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"THE EARTH BEING MAN'S INHERITANCE, IT BEHOVETH HIM TO CULTIVATE IT PROPERLY."

Vol. I.

FREDERICTON, N. B. MARCH, 1845.

No. 11.

THE FARMER'S MANUAL,

Containing Sixteen Pages Super Royal Octavo, will be published every Month by James P. A. Phillips, at the Office of the "HEAD QUARTERS," between the Central Bank and Messrs. Gaynor & Thompson's Store.

TERMS.—Five Shillings per annum, when paid in advance; Six shillings and three-pence, if not paid within six months; and Seven shillings and six-pence, if not paid before the expiration of the year.—Single numbers, Seven pence, half-penny.

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THE FARMER'S MANUAL.

In our last, we promised to notice the manner in which buildings were erected and grain preserved in Great Britain and the United States. The practice of building barns and housing all the produce of a farm appears attended with great expense without any proportionate benefit. This obtains in almost every part of the United States and in this Province, but in England and Scotland a less expensive and more effectual method has been from necessity adopted.

Every one who has visited the United Kingdom will admit that the climate is not by any means so favorable for the preservation of grain as the climate of this Province, the changes are more frequent and more rapid than here—the damp atmosphere and the heavy rains which so often prevail during the winter season are all unfavorable to the preservation of crops; yet there it has been found from long experience, that any kind of crop which the land is capable of producing, when properly cured before building into stacks, will keep in better order than if placed under cover of a building. Several reasons have been given by writers who thoroughly investigated the subject, but the most important appears to be the saving of the expense which is incurred by the practice generally followed in this country. Instead of erecting barns in

every other field, it would be undoubtedly better to set apart a portion of land, well fenced in, adjoining the out-buildings, where oats, hay, barley and such like, could be built in stacks, and preserved until wanted for the ordinary consumption of the farm. It is a rule laid down by agriculturists that they will never separate the grain from the stalk until they are compelled to use the one or the other; and nothing but a very sudden and extraordinary rise of price will induce the good farmer to thrash out his grain faster than he can consume the straw.

There is a peculiarity in the manner of erecting out-buildings for farming purposes, which is steadily pursued in Scotland, and incorporated in many of their leases. The tenant is bound to erect buildings in a particular way, always having reference to shelter for the cattle. Instead of a long row of buildings, they are compelled by their landlords to erect them in an oblong square, the side unoccupied by buildings having, if possible, a southern aspect. The upper side of the square is generally occupied by the Barn or Threshing Mill, and on each side of the square the Stables and Byres (as they are usually called there) are situated. Every care is taken to preserve and incorporate with the manure all that the farm yard produces, and from having his crop and stock under his own eye the farmer is saved a very great deal of trouble. In this country where buildings are principally of wood there might be some objections urged against adopting this system, but the risk to the farmer, in case of fire, would not be more than it is at present.

We notice that the original design which stands at the head of the first page of this paper, drawn for us by T. E. WOOLFORD, Esquire, of this place, and stereotyped at the Boston Foundry, has been copied by the *British American Cultivator*, published in Toronto. We hope that the fourth volume, which has appeared in what we think a much improved shape, will be as successful as its spirited publishers could desire.

We have much pleasure in copying the following sensible remarks on Agriculture from the *Morning News*, published in Charlottetown, Prince Edward Island. As there is now a Petition before the Legislature for the purpose of enabling a cotemporary to publish another Agricultural Journal it may be well at once to say that we are willing to continue the present paper and endeavour to make it as useful as our means of information will admit. One Journal is quite as much as the Province requires, and if it is thought that we have not done our duty in publishing this Manual we are perfectly willing to withdraw and leave the field open to those who may be better qualified to discharge their duty to the public. Our labors are before the Legislature and the people, and it is for them to judge how far we have already and are likely to succeed in the undertaking:—

CENTRAL AGRICULTURAL SOCIETY.—The annual meeting of this Society was held at the Court House on Wednesday evening last, and was respectably attended. After the Report had been read by the Secretary, which was voluminous and very interesting, several gentlemen addressed the meeting on the general business of the Society—its objects and interests. It would be rather out of place to particularise who was most zealous in the cause before them, were it not that the Vice President, WILLIAM DOUSE, Esq. M. P./P. read an original paper on the great Science of Agriculture, its respectability and usefulness—its dignity and pre-eminence over every other occupation, from the earliest period of time, and its close connexion with the growth and prosperity of every country in the world. The worthy lecturer was in good earnest, and we regret that our limits will not permit us to do justice to his address.

A noble zeal pervaded the meeting throughout—and we noticed that of the Hon. T. H. Haviland, Colonial Secretary.—the Hon. Robert Hodgson, Attorney General; Hon. Charles Young—George Coles, Esq., Mr. George Beer, and several other gentlemen, with whose names we were not familiar—as being very prominent in promoting the objects for which they had assembled. The election of officers for the present year was also very judiciously made,—the Hon. J. S. Macdonald was re-elected President—William Douse, Esq. Vice President; Peter Macgowan, Esq. Secretary and Treasurer. The Committee, which consist of nine, were filled up, differing but little from the past year.

This society has been in existence for eighteen years, and it is acknowledged on all hands that it has effected much good. This should be the impetus to future exertion. Individual subscriptions will do something, but Legislative aid will do more, and if both could be combined on a more enlarged principle, the result would soon be apparent throughout the Island:—it would be seen in the better organization of branch societies—the taste for Agricultural information would be increased—libraries would be useful—and *monthly meetings* for the dissemination of knowledge would be found indispensably necessary to the very existence of the societies, and every farmer would soon become enlisted in their favour. As it is at present, the want of agricultural information is much felt in the country; and it is a great pity indeed, that while periodicals may be had at five or six shillings per annum, which could be taken in the farming circles,

however poor the plea may be, the agriculturist in many districts is utterly destitute of that practical knowledge and information so intimately connected with his very existence. May the exertions of every influential farmer and townsman be extended, in some measure towards the pursuits of Agriculture—let an honest and hearty zeal be engendered in this Island on its behalf—let the press respond in terms of respect 'God speed the plough,' and this noble branch of national industry and wealth will revive with power to make this colony at no distant day, as superior in its internal circumstances as Newfoundland is at present with regard to its specie and its Fisheries.

In our last *Manual* we alluded to the absolute necessity of system in cropping lands, and the following hints from Sir J. Sinclair's statistical accounts of Scotland, shews pretty clearly the first introduction of the new system of agriculture in the Parish of Crossmichael, Scotland, which has since 1782 become a pattern of good husbandry to the whole kingdom:—

"This is a country in a middle state between pasturage and agriculture. Of late years, calcareous manures, both foreign and indigenous, have been much used, and leases have been granted on terms calculated to encourage the purchase and application of them. The tenants have it in their power to plough annually a fourth, and some a third part of their arable ground, provided they can carry on their ploughing in a regular course, always opening the oldest ground first, and taking only three, or, if one of them be green, four successive crops from the same field, and allowing it afterwards to rest at least six years.

"About a third part of the lands, as it goes out, is sown down with rye grass and clover seeds; and, if it has not been previously impoverished by over-cropping, the hay produced, both in point of quantity and quality, is highly valuable. The staple grain is oats.

The farmers lay their account with paying one term's rent out of the profits of their crop, and the other out of the profits of their cattle."

(For the Farmer's Manual.)

DEAR SIR—In looking over the January number of your *Manual*, (which, allow me to say, I think the best number you have yet published, and the contents of which, if studied with attention by the farmers of the country, would amply repay them for their year's subscription,) my attention was drawn to some questions proposed by your correspondent, "A Countryman," which, although they are brief and at first glance might appear of little moment, yet, on reflection, I am persuaded they are of vast importance to the Province. I am satisfied that the Potatoe crop in New Brunswick amounts in value to one-third of all the others put together; and if this be so, then it follows of course that any mode of culture which will give the largest amount of produce from the smallest amount of labour should be anxiously sought for, and eagerly embraced. These reasons induced me to answer the proposed questions, as far as my own experience enables me; and should you not be furnished with

more satisfactory arguments, you may, if you think proper, give them a place in the next Manual.

To the first question—"Is it better to plant potatoes in hills or drills?" I answer, without hesitation, in drills. Planting in hills originated at first from pure necessity—for in clearing up a new farm here was no alternative but to stick in a hill of potatoes wherever space could be found between the stumps and stones, and soil sufficient to cover them, and this method adopted by the fathers from necessity the sons appear to think they must follow as a matter of course, although the impediments may have been removed for fifty years. I am aware that there are some respectable farmers who advocate the old system, and the only reason they will give is that it takes less manure for an acre. Now this to me is a strong argument against it, and I believe the fashion of covering a large space of land with a small quantity of manure is one of the greatest curses of our agricultural system. Then plant in drills.

The second question is—"Is it better that the manure be put in the hills or drills, or to be spread on the ground and ploughed in?" To this I answer, from experience—Spread and ploughed in. This I know is rather a bold assertion in this Province, where the prejudices are yet so strong, but the advocates of the old system are fast losing ground, and I only wish there was the same spirit of inquiry in farmers generally as that evinced by your correspondent "A Countryman." Seek information and try experiments, and then I am sure the doctrine of manuring in the hills or drills will soon be exploded. The principle reasons given in its favor are—that it takes less manure, and that being immediately under the seed the plants receive a greater degree of nourishment from it in their infant state. Now neither of those reasons are satisfactory to me, for I am satisfied, from repeated experiment, that an equal quantity of manure spread and ploughed in will yield as much as if it was put in the drills; and is it not reasonable to suppose that when the manure is incorporated with the earth, and reduced to a liquid state (at which time only it can be taken up by the plants), it should yield more healthy nourishment, than when lying in clods beneath it; besides, when the manure is spread equally over all parts of the surface, at each dressing you give the potatoes, you bring up fresh and enriched earth to their roots at a time when they most need it. But the chief and insurmountable objection to the old mode is, that you risk the destruction of your whole crop;—there is not the shadow of a doubt in my mind but nine-tenths of all the diseases to which our potatoe crop is subject has been occasioned by manuring in the drill. Suppose the seed be planted in a dry soil, on dry manure, and a dry season ensues—is it possible for the plants to come up strong and healthy? Will they not rather be likely to be destroyed by the dry rot? Or reverse it, if you please, and suppose them to be planted in a wet soil and we have a wet season, is it not evident that the body of manure in the immediate vicinity of the seed will act as a sponge and retain the moisture until the plants contract a disease from which they never recover; add to the above that by spreading your manure, you save one third of the labour. I say spread and plough in.

