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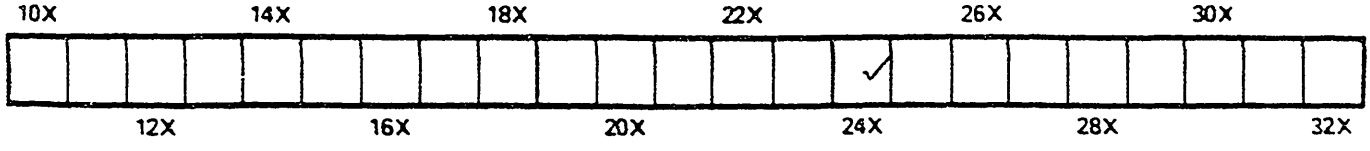

THE

FARMER'S MANUAL,

A MONTHLY JOURNAL,

DEVOTED TO THE

AGRICULTURAL INTERESTS

OF

NEW BRUNSWICK.

VOL. I.—1844-5.

FREDERICTON:

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☞ *In the compilation of the following Index, the Reader will observe that from the 17th to the 32d pages, inclusive, the folios have been referred to as if the proper figures were actually there, which is not the case—the same headings having been inadvertantly used for the second, or June No., as they stood in the first, or May No. Persons will, therefore, seek for articles that may be in the June No. as if that No. was properly paged.*

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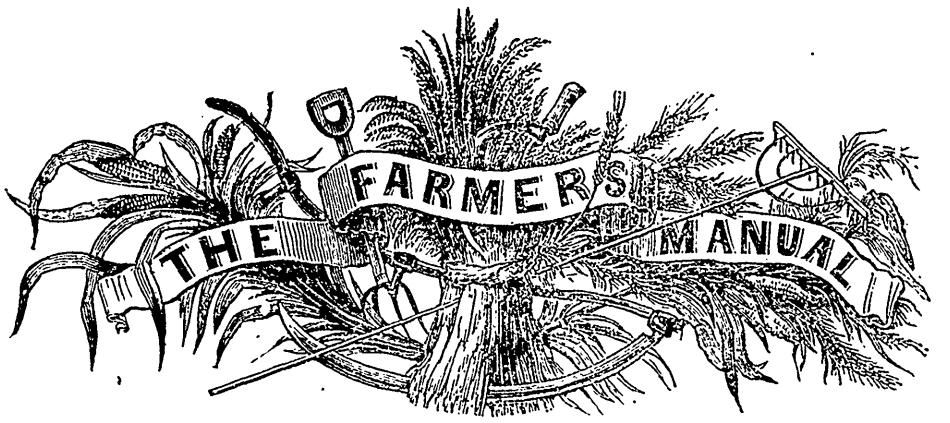

"THE EARTH BEING MAN'S INHERITANCE, IT BEHOVES HIM TO CULTIVATE IT PROPERLY."

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THE FARMER'S MANUAL.

IN presenting this our first number to the public, we would beg to address a few words to the Farmers,—a class of men whose occupations cannot be too highly estimated, and for whose benefit these pages are particularly intended.

It has been said by Doctor Johnson, that "Agriculture not only gives riches to a nation but the only riches it can call its own." Without contending for the literal correctness of this statement, we yet believe that Agriculture is a most important branch of industry, and that where its interests are not made a paramount object of political economy, no country can become very wealthy or independent.

The soil is an inexhaustible source of wealth,—the great storehouse whence the necessities of our nature are supplied. It possesses in itself a continually reproductive principle, which labor and cultivation increases rather than diminishes, and it is this which renders Agriculture important to individuals as well as to the country at large.

Our farmers seem hitherto never to have regarded this business in its true light, as forming the only basis on which our Provincial prosperity can safely rest; but rather as a merely subordinate employment, as scarcely more than an alternative against want, a sort of *dernier resort* for persons incapable of succeeding in other pursuits.

The practical evil of these impressions may be seen by looking over the face of the Province: in the country, in discontented farmers, and farms neglected and going to waste; in the town, in professions filled to repletion, and in merchants without credit or customers;—a large proportion of both having left the country for what they deemed more lucrative and honorable pursuits, in which however they have been in perhaps a majority of instances, most wofully disappointed; and many of them now instead of being of much use to themselves or of any to the country, hang as a dead weight upon the productive energy of the Province, producing nothing themselves and drawing their subsistence from the labor of others.

Look also at the influence of the Farmers in the Government of the country—In the House of Assembly and the Legislative and Executive Councils. Is it anything like what it should be? Does it not plainly shew that they have suffered themselves to fall far behind their neighbours, and have tacitly assented to the political insignificance of their employments.

This error, like most others, has been the means of perpetuating itself. When any occupation ceases to be considered important the more ambitious and enterprising are deterred from engaging in it—talent is looked upon as thrown away when confined to objects but little regarded, and intelligence is rarely acquired where there exists an opinion that it will be of little or no use. Thus the elevating, influences of mental improvement have had hardly any connection with our agricultural pursuits. How often have we seen a farmer expend large sums of money to qualify one of his sons to become an indifferent lawyer or doctor, to the neglect of his other children, who have scarcely been taught to read and write—as if the circumstance of their being intended for the farm should preclude them from the rational and delightful pleasures that arise from a well cultivated mind; as well as from that respectability which generally attends it.

Now the remedy for all this is to give to farming occupations that distinction to which by their importance to the general welfare they are entitled,—as they are unquestionably the first in point of utility let them be regarded the first in point of respectability;—let practical farmers assume and qualify themselves to sustain a higher position in the community than they have hitherto been content to appear in—let them feel that although their hands may bear the evidences of honest labor and their cheeks be bronzed by exposure to the sun and the weather, yet their pursuits are not incompatible with the highest moral and intellectual attainments —that education is no less necessary, both with respect to the proper and profitable management of their own business, and the elevation of their class among the other classes of the community, than it is to any of those other classes; and, without degrading their own employment by transferring the energy and ambition that may appear among them, or the educational advantages they may have it in their power to bestow on their children, to other employments, let them confine them to their own, and by thus raising their own character raise the character of their avocations.

We therefore say to the Farmers, study to improve your own minds as well as your lands; in proportion as you attend to the former, will you find yourselves enabled with more ease and better prospect of success to attend to the latter. Embrace every opportunity of educating yourselves and your families; and be careful never to admit the impression that knowledge of any kind is of no use to him who cultivates the soil. Impress upon the minds of your children that the calling in which you are engaged is most useful; and honorable because it is useful, and that by their prosecuting it honestly and industriously, and having at the same time a due regard to the improvement of their minds, they may occupy a station in life than which none can be more productive of happiness, none more virtuous in itself, and none more capable of contributing to the comfort and welfare of the community at large.

☞ Unavoidable circumstances has prevented the publication of this number earlier in the month. Having now procured the Heading of this paper, for which it was delayed, after the next number the *Farmer's Manual* will be ready for distribution during the first week in every month, so as to render the information which it may contain as far as possible suitable to the season.

AGENTS WANTED.—We will be pleased to receive intimations from persons residing in the various sections of this and the adjoining Provinces, who are willing to have their names enrolled in the columns of the Farmer's Manual as Agents in its behalf.—To such we will send a number of Copies for them to dispose of for *Cash*, and allow them 10 per cent. for their trouble.

Mr. Jardine, of the City of Saint John, has lately received from Greenock two Mares, a Cow and a Calf. They are said to be of the Ayreshire breed, and will no doubt untimately tend much to improve the breed of cattle in the Province.

[For the Farmer's Manual.]

In offering the following remarks to the public in a series of letters, it is the chief intention of the writer to call the attention of the youth of the country to some useful purpose, to which he would invite the well known energies of the industrious classes of his fellow countrymen.

Born and educated in this Province, the writer must acknowledge his predelictions for his native soil, and having reared a family in it, he cannot fail being deeply interested in its prosperity,

It is intended to confine the following remarks more particularly to the Mercantile, Mechanical, and Agricultural pursuits, but more especially to the latter, (the writer's favorite occupation.

It is common for young men to look forward with much anxiety for a future settlement, and remain long in doubt as to which is the most eligible profession to adopt; and it is not only a common but a very prudent method for them to avail themselves of the experience of their precessors.

Let us then first turn our attention to the prospect of the Merchant, although at the present time it is with a gloomy foreboding that the picture will bear but a dull comparison to one which might have been drawn on that subject four or five years ago. It has been affirmed by a writer on the subject, in a Mercantile Town in one of the western States, that among those who had attempted to obtain a living by buying and selling in that town for many years last past, ninety seven out of a hundred had failed, and three only had succeeded. This is, indeed, a far more distressing scene than has ever been witnessed in New Brunswick; but it is a melancholy fact, that for the last seven years, more than fifty in the hundred have failed. Which way then, young men, shall we turn our attention? Have you a good trade? If so, thank God and your friends for it; it is a valuable property—may give full scope to your native talent, and ample reward to your energies.

Let us then consider the truly respectable *Mechanic*. On this score there is much cause of exultation—no failure worth mentioning, but every reasonable encouragement in this Province. Provisions cheap and plenty, wages liberal, materials abundant, and protection from foreign competition hereafter to the extent of our Legislative power. Every complaint that could be made by the Mechanics of New Brunswick on the score of protection has been most respectably attended to by our Legislature, and there is no doubt but a suitable remedy for every grievance may be applied.

It should here be remarked that with reference to there having been no mechanical failure worth mentioning, that it is believed that mechanical failures have originated in man's trusting to man to too great an extent, and the same case may also apply to most of the mercantile failures, but when a mechanic trusts to a kind Providence and his own exertions he need not fear failing in New Brunswick. But Mechanics may properly be divided into three classes.—The first find employment by which they obtain a living; the second obtain a competency, enabling them to maintain and educate their families respectably; and the third acquire eminence in their profession, and frequently affluence in their circumstances.

But as many young men are brought up farmers without any mechanical trade, and are unwilling, after arriving at mature years, to serve an apprenticeship, their attention is naturally called to the cultivation of the soil, the best method of acquiring a farm and a comfortable settlement, and the manner of cultivating it to the best possible advantage, and making it produce the most profitable crop with the least labor and expense.

In considering these important matters it is the intention of the writer to consider the capabilities of the soil and climate of New Brunswick as compared with that of neighbouring countries—the present imperfect method of cultivation, and some reasons why farmers may fail as well as other professions: together with the great necessity of studying Agriculture as a science, and advocating the profession of the farmer as one of the first respectability. If, in attempting to arrange these different subjects, he should fail in adopting a regular method, or for convenience happen to confound one with the other, and occasionally huddle them together like a hurried harvest season in New Brunswick, the writer claims the indulgence of a generous public. If he succeeds in effecting any improvement in his profession, and thereby serving his country, he will consider himself amply rewarded, and remain its devoted servant,

A FARMER.

