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—AND—

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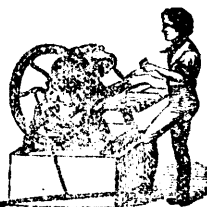
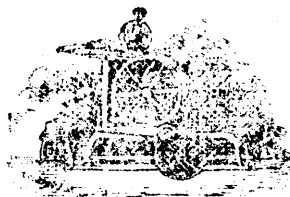
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De Montigny & Co.

Montreal, September 1857.

The Farmer's Journal.

MONTREAL, DECEMBER, 1857.

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Those who have not sent in the amount of their subscription, are requested to do so during the month, by post (prepaid), if not we shall be obliged to discontinue to send them the journal.

DE MONTIGNY & Co.,
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Montreal.

1st December 1857.

December.

Though I think it is not very necessary to recommend to farmers what they have to do in the month of December, I shall make a few observations on the operations to be chiefly attended to during this month. I do not write for those who know they have yet a great deal to do, but for those who, seeing their barns full, believe they have only to eat what they have harvested.

There is yet, however, much work to be profitably carried on for the out door labourer; ditches may be cleansed, fences repaired, plantations of fruit trees finished, turf may be collected, earths carted from either ditches, old banks, marl, or clay, or chalk pits, either as beds for future dung-heaps, or for the temporary foundations of cattle-yards, to absorb the liquid matter of the cattle, and afterwards be mixed with the dung. Towards the end of the month, also, is a good period, especially in hard frosts, to commence carting night soil or other distant heavy fertilizers. Live stock now will require a regular supply of food; the thrasher should be steadily employed in the barn; the chaff-cutter should also be

kept regularly to his work. Potatoes may be steamed and advantageously mixed with chaff. Put the boar to the sow; prepare for heavy snow falls; have stores of Sweeties ready for use. Fat cattle now usually sells well, and should be forced on. Lambs for early fattening begin to be dropped towards the end of this month; give these dry lodging and good keep. Repair roads; look to your accounts, prepare to collect in debts. Flood your water meadows, and extend and improve them. The importance of these meads is much too little understood, or the theory of their action on the water. Irrigation is, in truth, a mode of applying the weakest of liquid manures, on a very bold scale, to grass lands. Look to the regular littering of the farm yard; be careful that no drainage escapes. The sheep now require considerable attention; give them dry food and salt. Wood cutting should be proceeded with. Attend to your land drains, see that no water lodges on the land.

Remember that on a proper drainage rest all agricultural improvements, and that no commonly cultivated crop can flourish without a well regulated supply of moisture.

All the stables must be well ventilated and kept clean.

Put all your implements, not in use, in good order for next spring. (See below the manner of preserving them from rust.)

Have a snow plough ready for use.

T. C.

Laying Farm-yard Dung on Clay Fallows for Wheat.

The preparation of clay lands for a succession of crops by the process of summer fallowing, which pulverizes the soil and removes all weeds and stones, reaches the condition of receiving farm-yard dung for

manure in the end of August or during the month of September. Early operations are the most effectual and the best performances; get the land ready in August for the reception of lime and dung. The first article in a pulverized condition is spread evenly over the land, and harrowed into the ground by a double-tine of the common-purpose harrows. The farm-yard manure is laid in small heaps on the land, spread by the hand forks evenly over the surface of the ground, and covered by one furrow of the plough. The dung may be carried in the fresh condition from the cattle-yards, being the production of the latest store cattle, and from the soiling of beasts that consume the green food, or it may have been placed in a heap on the field or land from the month of March to the time of use, and will have reached a partially, if not a half-rotten condition, when it is spread over the ground in August. The lumps of dung will often not be covered by the plough, and lie on the surface, being pushed before the coulter, and not falling into the bottom of the furrow. A lad or woman with a hand fork follows the plough, and throws the pieces of dung into the hollows, where they are covered immediately by the next furrow of ploughing. This provision is made against the loss by evaporation from exposure of dung on the surface of the ground; but the theory of loss from exposure does not yet hold a confirmed dominion among undoubted facts.

The common plough opens drills with one furrow at convenient distances for green crops, and on light soils the dung is well covered by one furrow of earth being laid over it. Clay lands for wheat are drilled in the same way by one furrow, the dung is spread along the hollows, and covered by splitting the ridglets with the plough. In this way the plough opens a drill in going the length of the field, and in returning covers a drill of dung by reversing the furrow. This mode covers the dung very com-

pletely, and exhibits the field in the form of drills; not highly raised, or widely formed, as for green crops, but flatly done, and executed for the sole purpose of covering the dung from exposure. A cross harrowing is required to level the ground when the land is seed-furrowed in October. The two drillings of one furrow are less labour than one ploughing, and cover the dung much better. Even the harrowing that is required before the seed-furrow, does not raise the expence to an equality with the ploughing of the dung into the ground.

The wet nature of most clay lands prevents the carting of dung on the surface in October, and consequently the manure must be applied at an earlier period, and the land ploughed again for the sowing of seed. Cases occur when the dung is applied in October; but chiefly on the grattans of beans and peas, and on some few clay lands of the driest nature. Few wheat soils admit the application of dung in October, unless the modern system of frequent draining has produced a dry condition to bear the necessary cartage. Consequently the dung is covered by ploughing in August, or in early September, and a seed-furrow is done for sowing the seed in October.

The hitherto refrigeration of our globe from a state of expired combustion in a fiery mass, renders necessary the use of decomposing bodies as manures, to afford by decay the caloric to vegetables, and to raise the temperature of the ground, and also to place bodies in quantity together in the ultimate elements at insensible distances, in order to produce the same results of caloric and temperature, by the mutual action of fusion and attrition. Hence there arises a most important consideration in what way, mode, or manner the articles of manure are to be applied, in order to afford caloric to the plants and temperature to the soil in the largest and most effectual manner that is possible. Farm-yard dung bur-

ied in the cold clay ground can excite little action to raise the temperature of the soil—the quantity is too small to overcome the opposing resistance of clay and cold moisture, and the benefit is corresponding. Manure laid on the surface of the ground affords caloric in two ways; by sheltering from cold the vegetable growth, and by the residual decomposition of the substances sinking into and mixing with the surface of the ground, and producing the usual effect of mixture and combination. Farm-yard dung will be best laid on young wheats as a top-dressing in February and March, by means of timber railways placed on the ground at regular distances, and moved to the required positions. On this railway there runs a light iron four-wheeled wagon, which receives the dung from the carts at the end of the field, conveys it along the railway, and the dung is thrown from it on each side over the land in the quantity allowed, and to the distance that is convenient to the strength of a farm. The dung is immediately spread over the surface of the ground, and most carefully broken into small pieces, in order to cover every inch of ground for the purpose of a close protection. This performance must be carefully executed, as the effect mainly depends on its deposition. The vicissitudes of the weather in suns, rains, winds, frosts, and thaws will destroy the matters of the dung, and exert a joint effect on the surface of the ground. In the usual dry season of sowing grass-seeds, the land is well harrowed, in order to mix the light alluvium with the remains of the dung, which will produce a most choice bed for the grass seeds that are sown upon it, and pressed into a covering by an iron roll of not less than a ton in weight. The harrowing produces an alluvial top-dressing for the wheat that exerts a most wonderful effect on its growth, and is regularly done in Poland as a part of wheat farming. The mixture of

the dung with the fine earth in the present mode raises a bed for grass seeds that is not equalled in any other way, and the heavy roll presses all matters together with the wheat plants almost invisible among the raised and compressed earth of the surface. The growth is quick and rapid from this bed of favourable composition, and surprises every observation and experience; the grass seeds are delighted in the matrix of a most intimate comminution of soil that is so essential to their nature, and which is not obtained from the stale surface of autumn-sown wheat, and manured at that time. This advantage to the grass seeds is very large, and along with the superior benefit to the wheat crop, constitutes a mode of applying farm-yard dung that is much beyond the value of the common way during late summer or early autumn, which prevents the full action of the manure, by denying the opportunities that are necessary for the development of its power. The cold of winter follows the winter application, the increasing warmth of the returning sun attends the use of the dung in the early spring, and these two very different elements confer a power of the utmost value and efficacy. It must be studied that all applications of manures are made under the best known circumstances to develop their power and promote their action.

