

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

Coloured covers/
Couverture de couleur

Coloured pages/
Pages de couleur

Covers damaged/
Couverture endommagée

Pages damaged/
Pages endommagées

Covers restored and/or laminated/
Couverture restaurée et/ou pelliculée

Pages restored and/or laminated/
Pages restaurées et/ou pelliculées

Cover title missing/
Le titre de couverture manque

Pages discoloured, stained or foxed/
Pages décolorées, tachetées ou piquées

Coloured maps/
Cartes géographiques en couleur

Pages detached/
Pages détachées

Coloured ink (i.e. other than blue or black)/
Encre de couleur (i.e. autre que bleue ou noire)

Showthrough/
Transparence

Coloured plates and/or illustrations/
Planches et/ou illustrations en couleur

Quality of print varies/
Qualité inégale de l'impression

Bound with other material/
Relié avec d'autres documents

Continuous pagination/
Pagination continue

Tight binding may cause shadows or distortion along interior margin/
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure

Includes index(es)/
Comprend un (des) index

Title on header taken from:
Le titre de l'en-tête provient:

Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.

Title page of issue/
Page de titre de la livraison

Caption of issue/
Titre de départ de la livraison

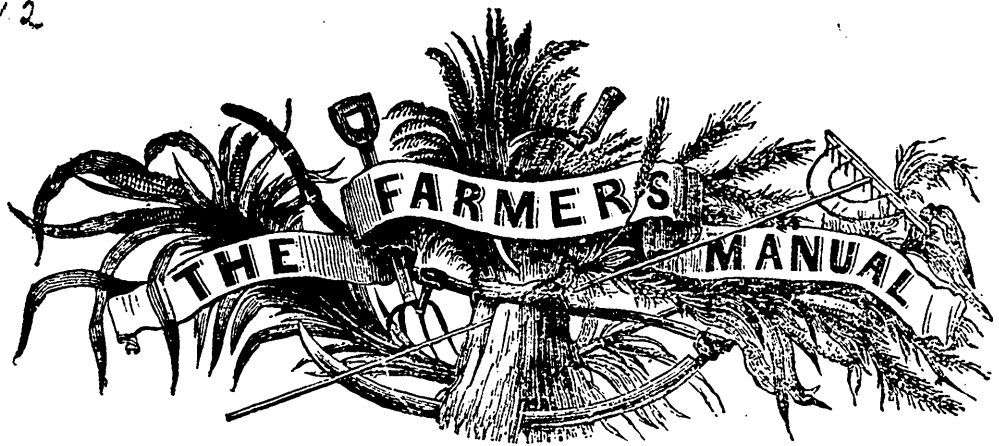
Masthead/
Générique (périodiques) de la livraison

Additional comments:
Commentaires supplémentaires:

Pages 11-12 are missing. There are some creases in the middle of pages.

This item is filmed at the reduction ratio checked below/
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	14X	18X	22X	26X	30X
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12X	16X	20X	24X	28X	32X



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

Vol. II.

FREDERICTON, N. B. MAY, 1845.

No. 1.

THE FARMER'S MANUAL,

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

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

ADVERTISEMENTS will be inserted for Four shillings and Six-pence, if not exceeding 13 lines, and in the same proportion for every line above that number.

☐ Ten per cent. will be allowed to Agents for collecting and forwarding money.

THE FARMER'S MANUAL.

TO THE PUBLIC.

WITH the present number of this paper we commence another volume, which it shall be our study to render as useful for the diffusion of Agricultural information, as our means will permit. We have not the vanity to suppose that our efforts, if unassisted by practical agriculturalist, can produce any thing like the good which ought to result from a publication like the present, and we again invite those who have experience and leisure for observation, to furnish statistical information for the benefit of their less thinking neighbors. It may be considered almost ridiculous to urge on the farmers of New Brunswick, the vast importance of improvements which are daily making in their profession; but the apathy which appears to exist too generally among the Farmers of this Province to the matters which so deeply concern themselves would almost induce the belief that they had already arrived at something like an equality with other parts of the world. We are ready to admit that in some sections of New Brunswick good farmers are to be found, but take the Province as a whole, there can hardly be a doubt that we are far behind our neighbors in Nova Scotia, and certainly far behind the people of the Eastern States of America.

There is no possible reason which we can imagine for this state of things unless the apathy

to which we have already alluded as existing among well-informed farmers; and the absence of original communications in this number, is a proof that this apathy is by far too general. What, we would respectfully ask, has placed some countries so very far in advance of others in the science of Agriculture?—A child can answer the question. The general diffusion of information. But this information, to have the proper effect should be communicated by those who have tested the improvements on their own farms, and can speak from experience of their value. The formation of Agricultural Societies has already done good, and if kept up in a proper spirit, will continue to do good; but we do not hesitate to say that the press can do more for the encouragement of any science than all the societies which can be established. The reason of this is obvious—the information and assistance derived from the establishment of Societies is confined in a great measure to particular localities: that from the Press is general and easy of access. Through the Press the farmers of the whole Province can converse together, assisting each other with their advice, and beyond all, giving the sanction of experience to improvements which are going on in their own country. Why then will not our farmers use the Press—our circulation is by no means a limited one—we are willing to publish—the publication will be of service to the country. Let us not again go to press without some home material—something which has been *tried here*, and found to be an improvement on the usual system. It will then be our fault if it is not soon pretty generally known throughout the Province.

☐ In order to secure the more ready transmission and general circulation of this paper in remote districts, the Postage will in future be paid on each number, as they are mailed at the Post Office here. To cover this expence the postage will be added to the yearly subscription, which will hereafter be five shillings and six-pence for all papers received through the Post Office.

☐ A few copies of last year's Volume of the Manual, can be had at the subscription price, complete with an Index, by applying at this ("Head Quarters,") Office.

WORK FOR THE MONTH.

The work to be done on the farm during this month, is of the greatest importance. Much of the success of the farmer will depend upon the manner in which the operations of this month are carried out. Unless the ground be properly prepared and the seed of a good quality, it is hopeless to expect a profitable crop. If information be more profitable to the husbandman at one season of the year than another, this is obviously the one in which it could be turned to the greatest account. The first thing to be considered is, a judicious system of rotation. Spring wheat may be sown after potatoes, rape, turnips, vetches, and peas. If a preference is to be given to either of these crops, it must be in favour of potatoes. The land for this crop should have been ploughed last autumn and the seed cannot be sown too soon in the spring. The moment the ground is sufficiently dry for the harrows, spring wheat should be sown. To prevent smut, the seed should be pickled in strong brine and dried in lime; by this process the oats and light grains may be separated from the wheat, and the early growth will be considerably promoted. In selecting a variety, choose the one which comes the earliest to perfection, and has the greatest number of good qualities and the fewest bad ones. For yielding and flourishing qualities the Siberian wheat cannot be surpassed; and by sowing alternately upon heavy and light lands, and selecting the finest samples, the quality of this wheat would be greatly improved. Forty bushels per acre after potatoes and rape have been repeatedly harvested, and it will command as high a price in the British market in wheat, as the finest samples of fall wheat. The flour from this wheat is of the finest quality, and if it be ground and packed in the summer months, it may be shipped across the Atlantic in as sound a condition as flour manufactured from winter wheat. If the land intended for this crop be very rich and likely to promote rust, it would be advisable previous to sowing, to plough the ground lightly in ribs about twelve inches asunder—the seed may then be sown and harrowed once. This method diminishes the weight of straw, brings the crop to an early perfection, and lessens the chance of rust and mildew. The drouth last autumn, having materially blighted the prospect of the winter wheat crop in many sections of the province, it would be advisable to sow spring wheat upon much of the land now occupied with this crop. In all cases where the plants are thin upon the ground and appear backward or stunted, the ground should be ploughed or scarified and re-sown with spring wheat. It is folly to wait for the winter plants to thicken, if the prospect is bad; plough and sow with spring wheat, as soon as the ground will admit.

Peas require to be sown upon good ground, and if they be a short, haulmed variety, three and a half bushels of seed will not be found to much.—This may follow any of the white crops; and the land should be ploughed deep and well in the fall, and harrowed fine in the spring. The seed is difficult to cover—this may be remedied by ribbing or drilling in the seed; of the two methods probably the former is the best, both for covering the seed and for the crop. In point of importance the pea crop ranks next to wheat. Instead of making a naked summer fallow, peas may be sown upon the land. An early variety should be selected for this purpose—one that will come off the ground by the twentieth of July. As soon as the crop is harvested the land should be ploughed ten inches if possible, which may be done previous to wheat

harvest, if the early variety be sown; and the only other preparations that the fallow will require, will be ploughing the seed furrow. The seed should invariably be sown in rows about ten inches asunder, or even fifteen inches is better than less than ten, which distance will admit a free circulation of air between the rows. If peas are cut a short period before they are ripe, the straw with care may be cured in such a state, that it will prove highly nutritious food for sheep during winter months. An abundance of food for stock might thus be raised at a very trifling expence, upon land that would have produced nothing if summer fallowed, but a heavy expence to keep clean.