Sunbury, April 15, 1844.

Letter I.

The *Soil* of New Brunswick may well be considered superior to most other countries, and it has larger tracts of alluvial than any neighbouring country of its size. No River short of the great Mississipi abounds in such extensive and fertile intervales as the River St. John.

It is true there are some tracts of rocky or barren land, but they are generally of small extent, and not more than the neighbouring settlements may require for woodland, for which purpose they should always be left; and there are likewise a few tracts of turf bog, which may be necessary at some future day when fuel becomes scarce.

The numerous navigable Rivers, Lakes and Streams with which the country abounds cannot fail to afford encouragement to its cultivation, and give effect to enterprise. The immense Lime beds, extensive quarries of Gypsum, and abundance of Granite, so wisely distributed in different sections of the country, on the shores of navigable Rivers and Bays, may well be admired as a rich gift from an all-wise Creator, who has dispensed his favors on New Brunswick with great profusion.

The *Climate* of New Brunswick is allowed to be severe, and it is certain the extremes of heat and cold are very great. It is affirmed that in extreme cold the thermometer has been down to 23 degrees below zero, but this is an extreme, for at 12 degrees it is allowed to be very cold weather. In Summer the mercury has been known to rise to 91 degrees, but this is also considered extremely hot, and lasts but for a short time in the day.

In the interior snow generally comes in November and remains on the ground until April, and this is called a long Winter; but when the Spring arrives people are generally as much hurried to finish their sleding as they are to conclude their harvest in the Autumn—a plain proof that winter has its advantages as well as disadvantages.

All kinds of grain excepting Indian Corn grow well in every County in the Province. Indian Corn will not grow near the Seaboard or Bays, where fogs prevail. A man who has spent two or three years in the State of New York (and on whose authority the greatest confidence may be placed,) affirms that near the western part of the State the snow came in October, 1842, and continued until January, when it was swept off for a short space with a great rain. He left that country on the 23d of October, 1843, and then the snow was five inches deep, and the Indian Corn, not having ripened, was still standing in many fields unharvested.

So it is evident that other countries are subject to adverse seasons as well as this. If our Seasons are shorter and climate colder than the far famed Western America, our produce is as certain and far more profitable, and our health much better.

Indian Corn planted about the last of May may do for green corn about the 24th of August, and be ripe about the middle of September; Wheat will grow from the seed to maturity in eighty-five days, and Buckwheat in seventy days. About 1816 there was the coldest summer ever known in this Province, but Wheat, Oats and Potatoes planted in due season came to maturity; likewise garden fruits and vegetables—a plain proof that a careful farmer is never entirely disappointed in his crop, or frustrated in his laudable designs.

But when the farmer allows himself to be led into the forest in search of wealth, to the neglect of his farm—when he is led to believe that Timber is obtained with little expense, and that it is much pleasanter gliding down the river with a fine raft than to be following the plough—alarmed at the amount of expense of his undertaking in lumber, and disappointed in his prospect he endeavours still to hold his farm from sinking—his business becomes divided, his interests separated, and he is fortunate indeed if he is not eventually ruined.

By such methods as farmers engrossing too many occupations, the business of the farmer is most grossly neglected, slighted, hurried, and wasted, ploughing and harrowing imperfectly performed on fields unprepared and injudiciously selected; manures wasted in the air for want of mixture and shelter, provender for stock nearly wasted by feeding it in such a manner as not to make the animals improve, fields ploughed for twenty years in succession and others mowed for forty, because "we can never get time to prepare them for the change." Such is the manner and method of some who ought to be farmers in every section of this country, even in situations where they are surrounded by careful, industrious men, who manage better.

To recommend a better method, and excite to more enterprise in the profession, shall continue the object of

A FARMER.

Letter II.

Having for more than thirty years past taken great interest in general improvement, having become generally acquainted with different sections of the Province—visited many harbors and islands on the sea-board as well as some neighboring countries: having carefully observed the different soils, modes of culture and productions, I have long witnessed with much regret the general apathy and want of enterprise among the Agriculturists of New Brunswick. I have endeavoured generally to ascertain the cause of this apathy, and have seldom failed of coming to a satisfactory conclusion.

Among the settlers arriving here in 1783, and previous to that time, there were some European Officers who prefered large claims on the Government, which were satisfied with large tracts of

land. Those who settled on their grants seldom made them available for any purpose excepting that of obtaining credit, which, with their pensions, enabled them to live in that dissipated style which was far more congenial to their aristocratic notions than profitable to the neighbouring peasantry. From this and other circumstances the rage for many hundred or thousand acres became established, and large tracts were engrossed, which continues still uncultivated, a perfect nuisance in their neighbourhood. The practice of large grants for the purpose of cutting off the timber, has helped to confirm and continue the fashion.

In travelling through settlements in the interior I have often observed that when one man had twenty acres of his two hundred improved fit for the plough, after twenty years residence on it, more had fallen short of that quantity, and some had found their tracts a great incumbrance and expense, which had finally caused their failure. Extending a little labor over a large field is always attended with a small return or a total loss.

Some farmers have purchased farms with the hope of making the price of them by their crops, but they have too often estimated that part which brings no income too highly.—If they say the buildings and 50 acres cleared is worth £500, and the 500 acres of forest is worth £500 more, they may be sure of falling in the rear. If a farmer thinks to erect elegant buildings and pay for them in the surplus produce of his farm, he may find, when too late, that building diverts his attention from Agriculture, and elegant houses add to the imaginary wants of his family, require elegant furniture, and numerous expenses unless economy and method is the order of the day. Hurry and disappointment will ensue.

It is a convenient and reasonable thing for every farmer to have a wood lot and common attached to the farm, when it does not cost him too much, but when he purchases by the acre let him purchase no more than he can occupy to advantage.

Agriculture, as I have before observed, having been in many cases, a mere secondary consideration in this Province, a very careless and bad practice has been adopted by our forefathers, and the tenacity with which it is adhered to by their children is proverbial; and a want of foresight, a want of a little capital to take advantage of present opportunities is every where apparent.

One admits that his crop has failed from his having sown bad seed, for he had not money to purchase better; another has lost his meat or a few tons of hay by the wet, for he was out of money to buy a few bushels of salt to save them. One has sowed foul seed with his wheat, because he had not a seive to cleanse it with; and he has thereby ruined his field and crop, *a very common occurrence.* And many regret that they sold their pork last fall for two pence per pound, for they see now if they had barrelled it up it would now have been worth five pence. Six or eight men will toil hard in raking hay all the afternoon, while their neighbor on the next farm will rake with his horse more than all of them, while the extra hands are carting it into the barn. But the matter is easily excused, "It is a busy season, and we have not time to step over the fence and see how the Horse Rake works, and indeed we have none, and our father never heard of one, but he always made out to get his hay raked."

But the prejudices of education, although strong are not always the worst. Many have framed and matured prejudices arising out of their own neglect and bad management, and fall far short of the vigilance and enterprise of their fathers. Of such, however, there is little hope of their reforming.

From this sad picture of bad management I would fain turn away and invite the attention to some of my countrymen who have acquired a handsome independence by farming, and also to many European farmers among the emigrants of the last 25 years, who have settled among us and rented land until they have become able to purchase, and are now in comfortable and respectable circumstances, a credit to their native country and a good example to be followed by their neighbours in the land of their adoption. All which plainly proves the capabilities of the Soil and Climate of New Brunswick, and the facilities for turning them to good account.

A FARMER.

LETTER III.

For the Farmer to keep his fields constantly in good order, so as to raise every year a good crop is the greatest art of Agriculture; but experience has proved that it is attainable, and the great secret lies chiefly in a proper care, preparation and application of manure.

Manures are of various kinds: but as this is a Stock country, abounding in extensive natural pastures, and plenty of hay, I shall chiefly confine my remarks to the Manure of Stock farms.

All manures undergo a certain degree of fermentation before they unite with the soil in forwarding vegetation. While this process of fermentation is in operation great care should be taken to have the mass so mixed and surrounded with vegetable and fossil matter, that all the æriform gasses should be completely absorbed and retained. Excrementitious manure may be placed in the earth in such a state as to afford no nourishment to the crop, but after it has become thoroughly composted, its strength remains in the earth for many years. Although it is not indispensably necessary that every farmer should have a thorough knowledge of chemistry, still that knowledge would be exceedingly useful to him in the management of his compost heap, and he would thereby clearly perceive the great loss sustained by the ordinary practice of farmers exposing the naked heaps of excrementitious manure in the open air. To describe the different combinations and vital properties of those gases which escape by such exposure would exceed my limits, and probably be less interesting than a few practical remarks, the result of observation and experience.

Excrementitious manure that has been well housed has been found much stronger than that of any other kind; but when exposed for one summer in the open air or for four or five months, it loses half its quantity and much more of its virtue. But when mixed with an equal quantity of peat earth, swamp mud as it is sometimes termed—or fossil and vegetable substances, its quantity is doubled, and all its virtues are retained. Manure carried to a distant field for convenience in the winter, or in the autumn, should always be covered with the clay of the field as soon as possible. This practice I have followed for several years, and have invariably found that I had saved all the manure covered improved its quality, while all the soil which I had placed on it, had also become good manure. I have also recommended it to some who have tried it with the same good effect. Another great loss in the manure is the liquid which escapes from the stable, which has been found capable of decomposing more fossil and vegetable matter than the excrement, and yet it is astonishing to see the carelessness of many farmers in allowing their cat-

tle to stand year after year upon a leaky floor with nothing under to absorb the moisture, which is consequently a total loss.

To remedy this great loss of manure should engage the careful attention of the farmer. Upon intervale farms there is a necessity of having the floors high up from the ground to avoid a freshet, but then care should be taken to have something placed under to absorb the moisture.

But on upland farms a regular and profitable system should always be pursued and might be to certain profit. All stands for cattle should be quite level and just long enough for the cattle to stand on. For ordinary sized Cows four feet two inches from the stanchion back is quite sufficient. The gutter should then be six or seven inches lower, about three feet wide, and as tight as possible. By adopting this method, my cows have been kept dry and clean as cattle running in pasture, and have been stabled winter and summer. The upland barn should have the stable floors laid upon the ground, and so firmly bed in the clay that no air should pass under. The gutter laid with descent, leading the liquid into a vat stored with proper absorbents for making manure, and the dung heap should also be covered with a shed.