The next question to be answered is—"Would beets and carrots be a remunerating crop, if cultivated extensively as field culture?" I have long thought that Farmers would find it much to their advantage, if they would turn their attention more to the cultivation of those articles for the use of their stock in winter. I can assure your corres-

pondent that they are as sure a crop as any other raised in the Province. I have raised them constantly to some extent for twenty years, and never have had a failure in beets or mangel-wurtzels, and but one in carrots during that time. In 1843, I measured the ground and produce of my mangel wurtzels, (which is a coarse kind of beet,) and found it amounted to *one thousand and ten bushels* to the acre; and the tops I consider worth one-third as much as the roots (during their growth) for feeding milch cows and fattening beef and pork. Carrots will yield at least, 600 bushels per acre, under good management. So that I have no doubt they would be found a remunerating crop.

On the last question propounded—"What crops answer best for a rotation?" it may be thought presumption in me to offer any opinion, after the learned and excellent article from "Elements of Practical Agriculture," republished in the two last numbers of the *Manual*; but as our markets and other local circumstances make some deviation necessary or desirable, I shall give my own mode without any reference to the above valuable work:

First crop, Potatoes—manure spread and ploughed in;

Second crop, Turnips, Mangelwurtzel and Carrots—manure spread and ploughed deep;

Third crop, Wheat—laid down to Timothy and Red Clover;

Fourth, fifth and sixth, Hay—in autumn plowed, sod-turned flat: in the spring cross-plowed and sowed with oats.

By this plan of rotation I get seven crops by two manurings. This may be objected to on the grounds that it will leave the soil too much exhausted, but I think that if the two first crops are liberally manured, most of the land in the Province would bear it well.

In conclusion, let me entreat my brother agriculturists to wake from the lethargy into which they have fallen, and read, mark, learn and inwardly digest, the improvements every where going on around them, and redeem one of the finest agricultural countries in the world from the stigma under which it now labors, from the want of ambition and enterprise among its farmers.

W.

Fredericton, February 27, 1844.

(To the Editor of the Farmer's Manual.)

LETTERS OF "A FARMER."

LETTER XVII.

It would afford me much pleasure to be able to answer the queries of "A Countryman," in the January number of the *Farmer's Manual*, in such a manner as to afford him useful information, as it does also to see an enquiry after the best way; but questions involving so many unexplained circumstances of such vital importance, can only be answered in general terms.

1st.—Is it better that potatoes should be planted in hills or drills?

Ans.—Have you such an abundance of land, that you think more of the crop you may raise than of the occupation of a large field? Twenty loads of manure, planted in hills, upon an acre, will doubtless raise more bushels of potatoes than the same quantity of manure would produce in drills upon half an acre. And if your land is previously in good condition, it may leave the acre in as good a state for a grain crop the next year, as though double the quantity of manure had been applied. But a greater quantity of potatoes may be raised on the same piece of ground, if carefully drilled, and abundantly manured.

2d.—Is it best to manure in the hill or drill, or spread it over the field?

Ans.—What is the quality of your soil? And is your manure abundant and well composted? If your soil is light and well pulverized, and you wish to raise a great crop of potatoes, with little manual labour, after it is well ploughed, spread it over with well composted manure to your satisfaction, then make straight narrow furrows, two inches deep and thirty inches apart, then turn a furrow from each side, so as to cover the seed about two inches, leaving the higher part of the furrow considerably higher than that which covers the seed, that the field may be prepared for a scratching with a short light tooth harrow, just as the sprout comes to the top of the ground; then use the plough and hoe occasionally, so as to keep it free from weeds, until the stalk buds for blossoms.

But if your field is of a stubborn, clayey soil, and a part of your object is to pulverize and make it more productive, and your manure also is new dung from the stable, be sure to put it in the hills, attend it well with the plough and hoe, until the time of budding, and then plough it up deep after digging the potatoes in the fall, lest you lose the strength of your manure through the ensuing winter and spring.

3d.—Would not carrots and beets, if cultivated extensively in the fields, be a remunerating crop?

Ans.—If your fields have been ploughed deep, and made rich, they will produce more bushels of carrots or beets than they would of potatoes, though they would require more labour and care in their cultivation. Those roots also bearing a higher price than potatoes, would unquestionably be a remunerating crop. Carrots especially, for feeding, affording more nutriment than any other root, well deserve more attention from farmers than is generally given them. But it should also be borne in mind that many fields which would yield a fair crop of potatoes, would not be worth planting with beets and carrots.

4th.—What crops answer best for a rotation?

Ans.—What field will you commence with? Suppose a green sward, ploughed in the fall. First, oats; second, potatoes well manured; third, wheat or barley, followed with clover and English grass—of which, see my observations in Letter 16, in the Farmer's Manual for January.

But it never should be forgotten, that all rules must vary with the various soils, circumstances and seasons, as well as the facilities which the farmer may possess of effecting his purposes. Experience is a valuable teacher to the careful observer who, recollecting his errors as well as his success, may generally be able in future to avoid the first and improve on the latter.

I feel obliged to my Countryman for his questions, and should like much to hear from him again, and know whether my remarks agree with his observations, what experiments he may have made, and on what particular soils he has operated. To obtain useful information in my profession, to improve it as a science, and to communicate that which may be useful to others, is the chief object of

A. FARMER.

LETTER XVIII.

It is much more agreeable to me to applaud than to endure, and it would be far more agreeable to witness improvement in Agriculture than neglect and bad management.

But the great waste of good land and valuable timber exhibited even within twenty miles of

Fredericton, constrains me to protest against a continuance of such havoc of both.

Where once I have seen the groves of maple, birch, and other hard wood, I now see useless groves of evergreen shrubbery which tend to impoverish the soil, render the land useless, and give a bad character to the soil which it never merited. I was once acquainted with two farmers similarly situated, and although one had much the largest farm, the least was large enough for ordinary purposes. The owner of the large farm selected his best hard wood trees for fuel, avoided the evergreens, and neglected to burn his bushes. The other farmer cut the timber clean as he proceeded, and found every tree useful either for fuel, fencing, or timber, and was careful to burn his bushes annually, and then sow grass seed after the fire.

The result was, that the latter had good pasture free from evergreen bushes, and as the stumps rotted out, good fields of an improved soil which had been improved by pasturing; while the former had a great range of useless woods to pasture his cattle in, covered with spruce and fir bushes of such form and quantity as never likely to be useful, excepting that he at length became obliged to use it for fuel after he had completely culled out his hard wood. The seeds of the spruce and fir are very numerous, and most of our hard wood groves have enough amongst them to seed all the land effectually. A fire running over the ground at any time when it is free from frost, effectually destroys the seed, which, being covered with a burr of a resinous nature, burns readily, without injuring the roots of the hardwood trees, which always sprout, and unless they are destroyed by pasturing, soon cover the ground, and by their falling leaves, annually add to its fertility. Hard wood land produces better crops than the spruce land, because the latter is constantly shaded, and thereby being deprived of its powerful influence, contracts moss and noxious grasses while the hard wood land admits the sun long enough to decompose the foliage, by contracting some aeriform gasses, and thus produces a rich manure. The reason that wood land which naturally produced both hard and soft wood, after cutting over, without burning also, now produces nothing but the soft wood or fir bushes, and the cattle feed on the sprouts at a season when it is sure to kill also the roots; but no animal will eat the fir bushes. Therefore, if land is intended only for wood (and many tracts are found fit for nothing else) it is very necessary to commence on one side, cut clean and burn the bushes, it will next produce hard wood only—an article becoming scarce, and unless better managed, will, in the course of twenty years, be very difficult to obtain in our market.

Some extensive accidental fires which raged about 1825, burnt so deep as greatly to impoverish the soil. In most places the spruce forests which were then burnt, are now covered with white birch and poplar, with scarcely an evergreen bush to be seen.

It is the duty of all to caution the new settlers against burning over their land in a very dry time. The fire is most injurious to the hardwood forest early in the season, before the leaves shoot; but in the spruce land, it will not run before midsummer, and then, if it is very dry, the fire will run through the woods very deep. It is high time our farmers were awake to the importance of cultivating hard wood instead of destroying it unnecessarily—in deep ravines and rocky hills, where it will never be useful for arable. How many beautiful groves of the sugar maple may be

encourage to grow, and how many barren soils would produce a luxuriant growth of the larch or hackmatack.

An acquaintance of mine, once built his house near the foot of a rough stony hill, which was covered with bushes, among which were maples—his wife desired that the other bushes might be cut away, but that the most promising maples might be saved for the sap. They were then very considerable in size. I was there about seven years after, and this careful matron showed me some beautiful honey from the maples, of which she had made several gallons, and which, having been boiled in the house under her own immediate inspection, was of the nicest quality; and I have no doubt, that by this time her little grove, which occupies less than three-fourths of an acre of rough stony land, not only furnishes an agreeable shade and good pasture, but also sugar and molasses for the family, which are both profitable and agreeable to

Sunbury, Feb. 1845. A FARMER.

AGRICULTURAL EDUCATION.

We have much pleasure, at the request of a member of "the Agricultural Education Committee," in giving insertion to the following extracts from their minutes, and in thus lending our aid towards impressing the public mind with the great importance of the general subject. Agriculture has now advanced to the dignity of a science, and it is manifestly a science of the deepest interest to the prosperity of a country like ours, dense in population, but limited in extent of soil. Professor Johnston's declaration, that the capabilities of the soil are yet very far removed from the limit of exhaustion, is truly encouraging. We rejoice, accordingly, to learn, that not only the attention of landholders and philanthropist has been seriously turned towards this subject, but that it has, in a very spirited manner, been taken up by the schoolmasters of Scotland, who have always contributed so materially towards her intellectual and moral eminence, and by whose efficient agency this new branch of study will now, we trust, become an integral and indispensable element in a Scottish common school education. The elementary works on agricultural science, recently published by Professor Johnston, are admirably adapted for this purpose, and we are glad to find them used as textbooks in the training of teachers attending the Edinburgh Normal Seminary. The trifling cost of the requisite apparatus and materials for experiment—the attractiveness of the subject itself—its easy adaption to the routine of common schools—and the small weekly amount of time requisite to impart a competent knowledge of the science—taken in connection with its vital importance to the country—should insure to agriculture, as a branch of common education, the favourable consideration of all classes of the community.

