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CULTIVATOR.

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

VOL. 2. TORONTO, MAY, 1843. No. 5.

THE CULTIVATOR.

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

TORONTO, MAY, 1843.

TO OUR PATRONS.

SINCE the issue of the April number, we have come to the conclusion to resume the management of a very extensive farm, which is situated in the township of Whitchurch, in the neighbourhood of Newmarket, being about twenty-seven miles north of this city; —a course we have been led to pursue from the inadequacy of the patronage we have received at the hands of the Canadian farmers.

We feel no regret in exchanging a city, for a country life; on the contrary, we feel a pleasure in anticipating the prospect before us, in having an ample opportunity of testing many of the experiments we have recommended, especially the introduction of Hemp and Flax culture, in connexion with the Dairy business. In recommending improvements in agriculture, we trust we shall be guided by the invariable rule of first practising what we recommend to others, and secondly, only recommend such as are calculated to remunerate the producer. If this rule had been carried out by the many who have written on the subject of agriculture, the result would have been that valuable improvements in husbandry would have advanced with rapid strides, and the darkness which every where pervades this too much neglected, though respectable profession would have long since vanished from our land.

We know too well that a lamentable apathy exists, on the subject of improvements or change being effected in the agriculture of the Province, and notwithstanding, much has been said and written on the subject, yet the advancements made towards *perfection* are so slow, that they are scarcely perceptible in some of the oldest Districts of the Province. No one residing in the Home District would scarcely imagine that hundreds of farmers in the oldest settled townships on the Bay of Quinte, are still in the use of the one-handled, or bull-plough, and that it requires one man and two stout boys to manage a single plough,—the one to hold, and the other to drive the horses, and a third to turn the sward!!

The real object of a journal like ours is to have a cheap and familiar channel of communication for the farmers of every section of the Province, by which each may have the experience and wisdom of the best educated of his class, brought home to his own fireside in as free and communicative a style as though he was in actual converse with his neighbour. That our journal should be such a medium of communication, none would pretend to deny, but that it has heretofore failed in being such, all who have read it must acknowledge, and the reasons for such neglect on the part of the public is rather unaccountable, as full and pressing solicitations have been frequently made for all to favour us with their views and experience on this subject. We take this opportunity of further pressing this matter, and urge upon each of our patrons the necessity of doing something to advance the prosperity of their calling. Nothing shall be left undone on our part to make the agriculture of this Province respectable, and, while engaged in the management of our farm, our constant study shall be to do every thing consistent in our power which will have for its end the welfare and interest of our brother farmers. Under these considerations, we appeal to the good sense of the intelligent farmers of British America, and urge at their hands a support which will at once place their medium of communication, and in fact the *champion* of their battles, in such a strong and enviable position, that every opposition, both as regards the ignorance of the people, and the FINANCIAL EMBARRASSMENTS, to which we have been constantly subjected since the connexion we have formed with their *organ*, may melt as wax before the sun.

The distance which our farm lies from the city, and the close attention which we will necessarily have to devote to the practical branches of farming, will preclude the possibility of our journal reaching the destination of its different routes at such regular periods as it otherwise would; but we promise that a number shall be issued monthly, and that it shall be continued, at least, until the end of the present year.

For the character of the Colony, for the welfare of the class whose interests we advocate, and for the prosperity of thousands yet unborn, we respectfully appeal to the good sense of every intelligent man in the Province, for a support at least equivalent to the actual expenses incurred in the publication.

The June number will not be issued much before the first of July.

FARMING—GOOD ADVICE.

It is thought by many, that farming is a *menial* calling or an uphill business, and that very little money can be made by cultivating "old mother earth," from this opinion we beg to dissent, and feel warranted in asserting that the prime cause of the poverty, which is too apparent among persons, who style themselves tillers of the soil, may be traced to the want of skill, and not to the demerits of their calling. As a proof of this just look about and examine the condition of the rural population of this country, who emigrated from England and Scotland ten or twelve years since, who landed on our shores pennyless, and are now in possession of large cultivated farms, houses and out-houses, and may be considered independent in their circumstances, and to what may this success be mainly attributed? most certainly to the superior agricultural skill which was every where manifested, and taught them in the mother country.

Instances without number have come under our notice, where the hired labourers of the above class, have been enabled from the savings of four or five years industry and frugality, to rent a farm, on which the real owner or landlord could scarcely make out to live; whereas the tenant by close attention and thorough knowledge of business, could afford to pay from ten to twelve shillings per acre of annual rent, and in a few years save money sufficient to purchase and stock a farm, as valuable as the one which he formerly rented. In a country where thousands of instances of this sort could be enumerated, certainly no one at all acquainted with the subject, could have the boldness to condemn it as a suitable country for agricultural purposes, and this may of a truth be said of Canada.

The parties who assert that the British American Provinces are unadapted for the introduction of an improved system of husbandry, are such, as are either too idle to work themselves, or have not sufficient calculating powers, or thinking faculties, to make the two ends meet. Many have no idea of changing from the "*good old way*," which their forefathers taught them, and so long as this is the case, but little advantage can be gained, from the mighty efforts which during the last few years, have been made to concentrate the skill and experience of the wisest and most experienced, that have written upon the subject of agriculture, through the public press; neither can they appreciate the exertions which are made by Agricultural Societies in elevating the character of the agriculture of the Province; nor will they read and inform their minds on the most essential topics, which are immediately and directly connected with their respectable profession. All this, and much more, we fear, is lamentably true; and to convince the intelligent part of the community, that we are willing to do our part, in our humble capacity to change the order of things, we are determined, in future, to lay before our readers facts—plain and practical; which, we trust, will have a tendency to cause men to reflect, before they act, and to study the various influences which effect every department of agricultural improvement.

The great fault which the farmers in Canada are too apt to engender, is the ambitious desire for lands. Experience has taught us that it is far more profitable to cultivate fifty acres well, than to poorly and negligently cultivate double that number of acres, Many farmers actually raise more produce from fifty acres, than others do from two hundred, the land being composed of like soil and other advantages equal, when their soils possessed their virgin qualities. Why this vast difference? Because one informs his mind on the improvements of the day, and studies to renovate his soil by manuring—top dressing with mineral substances, draining his land, and changing his crops alternately, and depends alone upon his superior skill and management for large crops and good profits; while the other studies to drain every thing from the soil, and returns nothing to it, to keep it from deteriorating and becoming barren.

We have elsewhere remarked, that, the most profitable business for the Canadian farmers, is the manufactury of butter and cheese. But little has been done in the production of these articles, and consequently, there will be much room for improvement in that department. In ninety-nine cases out of a hundred, the proceeds from the small surplus which the Canadian farmers have to sell of the above article, goes as a perquisite to the farmer's wife. It is not our business to find fault with such an arrangement, but we would just remind our brother farmers of a fact which came under our notice a few weeks since. A Yorkshire farmer who rents a farm seven miles north of this city, and pays an annual rent of fifty pounds, informed us that he only keeps *ten* cows, and the profits from which together with the sale of calves, pays the whole of his rent and leaves a ballance in the bargain. We examined his stock and found them in comfortable winter-quarters, with an abundance of good hay, and cut oats, sheaf and bran before them, and a good supply of clean straw under their feet for bedding. This farmer comes to town once per week regularly, with butter and other produce from his well cultivated farm, he also supplies a number of families with butter, cheese, &c., and sends in his bill once in a twelve month—and by furnishing a good article and observing strict punctuality, he always obtains the top price. This same individual came to this country twelve years since, without any means, and by dint of perseverence and superior skill, he can now boast of having thousands of dollars out on interest, and by most of his neighbours is considered independent. The circumstance is fresh in our recollection when the same individual astonished the *natives*, about ten years since, in the astonishing yield of 40 bushels of wheat per acre on a field of 12 acres, which field was thought incapable of producing 10 bushels per acre. If circumstances admitted, we would enter into the details of the superior farming which we noticed carried out in all its bearings on the above premises, but as it would be taking a greater latitude than we are warranted in doing, we will defer it for the present. Suffice it to say, that the farmer in question has kindly promised to become a contributor to our Journal—and the public no doubt will be much edified from the practical advice which he is capable of affording from his long experience and close observation of men and things.

In addition to the production of butter and cheese, the article of hops, would amply remunerate the producer, and might in a few years form a profitable article for export. Clover and flax seeds, would also remunerate the farmer if entered into with spirit, the latter bears a much heavier price in the English market than wheat, and can be produced with one half of the cost.

Twenty bushels of flax seed can be grown from an acre of ground with much less tillage than the same yield of wheat.

We would take this opportunity of reminding farmers, that if they want to graze stock for either beef or butter, that they would find it to their advantage to lay off their pasture grounds in small convenient fields and change the stock from one field to another every few days. Salt should also be provided bountifully, at least, twice per week for every description of stock.

A compost heap of refuse straw, peat, muck and a small proportion of lime, should be made in every barn yard, and should be used as a top-dressing for pasture and meadow grounds Each load of vegetable deposit that is converted into the above composition, is worth at least one dollar, and where is there an individual, who is so careless about his temporal prosperity, as to allow such valuable mines of wealth to lay unemployed? No man would do so upon reflection If a farmer aims at prosperity, he will find it to his advantage to make the most of his manure heap. A farmer of our acquaintance last season, purchased upwards of 40 loads of manure at a dollar and a half per load; and he assured us that he considered that he would get his money back with good round interest.

From the Connecticut Farmer's Gazette.

APPLE TREE INSECTS.

PLUM WEEVIL.—RHYNCHŒNUS (CONOTRACHELUS) NENUPHAR.

This is about the worst insect in existence. It does not confine its mischief to apples; nectarines and cherries. It is found in the black knots on plum and cherry trees. That it causes those knots, cannot be positively proved, though there is much reason to suspect it. There is some reason also for the suspicion that it causes the yellows in peach trees. Whether guilty or not in this particular, it does so much other mischief, that all mankind ought to combine for its destruction. It is so shy and sneaking—it shuns so cautiously the eyes of man while perpetrating its evil deeds—that few ever see the insect till it appears in the fruit, in the form of a loathsome grub. But every body ought to see and know the bug itself. I presume therefore I shall be excused if I give a very particular description of it.

The bug is nearly two-tenths of an inch in length, besides its snout which is about one-tenth of an inch long. The snout does not project straight forward, but bends downwards. At first sight the colour of the bug appears to be a dark brown. On a closer view, it will be seen to be very rough with black ridges and knots, with two black humps side by side on its back, and a yellowish band behind the humps. It may generally be caught in May, by placing a cloth or holding an umbrella hollow upwards, under a plum tree, and giving the tree or a limb a sudden jar. The moment the jar is given, the bug drops as if it was dead, and will be some time without stirring. In this state, with its legs and snout pressed up close to its body, it looks so much like the dead buds that fall from the tree with it, that a person unacquainted with it, will hardly discover it. Therefore it is necessary to take a sharp look.

The bug begins to lay its eggs in the fruit while they are small and tender. It makes a hole in the side of the fruit with its snout, generally in the form of a new moon or half circle, and there deposits an egg, which soon hatches

into a grub. That eats its way into the central part of the fruit, and remains there eating three or four weeks, till ready to go into the ground. Then the fruit drops, and the grub crawls out of it and enters the earth. It burrows about three inches under the surface, lies about twenty-four days, and then comes up a winged bug. By this time, most of the fruits are too far advanced to be suitable places of deposit for the eggs of a second brood, though we sometimes find the grubs in peaches as late as 1st of September—The greater part of the second brood, as is now known to us, appears to be bred in the black knots on plum and cherry trees.

The destruction caused by this insect is, in most seasons incalculable. It often happens that it leaves us not a single plum, though our trees set full and promise abundance. Unless therefore we can protect our plum trees from this insect, we may as well abandon their cultivation. And indeed, if our apples are hereafter to be the prey of insects as they have been for a few years past, an apple tree will be of no more use or value than an elm. This evil has now increased upon us to such an extent, that we shall require all the resources of our ingenuity and industry to overcome it. It will be of little avail for a solitary individual, here and there to try to protect their fruits—as fast as he destroys an insect on his own trees, its place will be supplied from the trees of his neighbour for the bug is winged and flies with great ease. Nor will it be of much use to destroy the insects of a single or favourite tree, while surrounding trees are filled with the winged destroyers. To do the work of destruction effectually, every body should engage in it—and all at once.

The habits of the insect in its different stages of existence, will suggest to us various modes of attack or defence.

1st. I have remarked that the bug is exceedingly shy—disposed to keep away from us or out of our sight. Advantage has been taken of this timed nature, to set some valuable fruit trees in places where persons are frequently passing—as, near the door of a house, pig-pen or well. Some have fastened a cord to a tree, attaching one end of it to a pump handle, so as to jar the tree whenever water is drawn. Trees so situated are pretty well protected from the insect. But it is evident that the number, which we can guard in this way, is quite limited and the trees also must be of a small size. Apricot, plum and peach trees, that stand close to a building on the south or east side, are less apt to be attacked by the weevil than others farther removed. I am unable to assign the cause of this, unless it be that the greater warmth, in the vicinity of buildings, brings forward the fruit too early for the use of the insect—for the same reason that very early peas escape the pea bug.

2d. When a tree is suddenly jarred, the insects drop from it as if dead. A cloth, large enough to cover the ground as far as the limbs extend, will catch a great many insects if the tree is jarred over it. The bugs may be thus collected and thrown into the fire. The bugs should be shaken off into the cloth every morning and evening, from the time the fruit begins to set till it is grown to the size of a large pea.

3rd. The grubs will go into the ground to undergo their final transformation. It has been proposed to make the ground underneath the tree so hard, by paving or otherwise, as to prevent the insect from penetrating into it. When this is effectually done it is said to be a sure protection of the fruit. I once paved the ground under a nectarine with round stones, without any apparent benefit. There were spaces of course, between the stones, where the grub might have entered the earth; and this experiment may not be conclusive against paving if it were to be done more perfectly. Perhaps a close pavement of brick might be effectual. A coat of cement or bitumen, like that used for walks, would exclude the grubs from the earth entirely; but whether the trees would flourish, with such a tight covering over their roots, is questionable. To effect the same purpose (arresting the grubs on their way into the earth) it is proposed to pick up the fruit containing the insect as it falls, and scald it. If this is to be done, the picking up should be at least twice a day; for many of the grubs quit the fruit soon after it falls. We may be assisted very much in the destruction of the grubs, as they come down to the ground, by such animals as will eat the fruit. Geese have been found particularly helpful in this sort of work. Turkies would probably be useful in some degree; but the best animal help at our command, is doubtless the hog. To derive full benefit from his services all our trees liable to be infested by the plumb weevil, should be placed together in an orchard, so fenced as to admit of the hogs runing at large in it during the whole of the summer. If geese, turkeys, ducks and common fowls can run with the hogs, so much the better. Such a mode of planting out and managing our fruit orchards, *extensively*, *adopted*, would probably give us an abundance of good and fair fruit. It will be obvious, I presume, to every one, that we shall gain but little by making war upon these enemies this year, and leaving them at peace the next—the war must be continued from year to year, till the enemy is not to be found.