It has happened to the writer of this essay to have had a very extensive and largely varied experience in practical farming, both on turnip lands and clay soils; and the length of the practice gave many opportunities of observation and experience. The prepared heap of farm-yard dung having failed to complete the manuring of a field of clay fallow in the end of August, a quantity of fresh dung from the stable door was applied to cover the remnant of the ground, and it was strawy and rough beyond the power of being covered by the plough, consisting of dry straws and dry faeces of

the horse. The dung lay exposed till October, when the land was seed-furrowed, and sown with wheat; the matters were better covered than by the summer furrow, while the harrowing pulled into pieces and spread the dung over the surface. In winter the ground was pretty well covered with the fragments of dung, among which the wheat soon evinced a superiority that continued very visible till harvest, and the crop was larger and thicker on the ground. The grass seed being sown in April, the advantages were derived that have been mentioned, and arising from laying the dung on the surface of the ground. This casual experience confirmed the mode now recommended, of applying farm-yard dung, and it destroyed in no small degree the theory of damage to farm-yard dung by evaporation from exposure. This theory has been very justly doubted, though conviction requires a length of time to be entertained. There is also called into question the fermentation of dung in heaps, and the fresh condition showed greater, at least equal results.—*Mark Lane Express.*

J. D.

Preparation of soil.

In the cultivation of the garden, as of the farm, the first thing is to select the locality for a particular crop, or for a permanent object, as that of a garden, for instance, and to prepare the soil.

After all the divisions of soils that have been made, they may for all practical purposes be reduced to three, *sandy, clayey, and loamy*, in the first of which *sand*, predominates, and in the second *clay*, while in the third *sand* and *clay* are happily blended in about those proportions which render them desirable to the cultivator.

A loamy soil is to be preferred for gard-

ening purposes. Choose such a soil if you have it on your farm, and in a location suitable for the garden. But remember that the garden is a part of the homestead; it is to be beautiful as well as profitable; its elegancies and luxuries are to be on hand and not afar off; it is to adorn your dwelling, as your dwelling is to adorn it; it is to be the rendez-vous for many a social enjoyment, earlier in the morning than you go to the broad field, and later in the evening when you return from its weary labours.

If, then, your buildings are already erected, or even if the ground for them is chosen, you have no great range for the choice of a "garden spot." If the soil, where as a matter of taste and convenience you want to meet your wife and children and friends, among flowers and fruits and esculents, is not a feasible loam with a porous subsoil, one that will stand the drouth and drink in excessive rains so readily as not to keep the surface long flooded, you must make it such. The expense will be considerable, but it will pay, and you cannot enjoy the pleasures and profits without.

An expense may be necessary which might alarm you, if it were to be applied to your whole farm. But what is it for an acre or half an acre? Nothing compared with the substantial benefits promised, to say nothing of the exquisite pleasure. If the soil is so exceedingly refractory that it cannot be made deep and mellow and rich, without a very great expense; it might be well to content yourself with a smaller garden than you would otherwise cultivate, though as a general rule we believe the gardens of our country are too small, and should be enlarged rather than diminished. If the mechanic or professional man has but the sixth-tenth of an acre, it is worth a great deal, and we would advise him to make the most of it. But why should not the farmer, who has land enough, take a generous piece for a garden? Of all that

the garden produces, there is scarcely an item which he can not dispose of advantageously, if he has a surplus, either by sale, or by giving it away, or feeding it to stock. An acre is perhaps better than more, because if the enclosure is too large, it may fail of getting cultivated so well as to be ornamental and highly productive; and half an acre is certainly better than less, because the person who but half appreciates the economical and ornamental value of a garden cannot do all he would desire on less ground. An acre, with fruit borders occupying one-half, and leaving an oblong or square half acre for the garden proper, would be to our mind, and that whether the farm of which it were a part were thirty acres or three hundred.

If your soil is medium loam, and has a porous subsoil, you have nothing to do in the way of preparing the soil but to plough ten or fifteen inches deep, harrow, grade, plough again, and work in plenty of good barn manure, so incorporating it with the soil that it shall pervade every inch, and you are ready to set your trees and make your garden. But suppose it to be a stiff instead of a medium loam, a few loads of sand in addition to the manure will effect the requisite amendment. Or if it is a light sandy loam, then a few loads of clay will make it just what you want. And the cost in either case will hardly be worth naming. If instead of being a loam, a little too stiff or rather too light, it is a sandy soil, then clay in addition to manure is all you want to make it just what you would have it. The more sandy the more clay will be required. Or if your soil is the stiffest clay, sand enough with manure will make it as good a loam as you can desire. Where clay is used as an amendment, it should always be exposed to the frosts of winter before ploughing in, and should be thoroughly incorporated with the soil; and even when sand is used the soil should be

ploughed more than once, harrowed many times, and the new ingredient evenly mixed. And where sand or clay, as one or the other may be required, can not be obtained within a reasonable distance, swamp mud, long out and well warmed in the sun, and washed with rains, will go far towards producing the same amendments—will readily produce, only less permanently, both the effect of clay on sand, and of sand on clay, rendering a compact soil lighter, and a light soil more compact. The difference is that this application would need to be repeated every few years, whereas the amendment of a soil by applying its opposite, is a permanent amendment.

The above is all on the supposition that the subsoil is porous, such that water passes downward freely, neither floods the surface, nor stops and becomes stagnant one, two, nor even three feet below. If there is any doubt about this, dig holes, like post holes, one, two, three, and three and a half feet deep, and if water stands more than a very few minutes in them after even the hardest shower, that ground requires draining, in order to be fit for a garden. You then have to preface your other amendments, whatever may be required, by underdraining. Of course, you would not have an open drain in your garden or any where near your house. A tidy farmer will hardly have them any where. Go to work then, and lay down the under-drains. For a garden where you expect to do a good deal of work, and would deem it bad economy to render your labour less satisfactory by any defect in the soil, the drains should be near each other. In some cases one very deep drain running through the centre, and side drains falling in from opposite directions not quite as deep, and near to each other, would be advisable. But we all know that "water runs down hill," and the owner can decide where to lay his drains better than some body a thousand miles off.

We will only add, that the autumn is the best time to prepare the ground for a garden. Winter even need not be lost, in case of large amounts of heavy earth to be drawn from a distance. How we wish that thousands of our farms, now showing only a little, stingy, miserable apology for a garden, not the most beautiful nor always the most productive spots on these farms, could show next spring, as the snow leaves them, grounds already prepared for gardens beautiful enough and fruitful enough to tempt the angels to come down and walk in them in the cool of the morning and evening.—*Canadian Agriculturist.*

Smut on wheat.

Smut seems to be a parasitic fungus, of which there are several varieties, as on Indian corn, wheat, &c. The black dust of matured smut is to be regarded as its seeds, each particle of which, however light and evanescent, is capable of germinating and producing its kind when brought into favorable circumstances. It is difficult to say precisely how these seeds find their way into the receptacles of growing wheat; but it is probable they adhere to the kernels of wheat when sown, and we know that in some way they are carried upward with the growing plant, and are developed at the base of the newly forming kernels simultaneously with the bursting of the spike from sheath, or perhaps a little before the head makes its appearance. From this time the fungus grows and develops itself more or less partially depriving the forming wheat of its appropriate food, as well as insinuating a hurtful ingredient.

Now, on the supposition that the smut in wheat comes from sporules (smut seeds) distributed with the seed wheat, which we suppose to be correct, it follows, that if you

could wash the seed before sowing, perfectly clean, there would be no smut in the crop; for however warm, damp, or lowerly the season, smut will not grow unless there is seed for it to grow from. But it is impossible to secure perfect cleanliness from these sporules or smut seeds: they are too minute to be all washed away, and their vitality is not destroyed by pure water. Hence the importance of washing seed wheat in some solution that will destroy the vitality of such of the sporules as fail to be washed out.