Nor is there anything in agricultural instruction that should, in the remotest degree, lead either clergy or parents to doubt its beneficial tendency and effect upon the youthful mind, or that should take it out of the category of that Bible education which ought invariably and prominently to characterize our parochial schools. On the contrary, no subject is better calculated, in the hands of a judicious teacher, to furnish matter, for pious exhortations on the wisdom and goodness of God, and for Scriptural quotation and reference. The Patriarchs were tenders of flocks and tillers of the ground;—and, by the Divine blessing on a combination of superior statemanship and agricultural skill, Joseph was enabled to keep the Egyptians as

well as his countrymen alive, through long years of grievous famine. How beautiful and striking are our Lord's parables of the sower and the barren fig-tree, and how important is the instruction he has thereby conveyed. Indeed, the allusions to the various departments and implements of husbandry, to seed time and harvest, to the early and the later rain, to the growth and foliage and decay of plants, to the germination and springing of the seed, are not only the most apt and exquisite in the Bible, but are constantly employed by the sacred writers to explain some of its most sublime and blessed truths, to influence the heart by its spiritual motives, and to regulate the conduct by its Divine maxims.—*Ch. of Scotland Miss. Rec.*

MINUTE of Agricultural Education Committee appointed at a Public Meeting held in Glasgow on the 9th August, 1844.

EDINBURGH, 21st November, 1841.

Mr. Lockhart, M. P., in the chair,

The minutes of last meeting, held in Glasgow on the 11th October, were read and approved of.

Several communications from schoolmasters and others were laid before the meeting, indicating the progress of the cause which the Committee had been appointed to forward. For these the Committee are glad to perceive, not only that agricultural instruction is now being generally introduced into schools throughout the country, but that it is likely to be taught in a way highly satisfactory. In no instance, so far as known, is it made compulsory on the scholars—or taught at hours which interfere with their ordinary lessons. In most cases, the instruction appears to be given on Saturday afternoon, and to such of the boys as have voluntarily formed themselves into a class for the purpose; in a few other cases it is given daily—half an hour being devoted to the subject, after the usual school hours.

The Committee hope and expect that in all cases where instruction in this branch are introduced into elementary, and especially parochial schools, these two principles will be acted upon—1st. That it shall not interfere with the course of education previously existing; 2nd. that it shall not be taught to any children, whose parents do not wish them to acquire it. There is no reason to doubt, that parties having a right of superintending schools, will easily be able to enforce observance of these principles.

In the belief of this, the Committee do, with cordiality and confidence, recommend instruction in the principles of agriculture to be given in elementary schools. They are satisfied not only that it will prove useful to the sons of farmers and agricultural labourers, but that it may afford the occasion of imparting views and reflections of a moral and religious nature, very fitting for the minds of the young.

The following letter from the Parish Schoolmaster of St. Quivox, (Ayrshire), explains his method of instruction.

"St. Quivox, Nov. 18, 1844.

"SIR.—Agreeably to your request, I beg to state a few things regarding the introduction of agricultural chemistry into St. Quivox Parish school.

"It is about a year since I formed a class for the study of this science. During that period, seventeen young persons have spent daily about half an hour, after the usual business of the school is over, in acquiring the elements of agricultural chemistry. Previous to the publication of Professor Johnston's Catechism, I was weekly in the practice of giving

simple lectures to the children—the subject matter of which I procured from another of that gentleman's works. My practice is to take up a page or two of the catechism for one lesson, upon which I examine the class, and endeavour, in so far as I am able, to illustrate the different points in a plain familiar manner. I occasionally, in the beginning of the week, give the pupils a promiscuous question, an answer to which is required to be handed in, in writing, at the end of the week.

"My exercises have been solely theoretical; and, indeed, I could not introduce successfully anything else, as none of my pupils are old enough to engage in manual labour.

"I have every reason to believe that the children appreciate the study,—in proof of which I have been informed by some of their parents that it is no unusual thing, to hear long debates on this subject carried on at home.

"I feel, however, a great want of chemical apparatus and books, and, therefore, I think that where heritors supply the former, they should on no account neglect to furnish the latter.

"In conclusion, allow me to say, that the promoters of a system of agricultural education ought not at first to expect too much of teachers, because for the most part, they are mere tyros in this study, and have many other objects to which they must give their attention. But I have no doubt, that as they become more familiar with chemical science, they will be enabled to impart to their pupils much useful practical knowledge—and without interfering with other branches of study.

"With the assurance that it shall afford me much pleasure to lend my humble aid in advancing the cause, I beg to subscribe myself, Sir, your most obedient servant,

(Signed)

"JAMES MILLER."

The following is a quotation from a letter by the Parish schoolmaster of Fettercairn:

"Having been, from the first movement in this matter, favourable to the introduction of agricultural chemistry into the ordinary schools, from a conviction of the entire practicability of rendering the subject pleasing and intelligible to boys accustomed to intellectual training, I resolved, some time ago, to devote a half hour on the Saturdays for the purpose of instructing the more advanced of my pupils in the elements of this science. I was particularly desirous to impress upon their minds that I had no selfish motives in the matter—that I did not even prescribe tasks, or impose the necessity of getting books,—but that any little trouble or expense on my part was entirely gratuitous, and that the trifling experiments which I performed were to be regarded rather as *amusing premiums* for previous diligence than as any additional labour on them. With this view I read, and endeavoured to explain and illustrate on each occasion, a few of the questions in Professor Johnston's Catechism. I found an increasing eagerness manifested by them for the study; and by the kindness of one of the heritors, Sir John Stuart Forbes, Bart., I was enabled to furnish each of the class with a copy of the Catechism. They now commit to memory a few of the question, rather as a voluntary than a compulsory work. Several of them have performed the experiments at home, and have even anticipated the exercise of the class.

"I am glad to observe that so many landed proprietors take an interest in the diffusion of knowledge on this subject; and I would hence hope, that, in every parish where the teacher is willing to introduce the study of agricultural chemistry,

the heritors may see the expediency of providing such apparatus and materials as may be requisite for carrying it out."

The Committee are of opinion, that it would forward the object entrusted to them, were they to publish the present minute, and also an extract from their last one. They with this view direct these documents to be printed in the form of a circular, and also made public through the medium of the newspaper press, and particularly in those monthly periodicals which are devoted exclusively to topics of agricultural interest; and they will feel obliged, if editors will give to these minutes a place in their columns.

(Signed)

WILLIAM LOCKHART, P.

ON FINING MAPLE SUGAR.

The Sweet obtained from the maple tree is undoubtedly the purest known; but from mismanagement in the manufacture of it, it frequently becomes very impure. Its value is lessened while the expense of making it increases. I am sensible that the method which I shall recommend is not altogether a new one, and that it is more by attending to some apparently minute and trivial circumstances in the operation, than to any new plan that my sugar is so good. Much has been written upon, and many useful improvements been made, in that part of the process which relates to tapping the trees and gathering and evaporating the sap, &c., but still if the final operation is not understood, there will be a deficiency in the quality of the sugar. I shall confine myself to that part of the operation which relates to reducing the syrup to sugar, as it is of the first importance. My process is this:—When the syrup is reduced to the consistence of West India molasses, I set it away till it is perfectly cold, and then mix with it the clarifying matter, which is milk or eggs. I prefer eggs to milk, because, when heated the whole of it curdles; whereas milk produces only a small portion of curds. The eggs should be thoroughly beaten, and effectually mixed with the syrup when cold.—The syrup should then be heated till just before it would boil, when the curd rises, bringing with it every impurity, even the coloring matter, or a great portion of it, which it had received from the smoke, kettles, buckets or reservoirs. The boiling should be checked, and the scum carefully removed, when the syrup should be slowly turned into a thick woollen strainer, and left to run through at its leisure. I would remark, that a great proportion of the sugar that is made in our country, is not strained after cleansing. This is an error. If examined in a wine glass, innumerable, minute and almost imperceptible particles of curd, will be seen floating in it, which if not removed, render it liable to burn, and otherwise injure the taste and color of it.

A flannel strainer does this much better than a linen one. It is indeed *indispensable*. As to the quantity of eggs necessary, one pint to a pailful of syrup is amply sufficient, and half as much will do very well. I now put my syrup into another kettle, which has been made perfectly clean and *bright*, when it is placed over a quick but solid fire, and soon rises, but is kept from overflowing by being loaded with a long dipper. When it is sufficiently reduced, (I ascertain this by dropping it, while hot, from the point of a knife, into one inch of cold water—if done, it will not immediately mix with the water, but lie at the bottom in a round flat drop,) it is taken from the fire and the foaming allowed to subside. A thick white scum, which is useable, is removed, and the sugar turned into a

cask, placed on an inclined platform, and left undisturbed for six weeks or longer, when it should be tapped in the bottom, and the molasses drawn off. It will drain perfectly dry in a few days.

The sugar made in this manner is very nearly as white as lump sugar, and beautifully grained. We have always sold ours at the highest price of Muscavadoes; and even when these sugars have sold at eighteen cents, ours found a ready market at twenty. Two hands will sugar off 250 lbs. in a day. From the scum taken off in cleansing, I usually make, by diluting and recleansing, one sixth as much as I had at first, of an equal quality.

It is not of much consequence as regards the quality of the sugar, whether care can be taken to keep the sap clean or not. The points in which the greatest error is committed, are neglecting to use a flannel strainer, or strain after cleansing—to have the sugaring kettle properly cleaned—and to remove the white scum from the sugar.—*E. W. Clark, of Oswego.*

PROCURING FLOWERS IN WINTER.—In the course of our discursive reading, we fell in with the following curious method of procuring flowers at will, as practised in Germany, and now publish it for the benefit of such of our fair readers as are curious in such things. The secret is, we conceive a valuable one, as it enables the lady of taste to decorate her rooms on festive occasions, at all seasons of the year, with her favorite flowers. And it will be seen that leaf or flower may be made to burst first upon the astonished vision of the beholder, as the pleasure or caprice of the experimenter may prompt.

“A branch proportioned to the size of the objects required, is lopped from the tree, the flowers of which are to be produced, and is plunged into a spring, where it is left for an hour or two, to give to such ice as may adhere to the bark to melt and to soften the buds; it is then carried into a chamber heated by a stove, and placed into a wooden vessel containing water; quick lime is to be added to the water, and left for twelve hours. The branch is then removed into another vessel containing water, with a small quantity of vitriol, to prevent putrefaction. In a few hours the flowers will begin to appear, and afterwards the leaves. If more quick lime be added, the appearance of flowers will be expedited; if, on the contrary, none be used, the branch will vegetate more slowly, and the leaves will precede the flower.”