4th. As the weevil breeds in the black knots on plum and cherry trees, all those excrescencies should be cut off and burnt as soon as the swellings begin to appear. The wild as well as the cultivated cherry is subject to these knots, and should not therefore be overlooked. It is the more important to destroy these knots, because other noxious insects, besides the weevil, inhabit them—particularly the Peach worm (Ægeria) that commonly is found at the root of peach trees—and a small moth, rust brown and copper coloured, about three-twentieths of an inch in length, the name of which I have not ascertained. In cutting off and burning these depositories of noxious insects, we at the same time may save the trees on which they appear, and prevent, to some extent, the increase of the insects.

I have given in the first part of this communication a history of the Plum-weevil, as far as it is known. It will be seen that this history embraces but a small part (only about three months) of the insect's life. Several thousands of weevils may be bread upon a single apple tree—they will go into the ground in June, and before the end of July come out in the winged state. A few of these perhaps may breed the same season in the later fruits and the knots on plum trees—but what becomes of the greater part—what they feed on, if they feed at all—where they spend their time—where they find winter quarters—all is yet unknown to us. Here then is an interesting field of research. If we can obtain a thorough knowledge of the weevil's habits and history from the first of August to the 1st of May, we may discover some more effectual mode of destroying the insects than any hitherto employed.

Your friend,

NOYES DARLING.

NUTRITIVE QUALITIES OF CHARCOAL.

Though the importance of mixing charcoal with the food of animals, particularly that of swine, has been generally acknowledged, and its benefits extensively tested, still it has been supposed that it only acted as a corrective to the acid tendency of food, and facilitated fattening by improving the health of the animal. Some experiments are, however, on record, which would seem to show that charcoal acts a more important part in the matter than has been usually assigned to it.

In 1793, a family being driven from New-York by the fever, were absent six or eight weeks before it was deemed prudent to return. A number of fowls confined in a loft to the workshop of the house, were forgotten at the time of leaving, and it was known that there was nothing provided for their subsistence, it was expected on the return that they would be found starved to death. To the astonishment of all, the fowls were found alive and fat, though there was nothing upon which they could have fed, except a quantity of charcoal and shavings, water being supplied from the grindstone trough.

These facts coming to the knowledge of a gentleman in New-York, as we learn from the Recorder, he instituted the following experiment. He placed a turkey in a box or enclosure, four feet long, two feet wide, and three feet high, excluded light as much as could be done, and allowed a free circulation of air, and fed the turkey with soft brick, broken fine, poundek charcoal, and six grains of corn per day. The box was kept locked. At the end of a month, the turkey was killed in the presence of several gentlemen, was large and heavy, and on being opened was found filled with fat. Nothing, on disection, was found in the gizzard and entrails but charcoal and brick. Last winter the experiment was repeated, and with the same success.

Several years since, in fitting out one of the Liverpool traders at New-York, a pig on board was missing, and was supposed to have been lost. The cargo was taken on board, stowed, and the vessel sailed. It was now discovered that the pig was alive in the coal hole, but as he could not be got at readily, it was concluded to leave him to his fate. He remained in this retreat until the passage was made, when his pigship was found to be not only alive and well, but materially improved in condition, though there was nothing, coal excepted, he could have swallowed.

When it is remembered that wood, sugar and several other substances, some which are most nutritive, are compounded of nearly the same original elements, it would seem possible, by animal chemistry, to convert them to saving life; though all experiments with wood or charcoal failed. The German chemists have converted wood into very palatable bread, by roasting and pulverizing; but calcination, it has been supposed, would destroy whatever powers of nutrition wood might originally contain. The chemical action of vegetables seems to produce the least effect on coal, and not the least particle of it has ever been found in the structure of vegetables, though mixed with the earth and water in which plants were growing, in the form of the most impalable powder. Whether animal chemistry is able to do what vegetable organiztion cannot, remains to be seen; though if there is no mistake in the statements alluded to, it would seem probable that this intractable substance is, in some way, made subservient to the nutrition of animals.—*Genesee Farmer.*

HOW TO MAKE GOOD COFFEE.

The question is often asked, why it is, that good coffee cannot be produced in this country? The reason is simply this: coffee is spoiled in the burning, and sufficient care not is taken in preparing it for the table. To make coffee equal to the French is very simple, and very easy, and for the benefit of all good housewives, and all lovers of good coffee, we will state the manner in which it should be done. First, procure the best coffee possible. See that your cook does not *burn* it, but roast it to the colour of a golden brown, and never allow it to remain in its burnt or roasted state for more than three days, as after that time it will lose its strength. Secondly, in *lieu* of the ancient method of *boiling* your coffee for an hour or more over a hot fire, and then being obliged to settle it with such rarities as *fish-skins, egg-shells* and the like, procure a *biggen*, as it is termed and make a distillation or decoction by puting the coffee in the apartment in which the strainer is, and turning thereon *boiling hot water*. Take care that the nose of the coffee-pot has a stopper to prevent the steam from escaping, and cover the top of your *biggen* immediately after having turned the water upon the coffee; as it is a most important requisite to have the steam confined. Judgement is also to be used, as to the amount of coffee required, and also to the quantity of water used. The best coffee may be spoiled by too much water applied to it. The coffee should be made very strong; and, if strong enough, its colour will be quite black.—Lastly, having made your coffee of great strength, do not use *hot water* to dilute it, in lieu thereof, take boiling hot milk, and weaken the coffee to your taste. By following these directions you will have as fine a cup of coffee as can be made in any country.

The time required for making coffee in this manner, is but a few minutes, the coffee being made as fast as the liquid issues through the strainer.—*Daily Times.*

DAIRY SECRET.—Have ready two pans in boiling water, and on the milk's coming to the dairy, take the hot pans out of the water, put the milk into one of them, and cover it with the other.—This will occasion great augmentation in the thickness and quality of the cream.—*Ally Cul.*

ENCOURAGING PROSPECTS.

In the April number of this journal, an appeal to the sympathies of the various Agricultural Societies was made, being confident that it was only necessary, on our part, to press the matter, in order to have a liberal share of patronage from such associations. We are happy to have it in our power to state that the suggestion has taken much better than we anticipated, and we have every reason to expect from the great interest lately expressed by friends from every point of the compass, that our sphere of usefulness will be speedily augmented, especially from Societies.

As an evidence of what may be expected from such societies, we give the following specimens: The Niagara District Agricultural Society, one of the most wealthy and respectable in the Province, passed a resolution at their last meeting, that a copy of *The British American Cultivator* should be subscribed for, for the benefit of each member, at the expense of the society. The Midland District Society have done the same; so also, have a branch society in the Johnstown District. While pening this article, we notice in *The Sherbrooke Gazette*, of the 18th instant, that the Drummond Agricultural Society have passed a resolution at a recent meeting, that ONE HUNDRED COPIES of THE CULTIVATOR shall be procured for the benefit of the members of that association.

It would require but little exertion on the part of the FOUR HUNDRED AGENTS who act for this work, together with the aid anticipated from other Agricultural Societies, to augment the circulation within a few months, sufficient to exhaust the whole of the present edition. The quantity of back numbers on hand at present are *twenty-two hundred*, which if disposed of on the very liberal terms that we allow to agents and others, would cover all expenses and leave a small balance in our favour.—If this point was once gained, we would be encouraged to launch out and make improvements, for instance, if the encouragement we receive between this and the end of the present volume, be sufficient to warrant a continuance of the work, a new series of volumes would be commenced with the number for January next, which would be printed on a larger sheet than the one we use at present, and each number would contain thirty-two large pages, in suitable form for binding—and all this too, without any addition to the price. But, we would ask, how can this be done, unless the public show a disposition to support the enterprise to an extent, at least, equivalent to the actual expenses? The whole matter stands thus; if the farmers creditably sustain the work during the present year, it may be continued for many years to come, if they refuse that support, duty to ourself and our family will require us to relinquish an occupation which has already been a source of entailing a loss so large that but few would encounter it, with the energy and fortitude we have heretofore manifested.—Although on the one hand, we have grounds to be discouraged, owing to embarrassments which we have subjected ourselves to, in embarking so much time and capital in a business, which nine out of ten from whom we have counselled on the subject, have predicted an ultimate failure; yet, on the other hand, we have substantial reason to be buoyed up with the hope of finally succeeding in establishing a Journal which will ultimately be a credit to our native country,

Let us for a moment examine some of the *evidences for grounding* such a pleasing prospect—There can be no question but Agricultural Societies and Clubs without exception, will give every encouragement in their power to sustain the respectability of the work by subscribing liberally for it, and by *recommending it to* the farmers, within their respective spheres of influence; and besides, there are between three and four hundred Post Masters, who take an active interest already in procuring subscribers, *and we flatter ourselves that there are but few* Post Masters in the Province, but would feel pleasure in promoting the Agriculture of these Provinces. We trust the Cultivator will prove a most efficient agent in bringing about the amelioration of the Agricultural interests by the introduction of a better system of farming in British America. There are many country merchants, and even private gentlemen who, also, have taken up the matter with consideration. warmth, and from whom we have had sufficient testimony of their good wishes,

It may not be amiss to mention, for the satisfaction of all, that upwards of 400 Copies of the Cultivator are sent to *Montreal*,—125 do, to London,—90 to Kingston,—70 to Port Hope,—65 to St. Catherines,—76 to Nelson,—50 to Niagara,—30 to Hamilton,—40 to Smiths Falls,—and 250 in the City of Toronto. In addition to the above, there are many places to which we send packages containing from fifteen to thirty Copies each.

These are the principle grounds for flattering ourselves with the prospect of ultimate and triumphant success.

British American farmers should bear in mind that only a portion of the burdens of conducting this Journal, envolves on an Editor, and that *portion by no means the most important.*

The mere filling the office of an hireling Editor is a trifling task, when compared to the responsibility connected with the publishing department. If the expenses of our Magazine were fairly met by the public, so that it would be morally certain that our property would not suffer, or be sacrificed at the SHRINE of *public apathy*, we would feel under these circumstances, a warm and hearty zeal in filling the columns with matter, which would not only be *original* but would be *practical* and profitably useful.

As a means of continuing the British American Cultivator, we have resolved to adopt a *regular course of retrenchment*, by which, the expenses will be considerably curtailed.—The work itself will be differently conducted from what it has been, in as much as it our is fixed and determined resolution to make it a plain *common sense agent to Canvass the Provinces* for the ostensible purpose of disseminating useful information on a subject, which, above all others, we feel ourselves qualified to express our views practically and intelligently—viz:—*Agricultural improvement in all its branches.*

In order to carry out our design, we want support, and we can recommend no better plan than a learned Doctor pricnced for the Albany Cultivator, some three years since:—He always carried a specimen or two in his pocket which he introduced to every farmer within the reach of his influence, the result was, that he very soon obtained a list of sixty-five subscribers, who paid their dollar in advance. This occurrence took place at the head of the Bay of Quinte, and, we trust that this praiseworthy example will be followed up by a corresponding result in favour of a *home-spun production* by the same individual, and by as many more of his profession and others, as think proper to encourage the enterprise.

Elsewhere, we have mentioned that we have entered into such arrangements that most of our time will be required in the laborious *operations of the farm—we say laborious*, from that term we wish to be understood, to mean ploughing, sowing, mowing, cradling, stacking, threshing, and in fact, every other branch of industry connected with an extensive and well cultivated arable farm. This being the employment which we have constantly practised for many years past, excepting the last two, we will feel ourselves not at a loss to engage our hands at even the most intricate.

Many have supposed that 'gentleman, farming,' could be carried out to the same extent that is practiced in Great Britain, but, from this opinion we beg to dissent, and consider it dangerous *doctrine to promulgate in this country. This* being the case, we will not consider ourselves in that light; although we are possessed of a free and unencumbered estate, which as it regards size, quality, and cultivation, will bear *comparison with any in the Province.*

In our last, we mentioned, that we ranked ourselves with the homespun farmers of the Province, by this we wish to be understood, that we not only wear, but intend to wear, cloth made from the wool of our own country, and we also intend to encourage the talent and industry of Canadian residents,

The only part which we intend to perform in the future conduct of this Journal, is, to supply original and selected matter, which will be done principally at the close of each day, as a source of amusement, after preforming the diversified, and toilsome duties incumbent more or less, on every Canadian farmer. As it regards writing editorial articles, we would at all times feel it a source of pleasure and delight in communicating our views and experience, through the Cultivator, (providing such exertions were appreciated by our readers)

We assure our friends that no expense or trouble have been spared to make our work as respectable as those published in the neighbouring country; but we are sorry to have it in our power to say, that notwithstanding this expenditure, very many have made choice of foreign publications, which even come twenty-five per cent dearer than the work published in their own country—whenever we meet with an instance of this sort, (and we are sorry to say there have been many,) our pride is so humbled at the thought, that a fellow countrymen could be found so void of a spark of patriotism, that we were almost ready to wish ourselves engaged in the occupation of a day labourer, breaking stones on the road, rather than be serving the public at an immense loss and risk, and after all discountenanced because, (as they say,) that Canada is too young a country to sustain a work of

such magnitude. Of course this would be correct if all were possessed of such narrow minded views.

We are aware that many have been deterred from patronising the Canadian publication, owing to the fact, that frequent unsuccessful attempts had been made by wild adventurers, or men of theory who had no other motive at heart but self aggrandisement; but no one acquainted with our habits would charge us with such motives, as we felt as much interest in forwarding the prosperity of the *Farmer* and *Mechanic*, as we have evinced in the success of our own Publication.

We assure our friends, that there need be no danger apprehended in our incapacity to make good our engagements as we have ten times as much stake in the country as any losses we may chance to have entailed on us by publishing this Magazine.

We beg to apologise for the foregoing remarks which are more lengthy than we anticipated;—they were made for the purpose of explaining the prospects before us, and our future intentions, so that no one may have it in their power to say, that we have been actuated by improper motives in engaging in a branch of business, which will require most of our time and attention.

HOME DISTRICT PLOUGHING MATCH.

The Annual Ploughing Match, under the patronage of the Home District Agricultural Society, took place on the 3rd Inst, on the farm of Mr. Daniel McBride's, nine miles north of this city; and the performance came off in a style quite creditable to the Society, which instituted it, and more especially so, to the ambitious competitors, who entered the field, Fourteen teams were on the ground, manned with able ploughmen, ranged under the different classes.—Each ploughman had allotted, for his portion of the work, one fourth part of an acre, which had to be divided into three equal portions, by each, respectively. There was no limited time given for the work to be performed, which was very proper, and consequently, it was not slighted nor hurried.

