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

Vol. I.

FREDERICTON, N. B. JULY, 1844.

No. 3.

THE FARMER'S MANUAL,

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

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THE FARMER'S MANUAL.

THERE is a species of contentment which is neither a blessing nor a virtue:—the indolent man who sits down in his poverty, indifferent to the wretchedness of his family, and without regard to the improving condition of his more industrious and successful neighbours, labels the active instincts of his nature, degrades its character, and becomes like a slow but foul and incurable leprosy upon the bosom of society. The stolidity of such an one can be extenuated by no pretensions to philosophy, and contentment in these circumstances is the by-birth of imbecility and ignorance. Yet there is a contentment which is both blessed and virtuous: blessed, because it is a sure element of success, and virtuous because we are enjoined to submit ourselves without dissatisfaction to the condition in which it has pleased God to place us. No man will rise to permanent distinction or prosperity in any of the pursuits of life without being ambitious of excellence in his particular profession. Pride in the business in which we may be engaged is necessary to our advancement, and this pride will be sought in vain among those who are discontented with their lot. It may be very safely predicated that that man must fail, even of respectability, in his calling, who is ashamed of that calling; he may attain respectability if he is only satisfied

with it, but he can neither rise to honor or fortune unless it constitute his chief ambition and pride to excel in it.

Now in this Province ignominy seems attached to every employment requiring human labor. Our artisans and Farmers, instead of devoting themselves with resolution to prosecute their respective businesses with vigor, to success, are too frequently found willing to drop the implements of their pursuits for the yardstick of the shop-keeper, or the type of some other calling, in their opinion more genteel, and thus half-hearted farming and half-hearted tradesmanship multiplying throughout the Province, develop only half the resources of our industry and skill, checks the improvement in our people, and reduces the character of our country. Many a man will find himself embarked in a business unsuited to his genius or his strength. Far be it for us to denounce an exchange for one more appropriate to the individual, our purpose is to persuade every man to employ his money, skill and labor in some honest and appropriate pursuit, with the determination that such shall be the business of his life, and that in it he will seek whatever of reputation, wealth or influence it shall be his good fortune to acquire.

But why this sickly disparagement of agricultural or mechanical employment? Labor—honestly employed labor—should every where be held in a respect equal to its necessity, and it is as necessary as food or raiment, for neither of these could be had without it. But, in this country the disparagement is particularly sickly and unwise.—Here we have none of those immense disparities of fortune known in older countries—individuals are scarce among us, who are not under the necessity to labor in some vocation, and it would be difficult if not impossible to find in the whole Province the head of a family of sufficient wealth to afford his children a full immunity from labor. Thus, where every man must labor for his livelihood, why the distinction which make one man's labor genteel,

and an object of ambition, another's vulgar and to be avoided. We can realize no sound distinction, save this—that labor is honorable in proportion to its usefulness to the individual engaged in it and to the world; and our pride could find equal gratification in exhibiting the finest field of grain in our district as in submitting the best digested and most demonstrative argument in a Court of Justice.—Nay, we are bound to believe that in a large majority of cases, the successful farmer is by far the more honorable and useful member of society than the successful lawyer.

The great difficulty in this matter has its beginning, continuance and ending in the parties directly interested in the support of opposite opinions. So soon as a promise of success breaks upon the reluctant labors of our half-hearted fashion-seeking mechanic or farmer, that promise instead of affording encouragement to the more steadfast and vigorous prosecution of the business on which it has broken, is strained to the very limit of its endurance to supply some approach towards the gentility so eagerly sought—fashionable apparel and furniture purchases are deemed attainable, and purple and fine linen, a stylish sofa or piano, are found intruding themselves in the place which should be occupied by an increased stock, and farming implements. Plain, old fashioned "father" becomes "papa"—conjectures are freely hazarded as to whether a small store might not be started with chance of equal profit and improved standing—the young ladies complain of lassitude, tire of the monotony of a country life, and "mamma" begins to think it might be as well for the old folks and better for the girls to move to town. The girls must have pianos, and be taught embroidery, and it is not to be endured that the boys shall be reared as plain mechanics or farmers. "Mr. Hobbs's son has got so genteel a situation in Mr. Tapester's store; and young Tomkins is making quite a fortune as a lawyer, and is to be married into one of the best families, though his father is *only a plain farmer*, and no better off than we are. And then, Mr. Strap, the schoolmaster, says our John is so quick at learning, it would be cruel to rear him in the bush!"

It is this disgusting, sinful disrelish for the wholesome, honest employments of life—this despicable pandering to the shadow of a false and hollow gentility—which dissatisfies our else most respectable and useful men with their most respectable and useful employment.

It is idle to dispute the existence of these feelings among us as a people, they are evidenced all over the country: in half cultivated fields—in empty, tottering, half-built baras—in patched farm-houses—broken fences, and scanty farm-yards—in mechanics so proud of themselves as to be ashamed of their business—in storekeepers without cash, credit, custom, or commodities—in an idle community, dissatisfied, ignorant and shiftless—almost

lost to enterprise, while their last sensibility to shame murmurs forth their ignorance in charging upon the Legislature the effects of their own false pride and helplessness.

We showed in our last number, that in the early ages of mankind Agriculture was esteemed honorable of God and Man: that the almighty gave it to man as a fitting vocation and exercise when he stood erect in the consciousness of purity even in the presence of his Maker: that down through intervening centuries to the Christian era, the most distinguished men of the most distinguished countries practiced the art industriously, successfully, and with increase of power; and though, through the looseness and length into which we have fallen in these remarks, we may not now fulfil our intention to illustrate the high estimation in which husbandry has continued to be held since that date—wherever civilization and knowledge have become prevalent, and the illustrious names, numbered among its patrons and practisers, so fully as we intended, still, we shall not forget the purpose in a future number. Meanwhile, we would commend to the recollection and consideration of our farmers that their employment is of vital importance to the country—that in subduing an acre of wild land to the purposes of tillage, they add stability to our institutions, and increase the substantial wealth of the Province,—that as there is no employment more useful there is none more honorable than that in which they are engaged. It is an employment which will well reward the investment of all their industry, information and talent—it is exempt from many of the debilitating anxieties of town employment—is suggestive of high moral sentiments and feelings, and the most rational and best enduring happiness.

PLEASE CORRECT.—Having used the same headings for the pages of our second number as in the first, and not altering the folios at the proper time, nor noticing the neglect until it became too late to make a correction, we must now inform our subscribers that the folios of the June number are incorrect. Instead of commencing with 1 to 16, as for the month of May, they should have commenced with page 17 and ended with page 32. Those who intend to have the volume bound will please correct the mistake with a pen and ink, as the *Manual* for July will commence with page 33.

It is our intention to furnish a title-page for the volume at the expiration of the year, as also an Index, in which the pages may stand corrected on the number for June, as printed.

* * * For want of space we are compelled to leave several interesting papers on the use of Guano, and other subjects, out of this Number, but which we promise to attend to at the earliest possible period.

(For the Farmer's Manual.)

LETTERS OF "A FARMER."

LETTER VIII.

On Meadows.—Having in my last dwelt briefly on the subject of the green crops, or rather roots and vegetables, I would call attention to the importance of the proper cultivation of English grasses so frequently neglected in this country. Some farmers talk of a general decline in the hay crop throughout the Province, without considering the cause, excepting the general remark that the seasons are bad; and I have long witnessed the fact with deep regret, but fully sensible that it was altogether attributable to the neglected state of cultivation.

One farmer states that his meadows does not produce half as much as formerly, and admits that he never recollects its having been ploughed, although he was born and brought up on the farm, and is now more than fifty years of age. Another affirms that twenty years ago his twenty acres interval produced annually forty tons of good hay, but of late not more than twenty tons. In both cases, however, the meadows have been closely pastured in the autumns, and these are fair descriptions of the old meadows in New Brunswick, evidently shewing the great necessity of rotation crops and top-dressing.

If a man has an old meadow, producing a light crop, let him commence ploughing and manuring a part, pasturing another part and top-dressing the remainder.

Of all the manures used in top-dressing, good composted manure is evidently best; ashes of any description are excellent, and the deposits of brooks, scrapings of the streets or ditches; mud, clay, or sand may be applied with good effect. Seaweed, straw, old rotten hay, in short any vegetable substance. Indeed, so valuable is a top-dressing of any kind, that even saw dust is far preferable to no dressing.

Among the kinds of grass cultivated, I am but little acquainted with any but the red and white clover, timothy and herd grass, as it is frequently called brown sop—all which should grow together to make an abundant crop of good fodder. Clover of itself may produce a good crop at the first cutting; but experience has proved that it is more profitable to grow all together. Our alluvials seem well adapted to all these grasses in the same soil, and where they all thrive together; they form a thick close bottom and abundant crop of the best description of fodder. I have found it answer well to allow a piece of good meadow to remain until the grass has ripened before mowing it, then mow, dry thoroughly, and thresh out the seed, which may be sowed in the chaff. The seed may be sown at any season, but does best to sow in the autumn, or even after the first snow comes.

In some situations, I have known meadows to continue very productive for many years, by never allowing it to be pastured in the fall, and even to become richer and require mowing twice in the season; but it is so rarely the case, that meadow land should remain more than seven years without ploughing, and it more frequently requires it to be ploughed every four years.

The Lucerne grass, and the Forion are highly recommended by some European writer, but as the former lasts but a short time, I doubt if it is equal to the clover, and the Forion, or as it is here called, sheepskin grass, is indigenous in this country, having no seed, is only propagated by planting, and only thrives on wet marshes, low intervalles, or

in ditches it is hardly worth our attention to plant it, we can be contented to use it for fodder or pasture, for both of which it is excellent.

It is much to be regretted that so much is annually sent out of the Province for grass seeds, when the seeds of our own country are not only abundant, but also much better. Although we are not yet in the habit of raising much clover seed for the market, yet many who have taken pains to secure their timothy seed, have found it a very profitable employment, which is done in various ways. Some employ persons to draw the ripe stalks from the swath, and bind them for drying and threshing. Others reap the timothy above the under grass, and save it in that way, and in either method it will pay well to hire persons to perform the labor. But the best and easiest method is to encourage the new land settler to sow timothy seed with his English grain, he may then winnow all together, and with a fine sieve, separate the grass seed from the grain, and both may be perfectly clean.

The Agricultural Society of this County, aware of the great importance of good grass seeds to the farmer, give annually four premiums to encourage its cultivation, and some specimens exhibited, far exceed any imported from the United States, and for the sake of encouraging the growth of it in our own country, it refuses to purchase the imported timothy for the Society's use.