We may add here, that bulbous roots may be made to blossom more rapidly, by placing lime at the bottom of the vessel in which they grow.—*Exchange Paper.*

COOKING FOOD FOR SWINE.—Dr. Lee, in an article in the *Genesee Farmer* on pork-making, says—“From some experiments of my own, and considerable research into the published result of the experience of others, I am satisfied that ten bushels of boiled potatoes, thoughly mixed with the pudding that can be made from three bushels of corn or peas, will make as much pork as twenty bushels of potatoes, and six bushels of corn or peas fed raw.”

CATTLE.—We should be particularly careful that our cattle are not suffered to fall away in the fore part of the winter. Milk cows should receive good attention. Cut corn-fodder and roots may be used to advantage, and prevent, in a good degree, the falling off in the quantity of milk at this season. Calves have not been accustomed to dry-feed, and you ought not to commence feeding coarse hay to them. Give them your best hay and roots, daily.

Extract from a Letter to the Secretary of the New York Farmer's Club.

An intelligent and ingenious practical farmer of New Jersey, who attended a late meeting of the New York Farmer's Club, since his return home has addressed a letter to the Secretary of the institution, in which he speaks in very high terms of the usefulness of such clubs, and the benefits to be derived by farmers from a general attendance on them. We should like to see such clubs in operation among every agricultural community, for we have no doubt they would be the means of spreading a great deal of useful agricultural information, and increasing agricultural productions far beyond conception.

The experience, detailed in the following extract of the letter above referred to, in the formation of manures, used on the farm of the writer, should be read by every farmer throughout the country.

In the course of the conversation in regard to *muck*, I was very anxious to inquire about *salt mud* on sandy soils, in lots of which you know we abound, how should it be treated to produce a salutary effect, or if recommended at all as beneficial under any application, how was it to operate on the soil?

Your talented Secretary was desirous that I should tell the club how I made my manure—but in such a place I found myself a much better listener than talker. I felt that I was learning something at every turn; but as my method is within reach of many of our farmer's residing on Long Island and in our state where salt marsh is to be found, in communicating it you can judge how far it may be new or useful to others; and you may use this letter as you please, if, in making the contents public, you only withhold my name.

When I first undertook farming, about six years ago, I began like all amateur novices, with books, science and experiments. I went as the four-in-hand club of London requires, through all the gradations of buggy, whiskey, dog-cart, curricule, and tandem; that is, through lime, plaster, fish, pot-ashes, pourette, wrate, salt mud, composed with lime, and all this sort of thing, and, I may add, “every thing in the world.”

A son of mine—a farmer—a thorough going fellow, full of strength and health—well educated—undertook the farm management, on condition that he was to be left to himself, to do what he could upon a worn out soil, wherein sand predominated. He took a great deal of pride in the management, and after three years' experience, came to the conclusion, that, by mowing all his salt meadows he improved them very much, gave employment to poor labouring people, and by taking this grass in abundance to his barn-yard, wherein he kept forty head of cattle, he could make more manure than he could use beneficially, it cheaper, and he tho't of a better quality than any he could get. His plan was to haul it from his barn-yard, fall and spring, pile it in as large heaps as possible, and on every two or three loads of his manure, to strew two or three hundred pounds of potashes, which he procured from the inspection houses in New York, and then the whole pile was covered with sods, when it was left until it was required to spread it, and then just before spreading he would turn it over.

This process I have pursued ever since, and it has proved highly beneficial, besides in other ways gratifying. It has enabled me to give constant employment to two poor men with families, and I now expend much less money than I had previously done in manures.

AGRICULTURE.

BY C. W. EVEREST.

How blest the Farmer's simple life—
How pure the joy it yields!
Far from the world's tempestuous strife,
Free, 'mid the scented fields!

When morning woos with the roseate hue,
O'er the far hills away,
His footsteps brush the silvery dew,
'To greet the welcome day.

When Sol's first beam in glory glows,
And blithe the sallow-lark's song,
Pleased to his toil the Farmer goes,
With cheerful steps along.

While Noon broods o'er the sultry sky,
And sunbeams fierce are cast,
Where the cool streamlet wanders by,
He shares his sweet repast.

When twilight's gentlest shadows fall
Along the dark'ning plain,
He lists his faithful watch-dog's call,
'To warn the list'ning train.

Down the green lane young hurrying feet
Their eager pathway press;
His loved ones come in joy to greet,
And claim their sire's caress.

Then, when the evening prayer is said,
And Heaven with praise is blest,
How sweet reclines his weary head,
On slumbers' couch of rest!

Nor deem that fears his dreams alarm,
Or cares with carking din;
Without, his dogs will guard from harm,
And all is peace within.

Oh ye who run on folly's race,
'To win a worthless prize!
Learn from the simple tale we trace,
Where true contentment lies!

Ho! monarch! flushed with Glory's pride!
Thou painted, gilded thing!
Hie to the free-born farmer's side,
And learn to be a king!

TENDING CATTLE.—Water your cattle in the yard, by all means, if you would not lose half their manure. He who lets his cattle run at large thro' the winter and then runs in debt in the spring for guano, poudrette, saltpetre and lime, to enrich his farm, may need a guardian within the year if prices continue as low as they are now.

Many farmers suffer their cattle to go to a distant brook to find water through the winter, when a bucket or a pump would yield enough in the yard warmer and better than rivulets supply. Keep your cattle up and you will have as much manure as your farm will need, or as you will have time to cart out and use. A good cow, well fed and kept up through the year will yield more manure than is often used on an acre of corn.

If you bow up your cattle in leantoos they should all stand on platforms raised four or five inches higher than the floor on which the excrements are dropped. In this way you can keep your cows comparatively clean, and their milk will be fit for use.

Litter of almost any kind may be thrown under them to make them easy beds and to make manure. Sawdust is used here to advantage, for though there is but little virtue in that material when applied alone as a dressing, yet it readily absorbs other matter and retains it till the more powerful absorbent, the soil, draws forth that matter and conveys it to the roots of the plants.

Some farmers will have no floors under their cows and oxen; they clear out their leantoos annually to the depth of one or two feet and fill in loam or sand to form a new bed and to be treated in the same manner. Cattle lie more comfortably on such a bed than on plank floors, let them be littered over so well. One or two planks may be placed behind them for convenience of shovelling the manure away—and these planks should always lie lower than the cattle's platform.—*Mass. 1 loughman.*

NIGHT FEEDING.—Is it proper to disturb cattle that have not labored through the day, by giving them food late at night? Many make a constant practice of going to the barn at nine in the evening, waking up their cows and inviting them to eat a little more. One object is to avoid placing a large quantity of fodder before them at a time; and it is said the winter nights are too long for them to go without food, and 'little and often' is the watchword.

On the other hand it is contended that by disturbing cattle after they have gone to rest you do them more harm than good—that if they were not woke up they would not feel hungry, and would not think of eating before morning light. We think much depends on habit; if we use children to eat half a dozen times in a day, they will as many times be hungry. What person ever rises in the morning on account of hunger? Would children rest better by being aroused at midnight and made to eat?

If it is proper to wake up cattle late at night and give them food, is it not equally proper to wake up pigs that are fattening and to feed them in the night? These queries are easily propounded, and if any of our readers are disposed to answer them we will find room in a future paper.—*lb.*

HYACINTHS.

As the season for commencing the cultivation of the hyacinth is at hand, the following directions from a recent number of the London Gardner's Chronicle, if strictly adhered to, will reward the cultivator with good blooms of this beautiful and fragrant parlour flower.

Pick firm, plump bulbs, as round as may be.—These are always the soundest, and are not likely to damp off.

When they are placed in glasses, take care that the water does not come within one inch of the bulb; put them in a dark closet that is rather warm, or which is better wrap them all over the glass and bulb, with old flannel, and keep them in a warm place, till the roots are an inch long at least. We recommend that the glass should be dark; but that is of little consequence, provided the place in which the bulbs are set to root is dark.

The reason for this very important rule is, that roots should always be formed before leaves; otherwise, when the latter begin to grow, they have nothing to feed them. Nature is most careful about this, as we may see when a seed begins to germinate, and a tree begins to bear fruit. But ignorant people pop their bulbs at once into a glass of water, place it in a window, or upon a mantel-shelf, where light has free access, and the consequence is, that roots, which abhor light, will not come, while leaves, which love the light, rush forward to enjoy it. Then follows a long cluster of foliage, and a top-heavy plant, which, when it does flower, if it ever gets so far, topples every time it is disturbed. Get plenty of roots first, and leaves and flowers will take care of themselves.

The reason why the water should not touch the bulbs is, that if the plant is slow in growing, the organisable matter of the bulb is distended with fluid before it can decompose it, and so becomes putrid, and communicates disease in all directions by virtue of its contagious properties. On the contrary, if the roots are active, and the leaves are beginning to grow, what water is taken up, is immediately converted into some of the matter that hyacinths feed on.

After the roots have made a fair appearance, water may be allowed to reach their tips, but not sooner, and it is only when the leaves are green and unfolding, that any water should be permitted to touch the bulb.

At that time, that is to say, when the leaves are green, a lump of charcoal the size of an egg may be advantageously dropped into the water. It will prevent the water becoming putrid, and will act as a manure.

None of these precautions can, however, be of any avail, unless the hyacinths are kept close to the light continually, from the time when the leaves are first turned green. Thus, and thus only, will a healthy growth be preserved, and a fine vigorous head of flowers insured. Above all things, be careful to make the plants grow as slowly as possible at first, so as to accumulate vigour against the season for them to blossom.

ECONOMICAL FARMING.—As most farmers pursue their business as a means of support for themselves and families, or for profit, it is of the greatest importance to study economy in order to accomplish these desirable objects. All the industry and the most skillful management, in other respects will not avail to make farming a good business without economy in every department. We have particular reference to economy in labor, not in regard to the amount to be performed, but to the manner of performing it, in order that there may be the least possible expense.

The farmers may pursue nearly the same course in raising crops, on farms that are similar, and each may get about the same amount of produce, one making it a profitable business, while the other will lose. The produce of one will cost twice as much as the other, though both had the same advantages in the beginning. One will raise corn at 50 cents a bushel and make it a good business, while the other extends a dollar in raising the same quantity.

One farmer will improve his tillage by removing all obstructions to the plough, and draining, or adding sand or gravel when it is too wet, and adding mud and clay to light lands, and supplying various manures to suit the texture of the soil, so that not only far less labor will be required to the same extent of land, but much larger crops will be obtained.

Some farmers will use four oxen and two hands to plow the same land which another would plow equally as well in the same time, with only half the team and hands.—In some cases the principal difference is owing to the ploughs that are used, for some plows require only about half as much draught as others, to perform the same work. In planting too, there is a difference of one half in labor. One will spread a part of the manure, and then furrow, or dig holes with the hoe, and apply the remainder of the manure in the hill. When land is prepared and highly manured, there will usually be as good a crop by spreading the manure, and sometimes it will be better, and the soil will be more improved than by putting it in the

hill; and there will be less waste by the escape of gases in fermentation, and the manure will be more equally mixed with the soil.

