribed for will be sent to the Post Office direct from Toronto, free of postage to the subscriber."

We trust that the above suggestion will be generally acted upon throughout the Province, and by a little exertion on the part of those who know the value of knowledge, our sheet will find its way into every farm house in the country within a very few years.

CONTENTS OF THIS NUMBER.

	PAGE.
Normal Schools—Gore District Agricultural Society	33
Sub-soil Ploughing—Fire Blight—Western District Literary Institution	34
Agricultural Report for Canada East	35
Montreal Markets—Good Advice	36
Preparation of Hams or Bacon—Grand Provincial Show	37
Letters on Education continued	38



LLOYD'S PATENT IMPROVED CANADIAN PLOUGH:

Manufactured at the Agricultural Forge, Lot-street, near Yonge st., next Door to the Toronto Factory.

THE above Plough is well worthy the attention of the Agricultural Community; and is, in fact, considered by those who have them in use, to be equal to the Scotch Plough in doing good work. On new Farms they are superior, being lighter to draw, and from their peculiar formation, much easier to hold or handle; and also, from their strength, durability, and cheapness, the Farmer will find them unsurpassed.

THE Manufacturer is confident, that when they become known, they will take precedence of others now in use; he therefore solicits a liberal share of patronage, and at the same time begs to assure the Agriculturists, and public generally, that no endeavour will be wanting on his part to give entire satisfaction to those who may favour him with a call. A liberal discount will be made to Merchant and Wholesale Dealers.

J. LLOYD.

Toronto, February 24th, 1843.

Importance of warmth in feeding Cattle—	
Winter Management of Bees	39
Unburnt Brick Houses—Hard Times	40
Resolutions passed at Newmarket, on the establishment of Manual Labour Schools	41
Original Correspondence	42, 43, 44, & 45
Duties of Farmers—Agricultural Statistics	46
Prognostics of the Weather—The Orchard	47

ST. CATHARINE'S NURSERY.

THE SUBSCRIBER continues to cultivate, and has now on hand for Sale, an extensive assortment of choice FRUIT TREES, and he assures purchasers that every effort will be made to meet their wishes.

He would also state that he has good reasons for reminding correspondents of the necessity of paying their own postage.

C. BEADLE.

St. Catharine's, Feb. 8th, 1843.

TORONTO MARKETS:

For the Month ending 23th February, 1843

	S.	D.	S.	P.
Flour Farmers', in barrels	16	3	a	18 9
Oatmeal, per barrel	12	6	a	15 0
Wheat, per bushel	3	0	a	3 4
Rye, do.	2	0	a	2 4
Barley, do.	1	3	a	1 5
Oats, do.	0	9	a	0 11
Pease, do.	1	6	a	1 8
Timothy, do.	3	2	a	3 6
Clover Seed, do.	39	0	a	35 0
Pork, per 100lbs.	15	0	a	17 6
Beef, do.	15	0	a	20 0
Mutton and Veal (gr.) per lb.	0	3	a	0 4
Pork, do.	0	2	a	0 3 3/4
Butter, do.	0	8	a	10 0
Turkeys	3	0	a	4 0
Geese	2	0	a	3 0
Fowls, per pair	1	6	a	2 0
Ducks, per pair	1	8	a	2 0
Eggs, per dozen	0	9	a	1 0
Potatoes, per bushel	1	3	a	1 6
Hay, per ton	45	0	a	60 0
Straw, do.	25	0	a	27 6
Salt, per barrel	10	0	a	11 3

Orders for THE CULTIVATOR will be received at the Star and Transcript Office; British Colonist Office; Wesleyan Book Store; J. Eastwood & Co.; Lyman Farr & Co. Druggists; James Wickson, Market Block; Richard Brewer and G. F. Payne, Bookbinders; George Leslie, J. F. Westland, and J. Fleming Gardeners and Seed Merchants, and Jno. Henderson, Merchant, Lot Street, West, Leslie Brothers, King-st.

Persons authorized to receive Subscription for The British American Cultivator are—All Postmasters throughout British America—all Newspaper Publishers—and all Secretaries of Agricultural Societies.

In addition to the above, we kindly solicit all Country and Village Merchants, and Farmers having influence in their respective neighbourhoods, to procure Subscribers.

PUBLISHED MONTHLY.

WM. EVANS, EDITOR.

W. G. EDMUNDSON,

PUBLISHER AND PROPRIETOR.

To whom all Orders and Communications must be Addressed, (Post-paid).

TERMS—ONE DOLLAR PER ANNUM, PAYABLE INVARIABLY IN ADVANCE.

CONDITIONS TO AGENTS:

COTIES.	DOLLARS.
3 for	2
15 for	10
50 for	25

RATES OF ADVERTISING.—Four Pence a Line for one insertion, and Two Pence a Line for every subsequent insertion.

Printed at the Star and Transcript, and General Advertising Office, 160, KING STREET, TORONTO.

Every Description of Book & Job Printing, neatly Executed on the Shortest Notice.