Salt, plaster, quick-lime, arsenic, sulphate of copper, and other things have been recommended. The first is always at hand, and the next two are seldom far absent from the farm; and we believe that these are sufficient. If the seed be first washed in pure water, then in a weak brine, of say one quart of salt to a pailful of water, and then dried in plaster or quick-lime, (the latter not to be used to fresh, nor very freely, lest it injure the vitality of the wheat,) we think that there will be little danger from smut, and that the operation will be favorable rather than otherwise to the germination and early growth of the seed wheat.—*American Farmers Magazine.*

Sowing in the Fall.

Frequent inquiries are made at our office in Boston in regard to seeding down to grass. We have often treated on this subject within the last fifteen years. But people forget, and we have new subscribers who are not familiar with the old story—therefore we are obliged to repeat, and perhaps be tedious to our old friends.

The fore part of November is not a good time to sow grass seeds of any kind. If the weather happens to be warm enough for the seeds to vegetate, the shoots are too

tender to endure hard frosts which we may always expect during the month.

But seeds may be sown in the latter part of the month, and lie buried till spring. This is better than to sow on the snow banks, because the seeds will be better buried than they will be if left in the snow till spring, and then trusted to be buried by the rains.

We are speaking now of cases where the farmer cannot sow his grass seeds in the fore part of September—as in cases he would have clover come up with his other grasses. September is decidedly the best time for fall seeding with herds grass and red top; but clover should not be sown at this time, on account of its liability to be killed out by late frosts.

We therefore advise to sow clover seed so late that it will not vegetate before spring. In such case we use no harrow, because we would not disturb the young plants already well set. As a general rule we prefer to bury all grass seeds with a harrow; but in case of fall seeding, if we want a mixture of clover, we should trust to throwing the seed on the surface.

Now the question arises, how late may clover seed be sown without danger of winter killing? We answer that when sown as early as July, the roots will penetrate so deep that there is no more risk of winter killing than when sown with spring grain. We mean of course that the clover shall have a fair chance for sun and air, as the seeds sown without grain in September when we sow herds grass and red-top.

SOWING IN JULY AMONG CORN.

Within a few years we have practised sowing grass seed among corn in July or June, at the last hoeing, and we are much pleased with our success. Even in cases where the land is intended for mowing, there is no great labor in beating down the corn stubbs in the spring. In cases of this

kind the corn hills should not be made high, and there will be no trouble in mowing the grass.

But the practise of sowing grass seeds among corn in June or July, will be found most excellent when the land is intended for pasture. Here no care is necessary to keep the corn hills flat in summer, or to beat down the stubbs in the spring.

By sowing in July, we avoid the necessity of keeping the land up for two years instead of one. We can plough up any portion of an old pasture and sow it down at once, so that the cattle may have new and fresh feed the following year.

In regard to manuring, there will be objections raised. We cannot manure all our grounds, pasture and all, still, we should endeavor as far as possible to go into rotation and let each portion of the farm have some chance of producing more than enough to pay taxes and pay for fencing.

We hold that all the cleared land on farms in this quarter, should have a fair chance. Let low mowing grounds have a little gravelly loam spread on the surface. Let the high grounds have a taste of peat mud, or of some material different from their natural character, to stimulate them into activity and productiveness.

Distant fields may have concentrated manures applied to them, or plaster may be used when grass only is expected. This may be sown without ploughing, and on the surface of pasture grounds at very little cost.

But we would advise to go a little deeper and turn up the old pastures whenever there is a good chance to plant and to manure. Guano may be used to advantage in distant fields. Good corn may be grown on suitable corn lands, with 300 pounds of pure guano to the acre.

Now don't expect too much from this costly article. It will not of itself keep your grounds in high order for years to

come. But if you can obtain a good crop of corn by using ten dollars worth per acre, and then sow grass seed at hilling time, you may probably obtain four fold the feed for many years to come, compared with the product of past years.

We advise to make no attempt to raise grain in such cases. Corn will pay, and it will sweeten the ground for future years. We much incline to think we cannot afford to buy manures in order to raise grain. We have but little doubt that wheat, rye, and oats, exhaust our soils in this quarter more than corn does; therefore we would renovate our old pasture grounds by planting corn rather than by planting and sowing any of the English grains.

One of our very early subscribers, Mr. Thompson of Duxbury, has lately stated to us that he has been very successful in sowing grass seed among corn, at the last hoeing.—*Massachusetts Ploughman.*

Fattening Swine.

The propensity to acquire fat in many animals, seems to have been implanted by nature as a means of protecting them against vicissitudes to which they might be exposed. The first herbage of the season works off the impurities of the blood, and cleanses the system from unhealthy humors, renovating the constitution and the functions of the body, and enabling the animal to accumulate a store of strength to carry it forward in its destined course. The bear, and other hibernating animals, acquire an amount of fat by the close of autumn, which enables them to live through the long winter without the trouble of seeking food or eating it. True, it is rather a low degree of life—an oblivious sleep—but it is adapted to their nature, and consistent with their enjoyment. The deer also lays up a supply

of fat against winter—smaller in amount, to be sure, than that of the bear, but sufficient with the food it can ordinarily procure, to carry on the economy of the system till the return of spring. It is so with the buffalo or bison; and our domestic cattle show that they were originally endowed with a similar propensity, which domestication has not obliterated.

In regard to the hog, if circumstances are favourable, he is inclined to lay up such a supply of fat during autumn, as would render it unnecessary for him to undergo such exercise or exposure during inclement weather. With plenty of *lard oil* to keep his lamp burning, he would prefer dozing in a bed of leaves in the forest while the ground is covered with snow, rather than to *grub* daily for a living. He fattens most rapidly in such a state of the atmosphere as is most congenial to his comfort—neither too hot nor too cold; hence the months of September and October are the best for making pork. The more agreeable the weather, the less is the amount of food required to supply the waste of life.

Against fattening hogs so early in the season, it may be objected that Indian corn, the crop chiefly depended on for the purpose, is not matured. Taking every thing into consideration, it may be better to begin to feed corn before it is ripe—or even at a stage of considerable greenness. After the plant has blossomed, it possesses a considerable degree of sweetness—hogs will chew it, swallow the juice, and nothing but the dry fibrous matter, which they eject from their mouths when no more sweetness can be extracted. They thrive on this fodder, and will continue to eat it till the nutriment is concentrated in the ear, and then will eat the cob and grain together till the cob gets hard and dry. Farmers who have practised this mode of feeding, consider it more advantageous than to leave the whole crop to ripen, unless they have a

supply of old corn to feed with. Even in the latter case, it is questionable, whether hogs will not do better on corn somewhat greener than they would on hard corn, unground. True, it is not necessary that corn should be fed up unground, but much is fed in this condition, no doubt at a loss.

In many parts of the country swine are fed considerably on articles which are not readily marketable—as imperfect fruits, vegetables, etc. Where such articles are used, cooking them is generally economical. A mixture of squashes (either summer or winter squashes,) pumpkins—the nearer ripe the better—potatoes, beets, and apples, boiled or steamed, and a fourth or an eighth of their bulk of meal stirred in while the mess is hot, forms a dish on which hogs will fatten fast. If skimmed milk or whey can be had, the cooked food may be put with it into a suitable tub or vat, and a slight degree of fermentation allowed to take place before the whole is fed out. The animals will eat it with avidity, and probably derive more benefit from it than if it had not been fermented. Articles which are of a perishable nature, should be used first in fattening swine, in order to prevent waste, and turn all the products of the farm to the best account.

Another quite important advantage of early feeding, is the less trouble in regard to cooking the food and keeping it in proper condition to feed out. The cooking may be done out doors, if convenience of feeding would be promoted by it, and there is no expense or trouble to guard the food against freezing.—*Boston Cultivator.*

To Fatten Horses.

A horse should be fattened as speedily as possible, when you commence the process, as you lose money by being six months

putting on what flesh can be made in six weeks.

When a horse is to be fattened, the first thing to be done is to put his stable in a clean condition, as no animal can fatten easily, while the effluvia of deleterious gases are being constantly breathed by him. Feed in such quantities as the animal will eat up clean, and at no time suffer his food to lie by him. If he be fed six times a day, instead of three, so much the better.

