

AGRICULTURAL.

TURNIP CULTURE.

THE system which it is our intention to describe is in full operation, and has been in practice in various parts of the kingdom for many years, so that it is no new thing no mere fancy.

The science of Agriculture is founded on those fixed principles which regulate the operations of Nature, and whether the farmer knows them or not—whether he endeavours to carry out these principles or not—Nature will constantly proceed in her own way acting upon them; and any striving against her, whether in ignorance or not, must result in loss. It is then of the greatest importance for us to know the principles which regulate vegetation, and, before proceeding to describe the mode of cultivating the Turnip crop, it may be well first to enquire into the nature and habits of the plant itself. We shall thus be likely to ascertain the kind of cultivation and the condition of the soil which it requires to make it grow in perfection.

The leaves of the Turnip plant are large, with thick fleshy veins, rough and prickly, having the power of evaporating or imbibing a large quantity of moisture; it is said that the plant, by virtue of these large leaves, receives a great part of its nourishment from the atmosphere. The roots present a fine silk-like appearance and extend to a great distance, till they meet with the obstruction either of other roots or uncultivated land. When the soil is well cultivated, they extend to the distance of two or three feet from the centre of the plant, ramifying in every direction, crossing and re-crossing each other, forming a complete net-work over the whole of the cultivated soil. This may be observed in the soil between the rows, when it has been repeatedly horse-hoed or ploughed and harrowed: but when the soil has not been well pulverised between the rows, the fine filaments of the roots cannot push themselves in search of nourishment.

The bulb is that part of the plant for which it is cultivated; it generally takes a globular form, sometimes more of a cylindrical shape, conical at the root, and globular or even flat at the top. The bulb when it is ripe and fit for use, has a fleshy substance full of juice, generally of a sweetish though sometimes of an acid taste. When fresh the Turnip bulb contains about 89 per cent. of water.

The roots of all plants that are cultivated by the farmer push over a large horizontal extent in search of nourishment; is limited generally by the distance at which the plants are placed on the ground, i. e. provided Nature do not fill up the space between them by natural plants (weeds). When this distance is great, the roots are most extensive, and the plants are proportionably luxuriant; but when the plants are thick on the ground, their roots extend and intermingle with the roots of those that are nearest, and are limited in their growth and bulk. Hence a necessity of having only the plant we cultivate growing in the field, and of extirpating weeds of every description, during the whole process of the growth of any crop.

The spongioles which are at the determination of the small fibrous roots, take in nourishment from the soil: and as the fibrous roots spread over the whole of the cultivated land, it is evident that if we give to this active soil a regular and equal supply of manure, and at the same time make and keep it in as perfect a state of cultivation, and the greatest possible depth which circumstances will allow, we may expect the greatest return which the active soil, under its present condition, can produce.

As the size and quality of every vegetable greatly depends on the size and number or the surface of its leaves, the advantages of attending to the growth of the leaves of bulbous-rooted plants must be evident. By increasing the growth of the leaves of the Turnip plant, we furnish it with the means of increasing the bulk of its bulb; for if the leaves be to the vegetable what the lungs and stomach are to the animal—if they are large, the roots will naturally be large also. When, therefore, we have our Turnips so close together, that the leaves have not room to grow, we prevent ourselves of getting a good crop of roots.—John Morton, Whitfield, Thornbury.

ON THE TURNIP-FLY.

Some years ago I farmed some uncultivated lands, and having a somewhat speculative neighbour having portions in the same open field, we occasionally tried experiments conjointly, the intermixture of these common lands being in some degree favourable for such practices. After reading most of the "infallible remedies" of the day for securing the Turnip-crop from the ravages of the fly, we each selected one or two experiments for one season's trial. My friend's choice was a mixture of some other seeds of earlier vegetation than Turnip-seed, that the fly might have its fill and pass into its change before the Turnip came up; a portion of Radish-seed was accordingly mixed with the Turnip-seed, which certainly came up first, but contrary to expectation, the enemy left the Radishes untouched, but finished off every plant of the Turnip-crop, according to the regular practice. This left plenty of room for the Radishes to grow, and they produced a very abundant supply for the whole parish. My experiment was a more expensive and laborious exploit; we had been reading Sir John Sinclair's method, which was to burn the land previous to sowing the seed, thereby destroying the grub or chrysalis containing the Turnip beetle in its embryo state. There is but one objection to this system, which most assuredly is a certain remedy, but, from the consumption of the materials, it is in a manner impracticable. The author recommends collecting together everything combustible about the farm—the cuttings of hedges, the clearings of ditches, &c., together with what straw can be spared (?); these are to be strewn over the land, and burnt on the ground, a few hours or so before the seed is put into it. The materials we got for this purpose by raking off the old Wheat-stubble from the young clover plant, such being the practice of cropping. Two ridges (called acres) were selected for this roasting—the process much resembles our practice of burning a fat pig for bacon. That season was remarkable for the destructiveness of the fly, but the two ridges were untouched, they flourished amid the desolation of barrenness around them; and it was worthy of notice, as confirmatory of the effect upon the crop, that the half of the next ridge of land to windward was partially secured by the effect of the conflagration.