Barley land can scarcely be worked too much; it should be rich, ploughed in the fall, and twice in the spring, and made by ploughing, harrowing and rolling, as fine as a garden. Ground thus prepared will scarcely fail in producing a heavy crop of barley. Ten pecks of seed per acre is none too much, and the seed should be sown by the first of May.

The Oat crop at the best scarcely remunerates for the expence of cultivation, and no good farmer will grow them with the expectation of realising a large profit. No crop is harder upon land than this, and it almost invariably leaves the ground in an unsuitable condition for the crop that succeeds it. Land for oats should be ploughed in the autumn and cross-ploughed in the spring. When all things are considered, the black oats are the most profitable variety cultivated. Three bushels per acre is the usual quantity of seed sown, and the average produce may be computed at sixty bushels per acre. Oats should be sown by the twentieth of this month.

Sow clover with barley, spring wheat, flax, and oats, either of these crops is adapted, to be sown with seeds. Clover cannot be sown too early, and rarely succeeds well if sown after the tenth of May. The quantity of seed that is calculated to produce a thick growth of hay, is six pounds of clover and four pounds of timothy per acre. Grass seeds should not be covered deep with the harrow, and the ground should be made perfectly clean and rolled. The success of clover culture depends generally on the state of the land upon which it is sown.

Prepared ground for flax; the deeper it is ploughed the longer and better the flax. Land for this crop requires to be made very mellow and tolerably rich; six pecks of seed per acre is a liberal seeding. Much less will answer if the seed be the principal object with the farmer. The flax crop will unquestionably remunerate the cultivator, if skill and proper machinery be employed in preparing it for market. The most feasible plan of engaging in this business is the factor system, which will take the trouble of preparing the fibre for market off the farmer's hands.

Twelve hundred acres were sown last spring in one township in N. Y. State upon this plan. The factors were bound to give the farmers one dollar per bushel for the seed, and eight dollars per ton for the flax or straw. No crop is on the ground a shorter period, and both seed and fibre will always find ready sale the moment that the business receives that attention that its importance warrants. Flax-seed is valuable food for stock, especially horned cattle, horses, and the fibre is well adapted for the manufacture of bagging and strong linen, which might be spun and wore by the farmer's family or it would give employment for the poor. Every farmer should sow at least one acre—the seed to be fed to the calves, horses, and cows, and

the fibre to be manufactured into articles for domestic use. If the land be rich and strong, the flax crop will prepare the ground as well for wheat as a naked summer fallow.

Prepare for sowing crop, and one which might take the place of a naked fallow with great advantage to the farmer.—Tares require to be sown thick, about two bushels per acre is not found too much seed. The quantity of tares or vetches mixed with one quart of rape seed, and sown upon an acre of well prepared ground, will yield an abundant crop, which might be fed off with sheep or lambs in time to plough once for wheat. Ten acres of land thus sown with vetches and rape would abundantly fatten fifty wethers from the first of July to the first of September, and the stock would yield an ample supply of manure, and the treading would put the land in a sufficient state of firmness for the reception of the wheat. The average yield per acre is twenty-five bushels, and the present value of seed is 7s. 6d. per bushel. Three bushels of tares are equal to two bushels of peas as food for stock. Rape, when sown alone upon fallows, should be cultivated in drills, about fifteen inches apart, which should be well hoed in the rows but not thinned. The quantity of seed used should be four pounds per acre, which should be sown by the tenth of May; and the sheep may be put upon it in ten weeks from the time it has been sown. The ground may be thoroughly cultivated between the rows with horse hoes, which will as thoroughly clean the ground as if naked summer fallowed.—After being fed off with sheep, it may be sown with wheat, which will produce a heavier crop than any other preparation of land for wheat.

Ploughing when the land is wet converts the soil into a mortar, and does it more injury, especially if clay, then cropping. Deep ploughing on most of the land in this country would be productive of advantages; it would not only lessen the chance of injury from drouth, but would increase the amount and quality of produce upon the land, to an extent that can scarcely be credited by those who have never practiced it. Every farmer should experiment upon deep ploughing, and in this way the merits of the system will be better understood. In proportion as the soil is deepened may fresh barn-yard manure be applied, without entailing the evil of premature growth of the plant.

Plaster may be sown upon the young clover during the latter part of this month. From one to two bushels per acre upon sandy, and four bushels upon strong clay land, is the quantity that is generally used by those who have had the most experience with this manure. By the application of the above quantity, the clover crop may be doubled. It is also a valuable manure for turnips, potatoes, Indian corn, and all other broad-leaved plants.

Ashes for a top dressing is found highly beneficial on strong, cold, and wet soils, or low spongy meadow or pasture ground, and all other land that is rank with vegetation; on strong loams it is an admirable manure. From ten to fifteen of unleached and from fifty to sixty bushels of leached ashes, will be found sufficient to dress an acre. No manure is more efficient upon deep vegetable soils than ashes, and every farmer should make it a point to collect them, to top-dress the wheat, potatoe, and grass lands.

All the short manure upon the farm should be collected together in a compost heap for a top-dressing for the meadow. This matter is too much neglected by the Canadian farmers. Meadow grounds should not only be top-dressed with

vegetable manure from the compost heap and gypsum, but strict regard should be paid in keeping every description of animals off the fields during the spring and summer months. Meadows are often destroyed in this way, without any sensible advantage to the stock.

SPRING OR SUMMER GRAINS.

Among the earliest operations in the field is that of sowing the spring grains—oats, barley, rye and wheat. The most usual course with these crops in this vicinity is to take the ground that has been manured one, two, or more years, and planted to corn or potatoes. This ground is plowed early in the spring, is usually harrowed, and then sowed with about three bushels of seed per acre, if the grain be oats; two bushels if barley, and a little over one bushel, if wheat or rye. No manure is applied to the land at this time. The seed is covered sometimes by the use of the harrow, sometimes by a cultivator, and sometimes by a light horse-plow.—After this the roller or brush harrow is generally used, especially if the land is stocked or seeded down to grass with the grain crop—and this is often done. A common seeding is about twelve quarts of herd's grass or timothy seed, 8lbs of clover, and three or four pecks of red-top per acre. These are the usual quantities of seed used on common farms, where the greater part of the hay is consumed at home; but such farmers as intend to sell much of their hay in our market, sow little or any other seed than timothy, and they do or should put on three or four pecks of this seed per acre.

Grass seed sown with the spring grains, has not done so well in recent years, in this vicinity, as it did in former times. The failures are so frequent that many now will not take the risk, and are probably wise in refusing to do so. Clover, however, though its growth might not be large, will probably pay well for sowing with the grain, even where it is to be plowed in, in August or September with the stubble.

The taking off a grain crop and then ploughing and seeding to grass in the autumn is coming into vogue, and the course has quite as much to recommend it as the old way of sowing to grass in the spring. The chances are greater that the grass will set well; the stubble is worth more when buried by the plow than when left on the surface, and the extra plowing and harrowing put the land in a better state to bear successive crops of hay. This last point is of considerable consequence. Usually the spring work of the soil is performed while the ground is too wet to pulverize well. And when this is the case, the ground will probably be very considerably less productive for the three or four following years, than if plowed again at midsummer and made as light and as fine as possible.

If you are disposed to pursue the old course, we will merely say that as far as our experience and knowledge go, oats are the worst of the grains in their effects upon the after crops of grass; barley, rye and wheat do not differ much in this respect; but we should name them in the above order, considering barley the worst and wheat the best.

We have been looking over some analyses of the ashes of these grains and their straw, which are contained in Johnston's Agricultural Chemistry. And supposing oats to yield forty bushels per acre; barley, thirty, rye twenty and wheat 20, we should find them taking silica, potash, soda and lime from the soil nearly in the following quantities:

	Straw.	Silica.	Potash.	Soda.	Lime.
Bushels.	lbs.	lbs.	lbs.	lbs.	lbs.
40 oats,	3000	223	39	2½	6½
30 barley,	1840	123	8	5½	11½
20 rye,	3200	100	3½	3½	6½
20 wheat,	2400	98	3½	3½	4

This table shows one unexpected result. What—which is said to require lime in the soil—has actually less lime in its ashes than either of the others. Barley seems to require the most lime, whilst oats take vastly the most potash. So far as the inorganic matters in its ashes give an indication, wheat ought to do as well as either of the other crops on a poor soil. Does it? We had supposed not.

The reasons why oats are injurious to the after crops of grass, perhaps appear in the table. They make a greater draught upon the silica and potash the soil,

The table shows that oats require a very large amount of the matters which enter largely into the composition of rocks and sand—for sand is only finely broken rocks. It must not however be inferred that *sandy* soils are better for oats than any others, for our common loamy soils contain nearly eighty per cent. of silex or sandy matter; and clay soils are more than half silex in most cases. In these soils, where the silex is very fine, the plants may find more soluble silex, or silex in a state that they can take up and make use of, than there is in the sandy soil, where the silex is more abundant in quantity, but being in larger particles, is less well adapted to nourish and strengthen our crops. But when we come to the bog-lands or peat-meadows, where vegetable matter is the principal ingredient and where silex is found only in small quantities, we may make the inference that wheat and rye might find a sufficiency of silica, even where barley and oats would fail to get a supply.