In hoeing, one half the labor is saved by having the land well prepared and the corn planted in such a manner that most of the work can be done by the cultivator and plough; and the use of these implements will improve the crop. By having the land well prepared and highly manured a large crop may be obtained, at little more labor than is requisite in going over the same land in poor condition, and obtaining a small crop.

In harvesting corn, nearly half the labor may be saved by cutting it up at the ground when well glazed, instead of cutting the top stalks; and afterwards gathering the corn, and then cutting up the buds, as the fashion was and now is with many. For a number of years we have recommended the improved mode as we have found from experience that it is attended with many advantages as to saving the crop of corn and stalks with much less labor, and having the land clear for a crop of turnips, for sowing rye, or for any other purpose.

It is the same with other crops. We have known many cases of farmers who would give the amount of the seed sown in payment for reaping the grain, because neither they nor any of their hands were willing to bend their backs to the use of the sickle. How would farmers in the West succeed in raising grain if they expended as much in harvesting, as the estimated cost of this operation in this section? In some parts of the country grain is not worth much more than farmers here would reckon the cost of harvesting—for instance, corn at 12 1/2 cts per bushel in seasons of plenty. Some years ago we were in the West and worked at harvesting grain which was done mostly with the sickle. The neighbors changed work, and arranged matters so as to have 12 men together in a field of grain, who reaped, bound up carried together, and shocked 12 acres in a day. With the same despatch in raising our grain we should not estimate the cost of corn at a dollar a bushel and wheat at two dollars.

We believe that corn may be raised in New England at from 60 to 75 cents per bushel, and wheat at 100 to 135 cents per bushel; and our grain is worth these prices on an average, as southern grain sells in New England. Though we may find it most profitable to import a part of our bread stuff, while we can obtain it from other sections in exchange for other productions, yet we think that the farmers of New England can compete with the South and West in our markets.

MANAGEMENT OF HENS, BY J. L. CHILD.—My hens laid nearly as well during the winter as in the warm weather. Their habitation was warm, and so constructed as to bring them to the ground, where they found at all times, a good supply of old plastering, ashes, pulverised oyster shells, charcoal fresh water, once or twice a week beef liver, or some other kind of meat. I feed chiefly upon baked or boiled potatoes giving their food to them warm in the morning and at night, occasionally dealing to them a little corn or oats, and give them all the crumbs, and skins, and fragments of the cooked vegetables. To prevent their being infested with lice, about once a fortnight I mix in dough, so as to discolour it, a quantity of flower of brimstone, which is a sure preventive as well as remedy, and may be safely given in small quantities to young chickens, for the same purpose.

It will be seen from my mode of keeping my hens, which average about twenty-five and three

roosters, through the winter, that I cannot give the precise cost of keeping, but I am satisfied that potatoes may be given, as a general food, and fowls kept cheaper in this mode than in any other—and they will always be ready for the spit, if not stinted in quantity. I find my fowls fat at all seasons.

I estimate that my hens afford me from their eggs, without regard to their meat, a clear profit of fifty per cent. I confine them to their yard, hen house, and barn cellar, during gardening, and to their house and cellar in the winter, and think with that degree of confinement, they lay better than they do when allowed to wander at large. Hen houses and roosts should be kept neat, and often whitewashed, and their nests should always have half an inch or more of ashes or lime on the bottom, under the hay. Broken or rotten eggs should never be allowed to remain in the nests. Dirty water should not be given them. To do well, they require pure water, and all their food fresh and uninjured from taint or fermentation. I estimate that during the year, (deducting the time of their moulting, and inclination to set,) I have got daily, one half as many eggs as I had laying hens.

Every family can, with a very little trouble, with their flock of a dozen hens, have fresh eggs in plenty, during the whole year, say in all, two thousand, and one hundred full grown chickens! and of all the animals domesticated for the use of man, (if such be the fact,) the hen is capable of yielding the greatest profit to the owner. It is a pleasant recreation to feed and tend a bevy of laying hens.

Care should be taken to change roosters often, as otherwise the best variety in the world will run out, and cease to be profitable from breeding in; and I feel great confidence that much improvement may be made by due attention to crossing, and in this way some of the evils from breeding be averted. I have stated that I give my fowls meat: this is indispensable, if they are not allowed to go at large. If corn is fed out it should be soaked, and fifteen bushels is a fair yearly allowance for twelve hens and a rooster. But they should always have food by them, and after they have become habituated to find enough at all times in the trough they take but a few kernels at a time, except just before retiring to roost, when they will take nearly a spoonfull into their crops; but if they are scantily or irregularly fed, they will greedily snatch up a whole crop full at a time, and stop laying, and not unfrequently engender some fatal disease.—*Boston Cultivator.*

At a meeting of the Committee of the Halifax Agricultural Society, held at Mason's Hall on Saturday last, the following estimate was made of the quantity and value of crops raised on the Peninsula, between point pleasant and 3 Mile House:—

Wheat, 65½ acres, 1509 bushels; oats, 78½ acres, 3150 bushels; barley, 9 acres, 345 bushels; potatoes, 125 acres, 34,388 bushels; hay, 577 acres, 1315 tons; straw, 232 acres, 132 tons; pasture, 138 acres. Total value, £10,571 4s.—*Novascotian.*

PREPARATION OF SEED WHEAT.—Rye, oats, and barley are sown without any preparation, but wheat must be prepared for the furrow or it will be quite likely to be smutty. It must be washed clean in several waters and then be mixed with lime or ashes on the barn floor, or in a lime cask so that every kernel shall be covered with the dust. When this is well done and suffered to stand for 24 hours before sowing there will be no danger from smut. Brine also will be effectual for the same purpose. Seed wheat may lie in brine a long time without injury.

CULTIVATION OF FLAX.

Flax may be raised on various soils, but the one most proper for this plant is a deep rich friable loam, neither too dry in summer, nor wet in autumn or spring—in short, the best soil that can be found, as the roots strike deep, and are said, by those who have had much experience, that they sink into the soil to a depth equal to half of the length of the stem above ground. It is obvious then that flax requires not only a deep soil, but a porous subsoil as well, or one that is well drained. It is needless to add, after what has been said in former numbers of this journal, that large tracts of land in this country might be made to produce as much flax per acre, and of as good a quality, as the so much celebrated article grown in the neighbourhood of Courtray, in the Province of Belgium, without one-half of the cultivation which is expended in that country. Notwithstanding a less quantum of cultivation and care would be required in this, than in the country just mentioned, owing to the virgin state of our soil, still the vast amount of labour this crop would, in many cases, require, would tend to deter many from entering into the business. It would, therefore, be advisable for only those to engage, at present, in this branch of farming who have lands of the description just mentioned. On most farms there is certain fields that have been under grass for a number of years, and which have collected a great amount of vegetable and animal matter, which have become intimately mixed with the natural earth by absorption, and which is, in fact, an accumulation of humus. This is the best possible food to produce a good crop of flax. The most suitable period for ploughing such sward for this crop is in the early part of spring. The depth of the furrow should be proportioned to the depth of the soil, and the ground should be well ploughed, and the furrows so closely packed that there would be no possibility of the grass starting before the season for sowing the seed. Before the seed be sown, which should be about the first of May, or when the season would admit, the twentieth of April would be preferable, the whole of the ground intended for flax should be so completely harrowed, that it should have the appearance of a well-prepared onion-bed. The seed is then sown at the rate of a bushel and a half per acre. Two bushels, in many cases, would not be too much, as the plants should be very abundant on the ground to prevent the fibre becoming too coarse and grassy. The seed should be slightly covered with a bush-harrow, as over an inch of earth over it would prevent its evenly vegetating.

An acre of good flax, in Flanders, is worth from £20 to £25, sterling, without including the seed, which is worth from £4 to £6 more, and the article is so much prized that merchants come out of France to buy it as it is pulled and tied in bundles. They have it steeped and dressed at their own expense, by regular steepers and dressers. It should be remembered, however, that the article for which this high price is paid, is converted or manufactured into the finest qualities of bleached linens, and is worth, when prepared for the spinners, from £120 to £140, sterling, per ton.

It will require years of long experience for the Canadian population to arrive at the same degree of proficiency that the French flax grower has arrived at. The Canadian flax will therefore have to be converted into coarser fabrics. We have lately conversed with many of the German settlers residing in the township of Markham and Vaughan, who are most willing to engage in the cultivation of flax and hemp, if a certain and profitable market

could be established for the above articles in their raw state. We shall do our utmost to open a market for the article, and shall give timely evidence of the success of our endeavours by advertisement through our columns.

The farmers in the township of Waterloo, Genesee county, State of New York, sowed last spring one thousand bushels of flax, upon the recommendation of an individual who guaranteed to erect an oil mill, and pay one dollar a bushel for all the flax seed brought to his establishment, and eight dollars per ton for the flax, without any preparation, further than thrashing the seed; and we learn from the *New Genesee Farmer*, that the business has proved a most profitable one to the farmers who engaged in it. Similar steps might be taken in this country, especially in such sections where the soil is too richly supplied with vegetable matter for autumn wheat,—and oil mills might be established in a very short time, in every district in the province. The manufacturing of linseed oil is a branch of business that cannot possibly overstock the market, as the English market is quite open to colonial oils, there being only a nominal duty of ten shillings per ton on colonial oil, whereas there is a heavy duty on all foreign oils, equal to *four pounds ten shillings* per ton. If Canadians were wise they would look to this matter. We trust every Agricultural Society in the province will look to it, and give that encouragement to the cultivation of flax, and the manufacturing of oils, as the subject justly deserves.—*British American Cultivator*.