It has been our lot to hold the plough for months in succession, and from the very elegant manner, in which the whole of the parties above, executed their work, we resolved, while on the ground, to enter the field as a competitor, at the next annual exhibition, if spared up to that period;—this resolution was not formed through vanity, or with the hope of ever being qualified to carry of the sweepstakes, but for no other purpose, than that of setting a good example to others, and for mutual and personal benefit. This principle, we trust, will be more generally acted upon, another year, and it will not be our fault if there are not on the ground, at that period, at least ONE HUNDRED COMPETITORS, who, will themselves, be incalculably benefited, from such a demonstration of rivalry; and the whole district in fact, would be the gainers from such a grand and creditable display of good ploughing.

The kind of implements used were with one exception, of the very celebrated Scotch iron plough, most of which, were imported direct from Scotland. The proportions of the furrow slices, which each endeavoured to turn, were eight inches and a half wide, by five inches and half thick, laid resting upon each other with a lap of three inches, so slices, that a grain of corn could not possibly find an entrance between them; and these slices at the same time resting on angles of about 48 degrees, presenting a most imposing, and likewise noval appearance.

We felt so much interest in the success of the above magnificent enterprise that with much personal annoyance and care, we had a dynaometer made by a mechanic, for the express purpose of testing the draughts of the several models of ploughs on the ground. The difference between the Scotch iron plough, wooden Scotch plough, and Lloyd's Canadian patent plough, was not as much as we previously anticipated. The experiments being made when the competition was quite over, it very naturally created much attention and confusion, and consequently it would be difficult for us to report as accurately as though it had been made by a select party who felt an interest in giving correct results; however, as near as we could judge, the Scotch iron plough with a furrow eight inches and a half, by five inches and a half, made a draught on the horses equal to one thousand pounds;—the Scotch wooden plough with a furrow of the same thickness as the above, and nine and half inches wide, made a draught of one thousand and twenty-six pounds; and Lloyd's Canadian plough with a furrow of the thickness just quoted, and eleven inches wide, made a draught a fraction less than a thousand pounds

We may have it in our power to test the respective merits of a number of ploughs, before the close of the present summer, and if so, we shall feel a most hearty desire to lay a plain and practical report of such experiments, before our numerous, and we hope, spirited and ambitious readers.

The successful parties were as follows:—

First class,—Including ploughmen without distinction; first, Walter Dalzill, Scotchman, second; George Coulter, do, third, George Harrison, Canadian:—

Second class,—Canadians over a certain age; first, James Johnson, second, John Gibson, third, Philip Ross:—

Third class,—Boys under a certain age; first, James Harrison, second, Alexander Montgomery, third, H. Lymburner.

The whole amount of Premiums granted, equalled the sum of *sixty dollars*, which was expended, in our humble judgement, in a manner quite satisfactory to all parties concerned; and will be calculated, no doubt, to inspire a laudable zeal among the youth of the District, so that they will be prepared with their well trained horses to enter when the next oppportunity presents itself with a determination to improve if not excel their more experienced neighbours.

We feel no scruples in asserting, that better ploughmen cannot be found in America, than are in the Home District; and it is quite probable that in addition to the premiums given by the Society at their next ploughing match, a sum of money or purse will be raised by gentlemen, residents of the District, to give a still greater impetus to improvement in that important branch of farming. Under this consideration we would strenuously advise the young men of the District to make as much improvement in their work as possible, and try if possible to excel their neighbours in executing good ploughing on their own farms, and to prepare themselves for a public trial.

HOME DISTRICT CATTLE SHOW.

The Spring Fair and Cattle Show was held on the show ground, near the New Gaol, on the 10th Inst., and the exhibition was fully as well attended by the farmers of the District as could be expected, when the backwardness of the season, and the value of each day, to an extensive farmer, at that particular period, is taken into account. Indeed, if we had stock of the best description, and felt morally certain of obtaining a number of *prizes* we would not be tempted to stop the plough for any such bounty, at a period when our crops should be sown, and business of an urgent nature required our personal superintendance.

Agricultural shows and fairs, ploughing matches, and similar exhibitons, should be held at a season of the year, when a day or two's absence from home, would not be of so much importance to the farmer. We hope in future, that this matter will be attended to by the manageing directors of the various Agricultural Societies throughout the Province.

The exhibition of stallions were very creditable, and probably surpassed any previous show. A powerful well proportioned draft-horse of the "Norman race" was on the ground, and attracted much attention, and in our humble judgment, was the best horse, with one exception that ever travelled in Western Canada. We were so delighted with this superior animal, that we resolved on having his portrait taken, and a correct likeness exhibited in the present number of the *Cultivator*. On the morning following the show, we accompanied our *Engraver* to the Inn where this noble animal made his stand, and to our astonishment, were informed that he had suddenly died from an accident incurred on the show ground. The gentleman who owned this horse, had been offered the day previous the sum, of five hundred dollars, which offer he refused

The fat sheep exhibited, could not be easily excelled in any country. A full bred Durham Bull owned by the Hon. Henry Dunn, M. P. P. for Toronto, and bred by Thomas Maires, Esq of the Township of *Vespra*, may be considered one of the finest bred animals in America, and if a "grand Provincial Show" should by the order of the day, the ensuing autumn, we would not be surprised to see the above animal eulogized by the judges on that occasion.

It was our intention to have drawn up a lucid report of the above exhibition, but have, been prevented from doing so, from causes over which we have not the slightest control and the few remarks thus given, have been pened in the hurry of the moment, and for which we beg to apologize

We have no desire to make ourselves at all officious in the management of the Home District Agricultural Society, but from the affinity we bear to the agriculturists in general, and those of our own District, in particular, we would feel a pleasure in advancing the prosperity of the Society in every possible manner—and in future may take upon us, the task of advancing a few general directions for the better guidance of Agricultural Associations.

LIME AND SALT.—In one of Professor Johnston's experiments, he finds that lime is a good strengthener of the straw, and forwarder of the kerning and ripening of wheat and other grain; while it appears to help fill the grain, and increase the weight per bushel.—*New York American Agriculturist.*

PLUMS.

Having given a description of what we consider a valuable suit of apples, we will now describe such plums as we would recommend—naming those only, with which we are sufficiently acquainted, to justify our observations. In presenting this delineation, we shall not feel bound to follow any published work, but will describe the fruit, and give such names as are common in the deficient places where we have known it to be cultivated. With slight variations, the varieties are placed in their order of ripening.

White Primordian.—This plum we have known under different names: as the *wheat* or *harvest plum*; *Jean hative, or early yellow*; *Jean hative, or early John*; and *white violet*. This is one of the first plums that ripens with us—which is at the time of the wheat harvest; hence one the names given to it. Fruit, about one inch and a half in length, and less in diameter; shape, oval, and some what contracted at the base: colour, pale yellow; skin, covered with a light bloom, and distinctly marked with a suture on one side; flesh, firm and brittle, and parts freely from the stone, flavour, sweet and pleasant; tree, moderate size, with small branches—from which circumstance, it is not as generally cultivated as many others, the small size of the limbs rendering it difficulty to procure cions for budding or grafting; leaves, slightly separated, narrowest at the base, and downy beneath; young wood covered with a light grey bark. The tree is a good bearer.

Blue Primordian.—This plum is also cultivated by different names: as the *early violet, violet hative*, and *early monsieur*. As to size and shape of fruit, time of ripening, and growth of tree, the description of the *white primordian*, will apply to this. The variation of colour, is accompanied with the usual deviation in flavour; purple plums being generally more acid than those that are white, although of the same family.

Early Orleans.—This is a delicious plum, and ripens soon after the *primordians*, or about the middle of August. The fruit is above middle size; shape, inclining to oval, and marked with a deep suture; colour, light green, finely specked with crimson; covered with a thick bloom; flesh, melting, juicy, pleasantly flavoured, and parts freely, with large, round leaves, somewhat downy beneath; limbs, inclining to horizontal, and covered with a brown bark.

Green Gage.—We place this on our list, next to the *early Orleans*, not that it is strictly next in succession, as to the time of ripening but because it is generally acknowledged as the best plum known, and the one from which the most of our valuable varieties have been produced. This being considered the richest plum cultivated, all crosses between it and others, is therefore, with those of inferior quality, and the new generations have uniformly become degenerate in flavour; many of them, however, have improved in size and beauty, and are considered superior to all others for cultivation. This is the *reine claude*, of the French catalogues; and the *green gage*, of the English and American. The fruit is one inch and three-quarters in diameter; shape, round, with a distinct suture; colour, green, with clouds of deeper shade; has a few carmine specks upon the sunny side; flesh, green, melting, and full of highly-perfumed sweet juice, ripens early in September; the tree is of a strong, but thrifty growht; limbs, short-jointed, with buds raised upon high projecting knuckles—by which it may easily be distinguished from any other variety; leaves, small, deep green and shining above; points, of young growth, have a redish appearance; limbs, covered with a redish bark, and bear remarkably.

Washington, or Bolmor's Washington.—This is one of the finest looking plums cultivated; measures from two inches, to two and a half in diameter, and has weighed four ounces; it ripens early in September, shape, nearly round, with a deep suture; colour, when ripe, light yellow, clouded with green, with a few bright crimson specks on the sunny side, when fully exposed. flesh, light yellow, breaking, sweet and delicious, but not as rich as its parent—the *green gage*; tree an upright and free grower; young wood, covered with grey bark; leaves, large, light green, and shining above; fruit, ripens early in September When the tree is overloaded, part of the fruit should be picked off, else its size and flavour will be diminished.

Huling's Superb.—In size, this plum is nearly equal to the *Washington*, being over two inches in diameter, and often weighing three ounces. It ripens about the middle of September; colour, of finest light green, with clouds of deeper shade; shape, a little elongated, and contracted towards the summit, flesh, melting, juicy, and extremely sweet; tree, of rapid growth, and a good bearer; colour of bark, upon young wood, redish brown; buds, considerably elevated; more so than most kinds of plums.

Imperial Gage.—This is a delicious plum, measuring over two inches in diameter; is somewhat elongated; colour, pale yellow, with a few red specks upon the sunny side; flesh, melting, and full of sweet, perfumed juice; ripens, about the middle of September; the tree is of rapid growth, and a good bearer; young wood, covered with gray bark; buds, slightly elevated.

Bleeker's Gage.—This plum is said to have originated in the neighbourhood of Albany, about thirty years since. The tree is of a long and thrifty growth—somewhat resembling the *imperial gage*; fruit, oval, and over the medium size; colour, a fine green, with a few specks upon the sunny side, flesh firm, sweet, and delicious; the tree bears well.

Coe's Golden Drop—This is an English variety, which ripens in September. It has all the good qualities of the *green gage* plums, but varies in these particulars—it is a *clung*-stone, and will keep longer upon the tree, than any other variety of that family; fruit, oval, and nearly the size of the *Washington*; colour, a fine yellow, with red specks upon the sunny cheek; will keep until the middle of October; the tree is an abundant bearer, and of thrifty growth.

Red Gage.—In size and shape of fruit, and growth of tree, this variety approaches nearer the parent, than any other; colour of the fruit, redish brown; with a distinct suture; flesh firm breaking, inclining to yellow, rich, and highly perfumed; ripens in September and will keep till the middle of October—This and the preceding one, may be considered as our best late plums.

Monroe Plum.—The plum to which we have attached this name, we first discovered in this county, about twenty-five years since. It is a seedling variety, and is probably a cross, between the *yellow egg*, or *magnum bonum* and the *green gage*. The growth of the tree, colour, size, shape, and flavour, of this fruit, all indicate such a cross In addition to this, the person who planted the stone, informed us that it was from a *magnum bonum plum*. The fruit is above medium size; shape, oval, flattened in the same direction as the stone; sides, unequal; colour, rusty yellow; flesh, breaking, sweet, highly perfumed, and parts freely from the stone; ripens about the third week in September; hangs long upon the tree—improving in flavour, until its quite shriveled. We think this plum has more valuable properties, than any other that is cultivated in this country, and therefore recommend it for general use.

The foregoing varieties of fruit contain the finest eating plums of the seasons; and where these can be obtained, we would doubt the propriety of increasing the number, as such a course would not be adding to the variety, for the desert. In addition to these, we give the following names, as varieties suitable for preserving.

Blue Imperiarice.—This is a large, purple plum, which ripens late in September; flesh, firm, dry, sweet, well-flavored, and covered, with a heavy bloom; the tree is a free bearer.

Yellow Egg.—This plum is about the size and shape of a hen's egg; colour, yellow; flesh, coarse and austere; is apt to rot upon the tree; ripens in September; makes beautiful preserves.

Smith's Orleans.—This plum is over medium size; dark purple; flesh, firm, and rather acid; makes good preserves; the tree is a good bearer.

Black Damson, or Frost Plum.—A small fruit, of dark purple colour; shape round, skin, smooth, tough, and covered with bloom; flesh, firm; flavour sour in the extreme; and yet many people perfer this to most other plants, for preserving; ripens in October, and often hangs upon the tree until January; the tree is hardy, and a great and constant bearer.—*True Genesee Farmer.*

PRUNING FRUIT TREES.

As pruning trees is confined to no particular season, some directions in the present number may be acceptable.

The first thing necessary is a good sharp knife, which is not always at hand.

The second object is to ascertain what part must be cut away, and what should remain. To be capable of this requires a knowledge of fruit growing, in general, and vegetable physiology and the nature of each kind of tree, in particular. The operator should examine if any of the branches came out too low, and if there is any inclining, or crowding the better proportioned parts of the tree. Such should be taken off. There is said to be more danger in leaving the tree with too much than with too little wood.

With large branches a small saw should be used, and the operator will use a smoothing plane, to leave the wound perfectly free from bruises and rough places made by the saw, the healing may be much sooner. In pruning small trees, let one foot be placed near the root, then hold in the left hand firmly the branch to be cut, insert the knife close to the body of the tree, and if possible let the work be done by one smooth cut.—The closer to the body of the tree the cut is made the better. Limbs cut at a half inch or inch from the trunk, must rot away, or the tree must become much larger before the healing can be effected, and in the mean time these wounds are most liable to produce serious diseases.