I recollect well when hemp and flax grew luxuriantly in this country, and regret that the cultivation of it is now totally neglected, occasioned chiefly by the abundance and low price of cottons; but as the farmers of New Brunswick want something more substantial than fancy cottons, and so much hemp is required to rig out our boats and vessels, I sincerely hope the subject will meet with that attention which it merits.

Besides, there are many persons in our country well acquainted with the management of flax, who are frequently out of employ in the winter. Even some of the inmates of the Alms House are capable of dressing and spinning flax, and there is no doubt but much good might result from introducing the manufacture of linen in the public Penitentiary. But these schemes, however, are rather beyond my limits, so I will endeavour to turn to that which may be more immediately interesting to a

A FARMER.

LETTER IX.

Of Sheep.—Having in a former letter dwelt chiefly on the neat cattle of the different breeds now in New Brunswick, I will now turn the attention to sheep, those useful and agreeable animals, so essential to the encouragement of domestic manufacture, and so agreeable to the palate. Few farmers do without them, but so variable is their produce, that while some flocks produce five or six pounds of wool to a fleece, and some even affirm they exceed ten pounds, others hardly exceed two pounds to the fleece, and indeed by the ordinary shearing time, some have hardly any wool at all. Still the same system has been pursued with very little exertion on the suffering party to remedy the defect in their breed or management, although they can hardly obtain five shillings for a lamb, while some farmers never sell one for less than a pound.

The greater part of the breed of sheep that have long been kept in the country, have long crooked legs, hump backs and long necks, and when fed on hay or grass, and well filled, the stomach and entrails constitute more than half their weight. They are generally great rangers, expert in jumping the

fences, and leave a good part of their scanty fleece upon the raspberry bushes. And as I have observed of the calves, so it is with the lambs, all that become fat go to the butcher, are sold, and the poorest only are reserved to keep up the number of the flock and sustain the breed.

There was indeed a better kind of sheep formerly, that had as many black, or nearly as many as of the white, and sometimes the same lamb would be black and white, and frequently a pair of twin lambs would be one black and the other white. Their wool was rather coarse, but long and useful, but for some reason there seems now to be much fewer of the breed left in the country than there was thirty years ago.

The Merinos, imported about twenty years ago, were not generally approved of, but the Dishley and Leicester breeds since imported, seem well adapted to our country and climate. The Dishley sheep is generally short legged, with a broad chest, flat back, short thick neck, and low headed. It is very docile, and fattens easily. But I have seen a kind more recently imported, called the Leicester Sheep, which is an animal of firmer form and finer fleece than the Dishley, but I have not been sufficiently acquainted with it to know whether it is a better feeder or as hardy an animal. It differs from the Dishley in having a finer limb, smaller head, straighter on the back, and firmer fleece; but both the Leicester and the Dishley are far superior to any other kind I am acquainted with.

The sheep is an animal that can accommodate itself to any kind of food used by other ruminating animals, and when fed solely on hay, will require a very large quantity of food for an animal of its size, and yet will thrive in a short dry pasture better than any other animal. An open stable or shed suits them better in the winter than a close one, and during the winter it is much better to them some succulent roots or a little grain of any kind, than to depend entirely on hay.

From their propensity to rambling over the meadows and crossing the fences by the aid of snow banks in the winter, I would prefer a yard and an open shed with a good roof and a shelter from the winds, let them blow from what quarter they may. Sheep, of themselves, seldom seek any other shelter from the cold than the lee side of a fence or building.

They might be more easily wintered if they were allowed to run in a pasture when the ground was bare during the winter, and come to the barn for hay when they required it; but in this way they injure the pasture, and frequently become feeble.

I have found it the best method to feed them in a rack standing in a yard or shed secluded from all other animals, and the lesser the number, the better they thrive. Eight ordinary sized sheep require as much hay as one cow, and a few turnips with it or other short feed, give them plenty of straw for litter, see that they may lay dry, and the quantity of manure they will thus make in the course of a winter, will fully repay all the trouble and expense of keeping them up: beside, while they are thus yarded, they are secure from Wolves. Sheep are short lived animals, and should never be kept until six years of age, as they begin to fail at five. They go five months with young, and great care should be taken that the lambs do not come in cold weather, as nothing else is so injurious to the fleece, and lambs coming in May or June thrive much the best.

A farmer intending to improve the breed of his own flock, should select the best lambs, and not allow them to have lambs until they are two years

old, and carefully separate all the old sheep intended for fattening, as early as the month of September.

Some object to the practice of washing the fleece on the sheep, but I have witnessed the practice ever since my recollection of sheep shearing, and am satisfied that the wool is much better cleaned in that way, and the animal, with care, need be no worse. Farmers owning large dry upland pastures, may deal largely in sheep to advantage, while some differently situated, may not find it profitable to keep so many.

That the beautiful imported breeds have been raised and perfected in England, none need doubt, and that a careful management and judicious selection will yet pass an equal or even superior breed in New Brunswick. I fully anticipate, and it is truly gratifying to hear persons when praising the beautiful Dishley sheep of Old England, to couple them with the celebrated Scovil sheep of Queen's County, and the Perley sheep of Carleton, all which should be encouraging to

A FARMER.

CLOVER SEED.—We have received two communications from Joseph Warbasse, of Newtown, N. J., on his mode of preparing clover seed for sowing, by which the writer calculates he makes a saving of one-half the seed required. Mr. Warbasse's process seems to be predicated on the assumed fact, that ordinarily more than one half of the seed sown does not germinate, either from the want of moisture to swell it or of gypsum, the presence of which he considers essential to stimulate the germinating principle. Mr. Warbasse is probably right in saying that one half the clover seed sown does not come up; and he is strengthened in his supposition that much of them remain dormant in the soil, by the fact he states, and which is of common notoriety, that plaster sown upon light lands will bring in clover where no seed is sown at the time. Mr. Warbasse's remedy for the evil is to saturate and swell the seed thoroughly in soft water, to which a quantity of salt is added, and after it has become well saturated, to coat it with Gypsum, &c., the effects of which seem to be to prevent the escape of moisture which the seed has imbibed and thus insure its germination and growth. A further advantage may be that the salts impart fertility to the soil which comes in immediate contact with the seeds, and causes a more vigorous growth. Such seems to be the philosophy upon which Mr. W's practice is founded. We give the process of preparing the seed in his own words:—"The seed is to be made thoroughly wet with a strong pickle from your pork cask; let it remain in a heap one day; then spread it out about one or two inches thick on a dry floor, and in a few days a crust of salt will be formed upon each grain. When you wish to sow it, moisten it again with pickle, spread it over a floor, and put on about 3 quarts or more of plaster to a half-bushel of seed; mix it well, and keep it moist in a cellar until you sow it."

DOMESTIC YEAST.—Persons who are in the habit of making their own bread, can easily manufacture their own yeast by attending to the following directions:—Boil one pound of good flour, a quarter of a pound of brown sugar, and a little salt, in two gallons of water for an hour; when milk-warm, bottle it and cork it close, and it will be fit for use in twenty-four hours. One pound of this yeast will make eighteen pounds of bread.

FOOD OF PLANTS.

"It is in vain for chemistry to discover or suggest, unless her discoveries and suggestions be adequately made known to those whose benefits they are most likely to promote."

In my last, I endeavoured to explain the source and application of carbon. I will now add a few words on the other three organic elements of vegetables.

Oxygen, although by itself it is a slight, inodorous, invisible gas; yet, when in combination with other gases, it is a chief ingredient in all animal and vegetable substances, and forms a full half of all that lives. When united in the proportion of eight atoms of oxygen, with one of hydrogen, it forms water. It also enters largely into the composition of the air we breathe, for the atmosphere is a compound body, viz: twenty three atoms of oxygen, and seventy seven atoms of nitrogen, with about one two-thousandth part of carbonic acid gas, all those gases rendered aerial by the expansive influence of heat. There are also constantly floating in the air, but forming no constituent thereof, variable quantities of ammonia and watry vapour. The oxygen gas in the atmosphere is the principle of combustion, and the vehicle of heat, and is absolutely necessary for the support of animal life; it accelerates the circulation of all the animal fluids, and is the most energetic and powerful agent that we are acquainted with, it is also as necessary to the growth and vigour of plants as to that of animals.

"LEAVES, LUNGS, and GILLS the vital ether breathe
On earth's green surface, on the waves beneath."

All vegetables have the power of decomposing water, they combine part of its hydrogen, as well as of its oxygen, with the carbon of the atmosphere to form the vegetable compounds, oil, wax, gum, resin, sugar, &c. Oxygen is the basis of vital air, and the chief support of heat and life, and performs an important part in most of the changes which take place in the mineral, vegetable, and animal kingdoms.

Nitrogen also is an invisible gas, it is incapable of supporting flame or animal life, and has the effect of neutralizing the properties of oxygen gas, rendering it fit for respiration and combustion, and the compound possesses properties different from either of them separately, so as to be fitted for every purpose for which it was designed. Nitrogen is lighter than atmospheric air, and is copiously thrown off from the lungs and skin of man and other animals, the interval which there is between every inspiration, seems to have been designed, to allow time for the nitrogen gas, which is thrown off from the lungs to mount in the air, in order that a fresh portion of air may be taken in, so that the same air be not repeatedly breathed. The upper surface of the leaves of trees and other vegetables give out during the day a large portion of oxygen gas, which, uniting with the nitrogen gas thrown off by animal respiration, keeps up the equilibrium, and preserves the salubrity of the atmosphere. Nitrogen forms part of all animal substances. It is also the base of ammonia, and the nitric acid, hence we understand its value as a fertilizer, for it is favorable to plants, as they grow and vegetate freely in this gas. It seems to be the substance which nature employs in converting vegetable into animal substances, and to be the grand agent in animalization.

One hundred volumes of water absorb about four volumes of nitrogen gas, and bear it in solution to the roots, by which it may be conveyed directly into the circulation of plants. "When nitrogen in

any of its compounds is applied to young grass or sprouting shoots of corn, it hastens and increases their growth, it occasions a larger produce of grain, and this grain is richer in gluten and more nutritious in its quality."—Schubler, Agr. culture, Chemie, p. 170.