This table will give testimony in favor of our wanting something more than vegetable matter, if we would get a strong and healthy growth, and would have it stand erect until it has matured. Want of silex lets the crop lodge or fall.

VALUE OF AMMONIA TO PLANTS.

"I have stated to you that most plants require, in addition to water and carbon, a portion of nitrogen. This also comes from a gaseous substance in the atmosphere. Although nitrogen forms the largest element in the air, (75 per cent,) yet it has been pretty well settled that plants do not obtain their nitrogen by decomposing common air, but derive it from ammonia, which is furnished to the atmosphere in great abundance by a world of decomposing vegetables and animals. It is the ammonia that escapes from putrifying substances that causes their offensive smell. Now, again comes up the practical question: How are we to collect this highly volatile gas, and transform it at the cheapest rate, into wheat, beans, cheese and wool, of which it is an important element? Rain water has a strong affinity for ammonia—which is a compound of 14 parts of nitrogen and 3 of hydrogen. Water at 50° will absorb 650 times its bulk of this vegetable food. Every rain, then brings considerable quantities of it to the ground. It is the ammonia in rain water that imparts to it its peculiar softness in washing the hands or clothes. It is the ammonia in snow that makes it valuable as a manure; and it is the ammonia in rain water that causes it to putrify in some degree like an animal substance, when permitted to stand in warm weather in a close vessel over ground. The first

fall of rain after a long drouth is much the richest in this gas. Being extremely volatile, it escapes into the air again after a warm shower, much quicker than water evaporates. What then will aid the cultivator of plants, and seize this volatile ammonia, as lime does carbonic acid, and hold it permanently about their roots, in such a shape that it will feed them all they need and no more? For an excess of this stimulating alkali, like an excess of salt in our food, will destroy life instead of supporting it.

Common Charcoal is the cheapest, and therefore the best material to apply to cultivated fields for this purpose. It will absorb ninety times its bulk of ammonia, and will give it out slowly to the vital attraction of the roots of plants. Most of you know that charcoal will correct the taint in meat—will purify rain water in a suitable cistern, so as to render it the purest water for culinary purposes. Such charcoal should be often renewed in filtering cisterns, and when saturated with ammonia, is an extremely valuable manure. The liberal application of this well known substance to the wheat fields in France, has mainly, in connection with the use of lime, within the last ten years, added 100,000,000 bushels to the annual crop of wheat grown in that kingdom. The charcoal should be sown in May, at the rate of 75 bushels per acre, well pulverized. This subject is one of vast practical importance. By studying the science of agriculture, you may grow fifty bushels of good wheat on any acre of your land, I have good reason to believe, every year, bating of course extreme casualties.

"You all know that a single kernel of wheat will sometimes, when its fecundity is highly stimulated send up twenty stalks, and that each stalk will bear a head containing 100 kernels. Here is a yield of 2000 fold. Nature then has rendered it practicable to harvest 2000 bushels of wheat from one bushel of seed. The most skeptical among you will not deny that 2,000 kernels have been produced from one kernel, and that the same cause that produces such a result in one instance, will ever operate at all times, and under like circumstances in the same manner. Hence it is but reasonable to say that nature is quite as willing to produce fifty bushels of good wheat on an acre of ground every year, mark me, *if her laws be obeyed*, as she is to grow fifty bushels of weeds every year on the same ground."—*Cor. of Cultivator.*

WHEAT—LIME.—We say yesterday a parcel of very superior red wheat, weighing sixty-four pounds per bushel, which had been purchased for city gardening, and which was raised under circumstances showing what good management may effect in the agricultural line. The wheat in question was the product of a field, which a short time since was part of a waste common, that had been uncultivated for many years, and was deemed to be too poor and worn out to yield any thing. After enclosing it, the present owner put lime upon it in the proportion of one hundred bushels to the acre, and subsequently followed the lime with a liberal application of stable manure. Last fall the field thus prepared was sowed in wheat, and has just returned a crop of the very best quality, averaging thirty bushels to the acre.—The field thus restored and enriched will require but little additional outlay for years to come, and in the meantime will yield a liberal annual return to the sagacious owner.—*Balt. Am.*

NORTHUMBERLAND AGRICULTURAL SOCIETY.

At the Annual Meeting of the Northumberland Agricultural Society, held at Wetherall's Hotel, Newcastle, on Wednesday, the 26th March, 1845.

John Wright, Esquire, in the Chair.

The Annual Report of the Society being read by the Secretary, it was thereupon

Resolved, That the Report be accepted, and that the same be published in the *Gleaner*, newspaper.

Resolved unanimously, That the Committee be authorised to appropriate as a Loan, a sum not exceeding Fifty Pounds, from the funds of the Society, to such person as will undertake to procure a **SEED HORSE**, for the benefit of the Agriculturists of this County; with such security, and under such terms as they may think most likely to benefit the county. The money to be lent without interest for two years.

Resolved unanimously, That this meeting are fully sensible of the great importance to this county, that a Seed Horse should be purchased; and that the Board, through their Secretary, do ascertain what a horse can be purchased for, either from Britain, Canada, or the United States; the result to be laid before the next annual meeting for their information.

Resolved unanimously, That it is highly gratifying to the friends of this Society to find that there is an increasing interest manifested by the inhabitants of this county in the pursuit of Agriculture and of the utility of this Society in promoting that important object.

Resolved unanimously, That the friends of the Society be urged to use their best exertions to induce all the Agriculturists who have not already become members, to add their names to the ranks of this Society.

Resolved unanimously, That the result of the Agricultural operations in this county during the past year, has clearly demonstrated that the soil and climate are in every respect suitable to ensure to the prudent Farmer a satisfactory return for his industry. And the friends of this Society are gratified in the prospect which the yearly increasing attention to Agriculture presents, of shortly seeing this county rendered in a great measure independent of Foreign Countries for the supply of Bread necessary for an increasing population.

Resolved unanimously, That the spare funds of the Society be appropriated, under the direction of the Committee, for the purpose of holding a Cattle Show and Agricultural exhibition, a Ploughing Match, and in importing such Agricultural Seeds and Implements as may be deemed most beneficial for the interests of the Agriculturists of the county.

The following persons were then elected Office Bearers for the ensuing year, viz:

John Wright Esquire—*President*.

A. Goodfellow, Esq., } *Vice Presidents.*
John Porter, Esq., }

George Kerr, Esquire—*Treasurer*.

Neal M. Lean—*Secretary*.

Committee—Charles J. Peters, Roderick M'Leod, Donald Mc Kay, A. Fraser, Junr., John A. Street, John M. Johnson, Esquires; Messrs. David Johnstone, George Johnstone, (Napan) Daniel Wetherall, John Wyse, James Dickson, John Renny, William Gerrard.

The Chairman having left the Chair, and Alex-

ander Goodfellow, Esquire, being called thereto; Resolved—that the thanks of this meeting be given to John Wright, Esquire, as President, for his able conduct in the Chair.

NIEL M'LEAN, Secretary.

DESTRUCTION OF INSECTS AND VERMIN.—It has long been known, that the leaves of the Elder when put into the subterraneous paths of moles, will drive them away; when the same in a green state are rubbed over fruit trees and flowering shrubs, or when strewed among corn or garden vegetables, insects will not attach to them. An infusion of these leaves in warm water is good for sprinkling over rose-bush and flowers subject to blight; also to prevent the devastation of the caterpillar.

A Pennsylvania farmer states, in a late American journal, that the water in which potatoes have been boiled, sprinkled over grain or garden plants completely destroys all insects, in every stage of existence, from the egg to the full grown fly.

Ammoniacal liquor, produced in the manufacture of gas from coal, and to be procured for the trouble of carrying, at any gas work, will eventually destroy the grub and other worms, which so often defeat the hopes of the gardener; more particularly as regards his early crops. So far as this liquid from having the property of injuring even the tenderest plant, that it seems rather to invigorate than otherwise.

A paste of charcoal powder, or soot and train oil laid on the trunks of trees, in rings or circles, by means of a brush, a few inches from the ground, will form a barrier over which snails or grubs, &c. cannot pass.

Cabbages, &c. may be easily guarded against the depredations of caterpillars by sowing a belt of hemp seed around the borders of the ground where they are planted; for it is a well known fact, that none of those vermin will approach the place so enclosed.

Destruction by the fly in turnips may be prevented by dividing the seed intended for one lay's sowing into two equal parts, and putting one part to steep in a vessel containing soft pond, or ditch water, the night previous to its being used. Next morning mix the whole together, and add to each pound of seed two ounces of flour of sulphur. It has been adopted with success for many years by the intelligent farmers of the south-west of Scotland.

The American farmers effectually prevent the blight or mildew from injuring their orchards, by rubbing tar well into the bark of the apple trees in the spring season; this is done about four or six inches wide round each tree, and at about a foot from the ground. Abundant crops generally followed this treatment.

The gumming of fruit trees, is to be prevented by forming a compost of horse-dung, clay, sand, and tar. This applied to the trunk and stem of fruit trees after being properly cleansed, will prevent that spontaneous exudation, called gumming which is so injurious to their growth.