I have found by placing two ordinary sized barns at a convenient distance from each other—12 or 15 feet—it is an easy matter to enclose the space between, so as to make it appear like one long barn. The lower part of the space then serves for a pit to hold the manure of two stables, extending each across the barn, while the upper part serves for stowing hay, and a door opening into the space from the yard, serves to back in the cart for the manure. This is a method I have tried with good effect, and can confidently recommend it from experience. In building barns with the stable floors on the ground, it is necessary that the sills, instead of being framed together in the usual way at the front corners, should enter with a strong tenon to the posts, which should also rest their ends on a flat stone upon the ground, while the barn floor for carting in the hay should be two or more feet high, leaving the scaffold above the cattle about four feet above the barn floor, which makes a material difference and relief in pitching up the hay.

In my outset, I anticipated some wandering, and now I find myself barn building in the midst of preparing manure; but to return, I can assure the farmer the more and oftener the compost heap is turned over and mixed, the more benefit may be derived from it, providing, however, there is a sufficient mixture of other substances to prevent the æriform gasses from escaping.

Lime is an excellent ingredient in the compost heap, but I have always found it too expensive. Deposits in or near rivers or creeks, table land at the foot of a large hill or mountain, deposits from brooks, which frequently settle in the ditch by the highway, and turf or swamp mud of any kind, should always be sought after as opportunity may afford, and be highly valued by farmers. I know cases where stable manure is hauled ten miles with profit, but the distance of hauling fossil and vegetable matter for the compost seldom need to exceed half a mile, and is frequently within twenty rods.

Having taken a general outline of the management of the compost heap, I will next consider the preparation of the field for receiving it and applying it with good effect.

And here I would first observe the necessity of having first the field well drained; for if the rain-water stands in puddles on the field, neither manure nor culture will perfect the crop. Draining may generally be effected by ploughing the land in ridges, or making a head land drain, but great care should be taken in hilly ground that the ridges should run obliquely down the hill, lest too great a rapid in the time of heavy rain should cut away the soil and make deep gullies.

It sometimes happens, and particularly in flat, level situations, that fields cannot well be drained without digging deep through a ridge—a great expense. But when this is the case, it generally answers well to go into the lowest part of the field in dry season, and there dig a large deep hole, and take away the mud for the compost heap. From all other parts of the field, let the drains head to this pit in the centre, and it will be found that in open space, one rod square; in one dry day the water that would be taken away by evaporation would keep two acres of land wet for a week, by laying concealed from the rays of the sun, under the sod. Besides, it is frequently the case, and more particularly in alluvial soils, that by digging three or four feet, we come to a strata of such loose open material, that the water filters away, and may be seen oozing out of a distant bank. In one particular case, I remember to have employed a man in digging a ditch four feet deep in a low flat swamp, while the weather was dry—before it was finished, there came a rain and filled it brim full, I viewed it next day, and found that at about the depth of 15 inches, the water had leaked away, but below that it remained for more than a week. But I must conclude for the present, as I find I am trespassing too much on my time, which is always precious to

A FARMER.

(To be continued in next No.)

SOWING AND PLANTING.—In most cases we obtain as good crops without early planting. Corn, potatoes, beets, carrots, parsnips, pumpkins, squashes, melons, cucumbers, beans, and most vegetable crops, do better by delaying planting till the ground is warm and dry, and the weather is generally warm, as cold weather and severe storms, check, and in some cases destroy tender plants. Most of these crops succeed better if they be planted from the middle to the last of May, though it is generally best to get corn in by the 20th of May, as it requires the whole of a common season, to become well ripened. In cases of early planting the ground becomes heavy and hard from severe storms, and the plants become stinted, while the weeds which are hardy, are getting possession of the land, and can be expelled only with much cost and trouble.

But some things require early attention.—Spring wheat, rye, oats and barley should be sown as soon as the ground becomes dry enough to work; as in this case there is a much better chance for a good crop. Warm, muggy weather, is more likely to cause a failure in late sown grains, than that which is sown early. Last season the drought cut off late sown oats and barley, and those sown late are generally more liable to injury from this cause.

Peas do best when planted early; and they are so hardy that cold will not injure them. When sown late they are liable to injury from rust and mildew. Onions should be sown quite early, else they will not ripen well unless the season be favorable. The tomato and some other vegetables should be sown early, else they will not generally ripen well in our climate; and for early use many kinds should be planted as soon as the ground is dry.

GLOUCESTER AGRICULTURAL SOCIETY.

Extract from the Report for 1843.

Kindred Institutions to this are now rapidly multiplying throughout the world, and their exertions in the cause of Agricultural improvement are attended with astonishing success.

The cultivation of the soil is no longer ranked as a base or plebian occupation. The taste and disposition to develope and diffuse the science and practice of Agriculture, would seem to have become almost universal; for every people in every clime, the great and the humble, the peer, the peasant, and the philosopher, are now engaged in prosecuting this great work—a work as essentially conducive to the true happiness of man, as it is pleasing to the God of nature, "who gives to the earth its increase"—who designed the tilling of the soil as the first employment for his creatures—and who alone understands and directs the process, to man mysterious, by which the earth returns the hidden grain from its bosom, "multiplied seventy, eighty, and sometimes one hundred fold."

Through the medium of the press, in the shape of Agricultural Journals and Periodicals, those powerful and necessary auxiliaries to Agricultural Societies, we are now almost daily put in possession of information invaluable to the farmer; every improved process—every successful experiment—every accidental discovery—is thus brought to our knowledge; and it would be highly culpable in us, with our soil and other local advantages, to disregard the lessons they contain. Rather let us, with a laudable ambition, endeavour to imbibe a portion of the zeal and industry they record—call into free and active vigour our own capabilities, and let us become contributors in return to the stock of Agricultural knowledge which others have hitherto been acquiring for our profit.

That this is not a chimerical idea, but that it may be accomplished with little more than ordinary perseverance and attention, is fully borne out by the observation of your Committee the past season; for notwithstanding the severe frosts and heavy rains experienced immediately before last harvest, which caused very general apprehension for the safety of the crops, and indeed occasioned much loss in the low lands, and up the rivers, a far more valuable return was obtained, greater in quantity, and infinitely better in quality, than was obtained in any former year. And this result your Committee do not attribute alone to the increase of cultivation, but in a great degree to the improved system of husbandry, which is now being observed through the efforts of the Society.

In the last Annual Report, your Committee recommended that the best description of grain raised in the County, should be purchased by the Society for distribution, in preference to importing from Prince Edward's Island and Canada, as has formerly been our practice; and this recommendation was acted upon. A very high price was paid for sixty bushels of wheat, forty bushels of barley, and one hundred and fifty bushels of oats, selected from the best samples the County afforded. These were sold to members in the customary manner for seed, and the result of this experiment, as disclosed at the late Grain Exhibition, amply bore out the propriety of the recommendation of your Committee; for excellent as the grain of 1842 certainly was, the grain of last year's crop infinitely surpassed it in weight and appearance; and proof was thus afforded, that simply shifting the seed grain from one locality to another, within the County, is sufficient to keep it in vigour and a state of improvement, without having recourse to a change of seed to other Colonies, where it is of a much inferior description.

It has been reported that wheat of the weight of seventy pounds per bushel, was raised in York and in Kent Counties, some time since; but your Committee have reason to think, that if such was the case, and it was measured by the correct Winchester bushel, the instances were very rare, for this weight, or any thing approaching to it, has not been maintained in either of these Counties. On hearing of the superiority of the wheat in the latter County, your Committee attempted to procure some for trial; but after diligent enquiries, they could find none of a desirable appearance or character. On the other hand, we have here since the establishment of the Society, been gradually, but steadily advancing; every succeeding year's exhibition showing a manifest improvement in the weight and quality of all descriptions of grain, until the present one, when we have numerous stocks of wheat weighing sixty-eight pounds to the bushel, and may safely state the average weight of wheat and barley throughout the northern part of the County, to be about sixty-four and one-half pounds for the former, and fifty-three pounds for the latter, an average not surpassed perhaps in the Province. The increasing quantity grown of late years, also affords cause of gratulation. From statistics collected by the Secretary, but not yet complete, it appears that all the grain raised in the Parish of Bathurst in the year 1833, did not exceed six hundred bushels; while the quantity already ascertained of the crop of 1843, is beyond seven thousand bushels. But notwithstanding this gratifying state of things, your Committee must not be deemed unreasonable in stating that they anticipate much more rapid progress yet for a few years to come. Settlers will multiply, for the excellence of our soil is becoming known and appreciated; cultivation will extend, and in corn at least, improvement must continue through assiduity and skill, until the weight of our wheat reaches seventy pounds per bushel, our barley fifty-eight to sixty pounds, and our oats forty-eight to fifty, and this may be considered perfection, for it is improbable that grain by any process can be raised to approach nearer the density of water than wheat at the above standard—a weight too, it has not yet attained in any country except in some rare and solitary instances. Let us then profit by our present experience, and pursue this object with a determined perseverance, as the success we have hitherto met with affords fair hope of its accomplishment; and then in one department of Agricultural industry at least, we can step into the foreground and contribute by example and instruction to the improvement of our seniors in the science, as a return for the very many useful lessons obtained from them in our infancy.

With regard to live stock, your Committee cannot speak with such satisfaction. The Horned Cattle that have come under the notice of your Committee, are of a very inferior description generally, although a few specimens of a good breed are here and there scattered through the County. Sheep also of a good description require to be introduced; and your Committee regret that they have again been disappointed in not obtaining the Sheep ordered in 1842. The breed of Hogs noticed in a former report, as introduced by Mr. Ferguson, are now beginning to be sought after by the farmers, and the experience of your Committee fully confirms the good opinion they formerly expressed of this breed, as well adapted to our climate and condition. The following are the weight

of some of those animals killed the past season:—

Fourteen Pigs raised by F. Ferguson, Esquire, killed last fall, weighed, viz:—One of two years old, 693lbs.; one of eighteen months old, 570lbs.; one of same age, 525lbs.; one of fifteen months old, 460lbs.; ten of fourteen months old, averaged, 300lbs.

Four Pigs of the same breed, raised by Mr. Mulloy, of Saltash, weighed together 1,800lbs.; none of them were over eighteen months old. This breed should therefore be encouraged, as they possess that quality so essential in cattle raised for food—a capacity for feeding and fattening beyond any other description known to your Committee.

Your Committee would recommend the importation of a good breed of Ayrshire Cattle, and a good Horse, together with the Sheep heretofore proposed, next season.

A quantity of Tares might judiciously be imported by the Society, and recommended for general trial. Experienced farmers consider them excellent food for cattle when cut green, and that they likewise improve the land in which they are sown.

Several instances of exceedingly large returns of grain from last year's crop, have come to the knowledge of your Committee. F. Ferguson, Esq. sowed seven and a half bushels of Black Oats in a two acre field, and reaped one hundred and thirty bushels, weighing forty-two pounds to the bushel. Mr. Michael O'Brien sowed three gallons of four rowed barley, on a small patch of land, perhaps about the fifth of an acre, and obtained therefrom sixteen bushels of clean grain. Other instances of equally favorable returns on a much more extensive scale, have been represented to your Committee, but they have have been unaccompanied by sufficient particulars to justify your Committee in recording them.