There is much dispute about the proper time of pruning. While some urge the winter or spring the only suitable time, others with as much vehemence, and indeed argument, argue for exclusive summer pruning. From our knowledge of the subject, we have no idea either system is wholly true. Any one who has had a little experience will see, even in the absence of philosophy, that branches cut away in the summer, heal over sooner than if the pruning be done at any other time; and he will also see, there are not a few young shoots which come out in the summer, which are not needed, and should be cut off before they take nourishment from the better parts of the tree. On the other hand, there are often awkward and unnecessary branches found on the tree in the winter, and even parts of

the tree killed or much injured by the severe cold of winter; and this shows the absolute necessity of spring pruning. To conclude the subject, the writer says no doubt pruning should commence in the latter part of the winter, or early in the spring, and continue as circumstances suggest through the whole growing season. If either spring or summer pruning be neglected, the trees cannot look so well or do so well.—*Tenn. Agriculturist.*

Pruning Fruit Trees.—It will be found upon experiment, that a wound made on a tree in March or April, will look black as soon as the sap begins to flow, and that the sap will ooze out until the leaves have put out so as to receive it; while a wound made in June, will remain white and immediately commence healing. And a tree that has been broken by being loaded with fruit, or otherwise, while the tree is green with foliage, the wound will look white and the would remain sound; while one broken in the winter by snow, or from any other cause, will look black and decline to decay.

It has been my humble lot to spend the most of my time in the spring and fore part of the summer in engrafting and pruning fruit trees, and my experience goes to prove that the best time for pruning is when the leaves are full grown, and the tree is vigorous and in a growing state. For at this season the sap has been spent in foliage, and the pores of the wood are filled, so that when the limb is taken off, the sun and warm weather will dry the end of the limb and close the pores of the wood against the weather, and the sap will keep the limb alive to the very end, and the healing will be perceived immediately.—*Boston Cultivator.*

Time of Grafting.—Some persons set scions in March, in order to have the work out of the way, and when well done they generally live, if the weather be not unfavourable; but when set so early they are not so likely to live. From that time till August, they may be set, but the later they are set after trees commence growing, the less the scion will grow for that season, and when set late they will be tender and of course more likely to be winter killed.

Should we choose a time most favourable for scions to take well, and to obtain a *good* growth also, we should take that when the buds were just bursting into leaves. At some seasons this stage of vegetation is much later than at others. From the middle of April to the middle of May is generally a good time for grafting in this climate. This season from the last of April to the last of May will be a good time.—*Boston Cultivator.*

Care of Grafted Trees.—Grafting is a matter of but little consequence unless they receive the requisite care and attention after the operation has been performed. It is not uncommon to see scions struggling year after year amidst a forest of suckers and the remaing limbs of the tree making scarcely any progress and producing no fruit, when if properly managed they would render a profitable return to their owners. No farmer would expect to gather a harvest by planting a field with corn and leaving the rest to nature. The same is true of the orchard; the cultivation of fruit is daily becoming an object of more importance on account of the increased facilities for transportation and the demand for it in foreign countries, as well as our own. Apples can now be exported to the East Indies with cargoes of ice; and even the early varieties to Europe in steam ships. There is no danger of ever stocking the market.

The climate and soil of Massachusetts are peculiarly adapted to the growth of the apple, and its cultivation is universally acknowled to be one of the most lucrative branches of agriculture.

In consideration of these facts, it is for our interest not only to graft trees with first rate varieties, but also to properly prune and cultivate in order to render them as productive as possible afterwards. My method of procedure, when giving a new top to the tree is as follows:

I cut off as many branches as is necessary for this purpose, leaving the rest to carry on the circulation of the sap; then inserting two scions in each stock, let it remain till the next year, when I prune off the remaining branches and suckers that may have protruded the first seasons, if the scions have had a rapid growth and are well united, with the stock, I generally remove one from each stock also, which will give top enough and prevent their entangling and crossing each other. If the suckers continue to grow in after years, they are removed, leaving the scions to take the entire growth. If branches are found interfereing with each other one of them is taken off and proper direction given to the tree.

Some persons practice cutting off all the branches from a tree at the time of grafting. This I think is erroneous, the scions in this case do not start so early and a death blow is given to the tree. The shock is too great for nature to bear. The bark of the stock turns black, and frequently peels off, and the wounds do not heal so readily.

Small trees which are an inch or more in diameter, after grafting, must be protected in winter by tying them up to the stakes to prevent breaking down, by the drifting snows. You should guard against mice by treading down the snow about them or some other method, and also secure with stakes and boards a few years, to prevent the cattle from having access to them. Many young and valuable trees are lost for want of a little attention to these particulars.—*Ib.*

Necessity of a Change of Crops.—*Messrs Editors.*—In a conversation the other day with an intelligent, I stated the remarkable fact, that if an animal were to be confined to one particular diet for a certain number of days, sickness, and eventually, death must be the consequence; when he immediately applied the *rationale* of the fact to a subject at once so highly interesting and natural, that I cannot help recording it. "Then," said he, "this shows at once the necessity of a change of food to the crop; or which is the same thing a change of crop to the soil—a *rotation of crops*, as it is called." Now in this little remark, a volume is thrown open to our perusal, and by studying it, I believe we may derive information and advantage at present unknown and unappropriated; and in return for the many useful hints and very pleasant ideas that I am continually reaping and garnering up from the perusal of your paper, I offer the above in grateful acknowledgement.—*Farmer's Cabinet.*

Advise on the Care and Management of Tools.—From a new edition of the Cabinet Maker's Guide, we quote the following:—

"The goodness of saws, chisels, and other edge tools, depends upon the quality of steel, which should be uniform throughout, and it is always better to have them tempered too hard than too soft, for use will reduce the temper. If at any time you wish to restore the temper, and to perform the operation yourself, the best method is to melt a sufficient quantity of lead to immerse the cutting part of the tool. Having previously brightened its surface, then plunge it into the melted lead for a few minutes, till it gets sufficient hot to melt a candle, with which rub its surface; then plunge it in again and keep it there until the steel assumes a straw colour, (but be careful not to let it turn blue,) when that is the case take it out, rub it again with the tallow, and let it cool; if it should be too soft, wipe the grease off and repeat the same process without the tallow, and when sufficiently hot, plunge it into cold spring water, or water and vinigar mixed.

"By a proper attention to these directions, and a little practice, every workman will have it in his power to give a proper temper to the tools he may use.

"If a saw is too hard, it may be tempered by the same means; if you are near a plumbers shop, you may repeat the process conveniently and without expense, when they are melting a pot of lead.

"In other kind of tools you must wait till the steel just begins to turn blue, which is a temper that will give it more elasticity and at the same time sufficient hardiness."—*American Mechanic.*

Important Improvement in Selecting Seed Wheat.—In the selection of seed-wheat, take at least six bushels of a good quality, then take a sieve or screen with holes sufficiently large, so that 5 bushels of the 6 will pass through it. The one bushel that remains will be kernels of the largest size, and this should be used for seed. When this seed is sown and germinates, it will be found that the blades which spring from it will be uniform, and present the same healthy appearance, and will maintain the same equality until the time of harvesting. Thus instead of having so great a proportion of small weakly stocks start from diseased or pinched kernels, which can never produce any thing but small straw and consequently wheat of an inferior quality, the whole will stand a fair chance to come to maturity, divested of many evils which attend the sowing of grain where sifting is neglected.

But, says the reader, this important discovery of which you speak, don't amount to any thing after all. It has been known for years, that to sift out the small grains from seed-wheat is a good idea, and is now generally practised among our best farmers. I will respectfully ask such, have you ever known sifting carried to the extent I propose? If you have not, you know but little of the real benefits that will result from this discovery and practice in accordance with its reasonable theory.

I am informed that Isaac Bowels Esq. of this town, tried the experiment the past season, and the result was what we had good reason to expect, the most perfect growth of wheat he has ever raised. I believe if this practice should be adopted generally by the farmers of this State, the quality and quantity of the wheat crop would in a very few years be increased one-quarter by the simple process of sifting seed in the proportion I have named, and no farmer need be afraid of injuring his seed by carrying the principle to too great an extreme. The improvement is within the reach of every farmer, and he can satisfy himself on this point.—*Maine Farmer.*

Cement to Mend China or Glass.—Garlic stamped in a stone mortar; the juice whereof, when applied to the pieces to be joined together, is the finest and strongest cement for that purpose, and will leave little or no mark if done with care.

For the Cultivator.

Seeing that in your last number you have invited your esteemed friend from Waterdown, to favour you with an illustration of the probable duties and benefits of a General Board of Agriculture for Canada, I send you the following remarks on that subject confident that neither your esteemed friend, yourself, nor your readers will look upon, my doing so as an unreasonble interference; as there can be little doubt that what I have to communicate, will be in accordance with his more comprehensive views and coming as it does from one residing in a part of the Province far distant from Water Down, who has never had the pleasure of an interchange of ideas on that or any other subject with your esteemed correspondent, may be the more strongly corroberative in so far as our opinions are found to agree.

The Agricultural class in Canada at present, *as a body*, possess but little influence little wealth, little knowledge of their profession, and little general information compared to what they ought to possess, from their number, the respectability and indispensable utility of their profession. That *union gives strength*, was well demonstrated in the days of old by the bundle of sticks which, when separated, were easily broken but, when united, were not, from the support they afforded one another; and the expression *divide and conquer*, is equally plain, and in the present day greatly in practice.

In pointing out as you desire, the probable duties and benefits of a General Board of Agriculture, it were in my opinion more injurious than profitable, to enter into a minute detail, since it is found that while many will agree on a principle, and on the necessity of effecting some important measure, the details thereof, are often subject to great diversity of opinion. Witness, for instance, the diversity of opinions amongst men on the sacred word of God, while they all profess obedience to His law, and that their various comments are for the interest of man, both in this world and in that which is to come.

It may be hoped, however, that it would not leave much room for differences of opinion, to say, that it would be part of the duty of the Board of Agriculture, to *unite* the agricultural interest of Canada, *and that is to make it strong*, and when it shall have *acquired the strength*, which is the *consequence of union*, there is little doubt that, in that Board of Agriculture, there shall be found sufficient intelligence, energy, and discretion to effect some good.

Let us take pattern from all of the most civilized classes, orders, and professions of men; the pious clergy, the public legislator, the speculator, and intelligent merchant the practitioner in law, and in medicine, down to the poor Paisley weaver, and Man, chester cotton-spinner; who all demonstrate to us that *union gives strength*. It is highly important, according to my views of the subject, that this General Board of Agriculture, should as early as formed, communicate their views to the Executive Government, and that the prospectus of their proceedings, should be such as the Government would be likely to approve and patronize, for admitting, what none can deny, that the prosperity of this Province depends on the prosperity of its agricultural interest, and that there is no question, but the Government of the country is anxious to promote the general prosperity; clear reasoning and proper representations from such Board, would no doubt, receive some attention from the Government. Indeed such a Board patronized by the Government, might be highly conducive to the carrying into effect, many of the measures of the Government, and especially in the education of the rising generation.

If a practical illustration is wanted of the benefits and duties of a Board of Agriculture, we may refer to the Board of Trade of Toronto, Quebec, and Montreal, from all of which are sent forth to the public, matter not only edifying to the mercantile class, and to the public in general, but what is of much real practical use and importance to the farmer, and I believe I may venture to say, that in some cases the reports of such Boards contain more real useful information to the Government than the collective wisdom of the House of Assembly (the mercantile men excepted,) could afford on the subjects to which such reports advert. This General Board of Agriculture, could do much good in collecting, condencing, and circulating amongst the farmers the most useful information connected with the profession. They might be instrumental in showing in a more clear, condensed, and uniform view, the disabilities under which the agriculturist labours, and petitioning with more force and effect for the desired amelioration. They might aid in preventing the circulation and signing of many useless and sometimes injurious petitions, which are laid before farmers, purporting to be prayers for what is the public good while the real object is either self interest, or if not may be so worded as to injure the cause it was intended to espouse. Take as an instance of this, a petition got up about two years ago in the Home District, to the Imperial Government, praying for protection to the agricultural interest of Canada, and assigning as a reason, "that when wheat was higher in America than in Europe, that article was of less value in Canada than in the United States, because a duty was levied on foreign wheat in the States, but none was levied in Canada;" or, words to that effect. Now should the farmers of Canada generally sign such a petition, and that it should go before the Imperial Parliament, its effects could not fail to be injurious to the agricultural interest in Canada—because if we have no better cause to show, why a duty should be levied on agricultural produce than that petition contains, we never should have that duty. Fortunately, the petition met with deserved opposition, and it is to be hoped never found its way to the Mother country.

Another petition is now got up in Toronto which minds me much of an axiom, that says "if a resolution is to be moved to which you are opposed, move it yourself, and do it in such a way as to make it miscarry." This petition has four paragraphs of reasoning, or of matter showing certain facts, which it may be presumed are intended to justify, and render reasonable, the prayer of the petition. In this communication there is not room to quote this petition, it may be remarked of its first paragraph; that it does not strengthen the petition, to limit its subscribers to farmers, but on the contrary weakens it; and many of the most intelligent merchants in the Province, even the managers of Bank institutions, would sign a petition for agricultural protection.

Of the second paragraph it may be remarked that it is not the present low prices that the agriculturist rests his claim for protection on, but on a general principle, that he has aught to it, whether prices are at present ruinously low or not. Passing over the third paragraph, it may be said of the fourth, that the Legislature of this country, have already passed a law imposing a duty on American wheat, and their doing this, was highly praiseworthy under the circumstances, and how can we now sign a petition which says, "*petitioners have no wish to have any restrictions on such articles of Agricultural produce or merchandise as are introduced for the purpose of being exported to Europe or elsewhere.*" In the same paragraph, the petition, "*represents that the benefits enjoyed by the United States farmer, by having our markets open to him, are not reciprocated.*" Suppose Lord Stanley should so arrange it with the American Minister in London, that Congress should immediately pass a law granting this reciprocity of open markets in the United States to the farmers of Canada, in order to put an end to our complaints, would that benefit the agricultural interest of Canada? No. because our market is generally better than theirs; and before the Americans come to a conviction that this reciprocity would benefit rather than injure we had better lay aside the unmeaning expression, till we have something to export to the United States, that shall command generally, a better price than we can obtain in the British market, where we are favoured, or in our own home market on the banks of the St. Lawrence.

The prayer of this petition is not sufficiently comprehensive, it enumerates certain articles, and leaves out many, on which duties ought to be levied. Indian corn for instance, of which one establishment near Kingston, converts about £5,000 worth annually into whiskey.

The prayer of the petition should be for a duty on all agricultural produce, in addition to what is therein enumerated.

THE PITTSBURG FARMER.

May 25th, 1843.

FOR MAKING CLOTH WATER PROOF.—Immerse the cloth in a solution of Alum for 10 minutes, air it for 20 minutes, then immerse it in pulverised Chalk.

PLANTING POTATOES.

In consequence of the unavoidable delay of the issue of the May Number, the season for planting potatoes will be pretty much over before it reaches the subscribers. It will, therefore, be unnecessary to give full particulars as to the management of that important crop.