COMPOSTS.—Animal manure combined with earths, and rendered fine by decomposition, are called composts; and when the preparation of them is well managed, a great increase on both the quantity and quality of manures on a farm may be obtained. When the dung of the stables or the barn yard, is allowed to ferment before it is placed in the field, or in situations, where it is uncovered or unmixed with some substance to absorb and retain the gases generated, a great loss to the farmer of nutritive matter certainly ensues. To avoid this and provide a supply of fine manure indispensable in gardening, and some other farm operations, it is found an excellent plan to mix the vegetable matter of swamps, the muck of drains, wash of roads, peat, &c. in heaps with the unfermented manure, and in this way the insoluble part of the vegetable matter used is prepared to become the food of plants, while they at the same time serve to prevent the escape of matter from the fermenting mass. In preparing these heaps, the manure, and the muck or the earth, (for even arable earth will be better as an absorbent mixed with the fermenting dung, than nothing,) is placed in layers until the requisite height is obtained, when it is left to ferment and decompose. If the heat rises to much over 100 degrees, the pile should be shovelled over, and this incorporation of the materials will check the too rapid fermentation, and promote the fineness and quality of the compost, and perhaps the best where it can be adopted, and there is no fine manure required, is to carry on the field proceeds of the stables and yards, spread them and turn them thoroughly under with as little delay as possible. A compost is also made by spreading the yard to the depth of ten or twelve inches, with swamp muck, or other earth containing insoluble vegetable matter, and allowing this to receive the wash of the stables, manure, &c. As the straw, hay, dung, urine, and other matters, will, in the course of the winter, become, by the trampling of beasts, tho-

roughly incorporated with the added earth, the volatile salts which are so apt to escape, as well as those which being soluble are washed away by the rains, are retained, and the quantity of manure is most beneficially augmented. In this way on some farms where but comparatively small numbers of stock are kept, from 500 to 1000 loads of manure are annually obtained, and the fertility of the farm rapidly increased.

“ Let the earth have cultivation,
Let its products have creation,
Bid the seas give circulation,
Give the people education,
And you build the mighty nation.”

The above rhymes contain, in quaint language, it is true, much good solid truth.

The items there mentioned, are all the essentials of building up a mighty nation, and every man, woman and child, should be taught to remember them, and be convinced that some portion of duty in this building up, devolves upon them. In the first place it is in vain for a people to consider them great or mighty who cannot feel themselves, who do not cultivate the earth. You might as well call the child in the nurse's arms, and who cries to her for food, independent, as a people who neglect their Agriculture, and look to others for food and raiment. In the next place, it is of little use to cultivate and produce crops, unless the products receive the modification which the hand of art can give them, and which can convert them from the raw material into the several kinds and sorts of things needed by the community.

They should be manufactured, created into different shapes and forms, and their value increased by the amount of change, and the amount of skill required to bring about that change.

Again, unless commerce and trade should step in, it would not be of much service to produce or to manufacture either.

Exchange is as necessary as produce, and in proportion as the facilities for exchange are promoted, in the same proportion does business increase, and activity take the place of stupid lethargy. Hence, roads, canals, rail-roads, and other internal improvements, become necessary, and add to the strength as well as to the convenience of the people.

Last, though not least of all, education should be the crowning requisite. Without this, prosperity, riches and honors, are as so many weapons, whereby to slay human happiness—so many gifts under which the freedom and enjoyment of the people may be plunged, never to rise again.

What applies to nations, as a general rule, will apply to small communities, and what will apply to small communities, will, as a general thing, apply to families, and even to individuals. Cultivation, therefore, of the soil and the mind, are subjects of no small importance to every one.

If you have not a farm to cultivate, you have a mind. If you have no products to create, you, nevertheless, have a mind. If you have no commercial transactions to employ you, you have a mind. And how are you managing it? In such a manner that if every other person should be like you, the community to which you belong would be improving—would be on the forward or backward march? Do you so cultivate your intellect, that you can say at night, I am wiser than I was in the morning, or that I know more to-day than I did yesterday? If yea, you have not only positively benefitted yourself, but you have added something to the weight

and respectability of the country to which you belong; and, of course, are so much the more worthy of the protection of its laws, and the other benefits accruing from the several institutions of civilized life.—*Maine Farmer.*

CULTIVATE YOUR FRUIT TREES.

The influence of the cultivation of the soil on fruit trees, appears to be less known and appreciated than any thing else of the kind equally important, which has been practised since the time of Hesiod and Homer. Persons who purchase fine fruit trees, appear to have more or less of five different objects in view, which are the following, to wit:—

1.—To kill the trees at once.
2.—To kill them by inches.
3.—To keep them alive, with the hope that they may bear small and imperfect fruit in ten or twenty years.

4.—To make them grow vigorously for a year or two, and afterwards neglect them, reducing the fruit to one-third in quantity, and one-tenth in quality of what it should and might be.

5.—To keep them well cultivated constantly during the term of their natural lives, and as a consequence receiving full crops, and of the most delicious quality.

1.—Although many appear to pursue the first of the above named objects, they probably do not really intend it. They are, however, much more successful that they intend to be in killing their trees, by drying them in the sun, freezing them in the cold, bruising them, or otherwise treating them as already dead, while life yet remains. A large number pursue this course.

2.—Others avoid these attempts to produce death, but practice another kind, which is, to crowd the roots of the trees when setting them out, into very small holes dug in hard soil, and then to suffer them to perish gradually from such careless transplanting and subsequent lack of care and culture. A much larger number follow the practice.

3.—Others again transplant well—but that is all. This done, they consider the whole work as finished. The trees are suffered to become choked with grass, weeds, or crops of grain—some live and linger, and others die from discouragement. An intelligent friend purchased fifty very fine fruit trees, handsomely rooted, and of vigorous growth; they were well set out in a field, occupied with a heavy crop of clover and timothy. The following summer was very dry, and the grass crop crowded them hard on every side—most of them necessarily perished. The browsing of cattle the next winter completed the work for the rest—it would have been cheaper to have thrown them away at once. Another person, a neighbour of the first, bought sixty trees, of much worse quality in growth; he set them out well, and kept them well cultivated with a crop of potatoes. He lost but one in the sixty, and by pursuing the same course of raising among them low hoed crops, his trees now promise to give him loads of rich peaches, before the dead stubs of his neighbour have disappeared from the grounds. Another neighbour, last spring, bought fifty fine trees. A few days since I passed his house, and he said to me—"I thought a crop of wheat was one of the best for young peach trees?"

"O no," said I, "it is one of the very worst; avoid all sown crops, and occupy the ground only with low hoed crops, as potatoes, ruta bagas, carrots, and the like."

"Well," answered he, "I have found it so—my

fifty peach trees all lived, but I have lost one year of their growth by my want of knowledge."

I examined his trees—they had been well set out in a fine soil, all the rows but one had stood in a field of wheat, but the one excepted, was hoed with a crop of potatoes. The result was very striking. Of the trees that stood among the wheat, some had made shoots the present summer, an inch long; some two inches; and a very few, five or six inches. On nearly every one that grew with the potatoes, new shoots a foot and a half could be found, and on some, the growth had been two feet two and a half and three feet. Other cases have furnished nearly as decisive contrasts.

4 and 5.—An eminent cultivator of fine fruit, whose trees have borne for many years, says in a late letter—"My fruit garden would be worth twice as much as it is, if the trees had been planted in thick rows* two rods apart, so that I could have cultivated them with the plow. Unless fruit grows on thrifty trees, we can form no proper judgment of it. Some that we have cultivated this season, after a long neglect, seem to be like new kinds, and the flavor is in proportion to the size." Large trees often stand in thick grass, and poor crops and poor fruit can hardly fail to result; and the nurseryman who sold them, is sometimes pronounced a scoundrel, for having furnished such despicable stuff.

"But," exclaims some one, "are we always to be troubled with cultivating and taking care of our trees as long as we live?" Exactly!—This is the condition of living and enjoying the fruits of the earth, which has existed these last six thousand years. Besides, if this labor gives a return of a hundred fold, who ought to regret it? If my orchard, yielding a hundred bushels now, of poor fruit, will, by putting a hoed crop and some manure into it, more than double its products, and greatly improve them in quality—where is my loss? Would it be grateful in me to complain of a little care and attention with so much gain? Labor cannot be avoided, but it brings its reward.—*Albany Cult.*

* The "thick rows," here spoken of, are meant to contain fruit trees, standing six or ten feet apart in the row, so the plow may be passed on each side, parallel with the rows, the last few furrows in immediate contact with the trees, to be plowed with two horses, one before the other, a boy riding the forward one. A very short whipple-tree should be used on the plow, and long traces attached, to admit the plowman steering far to the right or left, as necessity may require.

EARLY RISING—Is conducive alike to health, to pleasure and to profit—we mean to the farmer. To health, because it gives exercise when the atmosphere is most cool, pure and bracing. To pleasure, because nature is then in her most lovely garb, and birds most full of songs. To profit, because the two morning hours effect more in labor and avert more mischief, than four hours at mid-day. Early rising, and exercise in the open air, are the best stimuli for our meals, the best antidote for sound sleep, the best solace for care, and the best evidence of thrift. "Come boys," is the best reveille upon the farm. The farmer who rises late, is generally behind his work, while he who rises early keeps before it.

GROWING MUSTARD FOR SEED AND ENRICHING SOILS.—I beg to hand you the following statement on the use of growing mustard for seed, or to plough in as a preparation for a wheat crop. It is very palatable to all kinds of cattle, and I believe very wholesome. I think it far preferable

to buckwheat, or any other vegetable with such rapid growth. I sowed five acres on the 11th of July last, on rather inferior land, of a light gravelly soil, with chalk subsoil, where early turnips for wheat had failed. It should be drilled five inches apart, with twelve pounds of seed per acre. On the 25th of August I had measured portions cut in different parts of the field, and weighed, which on a fair calculation yielded six tons per acre—it was in full bloom—and the next day I ploughed it in; which I consider, being full of vegetable matter, must be an excellent dressing for a wheat crop. I would invite any friend to make trial of mustard on better land than mine; the expence being so trifling, compared with buckwheat, which is 5s. per bushel, and requiring 2½ bushels per acre, would be 12s. 6d., whereas 12lbs. of mustard seed, at 2d. per pound, the price it is now selling at, would be 2s. per acre.

CULTIVATION OF FLOWERS.—There are a class of men who would pare down every thing to the mere grade of utility,—who think it the height of wisdom to ask, when one manifests an enthusiasm in the culture of flowers, “of what use are they?” With such we have no sympathy, and are always inclined, in such cases, to thank God that our tastes do not correspond with theirs. Better—(say these ultra utilitarians)—better devote our time to the culture of things useful, and needed to sustain life, than to employ it on things which, like flowers, are intended only to look at and please the eye. But why should not the eye be pleased? What pleasures more pure, more warming to the heart, more improving to the mind, more chastening to the affections than those which come through the eye? Where shall we read more luminously displayed the perfections of the Creator, than in the star-spangled heavens above and the flower-spangled earth beneath?—

“Each cup a pulpit, and each leaf a book.”