The best precaution that can be adopted against loss by early frosts, is that of sowing winter grain. This has been tried on a large scale by Mr. Woolner, of Bathurst, two seasons ago, and the result has satisfied him that the practice may be very generally adopted with great advantage, if proper care only be taken in preparing and selecting the ground. As Mr. Woolner is the only member of the Society who has cultivated winter grain to any great extent, or persevered in it with system, your Committee think it well to introduce some of the practical advice collected from him on this subject.

The ground for winter grain should be prepared by summer fallowing, which can be done after the spring crop is in, and before haying. The subsoil to be disturbed, but not exposed during the first process, in firm or clayey soils—in old or worn soils, plough to the depth of nine or ten inches. About the middle of July, plough into ridges of twelve or fifteen feet wide, with a rounded surface; after harrowing, apply a top dressing of compost, in which lime predominates; avoid stable manure at this time, and in this situation, if possible. Adopt the drilling process in sowing, it is generally followed in the Mother Country, and is quite as applicable here, particularly to winter wheat, the horse rake to precede the sowing, may be substituted, but not with equal advantage; either is better, however, than the ordinary method of broad cast sowing. After sowing, harrow in the direction of the furrows, then use the roller across. After this, carefully open the main and head-land furrows with a double mould board plough, to give a free passage to the water in the fall. Sow in the last of July or beginning of August, if the weather permits, the plant will thus acquire strength before the winter sets in, and be enabled to resist the effects of frost called "winter killed." Winter killing is occasioned by the action of the frost upon the water lodged by winter thaws, and proves often fatal to grain when the plant is weak, therefore sow early, and if the plant is considered too far advanced before the winter sets in, feeding off, or rolling will be a remedy; clear the furrows and drains in the spring, and let the water off completely, then when dry, cross roll.

Prepare the seed grain by soaking for twenty-four hours in strong pickle, and drying it in newly slacked lime; if not sowed immediately, turn the heap occasionally. The best winter grain for seed, proves to be that from the Baltic, *not* that from the United States or Canada.

In selecting ground for trying the experiment of raising winter grain, the situation or "lay" of the land should be carefully considered, as it must be capable of being drained effectually in fall and spring. The simplest method of testing the soil most suitable for this crop, is that of washing a small handful of soil in a tumbler of water, and if it requires more than three hours to settle, it may be considered liable to injury from winter frosts.

A crop of winter grain may be advantageously introduced into a rotation system, (which should alway be followed,) thus: after winter wheat, potatoes with manure, and limed at second hoeing; then spring wheat, with timothy and clover; next, hay—and next pasture, to be followed by winter wheat again. It is no objection to this system, that but one crop of hay is taken off, as the land is improved by it, the grain receives the benefit, and it is more favorable to the farmer than summer fallowing without a winter crop.

With regard to spring grain, our farmers have already had a tolerable share of experience in the mode of cultivation, and your Committee only consider it necessary to keep in view the propriety of collecting and applying manures freely, but at the same time judiciously. The formation of composts, the trial of sea-weed, and lime and marl, all of which fortunately are to be found around us in great abundance, are becoming very general, with marked success, and to the liberal and judicious use of these manures, we may in a great measure attribute the fine quality of our wheat and barley the present year. Some of the cultivators of these grains have used swamp mud and stable manure, while others have only used lime, harrowed in with the seed.

The proper application of these manures, seems to be lime for the clayey soil in the district north of the harbour of Bathurst, and for the upper part of the Parish of New Bandon; and salt mud from the coves for the sandy soil of the town and vicinity, including the Big River. But it is evident that lime cannot do injury in almost any situation, and is particularly favorable for growing wheat. In some instances the French people last season gathered the mud from the coves, and applied it directly to the land with the seed, and the result has surprised many who considered this substance too cold, unless as a component of a compost, to have any effect in nourishing the seed.

Your Committee conceive the Society has had ample cause for satisfaction the past season, and quite sufficient encouragement to induce them to prosecute their efforts still further in promoting Agricultural improvement. Farmers generally should be aroused to a sense of the importance of the work, and should by all means contribute a small sum towards its support. The produce of the soil will soon perhaps be the only resource

which our people may have for the means of subsistence. Every successful effort therefore that is made towards improving the mode of cultivation, by reducing the cost of labor, and increasing the produce of the soil, contributes to the general wealth, and the independence and comfort of the inhabitants. Indeed the County should be ashamed, considering the great interest at stake, if it permits an Institution like this to fall into decay.

The Province.—There is no subject which, in our opinion, should more forcibly command attention in the Province of New Brunswick than that of public improvement. Until within a very short period our dependance has been upon accidental or extraneous circumstances to better the condition of the people at large, and though *these* have done a good deal for us in times past, it is evident that something more stable is wanted—some well developed system to regulate our energies and impart to them that success which they ought to command if well directed. Much, however, depend upon a correct view of the subject. The experience of the last twelve or fifteen months, (to go no farther back,) has convinced us, one and all, that we are not as yet very far advanced in the things that tend to make a country prosperous. Our Commerce is not on the footing it might be, (and eventually *will be,*) if prosecuted in *all its branches within our reach,* with becoming activity. Our natural resources are not, and never as yet have been, at work with zealous application: and we are confident that all means have not been used to bring that all-important branch of industry, *Agriculture,* to any thing like perfection. We possess an agricultural country, fertile to a great degree wherever it is capable of cultivation; and we would fain indulge a hope that our countrymen will no longer fritter away their energies while we stand so much in need of sound industry and judicious enterprise. We should unanimously endeavour to awaken an increased spirit of agricultural exertion, and instil into our Legislature the true wisdom of practically benefitting the country and making its population rich, by a dependance on their own exertions. The rest will follow as a matter of course.

Of all the branches of industry which ought to meet with attention in this province, Agriculture has been most neglected. It has been, (strangely enough,) regarded as of secondary consideration, while occurring events plainly show us that it is of 'first rate' consequence—that it is necessary, (if the prosperity of the country is really wished for,) to push it to the utmost. The gross attention to this unappreciated interest, has drained the Province and still drains it of much of its wealth yearly—discourages the country population—leads to a misapplication of their pursuits; and instead of the *general* cultivation which ought to be witnessed, presents its effects in insulated and disjointed efforts—in struggles for existence, rather than in the accumulation of those comforts which farmers and their dependents enjoy, even in countries less favoured than New Brunswick.

We should be united also in urging the Legislature to afford all possible aid in devising a good system which shall improve the country, save its capital and impart the true spirit of energy which alone can ensure our future prosperity. In short, a radical reform is required in this department of industry throughout New Brunswick.—*St. John Herald.*

St. John Cattle Show.—A good show of cattle &c., for the season of the year, was presented at the April market, held last Thursday week, as follows:—Cows, 37; Calves, 12; Horses, 2; Hogs, 16; Goats, 3. £11 were offered for a Cow, the property of Mr. John Forsyth, and refused.

At the meeting of the Executive Committee of the St. John Agricultural Society, held on the day of the Fair, it was resolved that an Agricultural Show should be held in that city in the month of September, when small premiums would be given by the Society for the best specimens of Seeds, Grain, Cattle, &c., the produce of that County.

The Society are in expectation of receiving, by the first arrivals from Scotland, an assortment of the best descriptions of Wheat, Barley, Oats, Timothy, Mangel Wortzel, Turnip seed, &c., with a quantity of guano manure, which will be disposed of at cost and charges to members of the Society who have paid their annual subscription.

An Agricultural Library, which members of the Society may avail themselves, is being formed under the direction of the Executive Committee, and many choice publications are already upon its shelves. As the funds of the Society will admit, its extent will be enlarged, and we doubt not it will be found useful as a mean of carrying out the objects of the Association.—*Courier, May 4.*

How to make Agricultural Pursuits pleasant as well as Profitable.—For ages the employment of the husbandman has been looked upon as dull, uninteresting work. It has been thought to be a dull plodding occupation of the hands and not of the head. And there has been too much foundation for such an impression. The agriculturists of years not long by-gone, did little with the head to dignify or enliven the work of the hands. A change for the better is now near at hand. Perhaps in your day farmers may be more intellectual, more intelligent, and more able to bring the truths of science to benefit them in their manual labours, and to give them interest and delight in their occupations. But what others do, I hope you at least will take such measures as will convince yourself if not others, that agricultural employments are as interesting, intellectual, and pleasing pursuits as any with which they may be put in comparison. I know of no method by which you can more effectually render them so, than by employing your mind upon your work. Most assuredly the more your mind is employed upon your work—in tracing effects to their causes, in accounting for failure and disappointment, in understanding the operations of nature, in devising improvements &c.—the more interest you will take in your employments, and the pleasure and gratification you derive from them. Moreover this is not the only way to make your pursuits pleasant, but it is the way to make them profitable also. Your mental operations must be wrong-sided and injudicious indeed if they do not lead you to the discovery of means whereby you can educe more produce out of any certain amount of labour and expenditure. The most intelligent farmers, you may easily convince yourself, if industry is not wanting, generally succeed in making their farms the most profitable. But what I wish especially to inculcate upon you at this time, is, that you will feel more interest, more pleasure, more conscious dignity in your pursuits the more you occupy your mind on the subject.

Agricultural schools would aid in thus elevating Agriculture.—*Albany Cultivator.*

ROOT CULTURE.

Most farmers who have made a fair experiment in raising roots and feeding them to stock, are in favor of providing this valuable food for their animals. *By roots they can be kept in a more healthy* condition than on hay and grain, young cattle can be kept in a more thriving state, they are an excellent and cheap food for fattening stock, and cows fed liberally on good roots, give about as much as rich milk as when fed on grass in summer. *And, besides, roots being a valuable kind* of food, they produce far more value to the acre than either grain or grass, in some cases two, three or four times as much.—Many who have made experiments say that one bushel of oats and one of carrots, are worth as much for a horse as two bushels of oats; and the same land that would yield 50 bushels of oats would yield 500 of carrots, or 10 for 1.

Then the comparative yield of roots being far superior to grain or hay, the great object is to raise roots with little expense, which may be done with proper management. Some years ago when occupying a large garden in raising seeds and making experiments on numerous varieties of vegetables, we found the labour of weeding very great indeed, and we endeavoured to discover some way to save this labor, and we first made experiments on a few beds, with a spade, where it was not convenient to plough, and afterwards by ploughing, harrowing, &c., and we found that we saved more than half the labor in weeding—in some cases two-thirds, and the increased crop, in consequence of frequently stirring the soil, and thoroughly mixing the manure, more than paid all the expenses of these operations.