The growth of weeds around fruit trees recently transplanted, does the latter much injury, and diminishes the fruit both in size and quality. *Sonini*, in his *Bibliothèque Physico Economique*, states, that to prevent this the German horticulturists and farmers spread on the ground, around the fresh transplanted trees, as far as their roots are supposed to extend, the refuse stalks of flax, after the fibrous parts have been separated. This treatment gives them surprising vigor, as no weed will

grow under flax after the fibrous parts have been thoroughly separated and the earth remains fresh and loose.—Old trees, treated in the same manner when languishing in an orchard, will recover and push out vigorous shoots. In place of flax stalks, the leaves which fall from trees in autumn may be substituted; but these must be covered with waste twigs, or other more weighty materials to prevent the wind from blowing them away.

Mr. Macdonald, of Scalps, in the Hebrides, having had his corn, &c. considerably injured by mice, put at the top of each stack or mow as it was raised, a handful of sprigs of wild mint, gathered near a brook in a neighbouring field; he never afterwards had his grain consumed. He tried the same experiment with his cheese, and other articles kept in his dairy, viz., by laying a few leaves green or dry on the articles to be preserved from their attacks, and with equal success.

To prevent hares, rabbits, and rats from barking young trees and plantations, take any quantity of tar, and six or seven times as much grease, stirring and mixing them well together; with this composition brush the young trees, as high as hares &c. can reach. This will so effectually prevent them from being barked, that if an ash plantation were made in a rabbit warren, the same would remain untouched.—*Gardeners' Gazette.*

SPRING SOWING AND PLANTING.—The month of May should afford the farmers ample opportunity to finish the spring sowing and planting. Early sowing and planting, provided the soil is in a suitable state to receive the seed, will generally be found the most profitable. In Eastern Canada, farmers have been in the habit for the last few years to put off sowing wheat to the latter end of May, in order that it should not come into ear before the middle or latter end of July, when the danger of the wheat-fly would be nearly over, as they seldom continue in the fields after the 15th or 21st of July. The risk, however, of sowing wheat so late is considerable, as it will be subject to rust and mildew, that are nearly as fatal to the crop if attacked by these diseases when in a green state as it would be by the ravages of the fly. In favorable years, such as last year, late sown wheat may succeed, but it is a practice we cannot take upon us to recommend, as the uncertainty attending it is too great to be incurred, unless upon a small scale by way of experiment.

Peas, oats, barley and potatoes should all be in the ground this month, as well as carrots, parsnips, and any other green crop, except turnips. Indeed carrots and parsnips should have been sown in April, where the land is suitable.—We have always recommended farmers not to sell their wood-ashes, as it will be found one of the best manures upon the farm, particularly for turnips, when sown, or as a top-dressing on meadows, or mixed in a compost heap.

We would suggest the propriety of mixing some fresh lime with potatoes immediately after they are cut for seed, and allow it to dry upon the cut part previous to planting. We would also recommend planting and covering in the morning, or when the day is not too hot. It is a bad plan to leave the cut seed for any length of time exposed uncovered in the drills, to a hot sun. The seed should be covered the moment they are planted.

TO DESTROY INSECTS ON VINES.—Soft soap, two pounds; flour of brimstone, two pound; powdered tobacco, two pounds. Boil for half an hour in 6 gallons of water. Apply luke-warm.

SMUT.

Various opinions are entertained regarding this disease, so common to the wheat crop. Some suppose it to be a fungous production; others that it is the work of an insect; and others, that it is propagated by inoculation, in a similar manner that infectious diseases are communicated to the animal creation; but the real nature, origin and habits of the disorder has hitherto eluded the researches of the most scientific inquirers of all nations; and therefore it would be presumptuous in us to be positive upon a matter in which there appears so much mystery involved. On one point, however, we feel certain, namely, that the remedy is most easy, and if it were generally adopted, a single smut-ball would not be raised where there are bushels grown under the old slovenly way of preparing the seed. In every neighbourhood there are more or less careful farmers, who seldom, if ever, have their wheat crops infected with this disease; from such farmers seed should be procured, and independent of its being good and free from disease, it should be steeped in a solution of stale urine and water, or a brine made of salt and water, sufficiently strong to buy up an egg. The liquid in the tub should be a few inches higher than the grain, so as to allow it to be stirred, in order to bring all the light grains to the surface, from whence they are to be skimmed off so long as they continue to rise. If baskets with handles were used to immerse the wheat in the tubs, it could be conveniently taken out and drained. The seed should be left in the steep about two hours, after which it should be drained, and spread thinly on the floor of the granary, which should be well sprinkled with sifted quick lime, fresh from the kiln, and which had been recently slaked with a small portion of the liquor. About half a peck or lime is sufficient for a bushel of wheat, and it should be carefully mixed in order that every grain may be completely coated. It may sometimes happen that seed entirely free from smut cannot be procured, but when instances of this kind occur, a solution of one pound of blue vitriol to eight quarts of water should be applied when quite hot, to three bushels of good wheat, and the whole should be frequently stirred and dried with lime. Sulphate of copper, in the proportion of five pounds to three bushels of wheat is frequently used with good success; it should be dissolved in a sufficient quantity of water to cover the seed. After being repeatedly stirred and cleared of light grains, it should be suffered to remain in the liquid about four hours and then dried in lime, as mentioned above.

Various other preparations of vitriol, nitre, sulphur, arsenic, &c., may be used with a probable certainty of success; but instead of trying needless preparations, it would be decidedly better to procure seed free from the disease, and steep it in stale urine or brine, and apply lime as previously directed.

By carefully preparing the seed, and by practicing almost absolute cleanliness in the operation, the disease of smut, so detrimental to the farmer's profits, may be wholly avoided.

SALT FOR PLUM TREES.—Mr. Benjamin Jacobs of Dorchester, had a small plum tree which never bore more than half a dozen plums that came to maturity; seeing salt recommended as a remedy, in an article from the Cultivator, he applied two quarts the first of March, in a space about two feet wide around the tree, and dug into the ground a little; the consequence has been a fine lot of fruit.

GARDENING.

The first thing to be taken into consideration, to ensure a good degree of success, is the proper construction and management of the seed beds; a failure in the first effort to obtain a crop, is almost always attended with a partial failure at least, of the second or third. A seed bed should, in the first place, be located in a door-yard pathway, or some place where the ground is trodden, and frequented during the growth of the plants. The bed should be made in shape, not to exceed two feet in width, and as long as may be required, also be raised six or eight inches by perpendicular board edging. Previous to putting in the earth, let it be thrown in a pile, and a fire made thereon, sufficiently hot to destroy all insects, or germs of weeds that may be in it: place the earth so prepared in the frame of the seed bed, and as soon as it is sufficiently cooled, sow in the seed, patting firmly with the back of the spade. For celery, and such tender plants a covering of brush, to partially protect them from the heat of the sun, may be necessary. One of the first vegetables of importance in the list of culinaries, is—

CABBAGES.—When the plants have attained to a size for transplanting, the ground should be prepared by thorough ploughing, and laid out in furrows three feet apart, on the side of these furrows set the plants, after pinching off the downward root: two feet apart in the rows. As cabbages are inclined to bind the soil, to their own detriment, they must be freely cultivated with the plow, until they have attained almost their full size. No sprout should be left to grow on a seed cabbage but that which shoots from the centre of the head.

ONIONS.—In the cultivation of onions, a spot of ground should be selected that can be used for the purpose several years in succession. After laying out the ground in drills 16 inches apart, sowing and covering the seed, sprinkle over leached ashes freely, roll or pat the ground firmly; leave no lumps or litter on the bed for destructive insects.

TOMATOES—are becoming so generally used on our tables, that a few remarks on the culture may not be out of place. The seed may be sown in the fall or very early in the spring, in a sheltered situation, if the plants appear too early to escape frost, they may be protected by some covering, set the plants in the poorest ground you have, four feet apart each way, in hills made for the purpose, three or four inches high, and as they grow, continue to hill up, as long as the plant remains upright. One or two plants are enough in a hill.

LETTUCE.—The lettuce bed should be well manured with hen dung. If transplanted 16 inches apart, in a bed well prepared, they will afford a much better salad than if left to grow in a cluster in a seed bed, as is too generally the case.

TRANSPLANTING FROM SEED BEDS.—If the weather should prove so dry as to endanger the plants which you may want to put out, it may be done with safety by thoroughly wetting the seed bed, then prepare a liquid of fresh cowdung and water, draw the plants, dip the roots in the liquid, and transplant in the evening, watering freely when done.

In raising seed, the following has been the result of my observation.—Cucumbers will destroy the flavour of melons, pumpkins of squashes, squashes of the melons, rutabaga, will incline cabbages to grow clubfooted, different varieties of the mel-

ons will sometimes produce a better variety, but two thirds will be good for nothing. Different varieties of the same species will always mix, and almost always lose the size and flavour. Fifteen rods is my rule of distance between plants of the same species.