Hydrogen is also only known to us in the state of gas, although by recent experiments there may be reason to suspect that hydrogen gas is a metal in the æriform state. All kind of vegetables, when assisted by the rays of the sun, have the power of decomposing water; during which decomposition the hydrogen is absorbed, and goes to the formation of oil, resin, wax, &c., in the vegetable, while the oxygen combines with part of the caloric received from the sun, and is given out in the form of oxygen gas; so that in *this one operation*, nature gives nourishment, and provides materials of growth to the vegetable world, and at the same time renovates that vital principle in the atmosphere, which is necessary for the support of the animal creation. Surely nothing short of consummate wisdom could have conceived any thing half so beautiful in design, or so extensively and superlatively useful in effect. Water as it falls in rain through the air, or trickles along the surface of the land, absorbs the gases, and carries them with it wherever it goes, conveys them to the roots, and into the circulation of plants, making them all minister to the growth and nourishment of living vegetables, yielding now oxygen to one, and now hydrogen to another, as the production of the several compounds which each organ is destined to elaborate.

It is almost more than wonderful, that a substance which we know only in the state of thin air, should, by some incomprehensible mechanism, be bound up and imprisoned in such vast stores in the solid mountains of the globe, be destined to pervade and refresh all nature in the form of water, and be seen to beautify and adorn the earth, in the solid parts of animals and plants. But all nature is full of similar wonders, and every step we advance in the study of the principles of the arts of husbandry, we must mark the united skill and bounty of the same great contriver of all worlds. And as some excuse for my being so tediously particular about the four foregoing gases, is the fact that they are the raw material, the elementary substances of all animal and vegetable production in nature. To the agriculturist, therefore, an acquaintance with these four constituent parts of all that lives and grows on the face of the globe, is indispensable, for out of those four elements all the products of vegetable growth are elaborated.

There is another gas, a compound of two of the former. I allude to ammonia, which is vastly too important to be overlooked. Ammonia is composed of a mixture of three atoms of hydrogen, with one atom of nitrogen, its chemical character being (N. 1 H. 3.) The influence of ammonia on vegetation, is of a very powerful kind, it seems not only to promote the rapidity and luxuriance of vegetation, but to exercise a powerful control over the functions of vegetable life. All the salts of ammonia are very soluble in water; the ammonia, which rises into the air in the form of gas, combines with the carbonic acid, and is readily again washed down by rain and dews, and those salts of ammonia contained in, or added to the soil, are dissolved by the water which percolates through it, and are thus in condition to be taken up and appropriated by the roots of plants to the growth and perfection of the whole vegetable. Yours, &c.,
ADDERBURG.

NEGLIGENCE AND ERRORS IN AGRICULTURE.

I believe farmers lose as much by negligence as by bad cultivation. Let me illustrate: Whenever I hear a man complain that his grounds are overrun with thistles, with ox-eye daisy, wild carrot, chess nut grass, &c. &c., I at once say to him, there was a time, and that not long ago, when you might have prevented this evil with five minutes labor. When you first saw that villainous plant on your land, there were but one or two, or half a dozen, and you could have destroyed them with a dock extractor or hoe in a few minutes, but you neglected the opportunity. In all your walks over your farm, let the staff in your hand be a well constructed weed-hook; you can walk as well and protect yourself as well with such a staff or cane as with any other. Now this is the way to rid yourself of all noxious weeds, or rather to prevent their formidable appearance. Begin at the beginning, with these pests, or any thing else. Put a new rail in that panel, in place of that rotten one yonder; do it now, don't wait till the broken rail invites some stray animal to leap into your corn field, and in doing so breaks half a dozen other rails. Take a spade and drain off that pool of standing water in your wheat field yonder, and as you go along, cut off that summer sprout or young shoot that is just starting from the limb of that apple tree, that favorite tree of yours, and mind, hereafter, don't let such things grow on any of your trees. Take a small spade and dig up all, every one of those butter cups, (*Ranunculus bulbosa*.) in your cow and sheep pastures, and as soon as you see a single plant of that poisonous plant hereafter, destroy it instantly. Don't you know it is one of the most deadly poisons to cattle and sheep that can be found? It does not kill, it is true, at once; but it is a slow poison, and ultimately kills any ordinary animal that eats it; besides, it poisons the milk of cows, and is supposed to be the cause of the "milk sickness" of the west.

Errors in farming or agriculture, as are numerous as instances of negligence, and even as deleterious. That was a capital error of yours, sir, in supposing that because you had a thin soil, with a clay substratum, you must not plough deep. Why, my dear sir, if ten years ago you had begun to plough deep, you would, at this time, have had a deep soil instead of this thin skin that is made still thinner every time you scratch it. Plough deeply, as deep as you can, every time you plough, and in a few years you will have no reason to complain of short crops from drought, or of winter killing from hard winters, nor of short crops from any thing else. Don't try too much of it! Try all new things in a small way. If you had tried but one acre of that new sprung wheat, and kept trying one acre till you found it to be, or not to be, what it was cracked up to be, you would not now be complaining of loss by experiments.

Errors in judgment are so numerous, so universal, that it is difficult to point out examples; there are so many of equal importance, that we can hardly choose which to take; but that farmer yonder who throws his stable manure out of the window of his stable, on the side of the hill, and allows it to remain there from month to month, to be washed by every rain, and bleached by every day of sunshine, commits not a greater error than he who purchases manure at a distance, employs teams and hands to haul it to the farm, all at a heavy expense, and at the same time overlooks, or omits to avail himself of the numerous sources of manure that are staring him in the face every hour of his life on his own premises. "My father killed

his corn, and made good crops," says one; forgetting, as it would seem, that his father's land was new, and could "stand any thing." "I have the tallest corn, and will have the greatest crop of any in these parts," said a Saratoga county farmer who had obtained some seed of the tall southern corn, in a tour last year to the south, forgetting, or not having recollected, that corn that may make a good crop in the south, will not necessarily do so in the north, until the first of October nipped all his prospects in the milk. He had not duly considered that plants have their climates as all things have their seasons.

But I must bring my discourse to a close, and will do so by a summary illustrative corollary: Two white millers, or moths, entered the gardens of two citizens, in the spring; one, of course, in each. The owner of each garden was present, and each saw the little creatures. One of the citizens instantly caught and killed the insect; the other allowed it to pass on, paying no attention to it. In mid-summer, the garden of the first citizen was free from caterpillars; that of the other was completely denuded of foliage, with bugs and offensive insects on every shrub and plant. "Why," says the latter to the former, "how happens it that you have no caterpillars, while my garden is devoured by them?" "I killed the first miller," says the former, "you let it live, lay its 500 eggs, which in two weeks turned out 500 caterpillars, and they in their turn, in a few weeks, each 500 more, and so on till you have your millions of insects, and I have none."—*Albany Cultivator*.

GUANO.—The following article contains some information respecting the mode of applying this manure, which may be of service to readers at the present time.

"In the latter end of December, 1842, I ploughed a lea-field, and sowed it with wheat and in the month of May following, it looked stunted and bad. At this period I sowed over it Guano at the rate of two cwt. to the acre, and in fourteen days an entire change had taken place, the wheat looking green instead of yellow. It continued for some time to improve, and every little place that was missed in the manuring, was seen from the opposite hill; and I am sure, from the application of this manure (costing about 30s.) the crop was improved full thirty per cent. Guano had the same effect on barley on a light soil, and a piece of Oats on a stiff clay soil. In the second week of May last, I tried it in a field of Grass, using three cwt. per acre against forty tons of Devonport Dung; and I can be positive in stating, that the part on which the Guano was used, produced a far better crop of Grass than where the dung was used. I have found guano very useful as a liquid manure. I have dissolved it in spring water at the rate of 1lb. guano to three gallons, for 24 hours, which has produced a fine piece of grass; but the best and most convenient plan is (where persons possess tanks for containing the liquid manure from the stables, &c.) to put it in the tank, about 1lb. guano to 8 gallons of water. This I found produce a most excellent crop of grass, which was in six weeks sufficiently high to mow. I likewise sowed a field of white turnips, one part with dung, the other with guano, two cwt. per acre. The guano produced a much better crop than the dunged part, which was allowed to be the case by several farmers who saw the field." William May, Saltash.

CURE FOR LOCKED JAW IN HORSES.—It is said that pouring water along the back from a watering pot, for a considerable time without intermission, will effect a cure.

HAYING.

But few persons have commenced haying, or made preparations for that purpose, though some have commenced in a small way under trees and where grass has lodged.

Success in this important and most pressing business in New England, depends much in being well prepared with all the various implements of the best style, and a good steady team, always near at hand. Scythes, sneads, rakes and forks should be light, strong and neat. In these things we have of late great improvements, and yet the prices are moderate.—Light and well constructed implements that save much hard labor may now be obtained at the price farmers used to pay for coarse heavy bungling articles, which they would not use now if furnished gratis.

No farmer makes a snead now, as he can buy a good one all rigged at less cost than a single set of irons can be made.—Most sneads are spotted by the manufacturer. If not, the best rule that we have ever found for this operation, is to make a small spot by guessing, at which Yankees are good, and then hang the scythe by using a large ring, and if not right vary the spot till the scythe hangs well, then finish the spotting and make the *tang* hole. In this way a scythe may be hung precisely as desired, if the operator knows when he is well suited.

Horse rakes make a great saving of time, as a man with a horse will rake as fast as half a dozen men with the hand rake. Besides this economy in time, a great saving is often made by securing hay from a rain, which could not be accomplished without this labor saving implement.

Boys should be furnished with tools suitable to their size and strength. Small boys cannot work to advantage with implements adapted to men. Yet some farmers make no other provision for their boys, though they expect much from them. When boys began to mow, they are often furnished with scythe and sneads, not only large enough for men, but which are so poor that men have laid them aside, and without experience in keeping a scythe in order, or instruction in mowing, and with an implement that men will not use, they are complained of for not making good work, or attempting to *mow before they know how*. In this way the youth is discouraged and his enterprising spirit depressed instead of aided and encouraged.

Though all the grass cannot be cut at precisely the best time, yet we should ascertain the best time and come as near to it as possible. We often begin to mow a week or so before the grass is fit, and then not get through till 2 weeks past the best period, when nearly the whole crop needs cutting about the same time. Clover should be cut when about one third the heads have turned brown: if very stout and lodged, the sooner it is cut the better. Some cut herd's grass when in blossom, others let it remain till the seed is quite or nearly full grown. From experience and observations we prefer the latter period.