We gave our method at the State House, on the subject of root culture, but it may be proper to repeat it now for the benefit of many new subscribers, and on some points we wish to be more full, than in that report. In the fall prepare your land by removing stones and other obstructions, then apply the manure and plough deep. If the land be not thus prepared in the fall, then do it as early as possible in the spring, after the earth is dry enough to work. The fall is the better time, and the manure will not waste by evaporation, nor leach down so far but that it will be found by tap-rooted plants, such as beets, carrots, and parsnips. If this labour cannot be done in the fall, the sooner in the spring the better; by all means attend to it in April, if possible, if not the first of May.

Having prepared the land in the fall or spring, as soon as the weeds get started, plough again, or go over the ground with a harrow or cultivator, as most convenient, or perform the operation that will be most beneficial in thoroughly pulverizing the soil, destroying the weeds that have started, and bringing to the surface a fresh lot of earth that another lot of weeds may start. Pursue this plan, every eight or ten days, or as often as the weeds get started, till the time of sowing, which may be a week or ten days later than when seeds are sown without preparation, as they will not only start soon, but grow fast from the fine tilth, and be less liable to suffer from drought, which sometimes destroys tender plants.

Prepare hard, slowly-vegetating seeds, such as beets, carrots, and parsnips, as follows: Turn on the seeds, water as hot as can be borne by the hand, and let them set near the fire or in the sun, where it is warm, and soak two days. Then drain off the water, and cover the seeds with a moist cloth or paper and keep them in a moderately warm place, several days longer, or till some of them begin to sprout.—During this time keep the cloth moist, and if the seeds begin to dry sprinkle them with warm water, so to keep them damp.

When the seeds are thus prepared rub them in *plaster, or sifted ashes, and they will separate so as* to be sowed conveniently, even in most any kind of machine.—The ground should be freshly prepared for the seeds, then the plants will come up very quick and may be hoed before the weeds appear, and with one-fourth the labour that is usually necessary; and as a much less number of weeds will come up under this system of cultivation, and as the plants will be larger than the weeds, they may be easily destroyed and kept down the whole season. The soil will be so light that what weeds appear may be pulled up with half the labor that is necessary in a soil that is settled down and baked hard, as is often the case in the common course of cultivation.

Farmers, try this system, and when you begin in season and follow it properly, you will raise your *roots with half the labour now required, and do* away with the principle objection to root culture. With this management we have observed that we could weed a larger piece in the usual time that we worked before breakfast, than we would in a whole day, on the system usually pursued in raising roots. In commencing at this time so much labor will not be saved as would have been, had a beginning been made last fall, or the first of April, had the season been favourable; but there is yet a chance to gain much in this way, as carrots, beets, &c., thus prepared will be in time when sowed from the 20th to the last of May. This method of cultivation will apply to all plants that require much attention in weeding.—*Boston Cultivator.*

Effects of Soaking Seeds in Chemical Solutions.—I steeped various seeds in sulphate, nitrate, and muriate of ammonia, in nitrate of soda and potash, and in a combination of these, and in all all cases the results where highly favourable. For example, seeds of wheat steeped in sulphate of ammonia, on the 5th of July, had, by the 10th of August, the last day of the show, tillered into nine, ten, and eleven stems of nearly equal vigor; while seeds of the same sample, unprepared and sown at the same time, in the same soil, had not tillered into more than two, three, and four stems. I prepared the various mixtures from the above specified salts, exactly neutralized, and then added from eight to twelve measures of water. The time of steeping varied from 50 to 94 hours, at a temperature of about 60 deg. Fahrenheit. I found, however, that barley does not succeed so well if steeped beyond 69 hours. Rye grass and other gramineous seeds, do with steeping from 16 to 20 hours, and clovers from 8 to 10, but not more; for, being bilobate they are apt to swell too much and burst. The very superior specimens of tall oats, averaging 160 grains on each stem, and eight available stems from each seed, were prepared from sulphate of ammonia. The specimens of barley were prepared from nitrate of ammonia; they had an average of 10 available stems, and each stem about 34 grains to the ear. The other specimens of oats which were next the most prolific, were from muriate of ammonia, and the promiscuous specimens of oats were from nitrates of soda and potash—strong, numerous in stems, (some having not less that 53) and not so tall as either the preparations for the sulphate or muriate of ammonia.—[*Mr. Campbell in the Transactions of the Highland Society.*]

POULTRY.

Poultry, from the French *poulet*. The term includes all domesticated birds raised for the table; fowls, turkeys, geese, ducks, and guinea fowls. All these fowls may be made very profitable to farmers by proper care and feeding but not otherwise. In Canada, fowl-yards cannot be made use of in winter, but they are necessary for the fowls during the spring, summer and fall, and should be attached to every fowl-house. There are certain seasons that it is very desirable the farmer should be able to confine fowls, and this can only be done where there are suitable houses and yards. Fowls of every description, are much more profitable when provided with a fowl-house and yard, than when suffered to go at large. We submit the following selection made from the article "Poultry," in the Penny Cyclopædia:—

"Those who intend to rear fowls or any kind of poultry should have a distinct yard, perfectly sheltered and with a warm aspect, well fenced, and secure from thieves and vermin, and sufficiently inclined to be always dry, and supplied with sand or ashes for the cocks and hens to roll in, an operation necessary to disengage their feathers from vermin—running water should be especially provided: for the want of water, of which all poultry are fond, produces constipation of the bowels and inflamatory diseases; and for geese and ducks bathing is an indispensable luxury. A contiguous field is also necessary for free exercise, as well as for the supply of grubs and grass to the geese.

The fowl-house should be dry, well roofed, and fronting the South, and, if practicable at the back of a stove or stables; warmth being conducive to health and laying, though extreme heat has the contrary effect It should be furnished with two small lattice windows, that can be opened and shut at pleasure, at opposite ends, for ventilation, which is frequently necessary; and the perches should be so arranged, that one row of roosting fowls should not be directly above another.

A house twenty feet long and twelve feet wide, may be made to accomodate 150 hens at roost. The plan is simply this:—The first roosting perch (rounded a little at the upper angles only, for gallinaceous fowls cannot keep a firm hold on perfectly cylindrical supporters) should be placed lengthways and rest on tressels in each end wall, six feet from the front wall, and at a convenient height, which must depend upon the elevation of the floor, which may be formed of plank, that can be easily swept. Another perch should be fixed ladderways above this, but ten inches nearer to the back wall, and so on until there are four of these perches like the steps of a ladder when properly inclined, but with a sufficient distance between the wall and the upper one, to allow the poultrymaid to stand conveniently upon when she has occasion to examine the nests, which is her duty to do every day at least once, and in the forenoon. The highest of those she can reach by standing on a stool, or step-ladder. By this contrivance the hens, when desirous of reaching the nests, have no occasion to fly but merely to pass from one stick or perch to another. If the size and form of the house permit, a similar construction may be made on the opposite side, care being taken to have an open space in the middle of the room, and a sufficiently wide passage for the attendant to pass along the walls. It is not at all required to have as many nests as hens, because they have not all occasion to occupy them at the same time; and besides, they are so far from having a repugnance to lay in a common receptacle, that the sight of an egg stimulates them to lay. It is, however, true that the most secluded and darkest nests, are those which the hens prefer.

The nests if built in the wall, are in tiers, from the bottom to the top, the lowest being about three feet from the ground, and a foot square. If the laying-chambers consists of wooden boxes, they are usually furnished with a ledge which is very convenient for the hens when rising. But the best receptacles for the eggs are those of basket-work as they are cool in summer, and can easily be washed—they ought to be fastened not directly to the wall, as is generally the case, but to boards fixed in by hooks, well clenched, and with a little roof to cover the rows of baskets. They will thus be isolated, to the great satisfaction of the hen, which delights in the absence of all disturbing influences when laying. All the ranges of nests should be placed checquer-wise in order that the inmates when coming out may not startle those immediately under. Those designing to hatch should be near the ground (where instinct teaches the hen to choose her seat,) and so arranged that the hen can easily enter them without disturbing the eggs. Wheaten or rye straw is the most approved of for the bedding, being cooler than hay, and less subject to produce lice in the hens, which often annoy them."—*British American Cultivator.*

Gardens and Gardening.—There are few things which more clearly indicate a refined mind and a cultivated taste than a neat garden, and among our agricultural population there are few, who can lay claim to the title of a good farmer, who do not possess a good vegetable garden. Indeed it is an indispensable appendage to a farm house, which no individual, having any regard for economy or comfort, will overlook. Those who have not paid attention to the subject will have but little idea of the profit which might be derived from the the small quantity of ground usually devoted to the purposes of a garden, or of the additions of comfort which it will make in his family. Mechanics and professional men too will find such to be a valuable acquisition, and that the pleasure afforded by its cultivation, will amply repay the labour expended for that object. One great principle that should regulate the conduct of both farmers and others is, seek happiness at home; and this end, we may rest satisfied, will be best accomplished by proper attention to all the appliances necessary to such a result. Every tree, plant, or flower, which an individual cultivates round his dwelling, forms a link in the chain of association which binds him to his home. They render his abode more delightful—they invite to a more intimate communion with nature—they increase the sources of rational enjoyment, and withdraw us for a time from the busy world, where the mind, in the retirement of its own contemplation, can forget the cares, the troubles, the vanities and the selfishness, which intercourse with an unfeeling world may develope to us. As a means of recreation and exercise after the labours of the day, we know of none better qualified to improve the mind than working a garden.—*Eastern Chronicle, Pictou.*

Ashes for Fruit Trees.—A sprightly gentleman of more than "three score and ten," with alert step and quick eye for observation, told us that he had known a man make and preserve in a flourishing productiv condition, an orchard of apple trees, on originally *very poor ground*, by every year sprinkling around each tree, to the circumference of the extent of its branches, *half a bushel of ashes.—American Farmer.*

SCIENCE APPLIED TO AGRICULTURE.

Chemistry has been styled "the secret process of the matter—that from which the forms of things originate." It is a science as universal in its operations as the combination of different simples in forming compound substances. Hence, the air we breathe, the earth we walk upon, the rain that cometh down from heaven and watereth the earth, the food we eat and the raiment we put on; in short, every thing, not only those which render our existence comfortable, but those which form its enjoyment, are the result of its operations and subject to its laws. Even ourselves, "fearfully and wonderfully made," a curious compound of undefinable, enduring mind, and perishable incongruous matter, come within its sphere, and possess enough of its "subtle agencies" to invite the research of the most persevering to an occupation for life. In fact, we live in a grand laboratory, where chemical action is continually going on, not a single set of them, but in a stupenduous whole, and where it will continue to go forward, until the mass of matter on which it operates shall, by a grand explosion, be thrown back to chaos. Mind truly may escape the catastrophe of ruin, and the clayey crucible in which it experienced its remodeling and assimilations;—but in all things else the amalgamation must be completed.