Potatoes will fatten some horses speedily, and loosen their hides. Carrots are also excellent with oats and corn, and if ground, the grains are much more nutritious.

A little very good hay should be fed with the other feed, and always give plenty of pure soft water, when it can be easily obtained.

The curry-comb must be used freely, plenty of clean bedding supplied, and above all, see that a sufficient ventilation exists to make the air fresh and pure.

T. C.

Selecting Seed Corn—Timely

Hint.

Farmers will remember that for two or three years past, a great deal of corn came up badly.—Last spring specially, much of it "rotted" in the ground. The loss from this cause is hundreds of thousands the present season. On our own ground (with some 14 acres in corn) the loss was next to nothing. The same is true of some others we could name. What is the reason of the difference? Why does the seed in one field grow, and in another rot? That is just what we wish to come at.

One great cause of the rotting of seed, is that it was never *well ripened*. Another reason is that it is *badly dried*. Poorly ripened and badly dried seed is very easily

injured by fermentation, and a very little fermentation and moulding will destroy vitality. Last autumn, we had the best, largest and ripest ears carefully selected, and braided together by the husks in tresses, and hung in a dry place. This was planted, and notwithstanding the drenching rains and mud, all came up,—not a missing hill or stalk,—and the field is noted as one of the best in the county. The same has been the experience of some others. Those who made no selection and took no care of their seed, have had “very bad luck.” Another field was planted with King Philip corn, not trussed; but as this sort ripens so early and perfectly, this operation appears not necessary. It came up as evenly as the other.

Let farmers select their best and ripest ears, and either truss and hang them up or place them, in the ear, where they will dry thoroughly, (unless it be some very early, quickly ripening sorts,) and there will be better success and *better luck* with the corn crop.—*Country Gent.*

Remedy for the Potato Rot.

Bury your potatoes as soon as possible after digging them, avoiding as much as you can their exposure to the air and light. They may be put into an old fashioned potato hole, or covered on the surface of the earth, so as to protect them from the frost,—I prefer the latter method,—and keep them thus until the day you want them to plant,—and then be careful to use none for seed but what are perfectly sound and healthful—cut or uncut as you prefer,—and you will be sure of sound potatoes next season, and just as long after as my directions are strictly followed. Seven years' trial has confirmed this remedy. Hence the reason for my complete confidence in it.

They may be well kept, also, by putting them into barrels in the cellar, and sifting on dry sand until all the space unoccupied by the potatoes is filled with sand. Potatoes, put up this way, retain their good eating qualities much better than when put into a bin, as is the usual method. Wives and daughters have observed and remarked, that potatoes taken from the bin to cook, are better, when taken from that part of it where the dirt is more abundant, in consequence of “dumping” them from a cart through a spout to the bin. This fact goes to confirm the use of barrels with sand, for the better preservation of potatoes for winter use, and until new potatoes are produced. Every farmer knows that light, air, and the heat of the sun, each and all, tend to impair the eating qualities of potatoes, and it would seem a fair deduction, also, that these same influences should impair and weaken the vital power of the tubers, thus rendering them liable to disease.

In olden times, most of the farmers' cellars were dark—rendering it necessary to take a light in order to see, and guide the cider tap at noon-day. In these days, cellars were generally small—making it necessary for farmers to winter many of their potatoes, oftentimes, in holes. I remember well how much better the potatoes were when taken from the hole, opened in the spring, than from the cellar.

Now it is very different. Cellars are generally much larger, more airy, and so well lighted, that no artificial light is necessary when visiting them by day. There can be no doubt that the quality and vitality of potatoes are both seriously injured when stored in such cellars as last described, for those first alluded to did not keep them as well as the potato-hole, as observation amply shows and confirms.

These are some of the reasons why I consider my remedy, now made known, a sure

preventive, if duly observed and practised, of the Potato Rot.

ASA G. SHELDON.

Wilmington, Oct. 6th, 1857.

PRESERVING GRAIN.

Grain to keep well should be perfectly ripe, and then be placed in a situation where it can remain cool and dry. It has been recommended when you have small quantities only to keep, a few barrels for instance, to put in dry bricks in different parts of the mass. These would absorb and retain any moisture that would be in their immediate neighborhood, not being liable to any action such as heating by any decomposition, and hence have a tendency to preserve the good condition of the grain in which they are placed. We have never seen the experiment tried, but the theory looks plausible.—*Exchange.*

Hints for December.

Do not attempt to winter more animals than you have abundant means of providing for.

Feed regularly all animals; keep them warm and comfortable by sufficient shelter; give them a regular supply of water; give sheep and cattle a portion of roots constantly intermixed with their daily food. Give horses ground oats, rutabagas, in moderate quantity, hay and a small quantity of oats.

Stables for cattle and horses should be kept constantly ventilated, very clean and well littered with straw.

Straw and poor hay are readily eaten by cattle if salted by sprinkling brine over them.

This is a very suitable time to cart leached ashes on land which may need it. It is valuable on wet meadows.

T. C.

Winter Feed for Milch Cows.

In winter their feed consists of corn, oats and hay. Bring in a portion of your corn in the stalk, without husking, when sufficiently dry, and stow it away for winter use. Then cut the corn, together with oats in the sheaf, and tread the mixture down in a large feed tub, or a hoghead with one head, and turn on boiling water, which softens the corn, so that the cows can eat it without making their teeth sore, and the oats will be perfectly cooked through so that they will all digest.

One hoghead full of feed; well trod down, will make about thirty pailfuls, or one feeding for thirty cows.

Feed them twice a day with this feed, and give them what hay they want besides.

T. C.

Preserving Tools from Rust.

Farmers should take great care of their farm implements at all seasons of the year, but more especially in the fall and winter seasons, when not in general use. The following compound is excellent to apply to all implements liable to rust:

Take about three pounds of lard and one pound of rosin. Melt them together in a basin or kettle and rub over all iron or steel surfaces in danger of being rusted. It can be put on with a brush or piece of cloth, and whenever it is applied it must effectually keep air and moisture away, and of course prevent rust. When knives and forks, or other household articles, liable to become rusted or spotted, are to be

laid away, rub them over with this mixture, and they will come out bright and clean even years afterwards. The coating may be so thin as not to be perceived, and it will still be effectual. Let every one keep a dish of this preparation on hand. As it does not spoil of itself it may be kept ready mixed for months or years.—Fresh lard, containing no salt, should be used. Rosin is a cheap article, and may be obtained almost any where for four to six cents per pound.

Chapters on Cooking, &c.

"JOHNNY CAKE" COOKED BY STEAM.

Directions.—To one pint of sour cream, add one teaspoonful of soda, add one of salt, and stir in a handful of wheat flour mixed with corn meal enough to make a stiff batter. Put it into a tin basin; set this into a bread steamer and keep the steam up for one hour, more or less, according to the size of the cake—the longer the better, however. Set this on the table with cream and sugar, by the side of a pound cake, and your *crustless* Johnny-cake will disappear first. *Mem.* If you have not a cow to furnish the cream, then make the Johnny-cake in any way you choose, but *bake* it in the steamer instead of an oven. If you have no regular steamer, put a deep tin-basin, upside down, in the bottom of an iron kettle partly filled with water, and upon this set your basin of batter and cover the kettle. *Query?* Why would not any kind of cake be better if cooked by surrounding it with steam. This secures a uniform heat and saves hard crusts; to say nothing of the quality of the food! We know biscuits are nice thus baked.

GREEN CORN CAKE.

This has been one of our August luxuries, and it will be in season all through Sep-

tember. It may be made of green corn, or of any other kind; the sweet varieties are best. Husk as many ears as may be desired, and without boiling them grate off the corn. Stir into this about two tablespoonfuls of flour for every dozen ears, and also one egg, previously well beaten. Add a little salt, and a very little sugar, if the corn be sweet, add about two tablespoonfuls to the dozen ears. Let the whole be well stirred, and bake it in a greased tin basin, or tin pan, for a full hour, in a hot oven. It is good without any dressing, but may be eaten with butter, or cream, &c.

AN EXCELLENT GINGERBREAD.