The times of gathering crops determines also the amount of their nutriment. Thus, radishes left too long in the ground become hard and woody, and so with the stem of the young cabbage and the artichoke; and it is, in effect with the grasses cut for hay. There is much sugar in these, and as they grow up, this is changed into starch first, and then into woody fibre. Therefore the riper plants become, the less sugar and starch they contain in proportion to size. Those parts of a plant which dissolve most easily, are the most nourishing:

starch and sugar are readily soluble in water. The weight of cut straw or hay is less when perfectly ripe. These should be cut consequently, soon after they are at their greatest weight, when both the quantity is greatest, and the quality is best, and the same may be said of all the corn or grain crops. The straw commonly begins to diminish three weeks previous to being fully ripe, and it becomes less nourishing after that time. But the ear of grains which is sweet and milky four weeks before it is ripe, afterwards becomes consolidated, the sugar changes into starch, the milk thickens into gluten and the alumen of the flour. And when this is completed two weeks before the ripening, the grains contain the greatest amount of starch and gluten. If grains be cut at this time, they are heavier, and they will yield the greatest amount of good flour and the least bran, as the skin of the grains is always thinnest at this time. If, however, they are left longer, the grains cover themselves with a thicker skin for protection, a part of the starch is also changed into woody fibre, as in the ripening of hay, the radish, &c. All corns or grains should therefore be cut two weeks before ripening.

FARM ACCOUNTS.—What would be thought of a merchant who did not keep a set of books, and who at the end of the year could not tell whether a certain branch of his business had been productive or not? And why is not a farmer as much interested in the result of his operations as a merchant? The petty shopkeeper must have a clerk to keep his books with double entries, and yet the most extensive farmer, operating with thousands, keeps no record of his proceedings. The manufacturer opens an account with each department of his business, charging it with the stock employed, the expenses incurred, and crediting it with the products. At the end of the year he sees at a glance whether it has been productive or not, and concludes to lop it off or extend it. So should the farmer open an account with every crop he cultivates; charge it with the outlay and credit with the proceeds. At the end of the year he should take another account of the stock on hand, and he will see at once how he stands on the year's operation. If he is unable to keep so simple an account, he should employ a clerk; (although he had better go to school himself,) he certainly needs his assistance as much as a merchant. But there is no difficulty about the matter, and extracts from a farmer's books, well kept, would form the most valuable contributions to an agricultural paper.

NUTRITIOUS FOOD.—A very interesting report on the comparative nutritive properties of food was lately presented to the French Minister of the Interior, by Messrs. Percy and Vauquelin, two members of the institute. The result of their experiments is as follows:—In bread every hundred pounds weight are found to contain 80lbs. of nutritious matter; butcher's meat, averaging the various sorts, contains only 35lbs. in 100lbs.; French beans, 80lbs.; Peas, 23lbs.; Lentiles, 94lbs. in 100lbs.; Greens and Turnips, which are the most aqueous of all vegetables used for domestic purposes, furnish only 8lbs. of solid nutritious substance in 100lbs.; carrots 14lbs.; and what is very remarkable, as being in opposition to the hitherto acknowledged theory, 100lbs. of potatoes only yields 25lbs. of substance valuable as nutritious. One pound of good bread is equal to 2½ or 3lbs. best potatoes; and 75lbs. of bread and 30lbs. of meat are equal to 300lbs. of potatoes; or, to go more into detail, 3-4lb. of bread and 5 ounces of

meat are equal to 3lbs. of potatoes. This calculation is considered perfectly correct, and may be valuable in families where the best means of supporting nature should be adopted at the least expense.—*Scientific Journal, Dublin.*

FARM YARD MANURE.—The situation of the dung pit should be near the stables and cow-houses, and placed so low that all streams of urine should flow at once into it, so that nothing be lost. It may be 3 or 4 feet deep, and of a size proportionate to the stock of cattle usually kept by the farmer. It is not necessary that it should be built round with a wall, or have a perpendicular descent, as it may slope gently inwards, and deepen gradually towards the centre. It should, if possible, be covered by a roof, to prevent the action of the sun. If the bottom be found impervious, and capable of containing the juices, no farther trouble is requisite, and the work is complete; in many instances, however, it will be necessary first to puddle with clay, and then line the bottom with flag stones. Into this pit, earth, with refuse straw, should be brought and strewed over the bottom and sloping sides, to the thickness of from nine to twelve inches, and this will form an inferior layer to absorb all that portion of the liquid manure which naturally runs to the bottom. The pit is now prepared to receive all kinds of animal and vegetable manure, which when brought, should be always laid evenly over the surface. In Scotland, such pits are common, and in the course of accumulation, a young or wintering stock of cattle is allowed to go at large upon the whole; the animals being at the same time fed on a proper allowance of straw. Care is also taken to mix, in laying on, the dung brought from the cow house, stable and piggeries, so that the rich excrement of the well fed animals may be incorporated with that of a poor description from others. It is likewise of the utmost importance, though too frequently neglected, to convey to the pit the entire liquid refuse of the farm yard, provided the quantity be not so great as to make it advisable to have a separate pit for its reception.

It is customary to cart away the material of the dung pit at convenient opportunities (usually during the frosts in winter) to a place in the fields, near where it is to be used, and there pile it up in a quadrangular heap of about four feet in height. Dung carted out in this manner, is ready for the turnip husbandry in June, and the practice is otherwise convenient. It may, however, be stated, that for want of attention to principles already explained; such dung heaps, by exposure for months to the weather, must lose some of their valuable properties. In every instance, the dung heap in the fields should be placed in a hollow situation, with a substratum of earth, and should have a scattering of a few inches of earth over it, and around the sides, to keep in the volatile gases. When the dung pit has thus become emptied, it may again be progressively filled as before; and when it is carted out in any of the spring months, it will be found necessary to turn it once or oftener, for the purpose of accelerating the decomposition of the strawy part of the mass. It may be of use to know, however, that the dung required for fallows for wheat in autumn, may be less putrified than that for turnip crops.

LIQUID MANURE.—The urine of cats is of great value as manure, and this is so well known to the farmers of Belgium, that they use tanks for collecting the liquid from cow houses, and thence they pump it up and pour it over the land at the

proper season. When mixed with vegetable refuse, moss, or earth, it forms an excellent compost. It is deeply to be regretted that so little is known on this subject; and such is the carelessness of farmers, cottagers, that the urine from their cattle stalls is in most cases suffered to waste.—*Chamber's Information for the People.*

CULTURE OF TURNIPS.—*Mr. Brook*—Sir, I have seen several remarks in the Farmer lately, on the cultivation of turnips, and as they do not all agree with the methods adopted by us, I forward you our plan of operations. First, select a suitable piece of land, plough, cross-plough, and harrow well, so as to pulverize it thoroughly; then sow the seed far enough between the rows to allow the cultivator to work, for that saves much labour in the hoeing. We have a machine for sowing the turnip seed, that makes the drill, sows the seed, covers it up, and rolls it over. With this, a man can sow as fast as he can walk. The cost is very little, for a good smart carpenter can make one in a day. It is all made of wood, except the cylinder which holds the seed; that is made of tin, and it answers the purpose better than the patent machines which cost ten times as much, and have the extra quality of getting continually out of order. Now, as our seed is in the ground, we will wait till it is about 4 inches high, and then thin it all out, so as to leave a plant about every six or seven inches; if you leave more, the turnips will be small and not worth harvesting.

In gathering them, let two men begin with a row each, pull a turnip with each hand, strike them together, to shake off the dirt, and lay them down with the tops all one way, over the place where they were pulled. Then cut the tops off with a knife made in this manner: split the end of an axe-handle, and lash about a foot of the point of an old scythe in it, so as to leave the end projecting about six or eight inches. It wants to be just long enough to reach the ground without the operator's stooping. One man can cut the tops off in this way as fast as three can pull them. We then haul them to the barn floor, upset the cart, and push them down through small traps into the cellar.

In feeding out to milch cows, we chop the roots in a plank trough with a spade sharpened for the purpose.

This is for raising turnips in the cheapest and most economical manner, and they cost but half as much as the potato, at the same amount of profit. However, a farmer should not calculate upon one crop alone, because he fancies it is the most profitable alone, but some of one and some of another. Rotation is the word for farmers.—*N. E. Farmer.*

PRESERVING TOOLS FROM RUST.—To preserve scythes, sickles, reaping hooks, and other steel tools from rust after the season for using them, wipe them clean and dry, and hold them before the fire, and keep drawing them backward and forward until warm enough to melt wax; then take some beeswax and rub it all over. A half penny worth of wax will be sufficient for a scythe. Then put it in a dry place; it needs no covering. The usual method is to wrap a hayband round: but in the winter time this naturally attracts moisture, or the damp air strikes in betwixt the folds of the hay band.—*Farmers Magazine.*

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

THRIFTY AND UNTHRIFTY FARMING.

I recently made an excursion of some distance in the country, and tarried for a short time in a farming community, where the first eighteen or twenty years of my early days were spent. Many years have elapsed since, and other pursuits have engrossed my time and attention. Yet, often my mind reverts to the scenes of my youth, and memory rolls back to the recollection of other days, when, in common with all the rural community in which I resided, I felt all the joyous hope of seed-time, entered with zeal into all the labours and excitement of hay-making and harvest, and shared in all the frolic and glee of husking parties; and in all the thoughtlessness and buoyancy of youth, looked forward for thanksgiving, as the best of all the days in the year.

In visiting the place after an absence of some twenty or more years, I found many striking changes had taken place; many an honest, brawny limbed farmer, then lord of his broad acres, now occupied but his six feet by two in the "auld kirk yard;" and others that were then in the vigour of manhood, and had been spared, were bowed down with age, and their thick locks had been plucked by the fingers of time, or silvered o'er by the frosts of 70 or 80 winters. Many of my schoolmates who were then wild and reckless youths, with whom I had an hundred times tried the "tug of war" a *long hold* and *side hug*, were now staid and steady farmers—heads of families, engaged in all the business scenes of life. And of the bright-eyed, flaxen-haired lasses, many were transformed to sober and careful housewives and mothers,—and others were quietly sleeping the slumber that knows no awakening—most of whom had been carried in all the bloom of youth and early womanhood, by that scourge of New England—consumption.

But as the whole country was covered with snow, I could not make much of an agricultural survey, but upon inquiry, I learned that many farms had from bad management and culture very much deteriorated, and greatly lessened in value; others had held on the even tenor of their way, and wintered about the same number of cattle they did formerly, and some few in the hands of enterprising, intelligent farmers, were advancing with a sure and steady pace that would yearly add to their value, and to the wealth of their owners.

There had been several causes in operation to exhaust the first named class of farms—such as ploughing the lands in the autumn, where much of the finer portion of the soil was blown off by the winds, and washed by rains and melting snows, and suffering their cattle to roam over their mowing fields, both fall and spring, with a reckless waste of their manure.