It has occurred to me, that, as no farmer ought to consume

the quantity of straw necessary for this process, whether a less expensive means could not be adopted to bring about the like result; a heated roller, if such an implement could be constructed—even a plain sheet of iron, if heated sufficiently to destroy insect life; the cost of coals would be a trifle, in comparison with the good to be effected.

Looking to the natural history of the insect, it appears to remain in the ground a considerable time, undergoing the different changes of egg, maggot, and chrysalis; it is in this latter stage that the plough and harrow bring certain quantities to the surface, or sufficiently near the surface to be within the influence of the sun's rays, and the hatching of the chrysalis is brought about simultaneously with the appearance of the Turnip-plant. This accounts for the preservation of the plant by early vegetation, for it thus gets sufficiently advanced to be unpalatable to the insect by the time the fly appears.—S. C.

POTATO MOUNDING.—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 mounding Potatoes; and if I was then partly convinced of the inutility, if not injury, of mounding, 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 the 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 spongioles, 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 mounding, 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 mounding 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. Goddall in the Hereford Times

MANURE TANKS.—We understand that the Earl Fitzwilliam has intimated to his tenantry, that he will pay half the expense of providing tanks for containing liquid manure, on the several farms held under his Lordship. It would be well if other landlords would follow the noble lord's example.—Doncaster Gazette.

SPRING IMPORTATIONS.—Ex Lady Caroline, from London.—100 chests Congo TEA (a superior article,) 3 chests Madras Indigo, 2 casks Putty, 4 hds. Loaf SUGAR, 2 hds. Poland Starch, 6 bags Pepper, 2 casks Epsom Salts, 1 bale Canvas, 1 case cotton Reels, 2 cases Linen Thread, Nos. 10 to 25, 4 cases Buttons, (assorted,) 1 case mixed Pins, 2 bales Molekine, 1 case Jaconets and Hollands, 1 do. Orleans CLOTHS, 2 do. Bracons, Velvets and Silks, 3 trunks Boots and Shoes, 1 case Chamois Skins, 1 case Irish Linens, 1 do. Shoe Hemp, 2 do. Paper, 2 boxes Windsor Soap, &c. &c.
St. John, May 30. L. H. DEVEBER & SON.

SLOP CLOTHING &c.—The subscriber has received per Portland, a large assortment of Slop Clothing, consisting of every thing useful and fashionable in the line, which will be sold (only) for Cash or approved paper, at the lowest possible advance. Gent's London-made BOOTS & SHOES very cheap.
St. John, May 30. WM. HOWARD.

DOMESTIC MANUFACTURE.—PAIS! PAIS! & BUCKETS!—The subscriber having been appointed sole Provincial Agent by the Proprietor of the Pais and Bucket Factory, now in operation at Union Point, where the article is manufactured by machinery of the most recent and improved construction, and by experienced workmen, he is prepared to furnish PAIS and BUCKETS equal to any imported into the Province, for perfection of make and soundness of material. City and Country Dealers supplied on the most liberal terms at the Warehouse, No. 20, South Market Wharf.
All orders from the Country punctually attended to.
St. John, May 30, 1844. HENRY W. PITTS, Agent.

THE SUBSCRIBER has just received his spring supply of Choice LIQUORS and GROCERIES, consisting of—Brandy, Martell's Holland, Malt Whiskey, Jamaica Spirits, London Porter, Halloway's and Younger's Ale, in bottles, Port, Madeira, and Sherry Wines, in wood and bottles; Tea, Sugar, Molasses, Tobacco, Cigars, Tallow and Sperm Candles, Soap, Pickles and Sauces, of various kinds, Spices, do ditto, Bloom Raisins, Currants, Figs, Almonds, Pecan, Brazil, and Walnuts, Macaroni, Vermicelli, Water, Butter, Lemon, Sugar and Pickle Crackers, Pilot Bread, Hams, Cheese, Butter, Digby Herrings, &c., with sundry other articles in the above line, all of which will be sold at the lowest market prices for cash.