One of the most prevalent errors practiced in cultivating the potatoe, is, the covering of the seed too deep, and afterwards banking them up so high that they not unfrequently suffer from the drought, and are subject to various other risks. An acquaintance of ours is so fully persuaded on this point, that for the last seven years he has not put a plough in his potatoe field after his crop is planted until it is ready for gathering—his mode is thus:—he ploughs and dungs his land in the autumn, then ploughs again in the spring as soon as he can get on the land, and subsequently harrows a number of times so as to completely pulverise the soil, and if the land require an extra ploughing, he makes it a point to *administer to its necessities* in that particular. When the ground is ready for planting, which, on an average of seasons, is by the twentieth of May, he ploughs as though for other spring crops, and drops potatoe sets in every third furrow, at the distance of ten inches asunder. The proportionate size of the furrow, average nine inches wide, by four deep.

The after culture merely consists in a thorough harrowing with the lightest description of seed harrows, at the period the plants are bursting out of the ground, and dressings with a horse *cultivator*, at suitable periods, for freeing the crop from weeds.

From the above mode of management, from four to five hundred bushels of excellent potatoes, are raised per acre. If the land be of a heavy tenaceous clay, the above might be deviated from, in this particular—by simply running the plough down between the rows, and forming a light furrow, to carry off a superabundance of surface water, if such should happen to be on the land.

ACKNOWLEDGEMENTS.

In addition to the regular files of the *American Agriculturist*, we have been presented with the first Volume of that work, got up in a neat and convenient form for binding, and also, a quantity of extra numbers sent for the purpose of distribution among our friends in this District. We would feel a pleasure in distributing them to any who may favour us with a call.

The above Journal has been before the public only fifteen months, and is just what its name purports it to be, a National Journal, or, one of the leading organs of the agricultural classes of the great *Republic*. Its talented Editor, A. B. Allen, Esq., is evidently a man qualified in every particular to perform the arduous task which he has undertaken, with credit to himself, and the nation whose interests and welfare he advocates.

We learn from a private letter from that gentleman that his Journal is obtaining a circulation which exceeds his most sanguine expectations, and from the account he gives us, we are led to suppose that his work has double the circulation of our own, notwithstanding there are six exclusively agricultural papers published in the *Empire State*, and only one in the so much boasted *Agricultural Province of Canada*.

The American Agriculturist contains thirty pages on a sheet a trifling larger than our own—say one-sixth—and may be had for one dollar a year, exclusive of American and British post age. Those of our subscribers who would like to take in also, a foreign publication, would do well to forward us their dollar, and we would procure them the above work.

For want of space, we have to apologize for not acknowledging numerous favours from publishers and others, but in future we will endeavour to do more justice to our friends in this particular.

THE WEATHER—THE WHEAT CROP &c.

While writing this article, the atmospheric temperature is extremely cold for the time of year, indeed, vegetation appears very backward, Rain has been much wanted for some time. and we apprehend that crops of every description will be under a medium yield, the ensuing harvest, unless a decided improvement takes place in the weather, during the next fortnight. In such seasons as the present, the application of the following substances as stimulant manures for top dressings are attended with most advantageous success, especially to the hay crop. Gypsum, at the rate of one bushel and a half per acre, salt at the rate of two bushels per acre, and unleached ashes at the rate of three bushels per acre, will be found to add at least fifty per cent to the gross amount of the product. If any are sceptical on this point, let them try one half acre of each, and by that means satisfy themselves as to the correctness of this statement. In the neighbourhood of a potashry or soap-boiling establishment, leached ashes may be procured for the mere drawing of them, and if applied to grass or almost to any crop, at the rate of sixty bushels per acre, will be found a most efficient stimulus to the plants, and will doubly repay for all expenses, The farmers in the neighbourhood of *New York*, *Philadelphia*, and *Boston*, have become so well acquainted with the use and importance of leached ashes that they not unfrequently pay ten cents per bushel and lade them eight or ten miles back in the country.

Accounts have reached us from almost every state in the Union, relative to the prospects of the wheat crop, and in summing up the whole testimony we give it as our opinion, that the prospects were never better.

We notice conflicting accounts in the English Journals, relative to wheat plants, but from the best sources which have reached us for obtaining the necessary information, it is our opinion that the prospects of a good crop are flattering.

Information from the very best sources, have reached us from almost every celebrated wheat growing District in Western Canada, and with but three exceptions, all agree in giving it as their opinion, that the wheat plants never looked worse at the advanced stage of the season, indeed, it is thought that fall sown wheat will not yield more than half an average crop, providing the summer season be ever so favourable. We understand that one half of the crops in some of the townships, have been ploughed up and sowed with spring grain.

The sickly appearance of the wheat crops may be attributed principally to two causes. The unfavourable and backward season in which the seed was deposited in the ground last autumn; and the great depth of snow which lay upon the ground during the past winter. We understand that many farmers have ploughed up their whole crop, and re-sown the land with spring wheat.

It has been frequently remarked by us that the system, or mode of managing farms practiced in Canada, is the real source of much of the distress at present experienced by almost all classes; if we required further testimony than what has been already adduced to substantiate that assertion, we would only have to point to the fact, that, during the last four years, only one good crop of wheat has been harvested, or in other words remunerated the producer. In the harvest of 1838, the crops of wheat yielded abundantly per acre, and the prices were exorbitantly high—in 1839 a general failure took place, owing to the mill-dews which was prevalent, The failure was so great that thousands of fields were not touched by the reapers, and many of the best and most wealthy farmers in the province, were under the necessity of obtaining a supply of bread stuffs from the United States;—in 1840 there was a medium crop, and if it had not been that an unusual quantity was sown the autumn previous, we would have been under the necessity again sending to our neighbours for a supply for home consumption. The average that year did not exceed 16 bushels per acre; in 1841, the snow fell exceedingly deep and remained on the ground for upwards of five months, the consequence was, that the wheat plants were smothered, and the yield per acre, was very similar to that of the year previous;—the small quantity of snow which fell upon the ground, during the winter of 1842, tended materially to injure the plants, from quite an opposite cause; and now, in 1843, the snow has fallen so deep, and remained on the ground so long, that, we hear of nothing but sad complaints about the severity of our rigid and "*Laplandish climate*," and other hard epithets about our country; and it is generally supposed that the ensuing wheat harvest will come far short of the average above quoted.

The difficulties which a Canadian farmer have to surmount, under the present system of farming, are so diversified in their general character, that it would almost puzzle a philosopher to recommend a mode for amelioration, however, we feel a sympathy for our brother farmers, and shall lose no opportunity in giving them such friendly advice, as may suggest to our mind, while engaged in the operations of farming. In the meantime, we would take the liberty to say, that no one should depend solely upon the wheat crop, at the same time, we recommend a better system of management for that important crop, which will lessen the risk, and add materially to the product. The manure intended for the summer fallow, should be thrown up in large heaps and covered with surface soil, to prevent loss from fermentation. And another method we have practised to a limited extent, and one we can safely recommend, which is to draw out the barn-yard manure, during the month of June, and plough it under with the first ploughing.

After all that has been said, respecting the Canadian farmers turning their attention to the dairy business, we fear but little action will be taken on the subject; and a small and inferior quantity of butter will be exported the forthcoming autumn.

If farmers were only enterprising, and felt an interest in the success of their own welfare, all the difficulties that they have to encounter, would be comparatively trifling, when compared to the natural advantages which the fertile lands of Canada possess, for the growth of flax, hemp, grass seeds, dairy produce and many other articles which might be enumerated.

REARING OF CHICKENS.

To the Editor of the Farmers' Register.

You some time since requested to know my mode of raising chickens, and I take great pleasure in forwarding the same to you.

I must, in the first place, give you my plan for constructing a "hen house," as I consider it one of the most important things about the rearing. My "hen houses" are built of pine logs, with the bark taken off, and chinked in with wood. On the inside of the house, and about one foot from the walls, I plant forks, across which I lay poles for the fowls to roost on, being careful that no part of the poles or forks shall touch the house. About once in four weeks, I have these poles washed or replaced with new ones; by these means I get rid of lice, if any should have found their way to the roost of the fowls. My boxes for the hens to lay in are put upon forks in the same manner, being entirely detached from the house, and are taken out once in three or four weeks, and new nests made for the hens.

Since I have been pursuing this plan, I have never been troubled with lice, nor have I ever lost any considerable number with the gapes, a disease which I am convinced proceeds from the young chickens inhaling hen lice from the parent hen.

In chickens having the gapes, a worm is found in the larynx, near the lungs, which continues to increase in size until the whole aperture in the windpipe is filled up, and the chicken then suffocates. I am convinced that this is the cause of the disease; for if the parent hen is kept clear of lice, the young escape the gapes.

When I find my hens are ready to go to setting, I always in the early part of the season, set two on the same day, and when they hatch, put them together in coops, or hovers, and feed them on corn bread; until the chickens begin to feather, when I give them small hominy. At this time I take away one hen, and confine her for a few days, when she will become weaned, and again be ready for setting in a few weeks.

In the summer, when the young chickens do not require the protection of the mother to hover them, I frequently give as many as fifty or sixty chickens to one hen.

Last season I set six turkeys, and they only brought out a sufficient number for three of them to attend to. I set the remaining three on hen's eggs, taking care to set a hen at the same time. During the season, each turkey brought out three broods, amounting in all to 150 chickens.

The turkey hens while setting require to be well fed and watered, and if well attended to, will set most of the summer.

Since I have adopted the above rules, I have been very successful in raising chickens, and can recommend them to the patrons of the Register.

Very respectfully,
WM. B. GREEN.

PEACH TREES.—When bearing trees are planted in low places, the blossom buds are urged forward by the warmth of day, and the increased severity of night frosts destroys them. But on hills, these extremes of heat and cold do not occur; hence they generally escape. One of the early settlers of Wayne county, near Palmyra, twenty four years ago planted a peach orchard on a hill nearly one hundred feet above the average height of land; and during twenty years since they first began to bear, he has lost only one crop by frost.—*Cultivator.*

LIME IN AGRICULTURE.

Of the mineral substances that have been employed to improve the soil, lime is the most important. All our lands seem to be susceptible of great benefit from it; and I believe that in many parts of this district it can be obtained on such terms as to create a probability that it may be profitably applied. The theory of its modes of action involves chemical principles, which it would be beyond my limits to attempt to explain here; I may briefly state, however, the facts connected with its various effects.

It renders stiff and tenacious soils more friable—and light and sandy soils more retentive of moisture. It disposes all vegetable matter in the soil to decompose, so as to supply the nourishment of living plants, and it makes the nutritive matter itself more salubrious. These last effects may be seen in familiar instances. If a little quick lime be added to a heap of leaves or rotten wood, it is soon reduced to black mould; and if a little be sprinkled on the rank spots which get up in pasture fields, and are rejected by cattle, they will shortly be eaten down. It is not more active in rendering the vegetable matter of the soil available, than it is in giving vigor to the plants, and goodness of quality to the grain; and on no grain are its effects so remarkable as on wheat. I knew a gentleman who from having a great command of manure, thought that he might dispense with lime. He raised by measure as many bushels of wheat on the acre as his neighbours; but it was coarser in quality, and therefore lighter, and in the British markets great discrimination of price is made on account of quality; so that he lost in two ways. He had at last recourse to lime, and with complete success.

In cold and humid climates, it is not considered that old turfy lands can be profitably broken up without lime; the straw will be abundant, but the grain light and unmatured—treated with lime these lands are the most productive. In our climate, the vegetable matter has no such a tendency to become peaty and inert, and lime may not, to such a degree, be necessary for the purpose of promoting decomposition; but it would in every case make our wheat of better quality. In our best lands, it would give health and vigor to the straw and render it less obnoxious to the diseases to which luxuriance is exposed, and it would make lands, at present too rich for bearing grain, capable of producing healthy and productive crops. From what has been said, it will follow, that it would be improper to apply lime to impoverished land, unless at the same time accompanied with manure, without which it would aid in the robbery of the soil. For other reasons, it should not be applied to wet land.

In calculating the expense of liming, the permanency of its effects should be taken into account. If a proper dose be administered, there will be no need of a repetition of it for 15 or 20 years. What the dose should be, must depend in the quality of the land; but generally speaking, it should be increased as the land is more adhesive, or as it is more filled with vegetable matter. There are soils probably that would be benefitted by less than 100 bushels to the acre, or which would require more than 300 to produce the maximum effect. As, in proportion to the mass of the soil, the quantity of lime used is small, the two should be mixed together as equally and intimately as possible. The lime may be allowed to lie till it falls down into a state of flour, and then be spread out, when the soil has been previously well pulverized.—*Renkine's Address.*

TOMATOES FOR COWS.—It is not generally known (says the *P. U. Advocate,*) that this vegetable is a superior article of food for milch cows. We have tried it two summers, and it is decidedly superior to any other vegetable we have yet tried. They add greatly to the quantity as well as to the richness of the milk, and give a rich colour to the cream and butter, which is at least pleasant to the eye, even if the flavor is not so improved. We do not know, however, that they impart any richer flavor to the butter.

We have known a cow to refuse them when first offered, but soon became very fond of them; others, we believe a large majority, eat them greedily from the first. Thus far we have fed them only in the raw state; but if boiled with corn meal, say half and half, or two-thirds tomatoes, they will, doubtless, be far better.

To one who has a dairy farm, the cultivation of an acre or two in tomatoes would be repaid by greater profit than any vegetable we know. From one acre not less than eight bushels may be gathered daily from July until frost. There is some trouble in picking them, but then nearly every farmer has children; his little boys—ay, and his big ones too—would not be the worse for a little work. We should be glad to see the experiment tried on a larger scale than ours, and to learn the result.

SPAYING.—We have received from L. Bishop, Esq., of Smyth County, Virginia, the following account of the process adopted in spaying pigs by Rufus Rouse in that neighbourhood.

"Fix a plank three feet high. Lay the pig upon the right side on the plank, with two persons to hold the fore and hind legs and mouth. The implements used are a sharp pocket knife and a long crooked needle, with cutting awlblade edges, and a strong wax thread. The operator takes his knife and shaves off some of the hair, three and a quarter inches from the hip bone; he then makes an incision crosswise, so that he can introduce one finger to bring out the uterus; he then cuts off the whole of the uterus and throws it away; he then enters the needle on one side of the wound and brings it up through the other, and secures it with a strong knot. One stich is sufficient. A mixture of tar and hog's lard is used to smear the wound. This mode of operating is the invention of Capt. Rouse, and I am in favour of the plan, considering it more safe and less troublesome than the other methods."—*Cultivator.*

TO HOUSEWIVES.—Recent experiments in more than one family in this city, says the *Delaware Gazette,* have established that the plant known to botanists as the *Polygonum punctatum,* commonly called water pepper, or smart weed, and which may be found in great abundance along ditches, roads, lanes and barn yards, is an effectual and certain destroyer of bed bugs. It is said to exercise the same poisonous effect on the flea. A strong decoction is made of the herb, and the places infested with the insect are carefully washed therewith. The plant may also, with much advantage, be strewn about the room. Elderberry leaves, laid upon the shelves of a cupboard, will also drive away roaches and ants in a very short time.