In conversation with one of those farmers, (a Mr. G.,) whose farm had run backwards, I suggested to him the idea of collecting the leaves and decaying vegetable matter from a piece of woodland near by. "Why," says he, "I haint much opinion of this vegetable matter—it is sour stuff—only give me dung enough from the hovel windows, and I can raise as good crops as Mr. I. does, with all his swamp muck, lime, compost, and book farming." I enquired if he took an agricultural paper. "No," said he—"I did take one several years ago, and that had so much to tell about a new kind of potato, that they sold for 25 cents a pound, and after all, it warnt no better than the long reds; and about tree corn and mulberry trees; and a good many farmers got bit, by believing their great stories, that I got sick of, and

stopped it, and would not now take the gift of one."

I afterwards called upon Mr. J., the book farmer, as Mr. G. sneeringly called him, and found him a middle-aged, intelligent farmer, who was quietly improving his farm by every means within his reach. I was so much interested in his management, that I thought I would attempt to communicate an account of it to the public, through the columns of your useful Journal, with the hope that other farmers might be benefited by his example.

Upon looking into his barn, I found his hovel floor was water tight, and sloping toward the back side. In the rear of the cattle, was a kind of trough, of the width of twelve or fifteen inches; this was also water-tight; the droppings from the cattle mostly fell into the trough, and by giving his cattle a good bedding of litter every night, they were kept comfortable, and nearly as clean as when at pasture. He had the past winter used several loads of sawdust from a shingle mill, and leather shavings from the carrier's, for the purpose of bedding, and soaking up the urine. The hovels were daily cleared out by wheeling the manure and litter into the centre of the yard, (which is dishing,) and piling it up in a snug heap. His barn is so situated that he cannot dig a cellar under it, but intends the coming season to build a shed for the purpose of keeping his manure under cover in future. The floors of his horse stable are tight: every day it is cleared, and the manure and litter is spread under a shed, and by being trodden by his stock, it does not heat and fire-fang, as is too often the case. Most of his winter manure will be mixed with swamp mud to compost through the summer. I inquired respecting a heap near his barn: he said there were two cart loads of lime mortar, that he bought for a trifle of a man who had taken down a large house; it was mixed with about four loads of brake root turf, about eig^t teen months ago; it had been left this length of time for the purpose of having the plaster come to pieces and rotting the turf. Last fall it was shovelled over, and two lime casks of fleshings, procured at the tanner's, mixed with it. He thought while this animal matter was decomposing there would be a large amount of nitrogen generated, and give him a large amount of nitrate of lime by spring, when it would be again shovelled over, and 35 bushels of good ashes mixed, and then applied to an acre and a half of ground, upon which he should sow wheat: I think he said the compost was to be put on after the ground was ploughed, and to be harrowed in with the wheat. The ashes he had purchased at ten cents per bushel.

He had a cart-load of the waste wool, or flying, from the wool carder's: this was boiled for a short time in lye, to cleanse the oil and grease, and to render the wool more decomposable. By way of experiment, a part of it would be used to manure some of his corn and potatoes in the hill, the rest would be mixed in the compost heap, to remain a year or so. He also had a large quantity of old woollen rags, that he bought of a store-keeper for a trifle—having, he said, read in some book that 100lbs. of woollen rags contained as much nitrogen as 3000lbs. of cow manure. Some of these rags were to be chopped up and steeped in urine for a few days, then to be partially dried and sprinkled with gypsum, and used as manure in the corn and potatoe hills; the other part would, like the waste wool, be composted. He had a number of casks of fleshings, that were obtained at the tanner's, which would be mixed with vegetable

mould as soon as the snow was off, and he could obtain it; he also has the hair, lime, and piths of horns from the tan-yard; the bones are broken up by the hammer, and mixed with manure and ploughed in; they will slowly decompose, and supply phosphate of lime to his land; he had about two barrels of the settlings of salts from the pearlsh factory—similar, he thought, to the material known as glass factory manure: an account of its use and value is given in Mr. Colman's Fourth Report, pages 344-5, by a Mr. Jarvis. There were a few inches of lye upon the top of the salts in the barrels, so strong as to float an egg with nearly one half its surface above the lye. This, he assured me, according to Mr. Jarvis's statement, would convert ten or fifteen loads of loam or muck into a compost equal to the same amount of good stable manure. All these materials, sawdust, wool, fleshings, hair, lime, piths of horns, and salts from the potash, he had for removing as they were considered a nuisance, and of no value by the manufacturers or owners. The droppings of the fowls are occasionally scraped from the boards over which the hens roosted, and put in old casks; in the spring it will be moistened with urine and ground to pieces with a hoe, and mixed with plaster of Paris, to be applied to grass land, or put about the corn and potato hills, at the first or second hoeing;—he styles it "Yankee guano." He has a strong tight box under his back house, in which is frequently thrown gypsum, or charcoal dust obtained from the coal pen of the village blacksmith: it absorbs the smell, and once in a week or two, the contents of the box are mixed with dry peat or sawdust, or some other material, to absorb the liquid part, and put into old tight barrels. This is home manufactured *poudrette*. His hog yard, of good size, has been dug to the depth of 18 inches, and a good plank floor over the whole, which makes it easy shovelling out the manure. The suds from the wash are conveyed to it by a spout, which with the manure of his hogs, mixed with the loam, muck, and other materials, makes many loads of valuable manure. He has tried many experiments that he has seen recommended in the agricultural books and papers that he has read; says, after he became 'one and twenty,' he did not feel obliged in all things to follow in the footsteps of his worthy predecessor, his father, and sometimes pursued a new track, and went upon his own hook. He intends getting a small quantity of guano and ground bones the coming spring, for the purpose of testing them by the side of other manures. Several of the kinds he has not yet tried, but from his remarks, I feel satisfied he will find them all invaluable helps for increasing his crops, and from the nature of some of them, valuable and permanent improvers of his soil.—*Correspondent N. E. Farmer.*

RAISING CALVES—TREATMENT OF STOCK.—On the subject of rearing calves, I differ somewhat from the mode which has been presented by the gentlemen who have preceded me. To make the most of my calves, I allow them to suck the cow for the first three or four months.—Calves dropped in the Spring, I keep in the stable, the first summer, leading them to the cows morning and evening; By this means I obtain better forms, broader loins and hips, with fuller bosoms; giving greater weight to the most valuable parts. About two months old, they would begin to eat hay and drink water; and at four months, would feed so well, that if then taken from the cow, and well fed, there would be very little, if any falling off.

in their condition. But if fed upon *skim milk porridge*, only, as some gentlemen state as being their practice, and turned to pasture the first season, I think they are more inclined to be narrow in the loins and hips, and became pot-bellied; defects which they seldom wholly outgrow. It has been said that our neat stock have degenerated; no wonder, if they have been brought up upon *skim milk porridge*. If there is no profit in keeping animals well, there is less in keeping them poor. In wintering stock, in our climate cows in milk, and oxen daily worked, should have comfortable warm lodgings. Yearlings and two year olds, will sometimes do well to run out, where there are convenient baryards, and sheds, with mangers underneath, adjacent to the barn, with a door left open. With this arrangement you will seldom find the animals in the stable. The same remark will apply to the horse, whose limbs are badly swollen by hard driving; giving what is called a winter's run, and taken up in the spring with proper treatment, has a remarkable good effect. Milch cows should have a regular and kind system of treatment in their management. They should be milked at stated times, and, if convenient, always by the same person.—When milking is commenced, it should be done with as much despatch as possible, consistent with mildness; and be sure not to stop until they are cleanly milked. I prefer milking after they have been fed and have done eating, when in the stable. Let no movement be made to excite them, or draw off their attention from yielding down their milk; this kind of treatment will add much to the quantity of milk. Good water, easy of access at all seasons, is highly important to most of our domestic animals. For two or three of the days after the cow calves, in cold weather, I do not allow her to have any cold water. I give her water about milk warm, with a handful of wheat bran to a pailful. For the loss of appetite of either horn cattle or horses, I give what is termed a warm mash, made as follows: two quarts of oats, two quarts of malt, and two quarts of wheat bran, put in a pail, well mixed, then pour scalding water until moist, cover the pail with a cloth, let it remain until it is about milk warm, then give it. If for a horse having a cough, put in two tablespoonfulls of honey.—I have seldom known this mash fail of producing the desired effect. Some care should be taken that the animal does not take cold after taking the mash. If necessary three mashes may be given, missing one day between each. In November last, I had a very fine cow, giving about twelve quarts of milk per day: very suddenly she dried up to two quarts per day; her eyes became dim, ears hung down, and she refused to eat. I was at loss to know the cause. I thought it might be the horn ail, or garget. I split the under part of the end of her tail, took off an inch of the bone; put about a gill of spirits of turpentine in the hollow, back of the horns, and about the roots of the horns; gave her a half a pound of sulphur and half an ounce saltpetre, put a piece of garget root in her dewlap, near the bosom, as a rowell, and gave her a warm mash. In a very few days she appeared perfectly well and gave her usual quantity of milk.

Leaves are the lungs of plants; they take oxygen from the air, and emit carbonic acid, which is composed of oxygen and carbon. While the former goes off; the latter remains and converts the sap into a kind of pulp, a part of which consists of carbon. The pulp passes from the upper to the under side of the leaf. The cells where the pulp

lodges being yellow, and the carbon of a dark blue, they form together, the green colour of the leaves and young bark.

INTERESTING FACTS.

Why is cream churned into butter?

Because of the heat produced by churning, which thus changes the cream from a fluid to a solid.

Why is a glass tube, called a cream gauge, used in dairies.

Because when filled up to a certain height (ten inches) with new milk of a proper temperature, and then set by for twelve hours, the cream will have risen to the top of the tube, if the cow be a proper one from which to make butter.

Why is lime important in the shells of bird's eggs?

Because the body of the egg contains neither phosphoric acid nor lime, both of which are requisite for the bones of the bird; it was necessary, therefore, that nature should provide means of furnishing both these substances, which it does at the expense of the shell; this becoming thinner and thinner during the whole time of incubation, till the living embryo has appropriated a sufficient quantity for the formation of its bones. Part of the albumen combines with the shell for this purpose, and another portion forms feathers.

Why do fowls, if kept confined, lay their eggs without shells?

Because they cannot then get at any earth which contains the material requisite for the shell. Dr. Paris, (in the *Linnaean Transactions*), shows that if the legs of hens be broken, they will lay their eggs without shells until the fracture is repaired; nature employing all the lime in circulation for the purpose of reuniting the bones.

Why are eggs preserved by rubbing them with butter?

Because the butter closes the pores in the shell, by which the communication of the embryo with the external air takes place. The embryo is not, however, thus killed. Varnish has a similar effect. Reamour covered eggs with spirit varnish, and found them capable of producing chickens after two years, when the varnish was carefully removed.