Nonsense—sheer nonsense—to tell us it is useless to cultivate flowers. They add to the charms of our homes. Rendering them more attractive and beautiful, we multiply and strengthen the domestic ties which bind us to them. We would not advocate the cultivation of flowers to the neglect of more necessary objects; attention to the one does not involve neglect of the other. Every man engaged in the culture of the earth can find time to embellish his premises, who has the will to do it, and we pity those who have not. Rob earth of its flowers—the wondrous mechanism of the Almighty—and we should lose the choicest mementos left to remind us that it was once a paradise.

SPRING WHEAT.

There is a very large part of this country not suitable to the production of winter wheat, or where it at best is but an uncertain crop, in which spring wheat is a very certain, and in most cases a productive one. This arises in a great degree from the severity of our winters, the frosts of which alternating with the thaws of spring, lift the fall sown wheat from the ground, and cause the death of the plant. This is particularly the case, where from the abundance of clay in the soil, it is disposed to be retentive of moisture as well as heavy in working. There can be little doubt that in all parts of the country favorable to winter wheat, it will continue to be grown in preference to spring wheat; it is more productive, and makes a finer flour, two causes sufficient to insure a preference; but spring wheat makes excellent bread, and be-

sides the plant escapes the hazards of our winter which is enough to insure an extensive culture.

Spring wheat requires a soil rich and in good condition, not so much from the recent application of manures, as from a series of good treatment. Like all the other grain crops, if recent or fresh manure is applied liberally to the soil as a preparative for the crop, it is most likely to prove injurious, giving a greater growth to the straw than to the ear, and rendering it so weak as almost to insure an attack of the rust, or its lodging in the field. It is a good plan to apply manures to a crop of corn or roots, and let spring wheat follow these. Thoroughly rotted manures, or compost, may be applied directly to the wheat crop.

Spring wheat should be sown early. We have hardly ever known a good or even an ordinary crop produced, where this was neglected. Early sowing favors early maturity, and thus avoids the danger of mildew or rust, to which this grain, if sown late, is very liable. It also enables the plant to throw up its ears, and prepare the juices necessary for the perfection of the berry, before the extreme heats of summer deprive the plants of the moisture necessary for this purpose.

It is from this necessity of having the soil early prepared for spring wheat, that it becomes desirable, very frequently, to have the fields on which it is to be sown plowed in the fall. If the soil is freed from surface water, (and no soil on which water stands is fit for a crop,) fall plowed lands are seen in the early spring, to present a surface finely pulverised by the action of frost, and fit for the reception of seed much earlier than they could otherwise be. We have seen beautiful crops of spring wheat grown after corn or potatoes that had been well manured, and after the crops were gathered late in the fall, well and deeply plowed for the spring crop.

It is as necessary to secure good seed for spring as for winter or fall sowing, and the preparation of it by brining and liming, should never in any instance be omitted.

SALERATUS A SUBSTITUTE FOR SALTPETRE IN CURING MEAT.—Saltpetre has long been considered by physicians as a bad article to be used in curing meat, being extremely injurious to digestion. It is of so cold a nature that only a small quantity is sufficient to destroy life. In the article of saleratus we have an excellent, convenient, and harmless substitute, and should be used in the same manner as saltpetre has been. Meat has a stronger affinity for saltpetre than for common salt. Saleratus has the same power in that respect, and thereby prevents the meat from becoming too salt; and the same quantity should be used as of saltpetre. There is this difference in them, that saltpetre dissolves readily in cold water, whereas saleratus does not; it should be pounded and dissolved before it is put into the brine. Saleratus is composed of sulphate of potash and pearlsh, and if any person is disposed to procure the sulphate of potash at the shops, and use it instead of saleratus, they will find its effects substantially the same.

TO KEEP POTATOES FROM SPROUTING.—Fill a basket with potatoes, dip them into a large cauldron of boiling water for the space of two minutes—take them out—spread and dry them in the sun—then pack them away in barrels or hogsheds, and cover them over with sand. They will remain in excellent preservation for a long time. This method is particularly recommended to masters of vessels and others preparing for sea.

RECIPES.

RECIPE FOR MAKING BUCKWHEAT CAKES.

Do, dear James, mix up the cakes—
 Just one quart of meal it takes.
 Pour the water in the pot,
 Be careful it is not too hot;
 Sift the meal well through your hand;
 Thicken well—don't let it stand;
 Stir it quick—clash—clatter, clatter;
 Oh, what light, delicious batter.
 Now listen to the next command—
 On the dresser let it stand
 Just three quarters of an hour.
 To feel the gently rising power
 Of powders—melted into yeast,
 To lighten well this precious feast.
 See—now it rises to the brim;
 Quick, take the ladle, dip it in.
 So let it rest, until the fire
 The griddle heats as you desire.
 Be careful that the coals are glowing,
 No smoke around its white curls throwing.
 Apply the suet softly, lightly;
 'The griddle's black face shines more brightly.
 Now pour the batter on—delicious!
 Don't, dear James, think me officious,
 But lift the tender edges slightly—
 Now turn it over, quickly, sprightly;
 'Tis done—now on the white plate lay it,
 Smoking hot—with butter spread,
 'Tis quite enough to turn our head.
 Now I have eaten—thank the farmer
 That grows this luscious mealy charmer;
 Yes, thanks be to all—the cook that bakes
 These light, delicious buckwheat cakes.

CURE FOR THE DISTEMPER IN CATTLE.—A writer in the *Quarterly Journal of Agriculture*, England, states that, "I cannot resist giving a receipt for the treatment of beasts that may take the prevalent distemper. It showed itself last winter in one of my farm-yard stock, by its discharging abundant saliva from the mouth, with sore and inflamed tongue and gums, very dull, no appetite, confined bowels, and very hot horns. I desired the bailiff to give him one half pint of the spirits of turpentine, with one pint of linseed oil, repeating the oil in twenty-four hours, and again repeating it according to the state of the evacuations. At the end of the twenty-four hours more, the bowels not having been well moved I repeated both turpentine and oil. In two days the beast showed symptoms of amendment, and in three or four took to his food again, and did perfectly well. All the yard beasts and two of the fattening beasts have had it, and all have been treated in the same manner with perfect success. Half a pint of turpentine is the smallest, and one pint the largest dose, during three or four days. Little food beside oatmeal gruel was given."

TO MAKE MUFFINS.—Mix a quarter of fine flour, a pint and a half of warm milk and water, with a quarter of a pint of good yeast, and a little salt; stir them together for a quarter of an hour, then strain the liquor in a quarter of fine flour; mix the dough well and set it to rise for an hour, then roll it up and pull it into small pieces, make them up in the hand like balls, and lay a flannel over them while rolling to keep them warm. The dough should be closely covered up the whole time; when the whole is rolled into balls, the first that are made will be ready for baking. When they are spread out in the right form for muffins, lay them on tins and bake them, and as

the bottoms begin to change colour turn them on the other side.

TO MAKE FANCY BISCUITS.—Take one pound of almonds, one pound of sugar, and some orange flower water. Pound the almonds very fine, and sprinkle them with orange flower water; when they are perfectly smooth to the touch, put them in a small pan, with flour sifted through a silk sieve; put the pan on a slow fire, and dry the paste till it does not stick to the fingers; move it well from the bottom to prevent its burning; then take it off, and roll it into small round fillets, to make knots, rings, &c., and cut it into various shapes; make an icing of different colours, dip one side of them in it, and set them on wire gratings to drain. They may be varied by strewing over them coloured pistachios, or coloured almonds, according to fancy.

GAS.—It has been found by experiments, that the coal-tar liquor, which is sometimes considered as waste by those who make Gas, if mixed with dry saw dust, exhausted logwood, or fustic, to the consistence of paste, and allowed to remain till the water has drained off, two cwt. of the mass, being put into the retort instead of coal, will produce more gas, and be less offensive.

OATS.—To make oats prove doubly nutritious to horses, instead of grinding the oats, break them in a mill, and the same quantity will prove doubly nutritious. Another method is, to boil the corn, and give the horses the liquor in which it has been boiled; the result will be that instead of six bushels in a crude state, three bushels so prepared will be found to answer, and to keep the animals in superior vigor and condition.

FOR BURNS.—A good remedy for burns, is a preparation one part of lard, one part of rosin, and a half part of turpentine, simmered together till all are completely melted. The burns with an application should be washed daily, and dressed with fresh ointment.

Common flour paste, placed on a burn, scald, cut, or chilblain, and suffered to dry on the wounds, so as to exclude the air, will be found an excellent remedy.

MOLASSES POSSET.—Put in a saucepan a pint of sugar house molasses, a teaspoonful of powdered ginger, and a quarter pound of fresh butter. Simmer it over hot coals for half an hour, stirring it frequently. Then stir into it the juice of two lemons, two teaspoonfuls of brown sugar; boil the whole for five minutes longer. This is an excellent preparation to relieve colds, and is also particularly serviceable to persons subject to consumption.

TO MAKE PORTABLE GLUE.—Take one pound of the best glue, boil and strain it very clear; boil likewise four ounces of isinglass, put it in a double glue pot, with half a pound of fine brown sugar, and boil it pretty thick, then pour it into moulds; when cold, cut and dry them in small pieces. This glue is very useful to draughtsmen, architects, &c., as it immediately dilutes in warm water, and fastens the paper without the process of damping.

TO PRESERVE EGGS.—Apply with a brush a solution of gum-arabic to the shells or immerse the eggs therein, let them dry, and afterwards pack them in dry charcoal dust. This prevents their being affected by any alteration of temperature.

FOR CHOPPED HANDS AND LIPS.—Wash two or three times in the day with tincture of lobelia, or steam-doctors' No. 6, Honey mixed with water is said to be good.

REMEDY IN CASE OF POISON.—Instantly administer two tea-spoonfull of made mustard mixed in warm water. It acts as an emetic, and will effect a cure.

Six Fairs in the Year.

THERE will be a FAIR for the sale of Cattle and Agricultural Produce, held at Mr. THOMAS GRAHAM'S, three miles from Government House, on the Gagetown Road, and thirty miles from St. John, the same distance from Fredericton, and twelve miles from Gagetown, on the second Tuesday in November, the second Tuesday in January, the second Tuesday in March, the second Tuesday in May, the second Tuesday in July, and the second Tuesday in September. Queen's County, Oct. 28, 1844.

FOR SALE.

2,200 ACRES of LAND, situate in the Parish of Wicklow, County of Carleton, granted to L. H. Loudham and E. T. Harrison, Esquires. Also,—1,200 acres situate in the Parish of Dumfries, County of York, granted to Charles Rainsford, Esquire. The same will be sold in lots to suit purchasers. Apply to **G. BOTSFORD.** Fredericton September 31 1844.