SOAK YOUR SEED CORN IN SALTPETRE.—It destroys the worm, is not relished by crows or squirrels, and yields much more abundantly than when planted without.

EXTRACT FROM A VERY SENSIBLE ADDRESS OF JAMES RANKINE, OF CANANADAIGUA.

Sources of happiness.—Surely pecuniary gain should not be considered as the scale in which all things are to be weighed. It has been said that wisdom is better than riches—and it is indeed so. The advancement of fortune is a laudable object; but we have received the capacity for social and intellectual enjoyments, and it could not be meant by the Giver that we should receive it in vain. All our struggles in life are directed to increase our happiness—if, however, we confine our endeavours merely to the enlargement of our possessions, the gratification which may arise from success will still be a gratification to which a rational and reflecting being should be loath to confine himself. The highest order of happiness, and that least exposed to vicissitudes, is to be found in the cultivation of our intellect, and the improvement of our dispositions. Knowledge may put nothing immediately into the purse; but it will bestow a purer and more lasting enjoyment than any thing contained in the purse can afford. The more we mingle in friendly intercourse with our species, the more will our benevolent feelings be expanded; and if, in addition to mental culture, a man be at the same time in peace with himself, and of charity towards all men be affirmed to have the means of happiness independent of worldly circumstances.

The Farmer's life.—Gentlemen, allow me to congratulate you on the happy situation in life, in which those are placed, who are engaged in the cultivation of the earth. In independence, in healthfulness, in amenity, it excels every other. Prudence and economy, and a just estimate of his position in society, are requisite for a man in all situations; but to whom are the facilities to independence so great as to the farmer? Favourably situated for avoiding temptations to be led away by the vanities of society, he is surrounded with every thing necessary to comfortable existence. His life, indeed, is a laborious one; but labour is no evil—it conduces to the vigour of the body and of the mind, and certainly, it is not in idleness, that happiness is ever found. The very place in which his labours are carried on is favourable to him. He lives not pent up in walls, and in a confined or insalubrious atmosphere, but in the free airs of heaven, with the boundless sky for a roof, and surrounded by every thing that is lovely in nature, and calculated to lead the mind from nature to nature's God. The sentiment of love and admiration of the beautiful works of the Creator, leads us to see him, and to know him, and to adore him. He who can plod on in his fields, insensible to these beauties, is truly of a clodddish heart. He is incapable of experiencing that sublime love of the Deity, which alone can elevate the soul above the miseries that envelope all wordly concerns, and give him as it were, a foretaste of the pure and exalted joys of a future state.

To wash woollen goods.—The art of washing woollen goods so as to prevent them from shrinking, is one of the desideratum in domestic economy worthy of being recorded, and it is therefore with satisfaction we explain this simple process to our readers. All descriptions of woollen goods should be washed in very hot water with soap, and as soon as the article is cleansed, immerse it in cold water; let it then be wrung and hung up to dry.—*Southern Planter.*

Lice in cattle.—1. Mercurial ointment rubbed on the animal from the crown of the head to the root of the tail, down the back bone, will effectually kill lice in a day or two. This, however, is a dangerous remedy to use, unless the animal is kept in the stable, and requires great care to preserve him from the effects of cold and wet.

2. Corrosive sublimate is another effectual remedy. This is to be applied as before prescribed, but, like No. 1, is dangerous.

3. A strong decoction of larkspur is also a sure and safe remedy. This should be applied as recommended for No. 1.

4. Spirits of turpentine is also a sure remedy. It should be applied as No. 1.

5 A decoction of Tobacco, applied as No. 1, will destroy the lice.

6. A mixture of Scotch snuff and fish oil, rubbed on the affected parts, will destroy lice.

7. A mixture of soft soap and Scotch snuff, well rubbed on the parts, will also eradicate them.

As an auxiliary to whatever remedy may be used, the currycomb and brush should be freely applied, after a day or two, in order that the hide and hair of the animal may be kept clean. No animal which is well fed, and daily curried and brushed, will either breed or retain lice; the latter operation, however, few who have much stock can regularly attend to.—*American Farmer.*

Poll evil.—This disease says the *Southern Planter*, has generally been considered incurable, but Mr. Samuel Terril, of Caroline, an old gentlemen of the highest respectability, called at our office a few days since, to say, that he had found an unfailing remedy in the little evergreen, commonly called the *ground ivy*. The leaf is gathered and dried before the fire until it can be pounded, when a table-spoonful is mixed with an equal quantity of slacked lime, and the swelling, having been laid open to the bone, the mixture is laid on the wound, and kept in its place by a bandage. Mr. Terrill says he has used it himself, and that he has known it frequently used by others, and that, in no instance, has the first application failed to effect a cure.

Dr. Lewis Feuchtwanger, of New York, in a letter to the editor of the *American Agriculturist*, says—The following preparation will effectually exterminate all caterpillars, snails, bugs, beetles, earth fleas, leaf lice, ants and other insects on fields, trees, bushes and hedges.

Take diluted Pyroligneous acid, 1 gallon; white oak bark, 1 lb.; urine, half gallon; garlic, half pound. After soaking the oak bark and garlic for two days in the acid and urine, strain them off and sprinkle once a week or oftener, the trees infected with insects, or the pea, cabbage, &c., and they will be preserved for the season.

Mode of increasing the potatoe crop.—An English writer says, by carefully removing the buds as they appear on the potatoe vines, the crop of large ones is very much augmented. The theory is plausible, and worthy a fair trial.

Candles.—Prepare your wicks about half the usual size, wet with spirits of turpentine, put them in the sun until dry, then mould or dip your candles.

Candles thus made, last longer, and give a much clearer light. In fact they are nearly or quite equal to sperm in clearness of light.

Red or black ants.—Take a few sprigs of green wormwood, and place them in immediate contact with black or red ants, and they will disappear. I have found this to be effectual after using every other remedy within my limited knowledge.

Another remedy is to sprinkle chalk around the places they frequent. It is said the chalk will cause them to make their exit, but I have not had occasion to prove it.—*N. E. Farmer.*

Salting Horses.—A curious fact is mentioned in Parker's Treatise on Salt:—"A person who kept sixteen farming Horses, made the following experiment with seven of them which had been accustomed to take salt with their food. Lumps of rock-salt were laid in their mangers, and these lumps, previously weighed, were examined weekly, to ascertain what quantity had been consumed, and it was repeatedly found that whenever these horses were fed on old hay and corn, they consumed only from 2½ to 3 oz. per day, but that when they were fed with new hay, they took 6 oz. per day." This should convince us of the expediency of permiting our cattle the free use of salt at all times, and it cannot be given in so convenient a form as rock-salt, it being much more palatable than the article in a refined state, and by far cheaper. A good lump should always be kept in a box by the side of every animal, without fear that it will ever be taken in excess.—*Farmers' Cabinet.*

Making Vinegar.—We have never found any difficulty in making good vinegar from cider when we have drawn it from the lees after the fermentation was wholly over, and placed it in a place where the temperature was higher than it is in a cellar. Left on the lees, or in a low temperature, the acetous fermentation is rarely complete. If our correspondent will place his cider where the temperature is from 65 to 80 degrees, and draw a pailful daily from each cask, to be returned by the bung-hole; or if he will procure from a cask of good vinegar a quantity of the substance called mother of vinegar, and add it to a cask, we think he will soon have vinegar. There are in London extensive vinegar factories managed in this way. The casks are placed on end, and the tops made full of holes. On each is placed a bucket or tub, containing about half a bushel of inferior or Malaga raisins. A man is constantly employed in passing around the rooms, which are heated to 75 or 80, drawing a pailful from the bottom and pouring it upon the raisins, from which it enters the cask. This gives the wine-flavor and body. If the cider is too weak, sugar will make it first-rate in a fortnight.—*Cultivator.*

Bees.—The best place to put bees in is a dry, cold, and dark room or outhouse, if it can be obtained. The colder the winter the better, if the air is dry. Damp cold gives bees the rot. Put your bees there the last week in November, and let them sleep quietly till the flowers begin to come out in spring. In Switzerland a whole village clubs together, and hires a cold dry room which they darken and put all their bees in.

We find the above in an exchange paper, and think the system recommended at least plausible. So long as bees remain torpid they do not eat; and to keep them in this state, the temperature of the place where they are kept must be low; it must also be dry, or the mass of bees and comb will become mouldy. Bees die in multitudes by being enticed out of their hives in sunny days, before they are able to obtain food, or get back to their hives.—*Albany Cultivator.*

USEFUL RECIPES.

Antidote for Poison.—Two tea spoonfulls of mustard mixed in warm water, should be immediately administered to the patient. It acts as an instantaneous emetic. (The mustard should probably be ground.)—*N. E. Farmer.*

To Revive Gilt Frames.—Beat up three ounces of the whites of eggs, with one ounce of chloride of potash, or soda, and rub over the frame with a soft brush in this mixture. The gilding will immediately become bright and fresh. So it is said.

Oil Paint can be removed by rubbing it with *very pure* spirits of turpintine. The impure spirit leaves a grease spot. Wax can be removed by scraping it off, and then holding a red hot poker near the spot. Spermaceti can be removed by scraping it off, then putting a paper over the spot and applying a warm iron. If this does not answer rub on spirits of wine.

Stains on Varnished Articles which are caused by hot water, may be removed by rubbing them with lamp oil and then with alcohol. Ink stains can taken out of mahogany, by one tea spoonful of oil of vitrol mixed with one table spoonful of water, or by oxalic acid and water. These must be brushed off quickly, and then washed with milk.

Silk Handkerchiefs and Ribbons can be cleansed by using French chalk to take out the grease, and then sponging them, on both sides with luke warm fair water. Stiffen them with gum Arabic and press them between white paper, with an iron not very hot. A table spoonful of spirits of wine to three quarts of water improves it.

DYES.

Pink Dyes.—Buy a saucer of Carmine at the apothecary's. With it you will find directions for its use. It is cheap, easy to use and beautiful. Balm blossoms and Bergamot blossoms, with a little cream of tartar in the water, make a pritty pink.

Red Dye.—Take half a pound of wheat bran, three ounces of powdered alum, and two gallons of soft water. Boil these in a brass vessel and add an ounce of cream of tartar, and an ounce of cochineal, tied up together in a bag. Boil the mixture for fifteen minutes, then strain it, and dip the articles. Brazil wood set with alum makes another red dye.

Yellow Dye.—Fustic, tumeric powder, saffron, barberry bush, peach leaves, or marigold flowers, make a yellow dye. Set the dye with alum, putting a piece of a size of a hazlenut with each quart of water.

Light Blue Dye, for silks or woolens, is made with the "blue composition," to be procured of the hat makers; fifteen drops to a quart of water. Articles dipped in this must be thoroughly rinsed. For *dark blue,* boil four ounces of copperas in two gallons of water. Dip the articles in this, and then in a strong decoction of logwood boiled and strained. Then wash them thoroughly in soap suds.

Green Dye.—First colour the articles yellow; and then, if silk or woolen, dip in blue composition. Instead of ironing, rub with flannel while drying.

Salmon Colour, is made by boiling annatto in soap suds.

Buff Colour, is made by putting one tea cup full of potash, tied in a bag, in two gallons of hot (not boiling) water and adding an ounce of annatto, also in a bag, keeping it in for half an hour. First, wet the article in strong potash water. Dry and then rinse in soap suds. Birch bark and alum also makes a buff. Black alder, set with lye makes an orange colour.

Dove and Slate Colours, of all shades are made by boiling, in an iron vessel, a tea cup full of black tea, with a spoonful of copperas. Dilute this until you get the shade wanted. Purple sugar paper boiled and set with alum, makes a similar Colour. So does black birch bark.

Brown Dye.—Boil half a pound of lamwood (in a bag) in two gallons of water for fifteen minutes, wet the articles and boil them for a few minutes in the dye. White walnut bark, the bark of sour sumach or of white maple, set with alum make a brown colour.

Olive Colour.—Boil fustic and yellow oak bark together. The more fustic, the brighter the colour, the more oak bark the darker the shade. Set the light shade with a few drops of oil vitrol and the dark shade with copperas.

Black Dye.—Let one pound of chopped logwood remain all night in one gallon of vinegar. Then boil them, and put in a piece of copperas as large as a hen's egg. Wet the articles in warm water and put them in the dye, boiling and stirring them for fifteen minutes. Dry them again, wet them in warm water and dip them again. Repeat the process until they are black enough.

To the Editor of The British American Cultivator.

SIR—The enclosed announcement has been handed to me, and has afforded me much gratification. I have long held the same opinions as are there expressed, and am so desirous that the proposed plan should be carried into effect, that I shall, (and I think, the whole Agricultural interest will likewise) be obliged by your early insertion of this, in order that those of my brother farmers who think as I do, may have an opportunity of forwarding so desirable an object.

I am, sir, your obedient servant,

AN OLD FARMER.

Home District, May 26th, 1843.

FIRE INSURANCE.

THE subject of Fire Insureance has hitherto met with but little attention on the part of the Agricultural population of this Province. Until these (comparatively) few years, the scanty produce of the scattered clearances, with their humble log houses and barns, were not of sufficient value to induce any portion of the narrow income arrising therefrom, to be applied to any object beyond the immediate wants of the Settler, how important soever that object might be. But now the case is widely different. Respectable, well furnished houses with their spacious farm offices meet the eye in every direction, the produce of thousands of well cultivated acres is annually stored, and, from the measures proposed by the Legislature with regard to the importation of grain, an encouragement is offered to increased exertion, in the prospect of our becoming, in some degree, the Granary of Britain.

Under these circumstances, it now becomes with every one, not only a matter of prudence, but one of duty, to look to the consequences of conflagration and to secure his property from loss by accidents from which no one can effectually guard, how careful soever he or his family may be; the merest spark, the smallest particle of ashes aparently extinct, may, in one instant plunge a family from a state of affluence and comfort into the depths of destitution and misery.

There still exists another cause of Fire Insurance not being more extensively adopted than it is, namely, the high rate of premium which is unavoidably charged by the present Insurance Offices. By insuring property both in *Town and Country,* much greater risk is incurred than if their operations were confined to country situations alone; consequently, to cover the chance of loss, a high premium *on each,* is absolutely necessary. In consequence of the near proximity of the houses in Towns, when a fire takes place, it is scarcely ever confined to the premises where it commenced, but spreads its ravages around, often to a great extent. Not so in the country; a fire occurring there, cannot reach beyond the scene of its attack.