CLOTHING.

Why have white veils a tendency to promote sunburn and freckles?

Because they increase the power of the sun's light.

Why does a flannel covering keep a man warm in winter, and ice from melting in summer?

Because it both prevents the passage of heat from the man, and to the ice.

Why does a person with a cold in the head, or catarrh from the eyes and nose, experience so much more relief on applying to the face a linen or cambric handkerchief than one made of cotton?

Because the linen, by conducting, readily absorbs the heat and diminishes the inflammation, while the latter, by refusing to give passage to the heat, increases the temperature and the pain. Popular prejudice has held that there was a poison in cotton.—*Arnott*.

Why is loose clothing warmer than such as fit close?

Because the quantity of imperfectly conducting air thus confined around the body, resists the escape of animal heat.

Why is cotton warmer than any other fibrous threads?

Because the fibres of cotton, when examined by the microscope, will be seen to be finely toothed: this explains the cause of their adhering together with greater facility than the fibres of other species which are destitute of teeth, and which cannot be spun into thread without an admixture of cotton.

Why does oiled silk, or other air-tight covering, laid on the bed, preserve greater warmth than an additional blanket or more?

Because the oiled silk prevents the ventilation of the person by the slow passage of air, as through the texture of the blanket.

THE TURNIP FLEA is one of the greatest scourges to British husbandry. The Farmer's Magazine contains a learned article upon this insect (*Haltia Rumorium*) giving us its natural history, and containing an examination of the various remedies which have been recommended to prevent its destructive ravages, embracing the application of lime, sulphur, soot, urine, fumigation, &c. Although these remedies, or some of them, are admitted to have had partial success, yet none of them, in the opinion of the writer, Matthew M. Milburn, can be depended upon with any degree of certainty. He thinks Mr. Poppy's plan of protecting the Swede valuable, which is to drill between the rows the common turnip, which the flea seems to prefer to the Swede, and when the latter has acquired the rough leaf, to plough up the common turnip—yet he concludes by saying, that if attention is paid to the following particulars, he thinks the crop may be generally saved.

"1. Hasten the germination of the seed by all natural means, as applying some portion of stimulating manure, sowing when a proper degree of moisture exists, and in close connexion with the manure, to secure at once the benefit of it to the roots, if possible, making most of the season when favourable.

"2. Sow a liberal quantity of seed, never less than three pounds, and sow it in drills, which will hasten the vegetation after it has come up.

"3. Clear the land perfectly, that no weeds may spring up to impede the growth of the plants, and give the soil a liberal supply of manure suited to its character.

"4. As a preventive, rid the soil by hand weeding, horse hoeing, &c., as much as possible of weeds.

"5. Select good seed, and test it before sowing, to see how many germinate, and in how little time."

☞ The above remarks are from an No. of the *Albany Cultivator*, and may be serviceable to some of our readers in this Province. As far as we are aware, turnips have not been used to any great extent by our farmers, as food for cattle. The length of the winter and difficulty of preserving them, together with the difficulty of raising them, on account of the ravages of the fly, &c., having prevented much attention being paid to the subject. The insect of whose ravages our farmers complain, appears exceedingly capricious in its attacks, and we are not aware of any infallible specific yet discovered for its destruction. Some of our farmers recommend sowing early, others as strenuously contend for sowing very late, and in adopting these different modes, both have sometimes succeeded, and both have sometimes failed. Were it not for the uncertainty connected with the crop from this cause, we are inclined to believe that turnips might be profitably raised for the feeding of stock in this country, as it is in Britain.

ON SOILS.

Sm.—To give a clear idea of the chemical relation of the soil to the plants which grow upon it, it is necessary to consider, that the outermost covering of the globe reduced to a rough powder by any means whatsoever, is termed soil, and must, on account of its origin, partake much of the nature of the under-strata termed subsoil, and for facility of consideration, may be divided.

I., A base, which forms the principal substance of the soil—about 96 or 97 parts of the 100, and is composed, 1st, of alumina and Silica (clay and sand), in very varying proportions, making all the varieties of soil from stiff clay to loose sand; 2nd, of carbonate of lime, making the limestone land; 3rd of carbon, with small portions of silica or sand, as in peatsoil. All the three kinds of bases contain larger or smaller quantities of each other, making so many varieties of soil. This base serves to hold the plants by its root in the most favourable position for receiving the benefit of the atmosphere by its leaves performing the office of respiration. It also serves in the best manner possible for the ramification of the roots, and holding fast the plant. It also acts as a diluent and distributor of the more active inorganic constituents. II., The fertilizing particles which form 2, 3, or 4 parts in the 100 of the soil, and consist of a number of substances greater than are contained in the base though so much less by weight; they are potassa, soda, magnesia, lime, silica (sand,) alumina (clay,) and iron in combination with sulphur making sulphuric acid and sulphates, phosphorus making phosphoric acid and phosphates, chlorine making muriatic acid and muriates, and carbon making carbonic acid and carbonates, and are the ashes left after burning vegetables in the open air, and are called the inorganic constituents, and form 3 or 4 parts in the 100 of the vegetables before being burnt. It is this and the next division that most require the consideration of the agriculturist. III., Particles injurious to vegetation, and which are mixed intimately with the base. They are—1st. Protoxide of iron which consists in the blue and yellow clay, which combines with phosphoric acid and forms "rust." 2nd. Too much magnesia is a caustic, which sometimes happens when the magnesian limestone is applied. The magnesia not attracting the carbonic acid, and becoming neutral as soon as lime. 3rd. Decomposing organic matter, which both attracts the oxygen from the atmospheric air in the ground, and charges the ground with noxious gases. Such is nearly the constitution of the soil. The earthy or inorganic medium of vegetation, and which but supplies some three or four parts in the 100 of the vegetables produced from it,—the rest coming from aerial medium, the atmosphere. Ammonia is not considered as a constituent of the soil, for it is never found there except in the smallest quantity, and it raises into the air during the day and falls with the dew during the night. All culture and improvement of the soil may be considered in relation to the above three divisions, and it is with consideration to the kind of base of the soil, that we are to direct attention as to the leveling draining, and to the other mechanical operations or removal of quicks, collsfoot, and other weeds, sowing the seed, and for liberating the fertilizing particles of the soil which are by nature bound up with the base, and though they form but three or four parts in one hundred of the soil, when we consider the quantity of soil contained on an acre of ground from 6 to 9 inches deep, and when we consider the small quantity removed by each

crop, sometimes 2, sometimes 1 or less per 100 of the green vegetable. It is no wonder that they are not exhausted; besides by nature, they are only liberated at a certain unknown rate per annum by the dis-integrating causes, frost, heat, and moisture; and this rate is found too small to support a crop of vegetables every year, so that it is found needful to re-apply the inorganic constituents in the form of manure. Means are also instituted for increasing the disintegration of the base, as burning of the soil, which effects a chemical decomposition, in which potassa is liberated, and if a soil has been allowed to disintegrate for several years in succession, then it will support a crop every year until these are exhausted, provided that no particles injurious to vegetation are contained in the soil. You may wonder how it is come to the conclusion that these compounds are the fertilizing ingredient in the soil? It is done so because, 1st, They are invariably found to constitute the ashes of plants, and as every plant has its own kind of ashes, it grows in proportion to the quantity of its ashes found in the soil, as inorganic constituents in a disintegrated state. 2d, The analysis of soils marked fertile, always contain more per hundred parts of the substances termed fertile ingredients, than the analysis of those marked sterile or barren soils. 3d, The addition of substances to the soil similar to what are termed in the second division, fertile, are always found to increase vegetation, provided that the injurious particles in the third division are removed. 4th, The soils which support a grain crop for twenty years together, is found to contain these fertile ingredients in large proportion. 5th, The unfruitful granite soils, containing few fertilizing particles, are rendered fruitful by being mixed with powdered traprocks, which contain them in abundance; and "in St Michael's, one of the Azores, the natives found the volcanic matter, and spread it on ground, where it speedily becomes a rich soil, capable of bearing luxuriant crops.

DIRECTIONS FOR USING GUANO.—1. It should never be employed in contact with seeds, as it kills them immediately they begin to vegetate. 2. It should be mixed as equally as possible with about four times its bulk of finely pulverized earth, burnt clay, turf, or pot ashes, after they have become cold. If sand is used, about twice its bulk will be sufficient. 3. The quantity per acre may vary from two to four cwt. according to the nature and quality of the land. Recent experiments have shown that a quantity which proved beneficial on poor soil, became deleterious upon land previously rich and well manured. 4. The best time for applying it is shortly after vegetation has commenced and immediately before rain or during damp, warm weather. 5. The best mode of application is, to divide the quantity per acre into two or three equal portions, and sow them broadcast at intervals of about ten days or a fortnight. 6. For small allotments it may be more convenient to use it in a liquid state, mix four pounds of Guano with 12 gallons of water, and let it stand for twenty four hours before being used. The same guano will do for mixing again with the same quantity after the first is drawn off.

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

THE PLOUGHMAN.

BY MOSES FOSTER, JR.

The twilight grey or early morn
Appears in eastern sky,
And ushers in the new-born day,
In bright imagery.

Old chanticleer his shrill-toned notes,
Is pealing forth in praise;
And from each tree the songsters sing
Their most melodious lays.

The ploughman rises from his couch,
Refreshed by slumber's balm,
And hastens to his daily toil,
With renovated arm.

A fearless heart and spirit brave
Attend him in the field,
Where he with strong and steady hand
The honored plough doth wield.

He strives not as the soldier strives
For victory by the sword,
But that his house and granary
With plenty may be stored.

His house the poor and needy ones
A blest asylum find,
Peace, comfort, health and charity,
Are there in concord joined.

No king beneath his palace dome
Enjoys an happier lot,
Than to the ploughman is bequeathed,
Within his lowly cot.

A rich reward has meted him,
For long and wearied toil;
To crown his labours, pleasantness
Springs from the fruitful soil.

The seed time and the harvest days
Bring tidings of delight,
To make the ploughman glad of heart,
Through winter's gloomy night.

The ploughman has a promise sure,
And never looks in vain,
As looks the merchant for the prize,
He trusteth on the main.

The vessel of the ploughman sails
At dawning of the spring.
And autumn's winds a rich increase
Have never failed to bring.

He builds no castles in the air,
To vanish like a dream,
He risks no cargo on the wave,
Of fortune's giddy stream.

With honest cheer he earns his bread,
By toil and sweat of brow,
Pays homage due to God alone,
And honor to the Plough.