GEORGE TROUGHTON.
On consignment, a few Barrels of Superfine FLOUR, cheap.
Fredericton, May 30, 1844. G. T.

SPRING GOODS.—Landing from London, ex Lady Caroline: 50 chests fine Congo TEA, 1 carolee Currants 30 drums Turkey Figs, 10 do. Sultana Raisins, 20 bags black Pepper, 3 brls. root Ginger, 2 chests Italian Liquorice, 2 chests Cassia, 1 bag soft-shell ALMONDS, 4 boxes Jordan Almonds, 1 hhd. and 6 boxes Poland Starch, 20 kegs Mustard, F. S. DSE., 2 cases bottled do., 12 dozen cold-drawn Castor Oil, in bottles, 2 hds. White Wine VINEGAR, 1 cask best button Blue, 4 doz. Day & Martin's Blacking, 20 lbs. Barclay & Perkins' Brown Stout, Isinglass, Senna, Sulphur, Saltpetre, Sago, &c., 1 cask finest Sweet Oil, for edge tools or machinery—cheap—4 cases richest assortment of Pickles and Sauces, Preserved GINGER—manufactured by Cross and Blackwell, Purveyors to her Majesty.

From Glasgow, ex 'Lady Sale'—50 boxes hard brown SOAP, 20 brls. Pot and Pearl Barley and split Peas, 200 lbs. Shoe Thread, 50 lbs. green and yellow Closing ditto, Martell's BRANDY, Holland, Geneva, and Cherry Brandy, 400 stone Jugs, 100 lbs. Lamp and Candle Wick.
Crushed and Loaf SUGARS, with other Goods, daily expected per Palmerston, from Liverpool.
Dock Street, St. John, May 30. THOMAS S. MAGEE.
Sign of the Golden Elephant.

GORDON'S HARDWARE ESTABLISHMENT is removed to the Store adjoining the London House, Market Square.
Daily expected—An excellent assortment of Hardware, Ironmongery, Cutlery, &c. &c.—Mill Saws and Files of superior make, which will be sold at the lowest rates for Cash.
St. John, May 30.

THE Subscriber has now for sale 50 boxes 8x10 Window Glass; 4 tierces Pork; 50 canvassed Hams; 3 bags Dried Apples; 10 coils small Manila ROPE; 28 reams large Wrapping Paper; 5 cases Pine Apple CHEESE; 6,000 feet 10x14 Crown Window GLASS; 20 boxes Company's Congo TEA; 20 bags Cuba Coffee, and 5 Smoked HAMS.
St. John, May 30th, 1844. THOMAS HANFORD.

Removal.—U. J. CLARK, BOTANIC PHYSICIAN has REMOVED from Germain to Leinster Street, near the Catholic Chapel, where he will keep constantly on hand a supply of such VEGETABLE MEDICINES as have proved effectual in the cure of nearly every complaint incident to the human frame, with full directions for their use, purchasers will receive Gratis a small pamphlet containing a list of the various preparations, with several useful hints to the sick and also to those in health.

Certificates in abundance have been received from some of the most respectable inhabitants of New-Brunswick and Nova Scotia, who have been cured of various diseases of long standing after all other remedies had failed, some of which may be found in the pamphlet above referred to, others can be seen at the office of the Subscriber. Also respectable individuals residing in this city may be consulted, who can state plain, unvarnished facts, relative to the effects of these medicines, sufficient to satisfy every unprejudiced mind, that they are indeed the most efficacious ever yet offered to the public; and let those narrow contracted individuals who condemn that about which they know nothing, prove, if they can, that those medicines have ever done harm in one single instance.

The great and good Dr. Rush after bewailing the defects and disasters of medical science, consoled himself with the animating prospects of that hope, that all diseases shall yet yield to the power of medicine, for such is my confidence said he, in the benevolence of the Deity, that he has placed on earth remedies for all the maladies of man, and if that period shall arrive, when the heart strings shall no more be torn and lacerated, who would not exult in the joyful anticipation of that coming day, when medical knowledge shall have attained to that apex of perfection that it will be able to remove all the diseases of man, and leave not for life a single outlet, a single door of retreat but old age.