Can it for a moment be imagined that a science of so general operations and such visible effects, can be so unimportant to a farmer? Take his soils; they are the result of a chemical combination of earths, say the disintegrated parts of rocks and vegetable matter in a decayed or decaying condition. Now all rocks, as the sciences which claim more particular kindred with them will determine, are not composed of the same material, consequently the earths which collect around them must differ in proportion as the sources from which they originate; and the early productions of vegetation are such as the peculiar nature of the earth most naturally excites, and these again are possessed of different constituents in their decay, both of plants and leaves, and when the parent stock has fulfilled its maturing process from soils of varieties differing from those which are the effects of different circumstances. Thus a soil on which the hemlock sheds its deep foliage, differs from that which sends the towering pine majestically high; that of the maple differs from the ash; the oak from the elm, and so on.

Soils in high regions have usually less depth and contain a proportionably greater amount of earthy matter than those of a lower territory, from the fact that vegetable matter is easily brought down by the thaws of spring and rains of autumn, and deposited in places which nature seems to have provided for its reception. These soils are usually of the most fertile character, yet they must in some, degree, vary in proportion with the mountains and forests whence they originated. Thus we see the valley of one river more fertile than that of another—a circumstance which chemistry can obviate, by determining what the *lacking* quality is, and how it may be provided, or introducing plants adapted to that peculiar soil. The analysis of soils, sufficient to determine their productive qualities, is a very simple process, and soon passed through. In order to perform it, the farmer need not be at expense for an extensive apparatus, nor restrict his operations to drams and pennyweights. His business is of a *wholesale* nature: his observation can mark the changes of soil, and by analysing a small portion of a particular one, the character of the *whole* is sufficiently determined for general purposes.

Soils which, in a state of nature, are sometimes of a character that renders them worthless, by a chemical process are rendered fertile. Take our swamps, which are found to be in almost every town, some of which have bottoms as deep as western prairies, and as "rich as mud," yet in a state of nature they are almost as worthless as the desert of Sahara for Agricultural purposes. How are they *to be made the most profitable of the farmers'* domains? They must be cleared and drained, to be sure; but when all this is done, there is yet one thing lacking, for they are as barren as an ash heap. What is "the one thing needful?" We respond, not only to show that *Chemistry* has a remedy, but also to assure those who pretend that our State surveys are useless operations, by giving an anecdote.

Somewhere in Massachusetts, (we could tell where,) an old gentleman, who had tilled the earth carefully and labouricusly, until his "three-score years and ten," had nearly vanished, pointed the Commissioner of the geological survey to a piece of very deep rich muck land, and complained bitterly that with all his industry, he could make it produce nothing but weeds. With his usual tact, the Commissioner assured him the only reason why his labors were not requited was, that his land was *too rich*. "Too rich!" said the veteran farmer, "it can't be; we wish to make our land as rich as possible, and labor incessantly to promote this object." Had he been acquainted with the beautiful operations of agriculture, he might perhaps have saved himself much labor, and a rich harvest from his land through many years. More, by the same labors, he might have increased the value of his surrounding fields, by bartering from them their sterility, and repaying load for load from the rich deposit from his muck-bed. This was all that was necessary to scatter fertility all around him—simply to carry off this rich vegetable matter which had been accumulating for ages, and replacing in its stead his sands or loam, or whatever that savored of barrenness.

Lands from mismanagement may acquire a diseased and sickly, as well as an exhausted state.—They may become too sour, too bitter, or some other of the evils which bad management induces, may *attack them. Then are they like a diseased stomach*, totally out of order. Usual applications will have no effect. They, like the sick man, must be dealt with according to the disease. And here we ask leave to introduce another anecdote, in support of our sentiment, that chemistry is an important science to the Farmer. One of that ancient and honorable fraternity was one day heard to complain, by a son then in College, that such a piece of land produced but "*leetle*." "Lime it," said the son. "Lime it!" said the old man;—"you, when you have not done a day's work on the farm in three years, came from the College, and to repay your father's toil in your behalf, undertake to teach him how to farm it." "*Lime it*," said the son—"the soil is too sour; and alkali will neutralize an acid, and your field will be productive." The father at length tried the experiment, and saw a good effect, and so thoroughly was he convinced of the utility of this science in agriculture, that he said his sons might all go to College to be farmers, if they all give assurance of similar acquirements.

Chemistry in agriculture, applies itself in a thousand ways, and produces a thousand good effects. Nature is a great workshop, where she is continually carrying forward her operations. Economy is a universal law in all her dominions. She forms nothing in vain, and where the purposes of its formation are answered, and it moulders back to de-

cay, she does not admit of the least waste in all its parts. She carries out with the nicest precision, the salutary injunction, "gather up the fragments, that nothing may be lost." Hence what is not available in one part of her operations is applicable to another; and so in her grand concerns each fills a "part of the stupendnous whole." To imitate and assist her in carrying this law into effect, is a part of the service of the farmer, and in proportion as he does his duty, will his labors rewarded. But if he is remiss, if he allows his soils to remain sterile, or suffers them to become exhausted—if he allows his manures to waste their richness on the atmosphere, or suffers them to be injudiciously applied on his lands—if he suffers anything to waste uselessly away, which with due care might benefit his soil, leaness will set a landmark to his possessions, which his neighbor will not try to remove; famine will enter his premises, and horrors most likely seize upon his mind. W. B.

For several years past I have observed the grass in pasture and meadow lands filled with a frothy matter resembling spittle. This has abounded in such quantities, that it has moistened my feet through my shoes; as much so as if the grass had been wet with rain. Upon examination I found that this froth on the blade of the grass contained several small grasshoppers; that it was their nest and protection, and that if they were removed from it when small, and before they were fitted by nature to leave it, the soon died. Every person who has seen the ravages of grasshoppers upon grass and many other vegetable growths during summer, must be aware of the destruction they cause; therefore we should endeavour to prevent the mischief by the destruction of the cause of it. I will, therefore, suggest a very simple contrivance, which I have found successful in a small way; and as the frothy matter prevails early in the season, and before the grass has attained any height to prevent the use of the means proposed, they may be put in practice with ease and certainty. In short, sweep the grass land infested with the grasshopper, with a coarse brushwood broom, constructed for the purpose. The twigs of such a brush being from 16 to 20 inches in length, might be fastened in a frame-work resembling a harrow, made large enough to be drawn by a horse—which in a few hours, with a boy and such a brushwood harrow, would pass over acres of grass land and destroy this insect upon it. Indeed, for want of a better broom, some brushwood of dried thorn, or the like, drawn by a horse, would answer the purpose.

The eggs of these insects, I suspect, are deposited during the preceeding Fall, by little white moths, which abound at that season in such places. Those who have time and curiosity for such investigations, would do well to take a sod of grass upon which the eggs are deposited in the fall, and preserve it, that they might watch the developement of the insect, from the egg to the grasshopper.

A FRIEND TO FARMERS.

—*N. B. Agriculturist*, 1841.

HOW TO MAKE A COW MILK RIGHT.—A correspondent of the *Massachusetts Ploughman* says—"I was conversing some thirty years ago with an old gentleman, an intelligent farmer, respecting cows milking too hard or to easy, I don't recollect which, but he said I might as well have cows milk right, as to have them milk too hard, or have them shed their milk; and he told me how to do it, and I have practised from it ever since, when occasion required, with good success, and without any injury to the cow.

Make a plug of lead about two inches long, as big as you can introduce into the teat, and about three-fourths of an inch from the end make it a little smaller, what I call a neck, and then it will not be likely to fall out. But my method is to tie a string round the big end of the plug, and to tie it to the hair on her bag, then if it falls out you will not lose it: put this plug in every day for about three days, after milking, to each teat, and it cures the young cow. I don't know how it will operate on old ones. if your cow sheds her milk, tie a piece of large woollen yarn round her teat, near the end, every time you milk her for a few days sufficiently tight to retain the milk, and your cow will milk right. You must be careful not to tie the yarn too tight, if you do, it will sometimes make her teats sore.

THE EXTRAORDINARY RESULTS OF SKILFUL AGRICULTURE AND HORTICULTURE, stated in the annexed extract from a report in the Tribune of the proceedings of a meeting of the *Farmer's Club* this week—should stimulate to like efforts elsewhere.

We remember to have been much struck at the recent exhibition at Niblo's under the auspices of the American Institute, with the remarkably fine specimens of cereal grains and of garden vegetables from the farm of Mr. Pell, and can now understand their marked superiority.

Mr. Meigs stated that Mr. Pell, of Ulster county, made a statement at the repository relative to his experimental farming, from which it appeared that he found benefit from the use of oyster-shell lime—using 300 bushels per acre. That in addition he had employed 52 bushels of charcoal per acre. That on this charcoal dressing he obtained last summer 78 bushels and 24 quarts of wheat per acre. That he had 20,000 apple trees in full bearing. That in dry weather he had applied lime freely at the roots—found that this preserved the verdure and growth when the neighbourood was much injured by drought. That he had cut wheat two or three weeks sooner than his neighbors; and when the root of the straw began to turn brown and when by the pressure of finger and thumb on the grain, its milk would fly out. That this wheat weighed 64 pounds per bushels. That he sold it for seed at one dollar when ordinary wheat was 7s.—that he cut clover and housed it on the same day—sprinkling about a bushel of salt over every load. That this clover retained its green colour and was preferred by cattle to that saved the old way. That he dipped a sponge in ammonia and applied it to the worm nests on his trees and banished them completely. That he has sent four thousand barrels of apples to market, many of which go to London and there sell for nine dollars per barrel. That he employed a man from Vermont to engraft 10,000 apple trees for 150 dollars.—That this man brought a company of men of whom two sawed off the proper limbs, two more made the proper incisions (two of them) in the branch, two more inserted the grafts, two more applied a compost of wax, tallow and rosin. That out of the 20,000 grafts not one failed.

LIME WATER TO KILL WORMS.—To six quarts of water, add half a pound of caustic lime, and after letting it stand for a few minutes, commence watering the ground infested by worms; and they will soon be seen rising to the surface, writhing about, and will die in a few minutes, especially if a little more lime water is then sprinkled on them.

LIME AS MANURE.—Much labour has been exhausted in trying to ascertain the best method to enrich and prepare the ground so as to produce the best crop, After using various kinds of dressing, none have proved better than lime, for land on which corn is planted.