SET OUT ORNAMENTAL TREES.—If you have already a supply of fruit trees, we would urge you to be sure and set out some ornamental trees. We recommend the maple by all means—the genuine Rock Maple. It is a vigorous, handsome, cleanly tree, and beside being ornamental, contains a whole sugar plantation in itself. We are told by those who have experience in the business, that the second growth maple contains sap much more full of saccharine matter than the first growth. This then is an additional incentive to setting them out. They will grow almost any where, except in a dry sandy soil, but where there is a strong loam a little inclined to moisture, they will grow very luxuriantly. Another noble majestic tree, which is a native of our state, is the Elm. We know of no tree that surpasses it in a combination of gracefulness and majesty, when full grown. It is a hardy and long lived tree, and should be more cultivated than it is. The bass wood is also a majestic tree, and has the advantage of bearing a profusion of flowers in the spring which are much liked by bees, so that you have an additional luxury from it.

If the young men of every village would unite and form a Tree Society, and each individual set out a tree and take care of it, our villages would soon present a more pleasing appearance than they now do.

MENDING A TREE.—We saw at Isaac Frost's, Newton, a tolerable large apple tree that had the bark eaten all round by the mice, some years ago, and of course would have died without some extra pains to save it. Mr. Frost set a dozen scions in the tree, one end in the green bark and wood below, and the other above the wound. They all took at both ends and grew well, excepting one which took only at the bottom, and is forming a little tree by itself. The scions are now about two inches in diameter, and are touching each other. The tree is in a fine flourishing condition. This method of mending a tree is attended with some trouble, but by this simple means, which can be done in a few hours, a valuable tree may be saved, as has occasionally been the case.—*Maine Farmer.*

RURAL EMBELLISHMENTS.—I have said and written a great deal to my countrymen about the cultivation of flowers, ornamental gardening, and rural embellishments; and I would read them a homily on the subject every day of every remaining year of my life, if it would induce them to make this matter one of particular attention and care. When a man asks me what is the use of shrubs and flowers, may first impulse always is to look under his hat and see the length of his ears. Heartily do I pity the man who can see no god in life but in pecuniary gain, or in the mere animal indulgences of eating and drinking.—*Colman's European Agriculture.*

WASH FOR FRUIT TREES.—You constantly recommend that fruit trees should be done over with lime as a wash. Nothing can look more frightful than their glaring conspicuous trunks on a hot summer's day, and to obviate this dis-

sight I use cow-dung, soot, or wood-ashes, mixed up with urine, the drainage of a dung-mix, or ammoniacal-water from the gas-works, to the consistency of thin paint. This composition appears to me to possess all the advantages of the lime, and the trunks of the tree appear lessened, and altogether much more pleasing to the eye—*lb.*

PRUNING FRUIT TREES.

The following is an extract from an article written by a Correspondent of the *Massachusetts Ploughman*:—

"Many writers recommend pruning in March, and others as late in the season as June. I cannot approve of either; experience has taught me that the former is quite too early, and the latter too late, unless the course I shall recommend, be adopted, then it may be said that I approve of both. I propose and recommend as the safest and most advantageous manner, particularly where much pruning is required, to go over the trees twice, viz: the first time in March, or earlier, if more convenient, and lastly in June; if the trees require but a slight pruning, they have been properly attended in previous seasons, it is of much less consequence, but then May or June is the most suitable time; but where a heavy pruning is to take place, and large limbs to be taken off, it should be before the sap moves or the buds start, and the limbs should be cut about a foot from the main trunk or branch at this season, and during the time the trees are in bloom these stubs should be cut off close to the trunk of the tree, with a fine sharp saw, leaving the surface as smooth as possible, and the bark solid around the wound; this will facilitate the process of healing, &c. The advantages derived from this manner, are many; for, by taking off the large branches early, before the buds start, you are able to separate the tree without injury to the buds remaining, and do not rob the tree of sap as you would if it was not done until May or June; if you cut close in March, you leave the wound exposed to the dry wind and sun which would require (if ever healed over) double the number of years it would if made when there was a full flow of sap, and the tree in foliage.

I think no one can doubt that it is important to prune at that season of the year that will do the least injury to the remaining buds, and will be the most favorable to healing the wound; by cropping your limbs early and cutting close in May or June, the object is the best accomplished, and the tree is not robbed of a portion of sap that it would necessarily be, if suffered to remain until May or June. To experiment for your own satisfaction, amputate a good sized limb, close to the body, in March, and then in June take another, and watch the process of healing; it will be found that the process of healing will be further advanced in ten days after, upon the wound made in June, than in three months after, upon the wound made in March.

I have not time at present to enumerate other great advantages to be gained by pruning at a proper season; a reflecting mind can easily know them in imagination."

The editor of the *Ploughman* in his remarks on above, says:

"Among the thousands of wild notions afloat, it is a relief to read something rational on the subject of fruit trees. How much valuable time is lost in transplanting and grafting by these who take not good counsel. Nothing is wanted but the exercise of good judgement in planing and in grafting; but good judgment is not often inhaled with the

mother's milk; it is perfected by close attention and the due exercise of reason."

GRAFTING TREES.—I send you a few lines upon grafting. Should you think them worth your notice you may give them a place in your valuable paper, as the time of the year has arrived when those who intend to graft this spring should make preparations for it, by cutting their scions from thrifty trees of last years' growth, and that too before the buds have swollen much, and then keeping them in a cool cellar with the cut ends buried in moist dirt. This will keep them fresh and good till the proper time for setting them is past; those who let their scions stay on the trees till they leave out, are apt to pay dear for their intelligence.

The best time that I have ever found for setting Pears or Apples is from the first to the last of May, when the sap flows freely. And the best material for doing up the stocks is a wax made three parts of rosin, one part of bees-wax, and one of fresh tallow, or enough to make it so that you can spread it with the thumb and finger after it has been cooled in cold water; with this you can cover the end of the stocks and the side splits perfectly tight from the air. You will need a little grease to rub your thumb and finger on occasionally to prevent the wax sticking. It can be put on faster and with less trouble, and with much less dirt than clay can, and the scions are more apt to live, and will grow, to say the least, as much as those of the same kind set in clay; and though there may be some little warts caused by an overflow of sap, they will all disappear in a few years. The wax does not so confine the scion as does the clay through the summer, for on a thrifty tree, in two or three months the growth of the scion will split the wax and leave it as free as nature does, but the clay dries hard in hot weather like a brick not burnt; and the scion is thus bound up with clay till the frosts of December release it; while the wax on the end of the stock still remains to keep out the water till it is thrown off by the growth of the tree.

When wax is used there is quite a saving made in scions, which, on large trees, is quite an object, especially when the kind is one which is scarce. I have seen an advantage in the wax where the canker-worms have eaten out the buds of scions that were above the wax, and had left the tree; but the bud on the scion, that is on the wedge part of it, which is always covered with wax or clay, will force itself through the wax, but cannot get through the clay; so all the buds are lost that are covered by the clay, and this makes it necessary to cut the scion with greater length.

Plum and cherry trees should be attended to earlier than those of apples and pear, and then they are more apt to fail, though if the scions are cut in season the chance for them will be pretty good, and better by far than the peach, for the peach tree suffers so much from the winter that it is difficult to obtain scions that are not hurt by the frost; yet when they do live they will grow faster than anything else.—I had a peach tree which last spring was one year old, from the graft that bore fruit last summer. At this rate who would fill his garden with little late natural peach trees, or any other kind of poor fruit, when a little time would give them the best country produce.—*Correspondent of Mass. Ploughman.*

We admit all kinds of opinions into our paper, yet, as many of our readers are young, we think it proper to suggest a caution occasionally.—Wax for grafting is made in different ways. Some of it

has proved very detrimental to trees, and we have, for a number of years, dispensed with it entirely. We prefer clay and loam and a little fresh manure, with hair intermixed, to any waxen or greasy composition. Perhaps wax may be so made as not to injure.—*Editor Mass. Ploughman.*

DANA'S PRIZE ESSAY ON MANURES.

EXTRACT—SECT. IX.

Much has been said about tanks and vats, and urine pits, and many plans devised for preventing the escape of volatile ammonia.—But when once the action of ammonia upon mould is understood, as we have already pointed it out, I am persuaded, reader, that these tanks and vats and urine carts, will appear to you not only expensive and cumbersome, but useless. Your first point is, to save your ammonia, your second is, never to use urine in its caustic or burning state. If you do, you will as assuredly burn your crop, as the puddle formed by a cow burns the grass upon which she empties it. Here the urine forming caustic ammonia acts as caustic potash or a lump of stone lime left to slack upon the grass. You want to change this burning or caustic ammonia into mild ammonia, or to combine it with some substance which has not only that effect, but also keeps it from flying away. Unless you understand, then, the principles of these actions, and apply them too, your labour is all vanity, when you attempt to save your cattle's urine.