The earth is covered over with vegetables, the simple vocabulary of which, no scholar, no academy, no nation whatever will ever be able perfectly to acquire. No, nor all the human race, in their united wisdom, shall be ever able to find out the limits, the name and nature of her innumerable millions! We therefore, with all humility, in consideration of our profound ignorance, should be willing to glean from every source, which promises an accession to our stock of materials. Amidst all the innumerable branches of knowledge which solicit the attention of the human mind, there can be none of so much importance, (religion only excepted,) as that of the healing art. Therefore let those who have reached a boundary at which they have designed to stop, not envy, nor impede the progress of him who is determined to press forward till his journey shall end in the dark valley of the shadow of death. Prove all things, hold fast that which is good.

The new PRACTICE BOOKS describing Medicinal Plants and containing a list of the compounds and mixtures employed in the New or Thomsonian Practice, by J. H. Robinson, Machias, Me., for sale by St. John, May 15, 1844. U. J. CLARK.

FREDERICTON HOTEL.—The Subscriber begs to intimate to his friends and the public, that he has removed the above establishment to the new, commodious and pleasantly situated premises on the corner of Regent and Brunswick Streets, opposite the Artillery Park, owned by Mr Andrew O'Connor, and built expressly for a Hotel.—In returning sincere thanks for the liberal patronage he has received for the last seven years, the subscriber hopes that the superior accommodation which he can now offer to the travelling public will induce his former friends and others to favour him with a call; and he pledges himself that nothing shall be wanting on his part, to render their stay as agreeable and comfortable as possible. There is attached to the premises—and now nearly finished—most excellent STABLES, for 30 horses. A careful Groom will at all times be in attendance, and a comfortable Coach will be in readiness to convey persons stopping at the Hotel to any place within a few miles of Town. A Coach will likewise be in waiting to convey such passengers as may favour the Hotel with their patronage, to and from the Steamboat, for which no charge will be made.—Gentlemen residing in Town who would prefer having their Horses kept at livery, can be accommodated on very reasonable terms; and the subscriber flatters himself that his long experience in this department of his business, will entitle him to the confidence of those who may place their Horses under his charge.
Fredericton, 9th May, 1844. WM. SEGEE.

GAGETOWN INN.—The Subscriber, thankful for past favours, would respectfully inform the Travelling Community, that he continues keeping a HOUSE OF ENTERTAINMENT at his old stand, Gagetown; where a choice assortment of Liquors are always kept on hand. Boarders, both permanent and transient, will meet with good accommodation, and Travellers will find every attention paid to their comfort, and would do well to call. Good Stabling connected with the establishment, and charges moderate.
Gagetown, July 19, 1843. JAMES GLASS.

CITY BOOT AND SHOE STORE, No. 1, King Street, Basement Story St. John Hotel.—The Subscriber, in returning his sincere thanks to his numerous friends and customers for the kind patronage he has hitherto received, begs to inform them and the Public in general, that he still continues to get up his work of the best materials and nearest workmanship the city can produce.—A large supply of Boots and Shoes constantly on hand.—All orders punctually attended to with neatness and despatch.—A general assortment of Shoe-makers findings constantly on hand.
St. John, March, 25, 1844. N. ADAMS.

MILL SAWS & FILES.—Just received at Gordon's Hardware Store.—2 Cases 5 and 5 1-2 feet best cast steel Gang Saws, 20 to 24 inch; best cast steel CIRCULAR SAWS, made to order on an improved pattern; Frame-Saw Files, from 4 1-2 to 7 inch; Mill-Saw Files, from 7 to 15 inch. Also—On hand, a good assortment of other Files, Rasps, &c.
St. John, May 30, 1844. T. R. GORDON.

THE LOYALIST,

Is published at Fredericton, N. B., every Thursday BY DOAK & HILL,

and will be circulated in St. John on Friday mornings by carrier-boys, FREE OF POSTAGE.

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No communications will be taken out of the Post Office, unless post-paid. Agents will please pre-pay their letters, and charge the same to the proprietors, who will give them credit for the amount.

The debates of the Provincial Legislature will be published in this paper, during each session.

Merchants of St. John will find this an eligible paper to advertise in, it having a circulation of about 300 copies in St. John, besides an extensive circulation in other parts of the Province.—Persons in St. John wishing to advertise in the Loyalist, will please leave their advertisements with the agent, or order them to be marked in the City papers.

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Job Printing executed to order with neatness and despatch.

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