It has therefore been proposed to establish a Company in this City, upon Shares of Ten Pounds each, for the purpose of *Insuring Country Houses, Offices, and Stock alone;* confining its operations to buildings at a certain distance (to be fixed upon) from any other unconnected with those insured.—Upon this system, Insurances can be effected at a very trifling annual charge. It is conjectured that a premium of 10s. or 15s. only, according to circumstances, for every hundred pounds, will be sufficient, and that few persons will be found willing to run the risk of loss, when for so small a sum security can be obtained.

In order that this Establishment should be based on a sure and substantial foundation, it is desirable, before proceeding further, to ascertain as far as possible, how it is likely to be supported both as regards Shareholders and Insurers: it will be esteemed a favour therefore, if you will have the goodness to make this communication as public as possible, and transmit, at your earliest convenience, such opinions and intelligence upon the subject as you may be able to collect, to Mr. SAVIGNY, care of Messrs. Strachan and Cameron, Solitors, Toronto.

Toronto, May, 1843.

TIME OF APPLYING MANURES.—Manure produced the greatest effect spread on grass land in the spring, as soon as the field appeared green.

When spread on either grass or plough land in the fall, and ploughed in, there was a loss of more than three fourths.

When spread on grass land, directly after the hay was taken off, in a very dry season, there was a loss, one half.

When spread on grass land at the same time, in a wet season, there was but little loss.

These experiments were made on a dry gravelly soil.—*Colonial Farmer.*

When the wash of the kitchen is throwu upon rotten chips or sawdust it makes an excellent manure for many purposes, but should not be used for potatoes, as it always contains a great number of the small hair-like worm, which by eating the skin from the potatoes makes them what is called "scabby." A mixture of decayed tanners bark has had the same bad effect upon potatoes.—*Ib.*

In old gardens which abound with wire worms, sow beets as early as possible. If they are sowed late the wire worms will cut them to pieces after they have sprouted, and before they have reached the ground.—*Ib.*

GARDENS.

Most persons who have only a small spot of land pay particular attention to gardens; but the farmer who has many crosses to attend to—often too many—generally neglects his garden. But few devotes to much time to this subject as it deserves. Not one farmer in five has a good garden with an assortment of vegetables so as to have a good variety early and late in the season, and a good store for the winter. This is not for want of land nor team, but the farmer says it is for want of time. This is no excuse; for he who can raise potatoes and grain for his family, can raise without any more expense a great variety of vegetables.

If a family be amply supplied through almost the whole year, as they may be, with choice vegetables from the garden, much less expense will be necessary for other kinds of food, some of which the farmer buys at twice the cost of producing garden vegetables, to say nothing of the pleasure of having a greater variety of food and living on one's own productions. So the farmer should have a good garden whether he consults pleasure or economy. On one fourth of an acre there may frequently be raised in a garden as much in value as on a whole acre in the field, and at less expense. Many an hour may be spent with pleasure in working in the garden when it is not convenient to work in the field. The children will do much in a garden if properly directed and encouraged. The women too will find a little exercise in the garden, with the light and convenient tools now made for their use, a source of health and pleasure. It will be a different exercise to that which they are constantly taking in the house, and this in connection with the open air will improve their health and strength, and "give to the cheek a fairer bloom." The farmer will find that if he lays out to have a good garden the whole family will cheerfully aid him, and how great is the pleasure to break the dull sameness of toil, by spending an hour in the garden occasionally with one's family around him, all engaged in the same pleasant and profitable labour. Even the little ones that cannot distinguish a plant from a weed, will afford pleasure in their desire to join the rest in their pleasant labours, and with the advantages of directing their tender minds to discriminate between the useful and worthless.

We will give a few directions by which a garden may be managed with less than half the expense that they usually require. In the first place we would observe that according to present management, it frequently becomes necessary to dig up a garden with a spade, carry on the manure with a wheelbarrow, or some slower process, which is done by manual labour, which might be done to better advantage with animal labour.

A good spot should be selected for a garden, and if convenient it should include a variety of soil, some parts rather moist, others dry, but this is not always convenient, and a soil may be easily improved, whether too wet or too dry. If it be too wet it should be thrown up and well drained. We have made an excellent garden spot from a mud hole, just by throwing into high beds, so that the water would drain off. If a soil be too light and dry, clay or mud may be added to improve it.

A garden should be laid out in such a manner that it can all be ploughed conveniently, excepting a narrow strip on one side, where there should be currant and gooseberry bushes, and other shrubbery, and next to them should be various biennial and perennial plants, such as herbs, flowers, &c., all arranged closely on one side next to the bushes and shrubbery, then all the rest can be conveniently ploughed, and it should be so arranged that a team may pass through the centre, if not in other parts with manure. This plan will save more than half the labour, by managing in the following manner.

Select now a suitable spot and if any part of it in grass plough it up and plant it that it may be in a suitable condition for a garden. A substantial fence around a garden is absolutely necessary, and there should be a gate or bars at each end, if it be so situated that a team pass through, as this will save the disadvantage of turning the team in the garden which will be injurious in treading down the soil and as much room is required for this purpose it is frequently attended with inconvenience. Where there is a passage through the garden, it is more convenient in ploughing, and a passage in the centre may be used till late in hauling on manure if necessary, and then ploughed and planted in cucumbers for pickles, cabbages, and other late crops.

To manage a garden with economy as to labour, it should be manured in the fall and ploughed deeply; subsoil ploughing will be beneficial; if a farmer has not a subsoil plough, there will be an advantage in trench ploughing. This is necessary in order to loosen the soil to a great depth, which greatly promotes the growth of most garden vegetables, and is a protection against drought.

By applying manure in the fall it becomes thoroughly mixed with the soil, and partially decomposed and more fine and mellow, and ploughing exposes the soil to the frost which destroys insects and improves its condition for tender plants. If manure cannot be applied and the ploughing done in the fall, it should be done as early as possible in the spring, that the seeds in the soil and manure may vegetate and be destroyed before the main crops are planted.

Early in the spring on one side of the garden should be ploughed and prepared for early vegetables. The other parts should be ploughed again, harrowed or worked with the cultivator as soon as the weeds start, in order to destroy them, and as other seeds, after the early varieties and kinds that require early planting, come on in succession, a narrow strip may be ploughed on one side and planted; and as the weeds start up in the part not yet planted, it should be worked over again, and so proceed till the time of planting. In this way the land will be worked over several times before sowing which will destroy the weeds, and as it is done by animal labour it costs a mere trifle, and the soil is improved enough by this frequent necessary for garden plants, to pay the whole expense. Proceed in planting every thing in its proper time, in strips on each side, approaching the centre, which may be left open to the last as a thoroughfare. By this plan every part of the garden is conveniently ploughed or stirred just before sowing, which is important to success, and the weeds are destroyed before the plants are on the ground; and if the seed be soaked before sowing, so as to start them quickly the plants will be up before the few weeds which will afterwards start make their appearance. In this way the weeding is done before planting, and by animal labour too, which will save more than half the labour usually expended on gardens, and it will ensure an abundant crop.

No weeds should be allowed to go to seed in the garden, and the manure applied should be free as possible from grass and weed seeds. Let a farmer pursue this general plan and he will no longer say that he has no time to attend to a garden, but he will find that it will not only be the most pleasant and beautiful spot, but the most profitable of any on his farm. By managing as we have named, in applying the manure early, and stirring the soil to render it mellow and destroy the weeds, and starting seeds by sprouting, we have so prepared the soil and destroyed the weeds that we could weed a larger piece *before breakfast*, than we could in a whole day by the common method of cultivation. Farmers, try this mode. Some of you can lay out gardens on this plan now, others can prepare the soil and complete the plan in the fall.—*Boston Cultivator.*

CUT FEED.

Mr. Editor.—As much is said, and I think truly said, in favour of cutting feed for fat cattle, I wish to ask you one question viz:—Will one ton of English hay by being cut, keep a cow longer than the same quantity will without being cut?

By giving your mind upon the subject, sir; you will oblige. A SUBSCRIBER.

Brookfield, April 5th, 1843.

REMARKS BY THE EDITOR.—There are many advantages in cutting fodder, as in this way much that is coarse, and would otherwise be wasted, will be eaten up clean when cut and sprinkled with salt water and mixed with meal or bran; or mixed with roots, chopped fine. In this way stock will eat much fodder that contains a good share of nutriment which they would refuse without this preparation.

Some old animals which cannot thoroughly masticate hard fodder, are greatly benefitted by having their food so prepared that they can eat it with comfort and digest it.—In hot weather when horses are too thirsty to eat dry food, and too hot to drink, they may safely eat prepared food, and thus relieve their thirst and satisfy their hunger.

But will young animals, or any others which can thoroughly masticate their food, and have a plenty of time to do it, be benefitted by cutting such fodder they would eat up clean without this preparation? Or will such fodder last any longer thus prepared? This question in substance is the same as that of our correspondent. We answer that it is a doubtful question, which has not been accurately decided by experiments, and which is rather difficult to determine.—Some have thought that there was an advantage in cutting fodder for an animal in full vigor and strength and having nothing to do but eat. But they formed their opinions from observation, not by precise experiments; and it is difficult to make exact experiments on this subject, so as to draw a correct conclusion from the result. We are informed by a nice observer who keeps a number of horses, that he can perceive a difference in the condition of his animals, on the same food, when he cuts the hay. Sometime he has cut the fodder one month, then fed a month without cutting. He thinks that besides the advantage of mixing meal, grain, &c. with fodder, as animals eat it, that good hay alone is worth more than enough by being cut to pay the expense of this process. He thinks that cut food is more thoroughly chewed and of course better digested. It is not taken up so readily, nor swallowed down so voraciously as whole. We think that the best of hay will spend better and be more beneficial to animals when cut of a suitable length, say two inches, though they may have a plenty of time to eat and rest.—*Ib.*

MILKING COWS.

The owners of cows should pay particular attention to milking Children must not be trusted with this business, and there are many grown people who never milk well though they have been brought up to the business.

If you would obtain all the milk from the cow, you must treat her with the utmost gentleness; she must not stand trembling under your blows nor under your threats. She may at times need a little chastisement, but at such times you need not expect all her milk.

Soon after the bag has been brushed by your hand and the ends of teats have been moistened a little with milk, it flows in rapidly, and all the vains or ducts near the teats are completely filled. Then it must be drawn out immediately or you will not get the whole. You must not sit and talk —you must not delay one moment if you would have all the cow is then ready to yield.

The udder should be moved in every direction at the close of milking, and the hands may beat it a little in imitation of the beating which the calf gives it when he is sucking. An expert milker will make the cow give one quarter more in butter, than a majority of grown milkers will.

One season, at Farmingham, we kept four cows in the home lot; there was but little difference in the quantity of milk given by each. We had a *very steady* hired man of forty years of age; he had carried on a farm in New-Hampshire and always been used to milking; but he was so slow the cows had no patience with him.

We milked two of the cows and he the other two, and we were but little more than half as long as he in milking, though we got the largest mess by about one quart. On our remonstrating that he did not draw out all the milk, he said his cows would not yield so much as those milked by us. We then made an exchange: he milked our two and we milked his. In three weeks time the case was reversed; our mess exceeding his by nearly one quart. He never failed to strip his cows to the last drop; but his *intolerable moderation* prevented his obtaining what an active milker would have done.

Young learners may practice on cows that are to be soon dried off. They should be taught *at first* how to take hold of teats and they will remember it; but how common it is to let each child choose his own mode of milking! Learners should know that the hand should be kept very near the extremity of the teat, if they would milk with ease. The left arm should always press gently against the leg of the cow; for if she is inclined to kick, she cannot with any force; she cannot *strike* an object that leans against her; but if she lifts up her foot, as she often will when her teats are sore, the milker will be ready to ward off and keep it from the pail much better than when he sits far off from the cow.

If heifers are made tame and gentle by frequent handling when they are young, they are not apt to kick the milker; their udders should be rubbed gently before calving; it is quite as grateful to them as carding. But if they are suffered to run wild till after they have calved, they cannot be expected to be gentle when you first attempt to milk them. They often acquire bad habits and are not broken of them through life.—*Mass. Ploughman.*

WOUNDS AND BRUSES ON HORSES.—Take one quarter of a pound of saltpetre, half a pint of vinegar, half pint of spirits of turpentine; put them together in a bottle, and shake up before useing. Apply it to the wound with a feather, three times a day

PRESS FOR WORKING OVER BUTTER.—Smooth as perfectly as possible a piece of hard wood plank, 18 inches wide and 24 long. On both sides and end, nail pieces of boards, rising one inch above surface. Near the open end screw in a small ring-bolt, or what is better, three; one at each corner and one in the centre. Let the ring on the bolt be one inch in diameter. Make a brake 35 inches long, 9 inches of which is for the handle. Let it be 3½ inches wide, 1½ thick; one edge made sharp, and the other rounded. On the end to go next the eye bolts, put a ring, and in the centre screw a bolt with a head, which will just slip through the eye of either of the ring-bolts. The bolts should be screwed into plank, so that when the brake is attached, its edges will exactly fit to the surface the whole length.

Need I say more? The rest is plain.—Give the end next you a slight elevation; and by using the brake as a braker does his, and by changing as occasion requires, all the milk may be worked from butter with a trifling labour,

A marble slab would be preferable, as the butter would stick less to the surface. A small wooden shovel three inches square, with the ledges perfectly straight, shoud be at hand to keep all in place.

JAMES BATES.

DESTRUCTION OF MOLES.—The following recipes for destroying moles, we extract from an English work by Charles Fothergill, of Salisbury, England.

1. Make a paste with powdered hellebore roots, wheat flour, and ground glass; place it near their holes to eat, and you will soon destroy them.

2. Make a mixture of brimstone, rosin and turpentine, put them into a horn with a narrow neck, first enveloping the same in tar; set fire to the tow thus prepared; then insert the mouth of the horn into the burrow of the mole, and he will soon be suffocated to death.

From the British Whig.

TO MAKE LABOUR-SAVING SOAP.—Two gallons of soft water, 1 lb. of salsoda, 2 lbs. hard soap, 4 oz. rosin, ground fine; 2 oz. extract of lime. Boil all till dissolved, and strain it, and it is fit for use.

TO MAKE ONE BARREL OF SOAP IN TWO.—One barrel soft water, 1 barrel of soap, 4 lbs of salsoda, 1 lb. of rosin, ½ a lb. of extract of lime. Boil all together until dissolved, and strain it.

TO MAKE ONE BARREL OF SOFT-SOAP HARD.—Four lbs. salsoda, 1 lb. of rosin, 6 oz. extract of lime. Boil all together until dissolved, then strain and cool it, and it is fit for use.