COW AND SHEEP PASTURES.—Cows and sheep should never be permitted to run in the same pasture, as the latter are astir early in the morning, they generally get their appetites appeased before the cows and other animals that share the pasture with them, are turned in, and usually destroy much more feed than is required to support them, as most animals refuse to eat where a sheep has lain or even trod.

ARABELLA SHILDRICK'S RECEIPT FOR MAKING CREAM CHEESE.—Take one quart of very rich cream, a little soured, put it in a linen cloth and tie it as close to the cream as you can. Then hang it up to drain for two days—take it down, and carefully turn it into a clean cloth, and hang it up for two days more—then take it down, and, having put a piece of linen on a deep soup plate, turn your cheese upon it; cover it over with your linen, keep turning it every day on a clean plate, and clean cloth until it is ripe, which will be in about ten days or a fortnight, or may be longer, as it depends on the heat of the weather. Sprinkle a little salt on the outside when you turn them. If it is wanted to ripen quick, keep it covered with mint or nettle leaves. The size made from a quart of cream is most convenient, but if wished larger, they can be made so.

SOAP—A Hint in Housewifery.—In summer and autumn your soap grease is apt to accumulate beyond your immediate wants; if put away, it is apt to be devoured by maggots, and if made into soap, you may not have pine or other appropriate vessels enough to hold it. Having suffered loss from being placed in such circumstances; we were much gratified with a piece of intelligence accidentally received, which relieved us from the disagreeable dilemma. By boiling your soft soap with salt, about a quart of the latter to three gallons of the former, you can separate lye and water enough to make the soap hard. After boiling half an hour, turn it out into a tub to cool. Cut the cake which swims on the top into pieces, and having scraped off froth and other impurities, melt again, (without the lye and water underneath, of course,) and pour into a box to cool. You may then cut it up into bars of proper dimensions for drying. By adding a portion of rosin, well pulverized, at the last boiling, you will have yellow soap like that made for market.

TO DESTROY COCKROACHES, ANTS, AND OTHER HOUSEHOLD VERMIN.—Hellebore rubbed over with molasses and put round the places that cockroaches frequent, is a very effectual poison for them. Arsenic, spread on bread and butter, and placed round rat or mouse holes, will soon put a stop to their ravages. Quicksilver and the white of an egg, beat together, and laid with a feather round the crevices of the beadsteads and the sackings, is very effectual in destroying bugs in them. To kill flies when so numerous as to be troublesome, keep cobalt, wet with spirits, in a large shallow plate. The spirits will attract the flies, and cobalt will kill them very soon. Black pepper is said to be good to destroy them—it should be mixed so as to be very strong, with a little cream and sugar. Great care is necessary in using the above poisons where there are any children, as they are apt to eat any thing that comes in their way, and these poisons will prove as fatal to them as to vermin, (excepting the pepper.) The flour of sulphur is said to be good to drive ants away, if sprinkled round the places that they frequent. Sage is also good. Weak brine will kill worms in gravel walks, if kept moist with it a week in the spring, and three or four days in the fall.

Lime spots on woollen clothes may be completely removed by strong vinegar. The vinegar effectually neutralises the lime, but does not generally affect the color of the cloth. Dark cloth, the color of which has been completely destroyed in spots six inches square, has thus had its original color completely restored.

TO PREVENT THE BLEEDING OF VINES.—If a piece of moistened bladder be folded over the end of the vine which is cut, and then bound tightly around with wrapping thread, it will effectually prevent bleeding.

POTATO MOULDING.—A few years since, I stated the results of experiments I had then for several years made, in order to ascertain the utility or otherwise of the system so universally practiced of moulding potatoes; and if I was then partly convinced of the inutility, if not injury, of moulding, that conviction is now fully confirmed, after ten years experience on a soil of mediocrity, neither wet nor dry, rich nor poor. I then stated to this effect:—"I am at a loss to know, why ridge up the rows like a roof of a building, the leaves acting as tiles, assisting to throw the genial summer showers off into the furrows, where it cannot benefit the plants, being below the spongioses, or roots?" Piling up the earth thus, causing the production of other roots, and throwing those already formed below out of office, and thereby unnecessarily exhausting the plants, much time is thus lost, and nature plainly indicates the error of very deep planting or moulding, which, together with hoeing, is generally left so long that many of the tender succulent roots are broken, to the serious injury of the crop. Thus, in the culture of this most essential root, the result of my experience induces me to conclude the moulding a loss of time, and a decided injury to the crop, which, to the poor man, for whose benefit principally I write, certainly is an object. I leave the land level, allowing the roots to extend on all sides within the influence of sun and air. I plant the tubers whole, a little deeper than is generally done, forking the soil for a time (the spade being improper for that purpose) and the weeds, of course, are kept down.—*Wm. Godsall in the Hereford Times.*

MANGEL WURTZEL.—This is a species of the beet root, and may be cultivated as a field crop to a limited extent, with much advantage. Horned cattle are very partial to this root. The culture is so nearly similar to that of turnips, that very little further detail than what should be given for the latter is necessary. The ground, as for turnips, should be drilled, and it should be ploughed very deep, and heavily manured, with a rich vegetable compost. The most usual, and perhaps the best method of sowing the seed, is to put it in with a dibble, upon ridges twenty-four inches apart, each seed being deposited one and a half inch in depth, and twelve inches distance in the drill.

The advantages which this crop possesses over the turnip, are these:—It is less liable to receive injury from the fly or grub; it will produce more weight of tubers from a given piece of ground; it is a better spring food for stock, and will produce a considerably greater amount of flesh than swedes, from a given weight of tubers.

Although neither mangel wurtzel nor turnips can be so profitably grown in this country to the same extent that they are grown in Britain; still every farmer might profitably cultivate far more than are grown at present.

ENGLISH AGRICULTURE.—England presents at this time a more brilliant example than any age or country has before witnessed of the application, I will not say of science, for that would not comprehend the idea which I wish to express, but the application of mind to agriculture. The practice of agriculture, and the philosophy of agriculture, are matters of universal interest. Men of all grades and conditions are labouring in this great cause, and are asking for the how, and the why, and the wherefore. The brightest intellects are directing their talents to agricultural inquiries; and the humblest in their humble, but not inefficient way, are

seconding their efforts. So many minds concentrating their rays upon the same point, they must be sure to illuminate with an extraordinary brilliancy. Agriculture is now getting to be recognized as the commanding interest of the state; so it must ever be as lying at the foundation of all others. Few persons are apprised of their obligations to agriculture; and it is difficult to estimate the extent of these obligations. Every man's daily bread, his meat, his clothing, his shelter, his luxuries, all come from the earth. The foundation, or as the French would say, the *materiel* of all commerce and manufactures, is agriculture; and its moral influences are innumerable and most powerful.—*Colman's Agricultural Tour.*

A CATTLE SHOW AND FAIR

IS to be held at M'Lean's in Maugerville, on Tuesday, the 8th day of October next, at 10 o'clock in the forenoon, when the following *Premiums* are offered for the following *Stock*, viz:—

For the best BULL, of any age,	£1 0 0
For the second do. do.	0 15 0
For the third do. do.	0 10 0
For the best COW,	0 15 0
For the second do. do.	0 12 6
For the third do. do.	0 10 0
For the best RAM,	0 15 0
For the second do. do.	0 10 0
For the best BOAR,	0 15 0
For the second do. do.	0 10 0
And for Domestic Manufacture, viz:—	
10 Yards best Homespun Fulled Cloth,	£0 12 6
Second best do. do. do.	0 10 0
10 Yards best Homespun plain Woollen Cloth,	
either coloured, figured, or white,	0 10 0
Second do. do. do. do.	0 7 6
12 Pairs of best Mittens,	0 5 0
12 do. do. Socks,	0 5 0
6 Best hand Hay Rakes,	0 6 0
6 Best Hay Forks, with handles,	0 7 6
6 Best Manure Forks,	0 10 0

And for the best sample of Produce, viz:—

Best quantity and quality of Indian Corn, from a quarter of an Acre,	£1 0 0
Second, do. do. do.	0 15 0
Third do. do. do.	0 10 0
Best of Potatoes, from half an Acre,	0 15 0
second do. do.	0 10 0
third do. do.	0 5 0
Best quantity and quality of Turnips, from a quarter of an Acre,	0 15 0
second do. do. do.	0 10 0
third do. do. do.	0 5 0
20 lb. Clover seed,	1 0 0
second do.	0 10 0
2 bushels of the best Timothy seed,	1 0 0
second do.	0 15 0
third do.	0 10 0

No animal or article exhibited to be entitled to a Premium unless considered worthy of such.

All animals and articles exhibited for a Premium are to be owned by the members of the "Sunbury Agricultural Society," and to be marked by a number attached them previous to the exhibition; the number and name of the owner to be kept by the Secretary.

Persons competing for produce and felled cloth, to acquaint the Secretary on the day of the cattle show, and be prepared to satisfy the Judges on the last Saturday in December.

CALVIN L. HATHEWAY.

Sec'y & Treasurer.

Sunbury, May 24, 1814.

BOOTS AND SHOES

FOR COUNTRY WEAR.

THE Subscriber has just received a large lot of Men's, Women's, Girl's, Boy's, and Children's strong BOOTS and SHOES, suitable for Country wear, for sale at very low prices for Cash, at

FOSTER'S Cheap Shoe Store,
Queen Street,

Fredericton, June 11, 1811.

Saint John Agricultural Society.

NOTICE is hereby given, that this society offer for competition the following Premiums, which will be awarded at a Fair, to be held at the city of Saint John, on day in September or October next, to be hereafter named:—

For the best entire Horse, between three and six years of age, fit for farming purposes, owned in the County, and to remain therein for the next season, £5 0
 For the best three year old Bull, 3 0
 " " Two year old, do. 2 0
 " " Two year old Heifer, 1 0
 " " Calf, 0 10
 " " Ram, 1 0
 " " Ram Lamb, 0 10
 " " Ewe Lamb, 0 10
 " " Boar, 0 15
 " " Sow, 0 15
 " " Spring Pig. 0 10

All the above animals, (except the horse,) must have been bred and owned in the County.

For the best pair of Geese, alive, £0 5
 For the best pair of Ducks, do. 0 3
 For the best pair of Turkeys, do. 0 5
 For the best pair of fowls, cock & hen, 0 3
 For the best cheese, made in the county, 0 10
 For the best tub of butter made in the county, not less than 40lb. weight, 1 0
 Second best ditto, 0 10
 For the best 10lbs. of roll butter, made in the county, 0 5

It is to be understood, that the Society reserve the right of withholding the Premium, in cases where there is no opposition and the animals or articles exhibited are not of superior character.