Lime has in itself many valuable properties. It gives a suitable degree of heat to cause immediate vegetation; it guards it from worms and insects that often destroy one-half of the first planting; it causes an early and rapid growth, that ripens the grain before the frost appears. When lime is used for other kinds of grain, it has the same effect as on corn; it has also the valuable quality of guarding it against mildew. No grain sown on land so prepared, will suffer from this great evil, by which so many valuable fields have been destroyed.

The best method of using lime is, to mix one eighth part with old barn manure, then to be placed in the hole with the corn. When used for other kinds of grain, it should be spread on the top of the ground after it is ploughed, and harrowed in with the grain. No one can fully estimate the value of lime for this purpose, unless they try the experiment. The average difference in a crop is from one-third to one half more by using the lime.

It is also almost the only sure preventative of vermin on fruit trees in this section of the country. Lime placed about the body of trees early in the spring, will prevent their increase. Slacked lime mixed with soap and water, used as a wash on the parts of the tree where insects have deposited their eggs will destroy them entirely. This has been proved by the writer.

In many parts of England, they estimate the value of their land, in some proportion, to its nearness to lime kilns, on account of the valuable properties of lime for dressing. Our farmers should turn their attention to the subject.

SOWING AND PLANTING.—In most cases we obtain as good crops without early planting. Corn, potatoes, beets, carrots, parsnips, pumpkins, squashes, melons, cucumbers, beans, and most vegetable crops, do better by delaying planting till the ground is warm and dry, and the weather is generally warm, as cold weather and severe storms, check, and in some cases destroy tender plants. Most of these crops succeed better if they be planted from the middle to the last of May, though it is generally best to get corn in by the 20th of May, as it requires the whole of a common season to become well ripened. In cases of early planting the ground becomes heavy and hard from severe storms, and the plants become stinted while the weeds which are hardy, are getting possession of the land, and can be expelled only with much cost and trouble.

But some things require early attention. Spring wheat, rye, oats and barley should be sown as soon as the ground becomes dry enough to work; as in this case there is a much better chance for a good crop. Warm, muggy weather is more likely to cause a failure in late sown grains, than that which is sown early. Last season the drought cut off late sown oats and barley, and those sown late are generally more liable to injury from this cause.

Peas do best when planted early; and they are so hardy that cold will not injure them. When sown late they are liable to injury from rust and mildew. Onions should be sown quite early, else they will not ripen well unless the season be favorable. The tomato and some other vegetables should be sown early, else they will not generally ripen well in our climate; and for early use many kinds should planted as soon as the ground is dry.

SOWING TURNIPS AMONG CORN.—By scattering a small quantity of turnip seed among corn at the last hoeing, the last of June or first of July, a considerable quantity of turnips may frequently be obtained with very little expense, and without injury to the corn. If the corn grows very rank, and completely shades the ground, the turnips will be small until the corn is ripe, or the stalks cut, or the corn cut up, then the turnips will grow, if the season be favorable.

It may be so late before the ground is exposed to the sun, that the turnips will be small. But when the sun is admitted, from the smallness of the corn, or it ripens early, or is cut up or topped in good season, the turnips generally attain a large size, and if they are rather thin, they will yield well for an extra crop. Sometimes 50 or 75 bushels of turnips are raised in this way at an expense not exceeding so many cents, excepting the harvesting.

Turnips of a rapid growth may be sown among corn as late as the middle or 20th July, and if the fall be warm, they get a good growth, after the usual season for corn to ripen, or for cutting it up, or topping the stalks. The early garden stone is an excellent turnip for late sowing. The quality is fine, and it grows more rapid than the common flat.

It is good for feeding out early, but does not keep so well as other kinds. We sowed some of this variety on the 30th of July, as mentioned in an experiment in the last number, and the largest measured seven inches in diameter, and three inches in depth. Many were nearly of this size.—*Yankee Farmer.*

CABBAGE HEADS FROM STUMPS.—James Bates of Norridgewock, Me., writing to the Farmers' Journal, says:—

"I do not know what all your Boston gardeners are up to, but I do know that, if cabbage stumps of any variety are set out in the spring, in good order, one, two, three, or even four good sound heads will grow on them; and this they will do year after year, until they die by accident. They are managed in the following manner: The upper, narrow leafed sprouts, which would bear seed, are carefully rubbed off, and likewise all the lower, round leafed ones, which latter will form heads, leaving only so many of these as the strength of the stump and the soil are capable of bringing to perfection. At our cattle show, Mr. John Drew presented several such stumps, with one to four heads of Low Dutch cabbage on each, which have borne for three years. He sets them out in earth in the cellar in autumn, cuts off the heads when required for use, and places the stumps pretty thick in the garden in spring. The labour is trifling, the cut-worm gives no trouble, and the crop is sure and abundant."

EWES AND LAMBS.—A difficulty is sometimes experienced in making ewes own their lambs, and oftener perhaps, when cases of twin lambs occur than at any other time. Those who desire to rear all their lambs, may find a benefit in sprinkling a little fine salt over the disowned ones. This will usually attract the mother, and when once the operation of licking has been performed, there is seldom any danger of desertion. A friend assures us he has practiced this method with decided success, and no injury to the lambs may be apprehended from the application. Sheep, when about to lamb, should be moved and disturbed as little as possible, as all such disturbances, especially with young or wild ewes, greatly increase the probability of their forsaking their young.—*Ayrshire (Eng.) Agriculturist.*

Thistles and Peas for Swine.—*Mr. Editor:*—Last August while passing through the eastern part of this state, I observed a field in which were growing peas and Canada thistles, in about equal proportions. A man had been mowing and was carrying out some of them. I inquired what he did with them, to which he replied, that he had for several weeks fed six swine on them and he never had hogs do better. He said in the spring the piece of ground was so entirely covered with thistles that he gave up all hopes of getting a crop from it, and concluded to turn it out for a hog-pasture; but seeing it recommended in the Farmer to sow peas for hogs' he concluded to try the experiment with this field. He procured the small early peas and sowed them upon the furrow and harrowed them once over.—The thistles grew luxuriantly and answered a much better purpose than oats or barley to support the vines. As soon as the peas begun to get full he began to mow them and feed them to his hogs, considering this better economy then to turn the hogs into them; for they were every day growing and becoming better. He says the hogs eat the thistles with greater avidity than they do the pea vines, and he thinks they are equally nutritious. This is certainly a useful way of managing a thistle patch, inasmuch as you not only turn them to use and profit, but get them entirely out of the way before the seed ripens so as to produce a new crop the next year.—*Farmers Monthly Visitor.*

The Litter of a horse should be frequently removed, for when it gets moistened with urine, putrefaction takes place rapidly, and the vapours of ammonia, or hartshorne are disengaged, which are apt to injure the eyes and the lungs of the animal. No heap of fermenting dung should be left in the stable during the day. The stall should slant gently, so as to allow the urine to flow from it; care however should be taken to prevent a slant sufficient to cause an uneasy posture with the horse, as this constant strain on the back sinews has been the unsuspected cause of lameness. This position upon too great a slant has caused contraction of the heel, by throwing to much and constant weight upon the toe. Gratings and traps leading the urine into reservoirs have been made for horses by those who are very cautious in this matter. It is well to keep a little litter under the feet during the day: the prejudice against this upon the principle that it heats the hoof is incorrect—there should be just sufficient to take off the hardness of the stall. The horse derives comfort from such a practice, and the farmer derives gain, as this litter, moistened with urine is so much added to the compost heap. Straw forms the best litter, as it does not ferment so soon as other substances which are occasionally used. Litter should never be allowed to accumulate under the horse—this is sometimes done, and the animal lays upon a wet fermenting mass, endangering his health.

New mode of planting Apple Trees.—A horticulturist in Bohemia has a beautiful plantation of the best apple trees, which have neither sprung from seeds or grafting. His plan is to take shoots from the choicest sorts, insert them in a potato, and plunge both into the ground, having put an inch or two of the shoot above the surface. The potato nourishes the shoot whilst it pushes out roots, and the shoot gradually springs up, and becomes a beautiful tree, bearing the best fruit, without requiring to be grafted.—*Canada Newspaper.*

Advantages of Total Abstinence to him whose farm is conducted upon strict Temperance principles.

1. The men do their work in a satisfactory manner, and at a small expense of tools.

2. He can, with much greater ease, have a place for every thing, and every thing in its place.

3. When a stone has fallen from the wall, it is laid up, as the men are passing by, without his mentioning it. The gates are locked, and the bars put up; so that the cattle do not get in and destroy the crops.

4. His summer work is done in such season, that earth, loam, &c. are carted into the yard in the fall. The consequence is when carried out, they are richer, and render the farm more productive.

5. His barns, in winter, are kept clean, and less fodder is wasted. The cattle and horses are daily curried, and appear in good order.

6. When his men go into the forests, instead of cutting down the nearest, thriftiest and largest trees, they cut those that are decayed, crooked, and not likely to grow any better; pick up those that are blown down, and thus leave the forests in a better state.

7. The men are uniform, still, and peaceable; are less troublesome in the house, and more contented with their manner of living.

8. On the Sabbath, instead of wishing to stay at home; or spend the day in roving about the fields, rivers, and forests, they choose statedly and punctually to attend public worship.

Cement for Grafting.—Two pounds and two ounces of rosin, six ounces of tallow, and ten ounces of beeswax. Melt them together, and turn the mixture into cold water, and let it remain till cold enough to handle; then work it as shoemaker's wax. We have used cement thus made and found that it remained on the stock for years. It is not so soft as to turn it in hot weather, nor so hard as to crack in cold weather. All of the ingredients for making cement must be of a good quality.

Grafting.—We thing better of late grafting than early. We have known grafts set as late as blossoming time of the apple tree and succeed to a charm. Cherry trees must be grafted early or the scions will be likely to perish. Many prefer March for this purpose.

Apple trees are not in full bloom here, in general, before the middle of May. Probably the last of April or the fore part of May will be found as good a time as any for setting scions in the apple and pear tree.

We prefer clay mortar, with a little manure and hair in it, to any wax that has ever been used. The wax in common use is poisonous to the limb when it is put on in any considerable quantity.—*American Paper.*

Potatoes.—Ought Potatoes to be cut or planted whole? [By A. C. Hornecastle.] I am in the habit of planting five or six acres of potatoes yearly, and for the last two years I have planted the greater part with whole potatoes, and find they produce as good crops as with cut seeds, from this great advantage—I have scarcely a potato miss growing, whereas in cut seeds I have often had a great loss from dry rot. When taking up the general crop, I pick up my seed potatoes of a uniform size, each weighing about one and a half ounce. I plant them in rows two feet apart, and one foot in the row, and have exceeding good crops.—*English Periodical.*

PROSPECTUS
OF THE
FARMER'S MANUAL;
A MONTHLY PERIODICAL,
DEVOTED TO THE AGRICULTURAL INTERESTS
OF THIS PROVINCE.