A friend on whom we recently called, treated us to a nice slice of gingerbread which was made after a little different recipe from any we have published, we believe; to wit: Take one pint of molasses, one teacupful of butter, half a teacupful of hot water, one teaspoonful of soda, half a teaspoonful of pulverized alum dissolved in a little water, two tablespoonfuls of ginger; the whole mixed thoroughly with enough flour to roll out and cut into cards. Bake in a quick oven. *Mem.* The mixing should be done rapidly and not until the oven is already hot, so that the baking can be done at once and quickly.

WATERMELON PRESERVES.

Remove the rind and seeds of watermelons, not fully ripe, and cut them into slices about half an inch in thickness. Scald these in weak alum water which will toughen them, and give them a nice green color. Next rinse in cold water and lay on platters to cool. To seven pounds of the melons thus prepared, take six pounds of sugar. Add water enough to the sugar to make a thick syrup and boil it, skimming it if brown sugar is used. Cook the melons in the syrup until well done. Then remove them and pack in jars, laying in two sliced lemons for each seven pounds of melons;

next boil the syrup some 15 or 20 minutes or until thick and pour it in. Keep up in close jars.

CITRON FOR CAKE.

Take citrons and treat them exactly as described above for watermelons, but instead of closing the jars, leave them open. The mass will dry down and furnish a material for fruit cake far cheaper, and just about as good as the best preserved West India citron sold in the market.

Hard Gingerbread.—Take $1\frac{1}{2}$ cups sugar; $\frac{1}{2}$ cup butter; $\frac{1}{2}$ cup sweet milk; $\frac{1}{2}$ teaspoonful of soda and 1 of cream of tartar; 1 egg, and ginger to suit taste, or cinnamon and nutmeg may take the place of ginger. Knead in flour to make a very hard dough and roll to thickness of pie-crust. With white granulated sugar, an extra nice cake is produced.

Indian Breakfast Cake.—Mix well 2 cups Indian meal; $\frac{1}{2}$ cup flour; 1 teaspoonful salt; 3 tablespoonfuls sugar or molasses. Dissolve alone in a little hot water, a heaping teaspoonful of soda; add to it 5 teaspoonfuls of melted lard, and put this into the other materials already mixed, adding cold water enough to make the whole a little thicker than fritters. Just before pouring into the pan for baking, stir in 3 teaspoonfuls of vinegar, put at once into the oven and bake quickly. This is pronounced extra by all who have partaken of it.

Mother's Sponge Cake.—Mix well: 2 cups flour; 1 cup sugar; $\frac{1}{2}$ cup milk; 2 eggs previously well beaten; 1 teaspoonful cream of tartar and $\frac{1}{2}$ teaspoonful of soda. Flavor with rose water, nutmeg, vanilla, and cinnamon to suit taste.

English Pudding.—Mix: 1 quart flour; 2 cups milk; 2 cups molasses; 3 well beaten eggs; 1 pound raisins; 1 pound suet; 2 teaspoonfuls of cream of tartar, and 1 teaspoonful of soda. Steam 4 hours, which

may be done by putting it into a covered tin pail, and setting it into a kettle of boiling water. Be careful not to let the water boil out of the kettle. A farina pail is the best for this purpose.

HAMS.—An excellent way to keep bacon hams through the summer, is to put on them a coat of molasses, made thick with ground black and red pepper; then hang up in a dry cool place.

ANOTHER.—Pack them in boxes, putting a layer of dry leached ashes, and some sticks, chips, or cobs between each layer, to keep them from touching. Keep it in a dry cool place, off the ground.

MANURE.

Manure is the prime want of the farmer. Its preparation and application is the foundation of all successful culture.

Without it he may underdrain his land in the most approved manner, loosen the subsoil to any extent, plow, mix, pulverize and cultivate to infinity, and yet cannot produce remunerative crops in succession; in short his expense will be incurred in vain his labor lost. With it, he may make all these expenses afford him an annual profit, of a large per centage; may reap a rich reward for all his labors; in the most abundant crops; may improve his farm until every rod of it shall become fertile as the most productive garden, and beautiful as anything in nature can be.

How then shall this want be supplied? Shall we go abroad and search the whole earth for sources of supply—bring lime from distant kilns—improved pouddrette, phosphate, superphosphate, ammoniated superphosphate, and muriate of lime from our large cities—shell lime, fish manure and animal fertilizers, from the sea coast—plaster paris from the north countries—

green sand marl from the south—salt from the Atlantic—guano from the far off isles of the Pacific—woole waste, horn sawings, bones and bone dust from all the regions?

Shall we do all this, and incur almost unlimited expense, while the substantial good we seek is within our reach, on our own farms but being wasted and lost, by its decay and loss, increasing earths' pollutions, and multiplying the sum of human sufferings? Would it not be better economy and wiser to husband our home resources first?

Many intelligent men believe that there are placed within the reach of the farmer, ample materials to fertilize the land he can profitably occupy.

However that may be, it is certain that there are materials at hand, which if carefully saved and composted, or otherwise prepared, would vastly increase his present supply. And when manure is itself the product of the farm, instead of being obtained at the cost of other farm products, it is then, and perhaps only then, the main-spring of all real profit in farming operations.

Consequently he who succeeds best in the home manufacture of manure, other things being equal, is likely to be the most successful farmer.

But where even at home, shall we first look for the supply of our prime want?

I answer in the barn-yard, or more properly the barn cellar. And I believe that among all the fertilizers ever invented, or discovered by man, there is none which, in all respects, surpasses nor even quite equals in permanent value, the dropping of the farmer's domestic animals, composted with such materials as every farmer may readily obtain in his own vicinity.

I am aware that there is a great diversity of opinion in regard to the relative value of the article in question, and that even "Doctors disagree" as to the best method of applying it. But I am also aware that

all practical farmers agree in assigning it a high positive value, and succeed in finding some profitable method of application. It is true that some complain that as they apply it on their soils, it heats quickly and exhausts its own powers long before the crop for which it is intended is fully matured, while others say that it lies cold and heavy in their soils, without affording apparent benefit to the crop, until late in the season. I think these difficulties, however, and their remedy, may generally be explained by a knowledge of the manner in which the manure is prepared and used, and of the soil to which it is applied.

I suppose that the solid excrements of animals yield a large proportion of seed forming elements, and that these elements are developed slowly, not acting upon plants materially in the early stage of their growth, when there is a deficiency of those elements specially needed to produce a luxuriant growth of leaves and stalks: so that if a crop, as of corn for instance, be cultivated with this manure alone, there will be danger that it will grow slowly, and be small, although what seed it does yield may be of superior quality.

This deficiency in the solid is richly supplied in the fluid excrement, which affords in abundance, those elements most needed to insure a rapid and healthy growth of leaves and stalks, while it lacks a supply of those so largely furnished by the former. And if the crops were cultivated with the liquid alone, applying it, as our farmers commonly apply their manures, before the growth of the plant commences, it would be forced in the early stage of its growth, and would present a magnificent display of leaves and stalks while there would be great danger that the ears would not fill out, and that the kernel would be imperfect.

If this supposition is correct, it will be readily seen that it is of the first importance that the farmer should save with the

utmost care both the liquid and the solid excrement of all his animals, and protect them from all exposure to loss, that the two may be intimately blended, and applied together to his fields, to furnish in common all the elements necessary to give a quick growth of leaves and stalks, and to supply a rich harvest of "full corn in the ear."

But even if the supposition be not correct, there is still sufficient proof that both the liquid and solid excrements of our cattle are of too great value to justify, as is still to frequently the case, their exposure to the scorchings of the burning sun, the "peltings of the pitiless storm," and the driving blasts of all the winds of heaven.

Instead of such exposure, let some shelter be provided for our manure, which shall protect it from the sun, rain and wind. A barn cellar is the best: Let an abundant supply of some absorbent be procured,—and nothing is hotter than good dry meadow muck; and used in quantities sufficient to absorb all the liquid droppings of our cattle, and mixed every day with the solid manure.—*Country Gentleman.*

Management of Milk—Butter and Cheese making, &c.