By order of the Committee,
 M. H. PERLEY, Secretary.

Saint John, June 1, 1844.

LEMONT'S FANNING MILLS AND RAKES.

THE subscriber has constantly on hand, and for sale at his Shop, corner of King and Regent Streets, a number of Fanning Machines of different patterns, which he will sell cheap for CASH or COUNTRY PRODUCE. Also, HAND RAKES of a superior description.

MARTIN LEMONT.

Fredericton, 20th May, 1844.

PLOUGHS! PLOUGHS!!

A Good assortment of PLOUGHS, with or without the woodwork. Also—Plough Points of all sizes: one wooded PLOUGH with a wheel, all of which are to be sold at the lowest prices for cash by

JOSEPH C. HATHEWAY.

Fredericton, May 15, 1844.

NEW CHEAP SHOE STORE.

THE Subscriber most respectfully informs his friends and the public generally that he has taken the Shop next above Mr. Harvey Garcelon's Store, where he intends carrying on the business of Boot, Shoe Making and Leather Cutting, and flatters himself that by a strict attention to business, he will receive a share of the public patronage.

BOOTS and SHOES of the best description constantly on hand, at the very lowest prices possible, and any deficiency in the workmanship will be made good free of expense. Gentlemen's Dress BOOTS, Walking SHOES and PUMPS, made to order at the shortest notice.

Sole Leather, Upper Leather, and Calf skin, of the very best quality, either wholesale or cut in any quantity, and will be sold as low as can be bought in town. Green Hides, do. Calf skins will be taken in exchange.

The Subscriber can assure those who favour him with their custom, that for neatness and durability, his work will not be surpassed by any in the Province.

GEORGE COUTHARD.

Fredericton, May 29, 1844.

TO LET.

THE HOUSE in Carleton Street, next to the Methodist Chapel, the residence of the late Dr. Emerson. Apply to W. J. BEDELL.

Fredericton, April 24, 1844.

CHEAP STORE,

No 4, NORTHSIDE OF KING STREET.

THE Subscriber offers for sale at the above Store Brown and Loaf Sugar, Mess Pork, Teas, (a superior article,) Coffee, Chocolate, Mott's prepared Cocoa, and Cocoa Paste, Cheese, Tobacco from 4d. to 2s. 6d. per pound, fine Salt, Vinegar, Mustard, Ginger, Pepper, Spice, Cinnamon, Cloves, Nutmegs, Starch, Soap, Indigo, Dye Woods, and Colourings of different kinds, with a variety of other articles, at low prices for Cash.

JOHN T. SMITH.

J. T. S.—Will keep a constant supply of Sims's Domestic Manufactured Brooms, and McLardy's Soda, Butter, and Water Biscuit, at wholesale and retail, as low as can be purchased in the City.

Saint John, June 7, 1844.

BLACKSMITHING.

THE above Business is carried on by the Subscribers at their Shop in Queen Street, next door to H. Garcelon's and adjoining the building on the corner of Queen and Westmorland Streets, owned by James Tibbets, Esq., where they are prepared to furnish all kinds of work in the above line. Axes and all kinds of Edge Tools furnished upon reasonable terms, and warranted to be Good.

H. A. ESTABROOKS.
 THEO. R. ESTEY.

Fredericton, June 19, 1844.

WOOL CARDING.

THE Subscriber has had his CARDING MACHINE put in first rate order. He will commence CARDING during the ensuing week, and will then be prepared, promptly and satisfactorily, to execute, at his STEAM MILL, Fredericton, any work, in the above line, which may be entrusted to him.

THOMAS PICKARD.

Fredericton, May 14, 1844.

FOR SALE.

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.

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.

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. GABRIEL, 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.

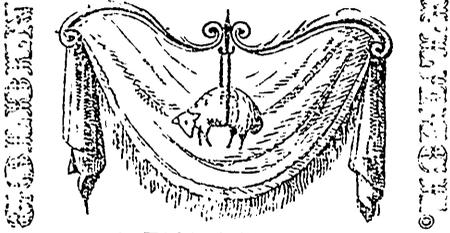
Carrying done at the lowest prices.

W. F. BARKER.

Fredericton, May 31st, 1844.

FIRE! FIRE!!

F. W. HATHEWAY, Agent for the PROTECTION INSURANCE COMPANY, continues to Insure Property of all descriptions against Loss or Damage by Fire, at very low rates, so that parties for a very small sum may keep their property safe, which, in case of any accident, would prove of great importance to them and the amount of Premium would never be missed should they be fortunate enough to escape the devouring element. Personal attendance to survey free of expense to applicants within the limits of the Town. Applicants from the Country must describe the Property wished to be Insured, and must always be bound by the description they give. Fredericton, 17th November, 1843.



NEW GOODS.

The Subscribers have received by the *Portland*, from London, and *Palmerston*, from Liverpool, part of their Spring assortment: consisting of—

B LACK and coloured Gros de Naps and Turc Satins Watered Orientals, Saracnets, Persians and Bonnet Stuffs.

170 pieces Plain, Striped and Brocaded Orleans, Parisians, Paramattas, Lustrés, Syrian and Coburg Cloths.

650 pieces Printed Calicoes, Rich Printed Muslin Dresses,

120 pieces Furnitures, with Linings to match,
40 pieces Damask and watered Moreens, Brocade, and striped Furniture Dimity, Orris and Float Lace, Furniture Gimps and Fringes.

120 pieces Window Muslins, newest styles,
740 pieces RIBBONS,

Artificial Flowers; Parasoles and Umbrellas,
300 dozen Black, White and Coloured Hosiery.

130 dozen Lace Kid, Lyle, Silk and Cotton Gloves,
400 pieces Muslins, in Jaconet, Mull, Book, Checked, Striped, Swiss, Mull and Book, Victoria Lawn and Tappet,

150 pieces Netts, in Plain and Fancy Brussels, Wire, French Square, soft finish, and Black and Coloured.

80 dozen Indiana and Fancy Silk and Satin Handkerchiefs.

130 pieces Silk Pocket Handkerchiefs; 60 pieces Neck Handkerchiefs and Scarfs, newest styles.

30 pieces Broad Cloths,
120 pieces Buckskins, Doeskins, Kerseymeres, Tweeds, Gabbroons Lastings, Shepherds' Plaid, &c.

350 pieces Rolled Jaconets; 50 pieces Selcias and Casbans.

Marseilles Quilts, Counterpanes and Toilet Covers, An assortment of Shawls, newest styles.

Tuscane, Dunstable, Devon, Rutland and Fancy Bonnets, Boys' and Mens's Straw Hats,

480 Beaver and Silk Hats, Boys' and Gents' Cloth and Fancy Caps.

230 pieces Cotton Handkerchiefs, and Fancy Cravats,
20 pieces Chintz Druggets, English, Welsh and Saxony Flannels,

8-4 Linen and Cotton Sheetings, Cotton, Swandowne, White and Brown Table Cloths, Oil Cloth do.

15 pieces Bed Tick, Brown Hollands, Damask, Table Linens,

Black, White and Coloured Crape, Rouches, Borders, Ladies' and Infants' Caps,

45 dozen White and Coloured Stays,
Linen, Lawns, French Cambrics, Linen Handkerchiefs,

2,340 dozen Silk Fringes and Gimps.

Drawing Nets and Muslins, Linen and Imperial Tapes, best drill'd eyed Needles, assorted papers.

A large assortment of Lace, Muslin and Dimity Capes, Collars, Cardinals, Habit Shirts and Berthes, newest styles,

460 pieces Grey and White Cottons,
55 pieces Regatta Shirts,

Rich Silk and Satin Stocks, Silk and Cotton Velvets, Velvetains,

Rich Satin Vestings, Royal Marseilles, &c.

Fancy Plaids and Sateens, for Boys' dresses,
Thread Laces, Edgings and Insertions.

Lyle, Brussels, Gimp, Point, Point D'Alincon and Plait Laces and Insertions,

Lace Scarfs, Veils and Demi Veils,
Writing Desks, Travelling do. Work Boxes, Dressing Cases, Cash Boxes, Dressing Combs, Ivory and Shell do.

Hair and Tooth Brushes,
Jewellery, (Warranted.)

Travelling Bags, (Patent Locks.)
Linen and Cotton Drills,

70 dozen Gents' Cotton and Merino Socks,
2 Cases Cutlery, consisting of Razors, Scissors, Pen-knives, Jackknives, Knives and Forks, &c. &c.

Tailors' Trimmings, Small Wares, &c. &c.

☐ CASH ONLY. ☐

The Subscribers expect the remainder of their Stock by the *Belize* and *Sarah Maria*, from Liverpool, and *Cammore*, from Glasgow.

DOHERTY & McTAVISH,

Sign of the Golden Fleece. Prince William Street, St. John, and Queen Street, Fredericton, N. B.

May 29, 1844.

NOTICE.

THE Subscriber has on hand Fresh Flour, of the very best quality; Fresh Indian Meal and Oat Meal; Indian Corn in Bags and by the Bushel; Wheat Bran and Horse Feed.

GROCERIES.

Loaf, Crushed and Brown Sugars; Molasses; Tea; Coffee; Pepper; Allspice; Cinnamon; Cloves, &c. &c.

DRY GOODS.

Cloths; Cottons; Prints; Mole Skins; Merinoes Orleans Cloth; Linen; Lining Cotton; Handkerchiefs; Muslins; Thread; Cotton Warps, &c. These the Subscriber offers for Cash at the lowest prices.

THOMAS PICKARD.

Fredericton, July 2, 1844.

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 accommodate 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 Establishment will be found as moderate as any other in the country for the like accommodation.

WILLIAM SEGEE.

Fredericton, May 22, 1844.

S. A. AKERLEY,

Auctioneer and Commission Merchant, Queen Street, Fredericton:

Has just received on Consignment the following articles:

TEEA; 10 cwt. TOBACCO; 20 cwt. SOAP; 20 cwt. Cut NAILS; Mould CANDLES; 5 cwt. English CHEESE; 4 cwt. COFFEE; 3 cwt. SALERATUS; Soda BISCUIT; 50 Boxes Glass, from 7 x 9 to 11 x 18; 8 cwt. Smoked HAMS; 20 M. CIGARS; and constantly on hand, Household FURNITURE.

The above will be sold at private sale at Auction prices. June 25, 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 apartments contiguous to the landing of the steamers and public offices.

☐ Good Stabling furnished for Horses.

Fredericton, May, 1, 1844.

FOR SALE—An Excellent Carriage. Apply to G. F. H. MINCHIN. Fredericton, May 22, 1844.