THE importance of Agriculture in the abstract is a fact too evident to need anything to be urged in its behalf. Every one who thinks at all must feel that upon it depends not only many of the comforts and luxuries which improve the character as well as add to the happiness of mankind, but also that it is essential to their very subsistence. But the assent thus readily given to the general truth has hitherto had but little practical effect on the people of this colony. The disadvantages incident to a new country—among the principal of which may be reckoned the length of time that must elapse before any sum expended in the clearing and cultivation of lands can yield any profitable return—has naturally deterred the man of small capital from engaging in such occupations, while the prospect of greater and more immediate advantage arising from lumbering and commercial pursuits has attracted the attention of the more intelligent and enterprising, and thus these employments have absorbed the far greater proportion of the wealth and talent of the country.

Under these circumstances it is not surprising that amongst us Agriculture should have met with so little encouragement, or that its value as a source of Provincial wealth, should not have been duly estimated. Men being generally more influenced by a perception of the immediate rather than the ultimate consequences of their proceedings, those employments which in comparison with others seemed so slowly productive of individual emolument naturally came to be thought less promotive of the public welfare.

But these pursuits, by whose flattering promises we were seduced into a neglect of the soil, have been proved to be extremely hazardous and uncertain. Most of the fortunes thus easily acquired have by a reverse of circumstances been suddenly lost, and when we look around for the public benefits they have conferred, we find them in tenantless houses, in forests denuded of their valuable timber, and in a Bankrupt Court, crowded with the impoverished victims of a false system of economy.

By these disasters experience—a slow but effectual teacher—has taught us a severe but salutary lesson, the good effects of which are beginning to appear in an increased attention to the cultivation of the land—the dictate of necessity has been more propitious than the alternative of choice—by it a new impulse has been given to the plough, which if sustained, cannot fail to be productive of the happiest results.

Impressed with these views, as well as with the advantages that would accrue to the country from the existence of a periodical, devoted exclusively to the advocacy of the Agricultural interests, the Subscriber brought the subject before the attention of the Legislature at their recent Session; proposing to undertake the publication of such a periodical if sufficient assistance should be engaged to him from the Provincial funds, to indemnify him against the probability of pecuniary loss; and he has now the pleasure to state that his design has been appreciated by the assembled wisdom of the country, and an appropriation had been made to enable him more fully to carry it into effect.

He therefore begs to announce to the public generally that he will be prepared to issue the first number of the proposed work during the next month. The title which he has adopted for it will sufficiently indicate its character. He intends it to be a general guide to the practical farmer in the various occupations connected with the management of the farm—such as the rearing of Stock, the formation and preservation of Manures, the preparation of Soils, and the best modes of planting and managing crops—upon all of which subjects much ignorance and prejudice prevails throughout the Province.

One object, which will be kept in view throughout the proposed work, will be to render it as plain and practical as possible, and adapted to the condition and circumstances of the rural classes, for whose benefit and improvement it is particularly intended. Its directions will be based upon experience rather than theory; and although articles of a merely scientific character may frequently appear, and the subscriber will be always happy to receive contributions of that kind, yet he will always give the preference to those of a practical, experimental and popular character.

Our Sister Colonies as well as the neighbouring States furnish abundant sources whence we may derive the most valuable information. With them Agriculture has been for some time a prosperous and staple employment; and from the similarity of their soil and climate to ours we may be safe in adopting the results of their experience.

A correspondence with the Parent country will also be opened—the social peculiarities of that country having necessitated a highly improved state of husbandry much may be expected to be learned from that quarter, respecting various matters of rural economy, which our different and in some respects more favorable circumstances would not be likely to suggest, but which being once known may become highly valuable.—Necessity is the mother of invention—but the expedients of want in one place may become the means of affluence in another.

The subscriber will also depend much upon the Provincial public for contributions to his work—he invites facts and information from all parts of the Province. It must be remembered that the forthcoming periodical will make no pretensions of a literary character, but will be a collection of facts, observations and suggestions for the use of the practical and operating farmer. There are but few, therefore, who will not be able to furnish something interesting or valuable to add to the common stock.

The *Farmer's Manual* will contain 16 large Octavo pages, and be published monthly, at the low rate of 5*s.* per annum, *payable in advance*; 6*s.* 3*d.* *at the end of Six Months*, and 7*s.* 6*d.* *at the end of the year*. It will also be sold to non-subscribers at the rate of 7½*d.* each Number.

☞ For every $9 forwarded to the Publisher by any one person, in advance, 10 copies will be sent according to order.

*** As the size is larger than the price will justify a small portion of the paper will be appropriated to advertising; and as a large circulation is anticipated, it will be well for persons to avail themselves of this medium for advertising, which may be done at the usual rates.

JAMES P. A. PHILLIPS.

Fredericton, April 24, 1843.

☞ *Publishers of Newspapers will confer a favour by inserting the above.*

THREE FARMS FOR SALE.

THEY are within two miles of Fredericton. Any Person wishing to purchase a place already under cultivation, may have an opportunity of suiting themselves by calling on the Subscriber.

THOMAS PICKARD.

Fredericton, May 14, 1844.

A Lot of LAND in the Hanwell Settlement, being the Northeastern half of Lot No, 29, on the Southeastern side of the Hanwell Road, having a front of ten chains on the said Road, and containing 90 acres more or less. Enquire at the office of B. W. HAMMOND, Esquire.

Fredericton, April 3, 1844.—3m.

TANNING AND SHOE MAKING.

THE Subscriber respectfully informs his friends and the Public, that he has taken the Tannery in King Street, owned by Mr. Jarvis Ring, and lately in the occupation of Mr. Z. G. GABEL, where he intends carrying on the above business on the *Cash System*.

Persons wishing to have Hides Tanned on *Shares* will please favor him with their Custom, and they will be attended to without delay.

MEN'S STRONG SHOES will be sold at this Establishment, from 7s. 6d. to 10s., and WOMEN'S SHOES, from 5s. to 10s.

☞ Currying done at the lowest prices.

W. F. BARKER.

Fredericton, May 8th, 1844.

GENTLEMENS'

BOOTS AND SHOES.

THE Subscriber has just received a large supply of Gentlemen's Boots and Shoes, &c., &c.,

The supply consists of

Fine	Dress	BOOTS.
"	"	BOOTEES,
"	"	SHOES and PUMPS,
Stout Sewed	Walking	BOOTS,
"	"	BOOTEES.
"	"	BUSSKINS.

Stout peg'd Boots for Lumbermen, &c.—For sale very Cheap, by

S. K. FOSTER.

N. B. Call and judge for Yourselves.

Fredericton, May 1, 1844.—1i.

Just received per Brig LEDI from New York, and JULIA and ECLIPSE from Philadelphia:

25 BRLS. New York City MESS PORK; 50 brls. Superfine FLOUR; 25 brls. Genesee FLOUR—expressly for family use; 75 brls. CORN MEAL; 30 brls. Southern RYE; 50 bags Yellow CORN; 6 brls. Timothy SEED; 2 do. Clover; Tobacco, Salaratus and Spirits of Turpentine—all of which will be sold at the lowest cash rate in the market.

F. W. HATHEWAY.

Fredericton, May 6, 1844.

BREAD STUFFS.

On sale at No. 4, NORTH MARKET WHARF, at LOWER RATES, than any other Establisment, viz—

1,500 BRLS. RYE FLOUR & CORN MEAL;
200 barrels NAVY BREAD;
50 brls. PILOT BREAD; 20 half do. do.;
20 do. CRACKERS; 20 half do. do.;
50 kegs Crackers and Pic Nics.

ALSO.—100 kegs Brandram Bro. No. 1 and 2 London LEAD.

Also Rowland's MILL SAWS, from 5 to 7 feet.

ESTEY & BLACK.

St. John, May 25, 1844.

ARESTOOK HOUSE.

THE Subscriber Begs to inform his friends and the Public generally, that he has resumed his business at his Old Stand (the Stone House) in Queen Street, formerly known as the *Commercial Hotel*, where he will be happy to Accommodate all Persons who may favor him with their patronage.

CHARLES YERXA.

Fredericton, April 23, 1844.—4w.

FREDERICTON HOTEL.

Corner of Regent and Brunswick Streets, near the Artillery Park.

THE Subscriber begs to intimate to his friends and the public that the above ESTABLISHMENT is now open for the reception of Visitors, and he flatters himself that from his long experience in the Business, together with the additional accommodation which he can now afford; he will be able to accomodate visitors to Fredericton in a style inferior to none in the Province. The House has been built and fitted up for the purpose of an Hotel. The out-door establishment is extensive, and when completed, will be superior to any in New Brunswick. A Coach will be in attendance to convey those who patronise the FREDERICTON HOTEL, from and to the Steam Boat landing, for which no additional charge will be made. Charges at this Estb-hment will be found as moderate as any other in the country for the like accomodation.

WILLIAM SEGEE.

Fredericton, May 22, 1844.

MISS O'CONNOR,

WOULD return thanks to her friends and patrons for the liberal encouragement afforded her since opening the House in Queen Street, opposite the Commissariat Office, for the accommodation of Transient and steady Boarders. She respectfully solicits a continuance of the same, and would fain recommend her Establishment to the notice of the Ladies and Gentlemen visiting Fredericton; its central and pleasant situation, so desirable for the temporary residence of such visitors, are recommendations in its favour; with the assurance that the most strict attention and diligence shall continue to be used by her, to insure the comfort and convenience of those who may be disposed to favor her with their patronage.

The House is in thorough repair, and contains spacious and commodious appartments contiguous to the landing of the steamers and public offices.

☞ *Good Stabling furnished for Horses.*

Fredericton, May, 1, 1844.

FLOUR, CORN MEAL, &c.

Brick Store, South Wharf.

Just received ex Schooner MATILDA, from Philadelphia

200 BRLS. fresh ground CORN MEAL; 150 brls. fresh RYE FLOUR; 300 bushels Round Yellow CORN; 30 brls. PITCH and TAR.

ON HAND,

100 brls. American Superfine FLOUR; 40 bushels Timothy and Clover SEED; barrels and bags Superfine, Fine and Middlings FLOUR, manufactured from a superior article of white Wheat.

ESTABROOKS & RING.

Saint John, May 3, 1844.

FOR SALE—An Excellent Carriage. Apply to G. F. H. MINCHIN.

Fredericton, May 22, 1844.

BOOK AND JOB PRINTING

Executed with neatness and dispatch at the Office of this Paper.

EMBOSSED, ENAMELLED, MOURNING AND PLAIN

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Officer's Half Pay & Widow's Pension Certificates,

Bills of Exchange & Timber Petitions,

Apprentice's Indentures, &c.

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