NEW SUPPLY

Of every description of **BOOTS** and **SHOES**, suitable for the season.

—CONSISTING OF—

- G**ENTLEMEN'S Fine Black and Drab Cloth Boots,
- " " Calf and Morocco Dress "
- " " Clarendon Boots,
- " " Strong " "
- " " and Fine Bootees,
- " " Fine Morocco "
- " " Calf Pumps,

House Slippers, &c. &c.

LADIES' Fine Cloth Boots, from the cheapest to the very best.

Ladies' Walking and Dress Slippers, of every description—with an assortment of Boys' Strong Boots and Bootees of every description, Pumps, Slippers, &c.

Misses Boots and Shoes of every description.

Childrens' Boots and Shoes

Ladies', Gents', and Childrens' Rubbers.

" and " Cork Insoles.

S. K. FOSTER, Queen Street.

Fredericton, January 29, 1845.

Cloth Boots, Cloth Boots.

Just Received,

ASPENDID Assortment of Ladies' and Gentlemen's **CLOTH BOOTS**, at **FOSTER'S Shoe Store.**

Dec. 17, 1844.

Preserved Ginger.

4CASES in Jars, in good order, and for sale by **JAMES F. GALE.** Queen-street, Fredericton, Feb. 18, 1845.

STRONG BOOTS, &c.

JUST RECEIVED—A large supply of Strong Peg'd **BOOTS**.—For Sale at 15s. to 17s. 6d. warranted, Ladies & Gentlemen's **GUM ELASTIC OVER SHOES**, &c. &c. **S. K. FOSTER.** Queen Street February 5. 1845.

BOOTS AND SHOES.

CHEAP FOR CASH.

THE Public are informed that the Subscriber carries on the business of **BOOT AND SHOE** Making at his Establishment in King Street, where he will be happy to receive orders.

Gentlemen's fine **DRESS** and **WALKING BOOTS**, made of the best material, and by first-rate workmen, for *Twenty Seven Shillings and Six Pence.*

Ladies' Shoes from *Five to Ten Shillings.*

STRONG BOOTS and **SHOES** at proportionate prices.

Business punctually attended to.

WILLIAM F. BARKER.

Fredericton, July 24, 1844.

Tanning, Currying, and Leather Cutting, also carried on by the Subscriber, on reasonable terms.

SEARS'

New Pictorial Family Magazine

FOR THE YEAR 1845—NEW SERIES.

PERSONS wishing to subscribe for this cheap and valuable publication, will please apply to the subscriber, in Saint John, or at the Drug Store of Mr. N. W. Smith, Fredericton, where copies may be seen.—SEARS' *Bible Biography, Bible History, Wonders of the World*, or, "*Guide to Knowledge*," will be furnished at greatly reduced prices, to subscribers to the Magazine, on application as above.

JOHN T. SMITH,

General Agent for the Provinces of New Brunswick and Nova Scotia.

King Street, St. John, Jan'y. 1845.

OATS WANTED.

W. J. BEDELL & CO., wish to purchase a quantity of good **O.A.T.S.** Fredericton, Dec. 30, 1844.

OATS WANTED :—For a good quality of which a liberal price will be paid.

THOS. PICKARD.

Dec. 14.

PICKLES, SAUCES, &c.

FRESH Pickles, Sauces, French Olives, Capers, &c. Vermicilli and Maccaroni.

JAMES F. GALE.

Feb. 18, 1845.

VALUABLE LAND FOR SALE.

A Tract containing 900 acres, in the Parish of Dumfries, lying between Land occupied by Asa Dow, and Land owned by the Heirs of the late John R. Patterson. The Great Road passes through this Property, and a considerable portion of the Tract is cleared, and will be sold entire, or in Lots of 200 acres, to suit purchasers. **ALSO**.—A Lot of wilderness Land in the Parish of Woodstock, in the rear of Lands occupied by John Dible, Esquire.

ALSO.—200 acres of wilderness Land in the Caverhill Settlement, Parish of Queensbury Apply in Saint John to Messrs. **R. RANKIN & Co.**, or to **Wm. J. BEDELL**, Fredericton. Oct. 9. 1844.

CHEAP GROCERY,

PROVISION & LIQUOR STORE.

THE Subscriber begs to intimate to his friends and the public, that he has commenced business in the above line, at his Store, Queen Street, nearly opposite Mr. Gale, *Druggist*, where he will constantly keep on hand a general supply of **GROCERIES, PROVISIONS, and LIQUORS**, and trusts that by strict attention to merit a share of public patronage.

THOMAS WILLIAMS.

Fredericton, Dec. 18, 1844.

FLOUR, MEAL &c.

THE Subscriber would remind the public of Fredericton and its vicinity, that he still continues to sell : **FLOUR, CORN and OAT MEAL.**

Of the best quality and at the **lowest prices.**

Of Dry Goods and **GROCERIES** he has rather a greater variety than usual.

Fur **HATS** of modern shape and of all sizes can be procured **Cheap**, and of good quality at his store; also, a few dozen **Looking Glasses.**

THOS. PICKARD.

Dec. 14, 1844.

Leather, Leather.

60 SIDES Upper **LEATHER**—For Sale by January 20, 1845. **W. F. BARKER.** Persons wanting Strong Boots will find it to their advantage to call on **W. F. B.**

Sole Leather.

Just received on Consignment:

6400LBS. heavy **SOLE LEATHER** for sale at the lowest market prices.

N. S. DEMILL.

St. John, Jan. 4, 1845.



EXTRAORDINARY NEW CASES.

ATTESTING THAT HERE IS

FOR ALL !!



HEALTH!

HOLLOWAY'S WONDERFUL PILLS !!!

The following Case of Dropsy can scarcely be called a Cure, being so **WONDERFUL** and **EXTRAORDINARY** as to be little short of a **MIRACLE**.

Mr. JOHN ROBINSON, an opulent Farmer and Grazier, residing at Wotton, in Bedfordshire, was lately reduced to the apparent extremities of **DEATH**, being at the time so bloated with water as to be increased in size to double his usual bigness, indeed his legs had become so large round that they actually burst in three places. In this most alarming and dangerous state his Medical Man informed him, "that he could not possible live more than two days longer!" Mr. Robinson, upon hearing this, instantly dismissed his DOCTOR, and had recourse alone to the wonderful efficacy of **HOLLOWAY'S PILLS**, which not only saved his life, but likewise effectually expelled the water from the system, and restored him in a short space of time, by a steady perseverance in the use of the Pills, to as sound and as perfect a state of health as ever he enjoyed.

N. B. Mr. Robinson, whose life has just been saved by these Pills, is well known to most persons, not only throughout Bedfordshire, but also in the surrounding counties.

An Astonishing Cure of Confirmed Liver complaint.

Mrs. MARY SANDFORD, residing in Leather Lane, Holborn, London, had been labouring for five years under the effects of a diseased Liver, which produced Indigestion, sick Head-Aches, Dimness of the Sight, Lowness of Spirits, Irritability of Temper, Drowsiness, Occasional Swellings of the Body and Legs, with general Weakness and Debility. She attended the Hospitals, at different periods, for about three years, but she only got worse instead of better, and her recovery at last appeared quite hopeless; but notwithstanding the very bad state of her health, she was, in about two months, restored to perfect health by the means alone of this all-powerful and efficacious Medicine—**HOLLOWAY'S PILLS**.

Cure of a Case of great Debility of the System,

Occasioned by the baneful use of Mercury, and the injurious effects of a long residence in Tropical Climates, by *Holloway's Pills*.

JAMES RICHARDS, Esq., a gentleman in the East India Company's Service, and who had resided for the last Seventeen years in different parts of India, where his constitution had become much impaired from the influence of the climate, and the injurious effects of powerful and frequent doses of that dangerous mineral, Calomel, which, together, made such inroads upon his constitution as to oblige him to return home to England, and on his arrival he placed himself for some time under the care of a celebrated Medical Practitioner, but received no benefit from that Gentleman's treatment. He was then advised by a Friend, (who had tried this medicine,) to go through a proper course of the **HOLLOWAY'S PILLS**, which he did, and in about Four Months his formerly shattered frame was so completely invigorated as to enable him to prepare himself again for his im-

mediate return to India, whither he will embark early in the coming spring of this year, 1844. This gentleman is now residing in the Regent's Park, where he is well known, in consequence of his opulence and liberality.

Immense Demand for Holloway's Pills in the East Indies.

Extract of a Letter dated 20th of September, 1843, from MESSRS. S. FERDINANDS & SON, (Agents for the sale of "Holloway's Medicines," in the Island of Ceylon,) these gentlemen state,

"All classes of people here are desirous to purchase your **WONDERFUL MEDICINES**, and we regret that we have now scarcely any left to meet the **IMMENSE DEMANDS** that are daily made upon us for them. We inclose you a testimonial from J. DAVISON, Esq., the Superintendent of Lord Elphinstone's Sugar Estate, at Callura, Ceylon; and we can, if necessary, send you abundant other proofs, not only from the middling classes, but also from the opulent and influential here, many of whom have derived immense benefit from the use of your invaluable Medicine.

Copy of the Letter from J. DAVISON, Esq., which is the same alluded to in the Extract of the letter above.

CALURA, 7th August, 1843,

My Dear Sirs,

Mrs. DAVISON has received so much benefit already from **HOLLOWAY'S PILLS**, that I am induced to trouble you for another supply,—viz., an Eleven Shilling Box.

Your's truly,

J. DAVISON.

To Messrs. Ferdinands & Son, Holloway's Agents for the Island of Ceylon, Colombo.

Time should not be Lost in Taking this Remedy for Any of these Diseases :

- | | |
|-------------------------|--|
| Ague, | Indigestion, |
| Asthma, | Inflammation, |
| Bilious complaints, | Jaundice, |
| Blotches on the skin, | Liver complaints, |
| Bowel complaints, | Lumbago, |
| Colic, | Piles, |
| Constipation of Bowels, | Rheumatism, |
| Consumption, | Retention of the urine, |
| Debility, | Sore throats, |
| Dropsy, | Scrofula, or King's Evil, |
| Dysentery, | Stone and Gravel, |
| Erysipelas, | Tic Douloureux, |
| Female irregularities, | Tumours, |
| Fevers of all kinds, | Ulcers, |
| Fits, | Worms of all kinds, |
| Gout, | Weakness, from whatever cause, &c. &c. |
| Head-ache, | |

N. B.—Directions for the Guidance of Patients in every Disorder are affixed to each Box.

JAMES F. GALE, Chemist & Druggist, Agent, Frederickton, N. B.

Price—1s 9d, 4s 6d; and 7s per Box.