These principles are in number two.—First, the principle which changes caustic to mild ammonia, is carbonic acid derived from air or decomposing mould. Second, the principles which render ammonia less volatile, or wholly fixed, are certain acids formed in mould, or sour mould, or certain salts which give up their said to the ammonia. Plaster of Paris does this, by changing its lime for ammonia. Now let us go into the reason of this a little, and see if we can understand it. Very slowly, and supposing moisture present, the oil of vitriol of the plaster quits its lime and unites to ammonia, and so changes the volatile into a fixed salt. Now this is a change that has been of late much insisted on, and the practice recommended of strewing the stable and barn cellars, and even the privies with plaster, to save the ammonia which escapes in these places. But it is doubtful whether the saving is as great as is usually supposed, for the ammonia arising from the urine is caustic, and flies off as caustic ammonia that has no effect upon plaster. Copperas, alum, common salt, potash, and woodashes, all act to fix the volatile ammonia, and have all been recommended for that purpose. But it is easily seen, that in employing some of these substances, it is to buy ammonia almost at apothecary's price.—These practices will be followed, therefore, only by those who place the crop, and its value upon ammonia. This is a limited and narrow view. The true and farmer like, as well as the most scientific and natural mode of preserving the ammonia of urine, is to fill your yards and barn cellars with plenty of mould; by which I mean truly decaying and decayed vegetable matter, as well as loam. There is no mode more effectual, no mode more economical.

Consider, now, for a moment how mould formed and forming and ammonia act. Have I not said again and again ammonia hastens decay? makes mould more easily dissolved, and cooks the food of plants? That action having occurred during its progress, acids were formed. The ammonia unites with them loses its burning properties and becomes

fixed. The acids having been satisfied, the ammonia is actually imbibed and retained by mould.

It does not drink it in like a sponge, but the mould forms a peculiar chemical compound with ammonia. This peculiar compound, while it does not render the mould as easily dissolved matter, yet it holds ammonia by so feeble a force, that it easily yields to the power of growing plants. It gives up the stored ammonia at the place where, and the time when, it is most wanting. If you remember these actions of mould and ammonia, it will be as plain as day, that what we have said of the inexpediency and expense of vats and tanks, and urine carts, must not only be true, but is confirmed by the experience of a host of hard-working, thinking, practical men.—In connexion with urine, the dung of birds, for instance domestic fowls of all kinds, and pigeons, may be here mentioned. These animals discharge their solids and what we may term their liquids together. Their urea comes out combined with or forming part of their dung. Now reflecting a moment on the nature of their food, strongly nitrogenous, being seeds, grains, &c. or animals, bugs, grasshoppers, &c., we can understand why their droppings are peculiarly rich in ammonia and salts. The strongest of all manures is found in the droppings of the poultry yard. But since these form but a small portion of the farmer's stock, and are never regarded as a principle source of manure, their further consideration may be omitted. It may perhaps be here added, that as from their nature bird droppings run quickly down, they are more allied to sheep-dung than other manures. Their mould not being great, droppings of poultry require to be mixed with decayed vegetable matter or loam. To this class belongs the manure brought from the Pacific Ocean, under the name of Guano, a Spanish word for excrement. New England farmers can find cheaper sources of salts, to which the main value of guano is owing, and therefore reader, we shall detain you no longer on this point.

A GOOD COMPOST FOR SANDY LAND.—Take 10 loads of stable or barn-yard manure, 5 loads of clay, 10 bushels of ashes, and 20 bushels of lime, mix the whole well together, let it remain in pile a few days, then turn it over, when it will be fit to apply to the land. The above quantity will make a better dressing for an acre of land than twenty, or even twenty-five loads of stable or barn-yard manure alone, and will last longer. Let any one who may doubt, try it, and they will be convinced of the truth of what we say.—*Am. Farmer.*

PLOUGHING FOR CORN.—The American says: In ploughing up corn and oats ground, the farmer should neither spare his team or his plough, as the deeper he goes the better prepared will his soil be to sustain the crop sown upon it. It is a fact that cannot be disputed, that corn planted upon ground deeply ploughed, always stands draught better, looks green and healthy longer, and nine times out of ten will yield more fodder and more grain, than that which is planted in shallow ploughed ground. There is no mystery as to the reason; it is obvious as that two and two makes four. The roots penetrate beyond the depth at which, by evaporation, the earth becomes deprived of its moisture, and there find in store for them that necessary ingredient to healthful vegetation, and thus escape from the evil of being parched up for the want of water.

CULTURE OF THE POTATO.

By common consent the potato has been placed at the head of all edible roots wherever it has been introduced, and the climate would admit of its cultivation. Originating from an obscure root among the Cordilleras of South America, in spite of prejudice and opposition, it has spread with a rapidity unknown to any other vegetable, and is doubtless destined to make the circuit of the globe, adding in an incalculable degree to the means of subsistence. There are few if any vegetables grown in the temperate zone that yield so great an amount of food per acre as the potato. Wheat, according to Sir H. Davy, contains 950 parts of nutritious matter in 1000; and the potato 250; but when it is remembered that the yield of the potato on an average is from ten to fifteen times as much per acre as wheat, the advantage in favor of the potato is manifest. Besides such is the human organization, that pure nutritive matter is injurious to its healthy functions, and the stomach requires to be more or less distended with other matter before the excitement necessary to nutrition takes place. We are, therefore, justified in supposing that good potatoes used exclusively as an article of food, would be less injurious than pure wheat flour. Be this as it may, the potato in most civilized countries now ranks next as an article of food to the rice of the tropics; and wheat and maize of the more temperate regions. To Europe is America indebted for the Graminæ, and had we returned them nothing more than the potato and maize, the debt must have been considered as cancelled.

The potato is usually propagated by the tubers or roots, but new varieties are obtained or old ones that have partially degenerated restored, by cultivating them from seed. There are few plants that show more decisively the improvement that may be made by cultivation than the potato. In 1838, a quantity of the original roots were brought from South America to England and carefully planted. The result was a small inferior root, more resembling the ground nut than the potato, and not widely differing in appearance from those of the first years' growth from seeds. There is an idea prevalent among many farmers that potatoes are mixed, or what by the breeder of animals would be called crossed, by having several kinds planted in the vicinity of each other. This is an erroneous opinion. The crossing takes place in the flowers or seeds and not in the roots; and hence there is the same uncertainty that the seeds of any given variety of this root will produce potatoes of the parent kind, that there is that the apple's seed will give apples like those from which they are taken, a thing of very rare occurrence.

Every farmer who has paid attention to the manner of growth in the potato, is aware that the tubers are not produced from the roots proper, these being, as in other plants, used solely for the purpose of nutrition, but on shoots thrown out above these and nearer the surface of the earth. It was the opinion of Decandolle, that by repeated coverings of the stems such shoots, and of course potatoes could be produced the whole length of the stalk, and some experiments that he made, seemed to favour such a supposition; still we must be permitted to say, that having in part repeated his experiments, we have found nothing to justify the opinion, that such a result would be effected by this treatment of the stem.

The propriety of cutting the tubers or planting them whole has been much discussed, and the multitude of experiments on record would seem to

show by their conflicting results, that at least as much is depending on other circumstances, as on the root being planted in a whole or cut state. If an acre of ground be planted in hills or drills with whole potatoes, and another acre be planted with sets or cuttings at equal distances with the other, the experiments made by the Horticultural Society would go to prove, that the acre planted with whole potatoes would yield the most, but not much if any more than the additional quantity of seeds required in planting. If whole potatoes are used, from 25 to 30 bushels will be used; if cut, not more than half that quantity will be required. In both cases, however, much will be depending upon the size of the whole potatoes, and the number of eyes in those cut. The distance between the rows must be determined by the length of the stem produced by the potato, and the several varieties vary much in this respect.

In cultivating the potato a climate rather cool and moist is found most preferable to any other. Of course the root succeeds much better in the northern states and in the British American Provinces than in the southern parts of the United States. In the north, parts of Maine and New Hampshire, and the Province of New Brunswick, are celebrated for the excellence of their potatoes. In New York, the tract lying east of Lake Ontario, between that and the Mohawk and Black rivers produces good potatoes; and the elevated lands in the south of New York and the north of Pennsylvania are noted not only for the quality of their potatoes but the large crops they annually produce. The potato will succeed well on almost any kind of land provided it is rich, and is not wet and clayey; but for this as most other crops, a friable loam of sufficient consistence to prevent drouth will be found superior to any other. Swamps containing large quantities of vegetable matter, when sufficiently drained, have produced great crops, and what in new countries is termed muck land, is also favorable to their growth. Two things in a potato soil seem to be indispensable; it must be rich, or a crop cannot be expected; and it must be sufficiently loose to allow the shoots that form the tubers to spread and enlarge freely. In Europe the British islands are justly famed for their root culture, and the introduction of the potato into Ireland has enabled that country to double its population; if it has not banished want and distress, these evils are not of as frequent recurrence now as formerly, notwithstanding the increase of consumers. Cobbett, indeed, charged upon the potato all the evils of Ireland: and Dr. Tissot has demonstrated to his own satisfaction, that no potato eating nation has ever produced a great man.

The greatest crops of potatoes on record are those grown by General Barnum of Vermont, which reached from 1,500 to 1,800 bushels per acre; and he gives it as his opinion, that in a good soil, and with his mode of culture, from 800 to 1000 bushels per acre may be safely calculated upon. The reports of the agricultural societies of our country show that from 500 to 700 bushels per acre are not uncommon. Mr. Bache, of Wellsborough, Pa., in 1839, raised 600 bushels to the acre, and the crop of Mr. Morris, of Cattaraugus, in N. Y. State, fell but little short. The average crop in the country cannot we think be estimated at more than from 175 to 250 bushels, the influence of the seasons being more felt on this crop than many others.