A PARSNIP PUDDING.—Boil two good parsnips, squeeze out the water, mash them, add the yolks of two eggs, a slice of a penny loaf steeped in a spoonful of cream, a little seasoning (make it either sweet or savoury, according to taste;) beat all together, line your dish with paste, and bake it in a moderate oven. Many other ingredients may be put in, such as ham or tongue.—*Magazine of Domestic Economy.*

LIME FOR FRUIT TREES.—The suggestions below as to the use of lime around fruit trees, are worthy of attention. In the autumn of 1841, we laid bare the roots of a number of unthrifty apple and peach trees, and left them exposed during the winter, returned the dirt in the spring, and applied to the roots of each tree about half a bushel of gas lime. Last year the trees seemed gently improved, and the pears bore more than three times as much as they did the two previous years; the limbs had to be propped up, and the fruit seemed improved.

We treated some old genuine trees in a similar manner, and the influence was obviously beneficial. Ashes are a good substitute for lime, and ordinary lime would probably do as well as the gas lime. Exposing the roots of trees occasionally during winter, it is well known, is very beneficial.—*Delaware Farmer.*

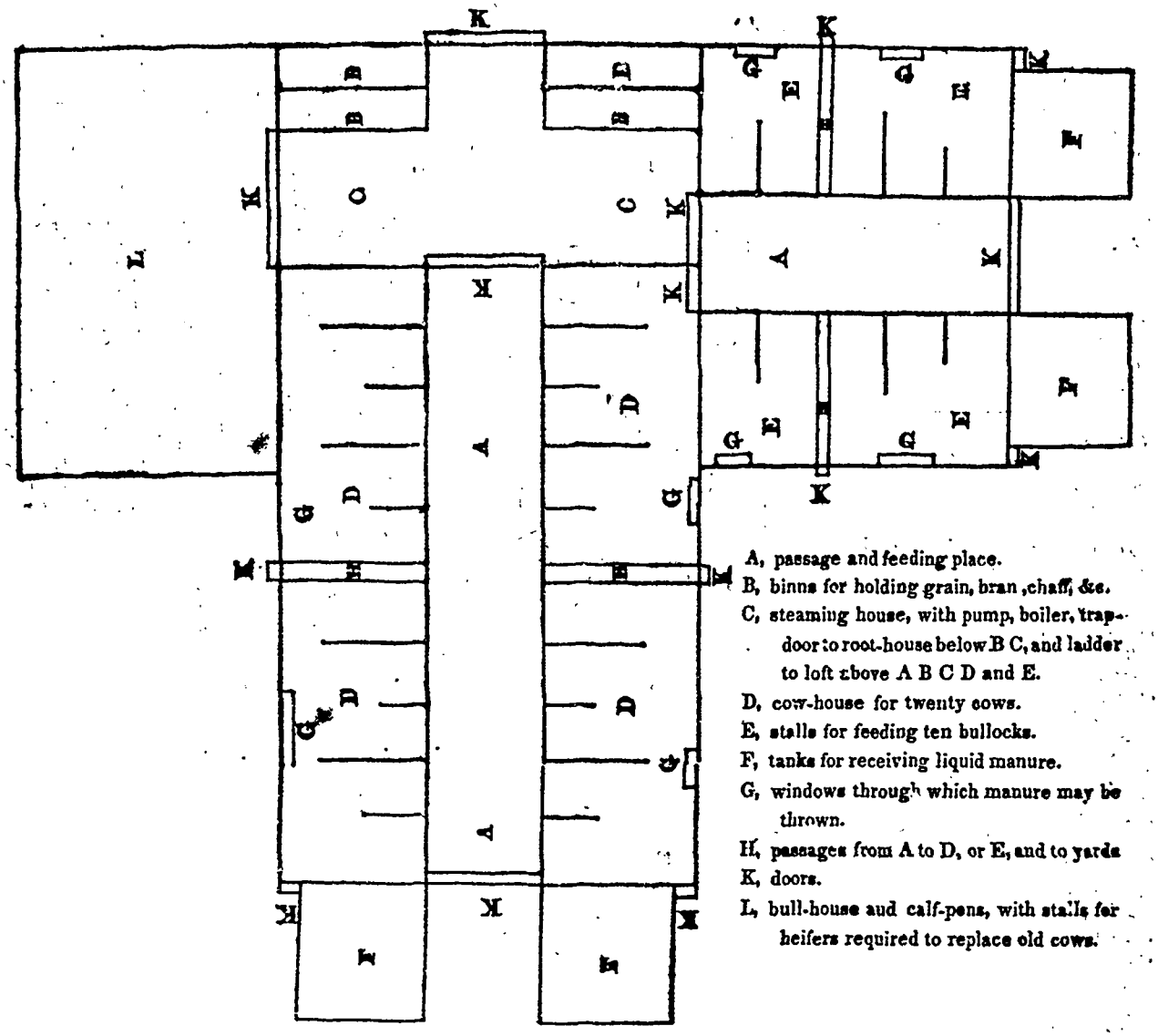
PLASTER FOR PLUMS.—Mr. Samuel Merwin, of Milford, informed us of a fact the other day, which we agree with him in considering important for those who would raise good fruit. Mr. Merwin had several plum trees of choice varieties, which were annually covered with a profusion of beautiful blossoms, giving promise of abundance of fruit; but this promsie was never realized. The blossoms were but false colours, hung out to deceive and disappoint the hopes of the proprietor. Ashes, lime, and various other eatcles were applied to no purpose, and he was finally about to cut down the trees as "cumberers of the ground." At last, a friend suggested that an application of plaster of Paris might have the desired effect, and he was introduced to try it. On several successive mornings, while the leaves and blossoms were yet moist with dew, finely pulverized plaster was thrown into the air above the tree, so as to give the whole top a thorough powdering. The consequence was that the trees, in their proper season, were loaded with a bountiful supply of plums of the very best quality. This is a simple process, and in the case of our friend Merwin the labour was abundantly renumerated. Try it, farmers and gardeners, and let us know the result.—*New Haven Farmer's Gazette.*

AMERICAN ROCK SALT.—A specimen of *Rock Salt*, taken from a new mine recently discovered in Virginia, has been left at our office by Mr. Forrest Sheppard. We are informed by Mr. S. that this is the first mine of Rock Salt ever found in North America, that the salt is of excellent quality, and the mine is of great extent; and that from its position in the interior of the State of Virginia, it cannot fail to be of great value, as furnishing to the population of a large extent of country an abundant and cheap supply of an article so necessary to the sustentation of small life.—*Ib.*

INFALLIBLE CURE FOR A FOUNDERED HORSE.—If your horse founders over night, in the morning take pint of hog's Lard, put in a vessel and make it boiling hot clean his hoofs well, set his foot in the lard. Heat it for each foot, boiling hot; take a spoon and put the fat over the hoof as near the hair as possible, and will be fit for use in three hours if it is done early in the morning. It is better to remove the horse's shoes, but I have made several cures without. I have tried this on many horses during a period of fifty years, and have never known it to fail.—*Louisville Journal.*

SALT.—I will give your readers some account of the benefit of salt, as it is becoming an important article among farmers. I observed two years ago in the town of Stow, an acre of land set with fruit trees of different kinds, and I took notice that one half of the trees were one third larger than the others; and I also observed that where the trees were largest the land was moist, while the other part was dry. That half of the acre that was moist, and on which the trees were largest, was sown over with two and a half bushels of salt four years before; the other part was dressed with two cords of manure. The part manured with salt appeared as though there had just been a shower upon it; while the other part was dry and dusty. On the part to which salt was applied, the trees were smooth & thrifty; on the other part, the trees were rough and backward. Salt is good to destroy insects that are injurious to fruit. By mixing it with peat mud and laying it around fruit trees, early in the spring, it will destroy the insects that often injure the plum, the apple and peach tree.—*Boston Cultivator.*

Plan of Cow House and Stalls for Feeding Bullocks, &c. &c.



A, passage and feeding place.
B, binns for holding grain, bran, chaff, &c.
C, steaming house, with pump, boiler, trap-door to root-house below B C, and ladder to loft above A B C D and E.
D, cow-house for twenty cows.
E, stalls for feeding ten bullocks.
F, tanks for receiving liquid manure.
G, windows through which manure may be thrown.
H, passages from A to D, or E, and to yards
K, doors.
L, bull-house and calf-pens, with stalls for heifers required to replace old cows.

SCALE OF TEN FEET TO ONE INCH.

To the Editor of The British American Cultivator

Hamilton, March 26th, 1843.

Sir,

Many circumstances have lately occurred to induce the thinking portion of the agricultural population of Canada West, to expect that henceforth great quantities of beef, pork, and dairy produce will be exported from Canada to the British market, and many remarks on the best mode of curing meat and preserving butter have been published; but I have, as yet, seen little on the subject of stall-feeding cattle, or of managing a dairy in a profitable manner, or on the erection of buildings adapted to such purposes; at the same time, I am not so conceited as to suppose that any remarks of mine will be of much benefit to the farming community, further than so far as they may be the means of inducing some more able correspondent to take up the subject. With this view I now enclose you a plan of a cow-house for twenty cows, an ox-house in which to feed ten bullocks, and calf-pens, &c., &c., so arranged that a large stock will require the attention of only one man.

Say— 1 Bull,
20 Cows,
10 Bullocks,
10 Heifers.

Having serious intentions of erecting buildings for the above purpose, I trust some of your correspondents will carefully examine my plan, and state the outlay which will be required, as well as propose such alterations as will tend, in their opinion to the better accommodation of cattle, and to greater economy in their attendance.

I am, Sir,
Your well-wisher,
B. A.

THE GARDEN.

The kitchen garden is the portion of the farm that many farmers are prone to neglect most of all, and yet it is the part which when well tended, contributes more to the comfort and health of the family, and as much to economy in living as any other spot of land of the same size on the farm. Good vegetables are agreeable to the palate, and healthful in the warm season. An abundant supply of these, lessens the desire to purchase fresh meat, and also diminishes the drafts upon the beef and pork barrels.

But, say the farmer, things never grow well in my garden, though it has been manured year after year, all my days, and is rich enough, yet I never get anything from it that half pays its cost. Worms will spoil potatoes and cabbages, and almost every thing else. This is true in many instances. But salt spread broad-cast in the spring upon the garden, at the rate of ten or twelve bushels to the acre, will do much to destroy the worms; and sand or sandy-wash from the road-side, if plentifully applied, will greatly enrich this soil. The manures you have been applying year after year, have caused the vegetable matters there to bear an undue proportion to the sandy matters. Salt and sand for these soils which have been long cultivated, will be worth more than applications of common manures. If it be not convenient to cart sand, then, at your convenience, take the spade and trench your garden deep; bring up four or five inches of the sub-soil, and mix it in with the soil. This will be of great and lasting benefit. Were you do this, you may get good potatoes, free from worms. Those who are within reach of the sea-shore, will find the beach sand the best of all applications to their long-tilled gardens. This will furnish both the silica and the salt—the bones to the plants, and the death-drug to the worms.—*New England Farmer.*

The annexed Petition, is now going the rounds of the Home district for signatures, and we have no doubt will be numerously and respectably signed by every class of the community. It would have been much better, if the petition had been drawn up in a more comprehensive and less ambiguous style, however, so far as this may be concerned and the difficulties which the *Pittsburgh* correspondent alludes to, they may be obviated by drawing up a new one which may be attached to the petitions collectively, as soon as the returns have been made to William Atkinson, Esq., Treasurer, of the H. D. A. Society. We feel a deep interest in this matter and shall use our influence in having it worded in a *strong*, yet courteous manner. Every man in the District should sign it, and if the whole country should join in the request, the result will be that all they ask will be granted at the forthcoming session of Parliament.

To the Honourable the Legislative Assembly, in Parliament assembled.

THE PETITION OF THE FREEHOLDERS AND INHABITANT HOUSEHOLDERS OF THE HOME DISTRICT.

Humbly Sheweth:—That your Petitioners are, with a few exceptions, wholly dependant for their support upon their avocation as Agriculturists, in which they have generally embarked all their Capital.

That the present low prices of Agricultural produce are ruinous, and destructive of their present prosperity and future hopes.

Your Petitioners would humbly present it as their opinion, that the depression in the price of many descriptions of their produce, is owing to the free and unrestricted admission of such articles from the United States, this conclusion is warranted by the fact of many articles of Agricultural produce being now sold in our Markets at an extreme low price, (much below the cost of production to the Canadian Farmer,) at a time when the season and the state the crops have been such as to materially increased the cost of the articles.

Your Petitioners feel no desire to effect any measure that would interfere with or prove detrimental to the interests of Trade or Commerce, nor wish to meddle with any restrictions on such articles of Agricultural produce or merchandize as are introduced for the purpose of being exported to Europe or elsewhere, as they are convinced of the general benefits resulting to the Country generally from such a Trade. But there are many articles of Agricultural produce which will not pay the cost of exportation, and which are thrown into our Markets, being brought from the United, States to the exclusion of our own productions—withdrawing Capital from the Country (as it is Specie only that is taken in exchange,)—and proving injurious to our interests generally. Your Petitioners would also represent that the benefits enjoyed by the United States Farmer, by having our Markets open to him, are not reciprocated, but, on the contrary, all our articles of Agricultural production, when taken to their Markets, are subject to a high rate of Duty.

Your Petitioners, therefore, humbly pray that your Honourable House will be pleased to impose such Duties on Foreign Barley, Oats, Peas, Live Stock, Fresh and Salted Meat, Butter, Cheese, Lard, Tallow, and Hides, as will afford the Canadian Farmer a fair protection and encouragement for the production of those articles.

And your Petitioners,
as in duty bound, will ever pray.

CONTENTS OF THIS NUMBER.

TORONTO MARKETS:

For the Month ending 31st *May*, 1843.

		s.	d.		s.	d.
Flour Farmers', in barrels,		17	6	*a*		20
Oatmeal	per barrel	12	6	*a*	15	0
Wheat	per bushel	3	0	*a*	3	6
Rye	do.	2	0	*a*	2	4
Barley	do.	1	6	*a*	1	9
Oats	do.	1	0	*a*	1	2
Pease	do.	1	6	*a*	1	8
Timothy	do.	4	6	*a*	5	0
Clover Seed	do.	35	0	*a*	40	0
Pork	per 100lbs.	16	3	*a*	17	6
Beef	do.	15	0	*a*	20	0
Mutton and Veal (qr.)	per lb.	0	2	*a*	0	4
Pork	do	0	2	*a*	0	3½
Butter	do.	0	6	*a*	0	8
Turkeys		3	0	*a*	4	0
Geese		2	0	*a*	3	0
Fowls, per pair		0	10	*a*	1	0
Ducks, per pair		1	3	*a*	1	6
Eggs, per dozen		0	4	*a*	0	4½
Potatoes, per bushel		1	3	*a*	1	6
Hay, per ton		45	0	*a*	60	0
Straw, do.		25	0	*a*	32	6
Salt, per barrel		11	0	*a*	11	3

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W. G. EDMUNDSON,
EDITOR AND PROPRIETOR.

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