From an excellent chapter on the dairy, furnished by "Hetty Hayfield" to the *Valley Farmer*, we copy the following:

MILK should be strained before the cream begins to rise, into vessels that have been scalded, and in summer rinsed in cold water. If milk is kept at proper temperature, cream will rise to the surface of any vessel, but sooner in shallow pans. Skim milk is not a presentable article on a well-to-do farmer's table. For table use it should be strained into covered pitchers or

bottles. Milk will yield up all its cream in from 24 to 30 hours. Cream should be gathered in a jar for churning, and stirred up night and morning. If you have occasion to save sweet cream, keep it in a freezer as if preparing ice cream. It will change very soon when taken out for use. Clabber for the table should be strained into a bowl, and after coagulating, set on the ice until prepared for use.

Directions for curds will be found under cheese. They should be drained, broken fine, kept on ice and served with loaf sugar, nutmeg and cream.

BUTTERMILK is best of cream soured and moderately thick. If water has been poured into the churning it will rise to the top after a few hours, and can be poured off. Indeed an excellent milk-managing neighbor, who cannot churn often, pours a pitcher of water into her buttermilk every morning, stirs it well, and pours it off at dinner—she says it keeps it fresh all the time. Clabber, surplus buttermilk, or sour skin milk, heated until it curds, makes good chicken feed.

BUTTER.—Numbers of reliable experiments have proved that butter made from sour cream is equal to any in flavor, and is the most economical use of the milk, all in all. Sweet milk produces fine butter, but inferior buttermilk. Milk will produce butter (without waiting to separate the cream) in small quantity and poor buttermilk. Scalding the milk, according to a current theory, with us made no perceptible increase of butter, and impaired the flavor of the milk. The churn should be scalded, the milk poured in, and if as warm as when fresh from the cow, it is right. (55° by the thermometer.) Churn rapidly in cold weather, and moderately in warm. A few minutes work will bring the butter.

When the butter is carefully gathered, draw off the milk; pour in a bucket of fresh water, churn briskly, pour off the water,

and repeat the operation until the butter is free from milk. (We repudiate the Holstein system of unwashed butter and hand manipulations.) Allow one ounce of fine salt to the pound of butter. Work it with a paddle thoroughly, and run a fork through it, lest a hair should have strayed through the sieve. Set it away until it gets firm, then repeat the operation. When sure the water is out, set on a perforated dish to drain, after you have moulded it. The next day put it in your butter crock, in a cool, dark place, or wrap in cloth and put in pickle, or beat it down into your firkins, if for winter use.

BUTTER PICKLE.—One gallon of water, one pound fine salt, one ounce saltpetre, two ounces loaf sugar, boiled and skimmed clear. Pour on cold and keep two inches above the top of the butter.

CLARIFIED BUTTER.—Put any quantity of butter in a preserving kettle; boil it ten minutes; set it off, and when cold it will be a clear cake. Cut it out, scrape off the caseous sediment, return it to the kettle, and at boiling heat, seal it up in cans as you would fruit. Inferior, but useful in scarce times.

The recipes for restoring rancid butter by chlorine, charcoal, &c., &c., we have found a failure.

CHEESE.—The common, and to my notion, unpalatable and indigestible country cheese, which is, nevertheless, both popular and saleable, is as easily made as butter and more remunerative. But good cheese is a tedious, particular and rather a laborious business, as taught me by the pattern like, and pleasant friends of a Shaker village. Skimmed milk alone does not make eatable cheese. Half the milk skimmed is poor. Milk fresh from the cow is the right article. It should be strained into a kettle and brought to a heat of 85°. Three quarts of milk is allowed to a pound of

cheese. One teacupful of strong rennet water will turn 12 gallons of milk.—(Too much rennet or heat makes tough cheese.) Cover the kettle; in about half an hour the curd should be formed. When it begins to sink, cut it in small squares with a slicer. Cover it with a thin linen cloth, and dip off the whey very gently. When you have dipped the last spoonfull to be had by tender handling, spread a cloth in your curd basket, (made with slits, wide apart,) put the curd in it; set it to drain, with a light weight pressing on it. When it seems dry, spread a cheese cloth in a hoop; break up the curd into it, fold the ends of your cloth over it, put in a follower that fits exactly and press. (We prefer the lever, to the screw press.) After an hour's moderate, but continually and slowly increased pressure, take it out. Break it up in fine crumbs, and stir in it enough fresh water to cover it well. Let it stand a quarter of an hour; drain it well, then salt it to your taste, and return it to the hoop with a fresh cloth. Press it all day in the above described way. At night take it out, pare off any uneven edges, return it to the press until another morning, or better, for another 24 hours. When made, wet it over with cheese varnish. Lay on a cool shelf, and for two weeks varnish every morning, and the rubbing and turning over keep up for a month.

Sage cheese is made as above, by mixing sage and spinnach juice in the milk. Stilton cheese has equal parts of sweet cream and fresh milk, requires very tender handling, and to be kept in boxes (while drying,) without bottom or top. Curds are made of fresh milk, as for cheese, or by pouring buttermilk into fresh milk and heating until it forms. Butter-milk poured into the whey, saved from cheese while scalding hot, will produce a quantity of rich curds, which may be used for the table or cheese cakes.

MONTHLY METEOROLOGICAL REPORT

Montreal Market Prices.

For September 1857.

BAROMETER.

| | |
|--|------------|
| Mean reading of the barometer F inches corrected and reduced to... | 32° 29 842 |
| Highest reading of the barometer corrected the 7th day | 30° 179 |
| Lowest reading of the barometer corrected the 23rd day. | 29° 494 |
| Monthly range..... | 0° 685 |

THERMOMETER.

| | |
|---|----------|
| Mean reading of the standard thermometer..... | 57° 47 |
| Highest reading of the maximum do..... | 91° 4 |
| Lowest reading of the minimum do..... | 30° 4 |
| Monthly Range..... | 61° 0 |
| Mean of humidity..... | 0° 823 |
| Greatest intensity of the suns rays..... | 121° 2 |
| Lowest point of terrestrial radiation..... | 29° 8 |
| Amount of evaporation in inches..... | 2 48 |
| Rain fell on 11 days amounting to 4,171 inches, it was raining 45 hours 4 minutes and was accompanied by thunder on 3 days..... | |
| Most prevalent wind S. W.... | |
| Least prevalent wind N..... | |
| Most windy day the 29th day, mean miles per hour..... | 15 m. 43 |
| Least do do the 5th day do do | 0 19 |
| Ozone was present in large quantity..... | |
| Aurora borealis was visible on 5 night..... | |

CORRECTED BY THE CLERK

OF THE

Bonsecours Market.

Montreal, Nov. 28, 1857.

| | |
|----------------------------------|--------------|
| Flour, Country, per quintal..... | 15 0 to 15 6 |
| Outmeal, do..... | 12 0 to 13 6 |
| Indian Meal, do..... | 0 0 to 9 0 |

GRAINS.

| | |
|--------------------------------------|-------------|
| Wheat, per minot..... | 3 4 to 3 6 |
| Barley, do..... | 3 0 to 3 0 |
| Peas, do..... | 3 9 to 4 0 |
| Oats, do..... | 1 10 to 2 0 |
| Buckwheat, do..... | 2 3 to 2 6 |
| Lower-Canada Indian Corn, do, yellow | 0 0 to 0 0 |
| Rye, do..... | 0 0 to 0 0 |
| Flax Seed, do..... | 5 0 to 5 6 |
| Timothy, do..... | 9 0 to 10 0 |
| Brnn, do..... | 0 0 to 9 0 |

FOWLS AND GAME.

| | |
|--------------------------------|-------------|
| Turkeys (old) per couple,..... | 9 0 to 10 0 |
| Do (young) do..... | 3 9 to 6 0 |
| Geese, do..... | 4 6 to 6 0 |
| Ducks, do..... | 2 6 to 3 0 |
| Do Wild, do..... | 2 0 to 3 9 |
| Fowls, do..... | 3 0 to 2 6 |
| Chickens, do..... | 1 10 to 2 0 |
| Pidgeons, Tame, do..... | 1 0 to 1 3 |
| Partridges, do..... | 2 0 to 2 6 |
| Hares, do..... | 1 0 to 1 3 |
| Plover, do..... | 0 0 to 0 0 |
| Woodcock, do..... | 0 0 to 9 0 |