The methods of planting are various, Gen. Barnum's mode, after a careful and thorough preparation of his land is to plant in drills 22 inches apart

PAGE

MISSING

PAGE

MISSING

SIBERIAN SPRING WHEAT.

This variety of wheat is now pretty generally cultivated in the central districts of the Province, though it may be had in the largest quantities in the vicinities of Cobourg, Port Hope, and Peterborough. We expect that thousands of bushels may be purchased in the neighbourhood of the above towns, for about the same rates that good fall wheat commands. We sowed 47 bushels of Siberian wheat last spring, which has given a return of about 25 bushels per acre, and its flouring qualities are nearly equal to red chaff winter wheat. Our average was not equal to many of our neighbouring farmers, who only sowed a few acres upon land prepared in the best possible manner: notwithstanding we have no reason to complain, as it yielded a much more profitable return, than about an equal number of acres of autumn wheat, which was summer fallowed, and prepared with the greatest care. We also sowed about 30 bushels of white chaff, called spring wheat, and acre for acre, the Siberian will yield 25 per cent more than the common variety, and will bring 2d. or 3d. more per bushel in the market for grinding purposes. We have met with a number of instances in the neighbourhood of Newmarket, where from 40 to 45 acres of Siberian wheat has been harvested the past season; and those large yields have been grown without an exception after potatoes, with no other preparation than autumn ploughing, and a thorough spring harrowing. Potatoe fallow, we believe to be the best preparation for spring wheat, and if the ground be properly managed in the autumn, it will require no further trouble in the spring than a harrowing to prepare it for the reception of the seed. The sooner it is sown in the spring the better, but the land should in all cases be allowed to get dry, before it be harrowed. To facilitate the spring work, it should be ploughed as deep as the strength of the team will admit. Many inquiries have of late been made, relative to the peculiar appearance of this wheat, which we shall briefly answer. The chaff and straw are red, and, if free from rust, are beautifully transparent. The diameter and length of the straw are considerably under the common varieties, and the straw is much harder, and of a more wiry appearance, like the straw of chess, than other kinds of wheat. The heads are remarkably long, and the grains are placed at a considerable distance asunder; notwithstanding we have frequently counted ninety grains upon a single head, but the average number is about sixty. The grains are short, plump, and of a light colour; and the bran is very thin and light when compared with the common kinds. The high character which we gave of the Siberian wheat, has been fully borne out from numerous and repeated trials; and from this fact, we feel an additional confidence in soliciting the Canadian farmers to sow this valuable variety of wheat, in preference to all other varieties of spring wheat. We trust that merchants and millers, who are interested in this matter, more than even the farmers themselves, will purchase this wheat from the present holders, and retail it out to the farmers in their respective neighbourhoods, for seed for the coming season.

BLACK SEA SPRING WHEAT.—Messrs. Gaylord and Tucker:—Believing it will be beneficial to the public to have this wheat reserved for seed, I make this communication. It is believed in this quarter, to be superior for seed to any other spring wheat. First, because it requires but about two thirds the usual quantity to sow an acre.—2nd, it yields better in a good season. If it lodges, it generally

fills well—but its great superiority consists in its hardness to withstand the rust.

Our thresher, Mr. G. Farnum, of this town, says he threshed in Cornwall, about 500 bushels of this wheat, of 1842 crop, and did not have a rusty bundle, whereas, three fourths of the other wheat was very materially damaged by rust. Of the 1843 crop, he threshed about 3000 bushels of this wheat and found its yield superior to any other spring wheat; and also, that it filled well where it lodged.

I learn that the wheat raised in Cornwall, came from a peck of seed, procured near Boston in 1839 or '40. Some suppose there are two kinds, and that the red chaff is the best. It is dark colored, hard and heavy. Until our millers learned how to grind it, it was supposed to make inferior flour.

Homer Wright, of this town, got 44 bushels from 1½ bushels of seed; Mr. Elmore, 26 from 1 bushel; Orval Smith, 29 from 1 bushel of Seed; Hiram Foster, of Whitney, 42 from 1½ bushels B. Simonds, 41 from 1½ bushels of seed.

I am surprised that our farmers should send so much of this wheat to the mill to be ground, considering the estimation in which it is held, and that there is not more of it than ought to be sown in two counties.

Shorcham, Vt. 1844.

CLARK RICH.

CART WHEELS.—There is still, I apprehend, not only in Ireland, but in Great Britain generally a deficiency in the formation, or rather in the height of cart-wheels. From frequent observation of the power of those which are used in France which enables a very feeble horse to draw great weights, I am convinced that the average height of the cart-wheels we employ in road and farm labour ought not to be less than from five feet six inches to six feet. The wheel of the common Irish farmer rarely exceeds three feet six inches; for he is impressed with the notion that, if it were higher, the pressure would be too great on the horse when going down hill, having no knowledge of the simple contrivance of the Frenchman, who by means of a piece of wood which can be pressed from behind by a simple sort of screw, causes a degree of friction which retards the action of the wheels so as to relieve the horse in the descent. In a level country, there can be no doubt whatever of the mechanical advantage to be derived from a very high wheel, and still more on ascending ground; and though it often from want of a friction-break, or the neglect of the carter to apply it, there is on the average of work a decided advantage obtained from the use of the high wheel provided that it does not exceed the elevation which will admit of an horizontal shaft, or still better, allowed a trifling declination from the fore point to the other extremity; and, I may add, from a narrow axle, which causes a lesser friction than a wide one.—*Martin Doyle.*

LOOK OUT FOR CATERpillars.—These little *varmints* came out early this spring, and you will find their silken tents spreading in the forks of the branches of your fruit and other trees. Crush them "in the bud," or rather, before they get hold of the bud.

If let alone, they will destroy a whole tree in a short time, and not only destroy the tree, but prepared trouble for your long hereafter, by laying the foundation of thousands of similar colonies which shew themselves from year to year, rendering it very difficult to extirpate them.—*Maine Farmer.*

CULTURE OF THE ONION—I beg to mention a method I have been practising for the better growth of Onions. The soil here being the worst I ever met with for the culture of Onions, forced me upon trying an experiment. Late in the autumn, of last year, I caused a piece of ground to be dug deep and left in a rough state; I then procured a quantity of hog manure, which was spread over a portion of the prepared ground; at the same time I got some horse and cow manure, which were also spread separately on the remaining portions of ground. Previous to laying on the manure, the ground was well salted with common salt. I suffered the manure spread over the surface to remain through winter until April, when it was forked off and wheeled away. Onions were drawn from the seed bed, and transplanted on this piece of ground, and the result has been as fine a crop as could be desired. Of the three kinds of manure tried, I find that the hog manure has answered the purpose best, but the Onions on all the portions are good, whilst in other parts of the garden not so prepared they have failed, and are not worth gathering, for keeping, as three parts of them are grubbed, while the piece experimented on is perfectly free from grub.

EXTRACT.—Agriculture is the oldest art of which we have any account. Its inventor was God.—By it nations and communities are kept together. It is the bond of union that unites all society.—It is an art more conducive to health, and more intimately allied with religion and morality than any other. It is important then, that it should be well understood. Inquiries into its principles will disclose vast riches for the mind to delight in, and vast resources for physical happiness. As nothing comes by chance, as there is a cause, a law for every thing that occur in the universe, the inquiring cultivator of the soil, may trace those laws, ascertain correctly the theory of nature in the production and re-production of plants; and when he prosecutes these interesting inquiries, he will be making himself a scientific or natural farmer, and enabling himself by the knowledge thus gained to greatly increase the products of his lands. Every man should certainly be thoroughly acquainted with the fundamental principles of his own business; and if this was the case with our farmers generally, how much of their land now sterile and unproductive, would be prolific in fertility.

PREVENTION OF THE FLY IN TURNIPS.—The fly in turnips may be prevented by dividing the seed intended for one day's sowing into two equal parts, and putting one part to steep in a vessel containing soft pond, or ditch water, the night previous to its being used. Next morning mix the whole together, and add to each pound of seed two ounces of flour of sulphur. This mode will ensure two successive growths, and the fly will not touch them. It has been adopted with success for many years by the intelligent farmers in the Southwest of Scotland.

PINE BOUGHS.—Give your sheep occasionally a few pine boughs, if you cannot easily obtain these, you may supply them instead with fir, hemlock, or spruce. These animals require extra attention at this season. Salt and other articles calculated to give them an appetite, and ward off colds and other diseases to which they are, from their nature, peculiarly liable, should be supplied

with no stinted hand. Warm quarters at the period of lambing, and above all, a constant and liberal supply of pure and wholesome water, are indispensable.

EXPERIMENT.—A gentleman cultivated two hills of cucumbers, each having the same number of plants, under precisely the same circumstances, excepting in the following particular, viz: the ground around one hill was hoed every day, (Sundays excepted,) as long as the state of the vines would admit—the other was hoed just often enough to keep down the weeds, but no more. The hill which was hoed every day produced more than twice the quantity of cucumbers the other did. "A nod is as good as a wink."