MEATS.

| | |
|-------------------------------|--------------|
| Beef, per lb..... | 0 3 to 0 10 |
| Pork, do..... | 0 6 to 0 7 |
| Mutton, do..... | 0 5 to 0 7 |
| Do per qr..... | 1 8 to 5 0 |
| Beef, per 100 lb.,..... | 30 0 to 45 0 |
| Pork, fresh, in carcass,..... | 47 6 to 50 0 |

DAIRY PRODUCE.

| | |
|--------------------------------|-------------|
| Butter, Fresh, per lb.,..... | 1 2 to 1 3 |
| Do Salt do..... | 0 9 to 0 10 |
| Cheese (skim milk) per lb..... | 0 4 to 0 5 |
| Do (sweet) do..... | 0 11 to 1 0 |

VEGETABLES

| | |
|---------------------------------|------------|
| Beans, American, per minot..... | 0 0 to 9 0 |
| Do Canadian, do..... | 7 6 to 8 0 |
| Potatoes, per bag..... | 3 6 to 3 9 |
| Turnips, do..... | 0 0 to 9 0 |
| Onions, per minot,..... | 4 6 to 5 0 |

SUGAR AND HONEY.

| | |
|---------------------------|------------|
| Sugar, Maple, per lb..... | 6 6 to 9 6 |
| Honey, do..... | 0 7 to 0 8 |
| Bee's Wax do..... | 1 3 to 1 6 |

MISCELLANEOUS.

| | |
|------------------------------|--------------|
| Lard, per lb..... | 0 9 to 0 11 |
| Eggs (fresh) per dozen,..... | 0 8 to 0 9 |
| Half-but, per lb,..... | 0 6 to 0 7 |
| Haddock,..... | 0 0 to 0 5 |
| Apples, per barrel,..... | 15 0 to 20 0 |
| Oranges, per box,..... | 0 0 to 9 0 |

Re-Organization

OF

AGRICULTURAL SOCIETIES

IN

LOWER-CANADA.

NOTICE is hereby given that all the County Agricultural Societies in Lower-Canada, will have to re-organize under the *Act 20 Vict. Chap. 49, Sect. 4.* "The first meeting in each County shall be called by the *Warden* of the County at the *Chef-Lieu* where there is but one society and at the most frequented place within the territorial limits where there are two societies, **IN THE THIRD WEEK of JANUARY**, one thousand eight hundred and fifty eight, after notice of the object, and the *time* and *place* of such meeting, publicly given in the newspapers of the County, or by placards posted up in different places in the County for at least one week previously, and the society, then and there organized shall be, and be held to be, the County Agricultural Society."

A copy of the proceedings of such meeting, certified by the *Warden* of the County, the *President* and *Secretary* of the Society shall be sent at once to the *Board of Agriculture, Montreal.*

T. CHAGNON,
Secretary pro-tempore,
Board of Agriculture,
Lower-Canada.

Montreal, december 1st, 1857.

Dr. Picault's Medical Hall, 42, NOTRE-DAME STREET, MONTREAL.

THE most approved Medecines for the diseases of Horses and Cattle will always be found at the above address.

— ALSO:—

Consultations and treatment of all diseases by Drs. Picault, father and son, Drugs of all sorts, French Patent Medecines, &c.

September 1857.

TO FARMERS !

PIERRE DUFRESNE,

MANUFACTURER OF

BOOTS AND SHOES,

AT LOW PRICES,

Wholesale and Retail,

NO. 123,

CORNER OF ST. GABRIEL AND
NOTRE-DAME STREETS,

Sign of the Little Red Boot.

September 1857.

Worthy of Recommendation.

MR. J. B. ROLLAND'S Library has always been remarkable for the choicest and most complete assortment of

Books on Agriculture,
Papers,

Pictures, &c.,

to be found in this City, his prices will be found as low as those of any other book store.
September 1857.

THOMAS COUILLARD,
IMPORTER,

No. 165, ST. PAUL STREET, MONTREAL.

Farmers will always find at the above address, a large assortment of Agricultural and Horticultural Implements, such as: Shades, Rakes, Scythes, Shovels, Plough Shares, Pitchforks, Hoes, Stay-Reeds, &c.

— ALSO —

Sugar and Potash Kettles, Stoves of all sorts, Furnaces with Boilers, cast Iron of every description and a large assortment of

Shelf Goods.

Nov. 1857.

AGRICULTURAL BOOKS.

A large variety of the most modern works on every thing pertaining to Agriculture, Horticulture, &c., &c.

For sale by

JOHN DOUGALL,
36, Great St. James Street, Montréal,
Nearly opposite the Wesleyan Church.

Nov. 1857.

Every Farmer should have

The Illustrated Annual Register of Rural Affairs for 1858,—price 1s 8d.

Sent by mail free postage.

For sale Wholesale and Retail by

JOHN DOUGALL,

36, Great St. James Street, Montreal.

Nov. 1857.

N. Lepage's
SUPERIOR FIRE ENGINES.

MR. LEPAGE is ready to manufacture Fire Engines for the City and Country at prices varying from \$20 to 2000.

— ALSO, —

Portable and Stationary Engines for steam-boats, the whole warranted superior to any other Engine and constructed so as to occupy but little space and be ready for service at all times.

The Fire Engines are well known as the best suction engines, and will be found allways in order.

Liberal conditions on orders for Engines sent from the country.

N LEPAGE,
St. Edward Lane, Montreal.

Models in wood and brass for all kinds of machinery, new inventions, &c. made according to plans sent to him in the best style.

N. LEPAGE,

Engineer and Fire Engine Manufacturer.
September 1857.

VETERINARY INFIRMARY.
DR. FELIX VOGELI

Graduated in the French Government schools and formerly Veterinary in Chief in the French Artillery and Cavalry. Short and full treatment of all horse and cattle curable diseases, 11, Bonsecours Street, Hôtel du Peuple, Montréal. Horses bought or sold to order.

October 1857.



Crown Lands Department.

TORONTO, OCTOBER 27TH, 1857.

NOTICE

IS hereby given that about NINE THOUSAND ACRES of LAND in the 5th, 6th, 7th, 8th and 9th ranges of CHERTSEY, County of Montcalm, L. C. will be open for sale to actual and intending settlers at ONE and SIX per acre on and after the 30TH OF NEXT MONTH, on application to A. DALY, Esq., AGENT at RAWDON in said County.

November 1857.



Bureau of Agriculture
and Statistics,

Toronto, July 28th, 1856.

HIS EXCELLENCY THE GOVERNOR GENERAL, has been pleased to approve of the method of distribution of the LAND IMPROVEMENT FUND, prescribed by the Order in Council herewith; published in the hope that a judicious and economical management thereof may be thereby insured.

A Circular from the Department will be received by the Head of each Municipality, stating the amount at the disposal of such Municipality.

As the best season of the year for making improvements to which the Fund is applicable is close at hand, it is recommended that the preparations for the appropriation of the Money be made as soon as possible.

The Order in Council is as Follows:—

It is ordered that the Funds derived from the sales of Lands in each particular Township, or other Municipality, and applicable to the purposes of the Fund formed under the 14th Section of the Act 16 Vic., Ch. 159, and not already apportioned, be applied to the making, maintaining, altering, or improving of the Roads or Bridges in each of those Townships, or other Municipalities, respectively, and be for this purpose, distributed and disposed of by and through the Municipal Council of each such Township or other Municipality. Each such Council to report to the Bureau of Agriculture the manner of Expenditure of all such Monies on the FIRST DAY OF JANUARY and JULY, in each year, and at any intermediate time within ten days after having been called upon so to do, by that Department.

Certified,

W. H. LEE, C. E. C.
P. M. VANKOUGHNET.



Bureau of Agricultural Statistics,

Toronto, 25th July, 1856.

To Emigrants and others seeking lands for Settlement.

The PROVINCIAL GOVERNMENT have recently opened out THREE GREAT LINES OF ROAD, now in course of completion, and have surveyed and laid out for Settlement the Lands, through, and in the vicinity of which those Roads pass.