NEW GOODS!

The Subscribers have received per the *Bristol* from Liverpool, and *St. John*, from the Clyde,—thirty-three Packages, containing:—

SUPERFINE Cloths, Cassimeres, Buckskins, Doo-skins, and Tweeds; Carpeting, Hearth Rugs; Moreens. Furniture CALICOES, Table COVERS, Damask and Diaper Table CLOTHS; Napkins, Linen and Cotton Diapers, Towelling, Huckabucks, Window MUSLINS, Dressed and Undress'd Hollands; Linens, Lawns, Osaburgs, GINGHAMS, Regatta Shirtings, Printed Calicoes, RIBBONS, Turc SATINS, ORIENTALS, Gros de Naps, Satin VESTINGS, Bonnet SILKS, Black and white CrapeS; Stocks and Neck Scarfs—*Newest Styles*; Muslin Collers, Dress Stuffs, Fancy Handkerchiefs, Jaconet, Mull, Elastic Book, and Tarlatan Muslins; A splendid assortment of SHAWLS; Scarfs, in Wool, Silk, Satin, and Fancy styles; 1 Case Straw BONNETS.

Further Supplies daily expected from London, Liverpool and Glasgow.

Wholesale and Retail.

DOHERTY & McTAVISH.

Prince William Street, St. John, and }
Queen Street, Fredericton, April 5, 1845. }

FLOUR, MEAL &c.

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

Of the best quality and at the lowest prices.

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

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

Dec. 14, 1844.

THOS. PICKARD.

BOOTS AND SHOES. CHEAP FOR CASH.



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

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

Ladies' Shoes from Five to Ten Shillings.

STRONG BOOTS and SHOES at proportionate prices.

Business punctually attended to.

WILLIAM F. BARKER.

Fredericton, July 24, 1844.

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

Bills of Exchange & Timber Petitions,
For sale at this Office.

GUANO.

THE Subscribers offer for sale a lot of superior Guano, and beg to refer intending purchasers to its Analysis, as per the following Copy thereof:

Guano Per "CORSAIR," from Ichaboe, 100 parts.

Analized Animal matter, with Oxalite and Phosphate of Ammonia,	50
Phosphate of Lime and Magnesia,	26 85
Carbonate of Ammonia and Free Ammonia,	3 50
Moisture,	16 50
Fixed Alkaline, Sulphates & Muriates,	2 70
Silica,	45
	100

Equal to 80.35 per Cent. available matter.
 GEO. C. HUSON, *Analyst.*
 Ramford Buildings, Liverpool, Jan. 30, 1845.
 W. J. BEDELL & CO.
 Fredericton, May 12, 1845.

VALUABLE ISLAND PROPERTY FOR SALE.

WILL be sold by Public Auction at the Market House, Fredericton, on Tuesday, the 3d day of June next, at 12 o'clock, the following valuable lots of LAND—Lots No. 1 and 2, on the Oromocto Island, containing about seven and a half acres each.
 Also a lot of Intervale containing about fifteen acres, fronting on the Oromocto and St. John Rivers.
 For further particulars inquire at the Central Bank, Fredericton, or of Wm. Scoullar, Oromocto.

WHOLESALE & RETAIL STORE.
 No. 5, NORTH WHARF.

THE Subscriber has received from Boston per the Steamer "Herald" and Schooners "Meridian" and "Eliza Jane," 30 chests and half chests Souchong and Ning Yung TEAS, Hyson Tea, bags of Java, Manilla and St. Domingo COFFEE, tierces of Rice, boxes and kegs of Tobacco, of different brands and prices; 40 bushels of fresh Northern Timothy Seed, casks of Clover seed; brls. dried Apples; 2 tons Logwood, 1 ton Red Wood, brls. ground logwood, red wood, and fustic; 20 dozen Palm leaf Hats; boxes Wheel Heads; 100 dozen Scrub, Shoe, Paint, White-wash, Cloth, and Hair Brushes, with a variety of other articles. Also on hand, American and St. John ground S. F. FLOUR, Rye Flour, and CORN MEAL.

[The above articles have been carefully selected by the Subscriber personally, and will be sold at very LOW rates Wholesale and Retail.]
 JOHN T. SMITH.

St. John, May 12, 1845.

SPLENDID ASSORTMENT OF PAPER HANGINGS.

3,000 PIECES English, French, and American of the Newest and most Fashionable Patterns, at the astonishing low price of 6d. per piece, and upwards.
 S. K. FOSTER.
 Fredericton, May 6, 1845.

PUBLIC NOTICE.

IS hereby given, that all persons having claims against the Estate of the late Mrs. SAUNDERS, of Fredericton, are requested to present the same to the Subscriber for adjustment, within one month from this date; and all Persons indebted to the estate, are required to make immediate payment to
 G. S. FLOOD.
Sole Executor
 Fredericton, May 6, 1845.

NOTICE.

THE Subscribers have entered into Co-Partnership, and their business will be conducted in future under the firm of KENDALL & NASH.
 W. H. KENDALL.
 JAMES T. NASH.
 [All Persons indebted to the Subscriber will please call and pay the amount of their respective claims to the above firm.]
 W. H. KENDALL.
 Fredericton, April 26, 1845.

TRAVELLERS' HOME.

NOTICE.—The Subscriber has removed his BOARDING ESTABLISHMENT to the House lately occupied by Mr. Wm. S. Estey, in Queen-street, next above Wm. J. Bedell & Co's., Store, and opposite the large Building formerly known as Beckwith's Hall. The HOUSE is newly finished and comfortable, and the view is very pleasant.

The Subscriber is very thankful for the liberal support which he has received from his friends and the public heretofore, and hopes he will be able to give general satisfaction to those who may favour him with their patronage. A good BARN and a pleasant YARD belong to the premises.

Storage for a large quantity of Freight can be had if required.

Travellers coming from any part of the Province and stopping at the TRAVELLERS' HOME, will find the situation a pleasant one.

A STAGE will run from this establishment twice a day to the BOON, four miles below Fredericton.
 Charges moderate.

BENJAMIN A. HUESTIS.
 Fredericton, April 30th, 1845.

NOTICE.

ALL Persons wishing their Logs, Timber, and other Lumber, coming down the Nashwaak and its tributaries, secured by the Nashwaak Boom Company, are required to register the marks thereof, with the Secretary of the Company, J. H. Chalmers, at the office of W. J. BEDELL & Co.
 Fredericton, April 15, 1845.

FRESH GARDEN SEEDS.

THE Subscriber has just received part of his supply of Fresh Garden Seeds.
 ALSO,—Red CLOVER SEED.
 JAMES F. GALE.
 Fredericton, April 5, 1845.

SEED WHEAT.

A FEW Bushels of excellent SEED WHEAT for sale by
 THOS. PICKARD.
 Fredericton, March 29, 1845.

OATS WANTED.

W. J. BEDELL & CO., wish to purchase a quantity of good OATS.
 Fredericton, Dec. 30, 1844.

TIMOTHY SEED.

A Quantity of very superior GRASS SEED for sale by
 THOS. PICKARD.
 Fredericton, March 29, 1845.

Leather, Leather.

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

PRESERVED GINGER.

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

PICKLES, SAUCES, &c.

FRESH Pickles, Sauces, French Olives, Capers, &c Vermicilli and Maccaroni.
 JAMES F. GALE.
 Feb. 18, 1845.

FLOUR, TEA, &c.

Ex. *Eleonor Jane from Boston—on Consignment:*
 85 BARRELS Genesee Fine middlings Flour;
 50 boxes Congo Tea;
 40 boxes Cavendish Tobacco, 16s;
 20 half boxes and 20 qr. do. Buckwheat Flour,
 T. HANFORD & CO.
 St. John, March 27, 1845.

EXTRAORDINARY NEW CASES.

ATTESTING THAT HERE IS

FOR ALL!!



HEALTH!

HOLLOWAY'S WONDERFUL PILLS!!!

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

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

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

An Astonishing Cure of Confirmed Liver complaint.

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

Cure of a Case of great Debility of the System, Occasioned by the baneful use of Mercury, and the injurious effects of a long residence in Tropical Climates, by Holloway's Pills.

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

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

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

Extract of a Letter dated 20th of September, 1843, from MESSRS. S. FERDINANDS & SON, (Agents for the sale of "**Holloway's Medicines**," in the Island of Ceylon,) these gentlemen state, "All classes of people here are desirous to purchase your **WONDERFUL MEDICINES**, and we regret that we have now scarcely any left to meet the **IMMENSE DEMANDS** that are daily made upon us for them. We inclose you a testimonial from J. DAVISON, Esq., the Superintendent of Lord Elphinstone's Sugar Estate, at Caltura, Ceylon; and we can, if necessary, send you abundant other proofs, not only from the middling classes, but also from the opulent and influential here, many of whom have derived immense benefit from the use of your invaluable Medicine.

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

CALCUTA, 7th August, 1843,

My Dear Sirs,

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

Your's truly,

J. DAVISON.

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

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

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

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

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

Price—1s 9d, 4s 6d, and 7s per Box.