The Roads, as advertised by the Agents of the Government, appointed to the respective localities to afford information to the Settler, are known as "THE OTTAWA AND OPEONGO ROAD," "THE ADDINGTON ROAD" and "THE HASTINGS ROAD."

The Ottawa and Opeongo Road

Commences at a point on the Ottawa River, known as "Ferrall's," a little above the mouth of the Bonchere River, and runs in a Westerly direction, passing through the northerly part of the County of Renfrew.

It is intended to connect this road with a projected line of road known as "Bell's Line" (leading to the Lake Muskako, and Lake Huron, by a branch which will diverge from the Opeongo Road in the Township of Brudnell, at a distance of about 53 miles from the River Ottawa, forming with "Bell's Line," a great leading road, or base line from the Ottawa to Lake Muskako, 171 miles in length, passing through the heart of the Ottawa and Huron Territory, and opening up for settlement a vast extent of rich and valuable land.

This road, and the country through which it passes, now open for settlement, is easily accessible, and the Agent for the granting of Lands in this district is Mr. T. P. French, who resides at Mount St. Patrick, near Renfrew, on the Opeongo Road, a few miles from the Lands which are to be granted. To reach the section of Country under Mr. French's charge the Settler must go from MONTREAL up to the Ottawa River to a place called Bonchere Point, and thence by land come twenty-five or thirty miles westward to the Township of Grattan, in which Mount St. Patrick is situated.

The Addington Road

Commencing in the Townships of Anglesea in the northern part of the county of Addington near the Village of Flints Mills, in Kaladar, runs almost due north to the River Madawaska, a distance of 35 miles—and is to be continued thence for the distance of 25 miles till it intersects the Ottawa and Opeongo Road.

The Agent for the granting of the Land in this district is Mr. E. Perry, who, for that purpose, is now resident at the Village of FLINTS MILLS. The outlines of five townships of very superior land are already surveyed and ready for Settlement within the limits of the Agency, lying north of Lake Massanoka, and between it and the River Madawaska. The Townships are

called respectively Abinger, Denbigh, Ashley, Effingham, Anglesea, and Barrie.

The direct route to this Section is by way of KINGSTON, Canada West, thence, to NAPANEE, either by land or Steamboat, and thence North to the Township of Katadar, and the Village of FLINTS MILLS where Mr. Perry resides.

The Hastings Road

Almost paralld to the Addington Road, and at a distance West from it of about 32 miles is the HASTINGS ROAD. This Road beginning at the northern part of the County of Hastings, and running a distance of 74 miles, almost due north, also intersects the OTTAWA AND OPEONGO ROAD and its extensions.

The Government Agent is Mr. M. P. Hayes, who resides at the Village of Hastings, lately called Madoc, about 28 miles north of the Town of Belleville. The Road between these places is in good order—The land to be granted by the Crown under this Agency extends from 15 to 70 miles north of the Village of Hastings. The Road through this large extent of land is passable for 40 miles, and money is now being expended to extend it 30 miles further, so that Settlers can get in and out without difficulty, and find a good market for surplus produce, as well as convenient facilities for bringing in whatever supplies they may require—abundance of which can be had at the Village of Hastings, where the Government Agent resides.

The direct way to reach this Section which is easily accessible, is by KINGSTON, Canada West, thence by Steamboat up the Bay of Quinte to BELLEVILLE, 56 miles, and thence by a good Road to HASTINGS, 28 miles.

In order to facilitate the Settlement of the Country and provide for keeping in repair the Roads thus opened: the Government has authorized Free Grants of Land along these Roads, not to exceed in each case ONE HUNDRED ACRES, upon application to the Local Agents, and upon the following.

Conditions.

That the Settler be eighteen years of age.

That he take possession of the Land allotted to him within one month, and put in a state of cultivation at least twelve acres of the land in the course of four years,—build a house (at least 20 by 18 feet) and reside on the lot until the conditions of settlement are duly performed; after which accomplishment only, shall the settler have the right of obtaining a title to the property. Families comprising several settlers entitled to lands, preferring to reside on a single lot, will be exempted from the obligation of building and of residence, (except upon the lot on which they live) provided that the required clearing of the land be made on each lot. The non-accomplishment of these conditions will cause the immediate loss of the assigned lot of land, which will be sold or given to another.

The road having been opened by the Government, the settlers are required to keep it in repair.

The Local Agents, whose names and places of abode have already been given, will furnish every information to the intending Settler.

The LOG-HOUSE required by the Government to be built, is of such a description as can be put up in four days by five men. The neighbours generally help to build the Log-cabin for newly arrived Settlers, without charge, and when this is done the cost of the erection is small; the roof can be covered with bark, and the spaces between the logs plastered with clay, and white-washed. It then becomes a neat dwelling, and as warm as a stone-house.

The Lands thus opened up and offered for settlement, are, in sections of Canada West, capable both as to Soil and Climate, of producing abundant crops of winter wheat of excellent quality and full weight, and also crops of every other description of farm produce, grown in the best and longest cultivated districts of that portion of the Province, and fully as good.

There are, of course, in such a large extent of country as that referred to, great varieties in the character and quality of land—some lots being much superior to others; but there is an abundance of the very best land for farming purposes. The Lands in the neighborhood of these three roads will be found to be very similar in quality and character, and covered with every variety

of Timber—some with hard wood, and some with heavy pine.

Water for domestic use is every where abundant; and there are, throughout, numerous streams and falls of water, capable of being used for Manufacturing purposes.

The heavy timbered land is almost always the best, and of it, the ashes of three acres—well taken care of and covered from wet,—will produce a Barrel of Potash, worth from £6 to £7 currency. The capital required to manufacture Potash is very small, and the process is very simple and easily understood.

The expense of clearing and enclosing heavily Timbered Lands, valuing the labor of the settler at the highest rate, is about FOUR POUNDS Currency per Acre, which the first wheat crop, if an average one, will nearly repay. The best timber for fencing is to be had in abundance.

A Settler on these lands, possessing a capital of from £25 to £50, according to the number of his family, will soon make himself comfortable, and obtain a rapid return for his investment. The single man, able and willing to work, needs little capital, besides his own arm and axe—he can devote a portion of the year to clearing his land, and in the numerous lumbering establishments, he can, at other seasons, obtain a liberal remuneration for his labor.

The climate throughout these Districts is essentially good. The snow does not fall so deep as to obstruct communication; and it affords material for good roads during the winter, enabling the farmer to haul in his Firewood for the ensuing year from the woods, to take his produce to market, and to lay in his supplies for the future—and this covering to the earth, not only facilitates communication with the more settled parts of the District, but is highly beneficial and fertilizing to the soil.

In all the localities above named, wherever Settlers have surplus produce, there is a good market for it near to them—farm produce of all kinds being in great demand by the Lumber or Timber Merchants, who are carrying on extensive operations through these parts of the country.

According to the ratio of progress which Canada West has made during the last ten years, the value of property on an average

doubles within that period; irrespective of any improvements which may have been made by the Settlers.

In many Counties the value of Land, once opened for settlement has increased FIVEFOLD in the period named, but the average value of such land, according to the statistics of Canada West, **DOUBLES EVERY TEN YEARS** in the mere lapse of time, exclusive of any expenditure thereon—and it is not too much to expect that this ratio will not diminish for generations to come.

The Sections of Country opened by these roads, lie in and to the Southern part of the Great Ottawa Region, stretching from and beyond them to the shores of Lake Huron, to Lake Nipissing, and to the Ottawa River—an immense extent of country whose resources are now seeking and will rapidly obtain development.

THE OTTAWA COUNTRY, lying south of Lake Nipissing and of the great River Ottawa, and embracing a large portion of the land offered for settlement, is capable of sustaining a population of **EIGHT MILLIONS OF PEOPLE**, and it is now attracting general attention, as the more western portions of Canada are being rapidly filled up;

The Parliament of Canada in its last Session, incorporated a company for the construction of a Railway to pass through this Ottawa country from the Shores of Lake Huron to the City of the Ottawa, and thence Eastward.

A survey of the River Ottawa and the neighbouring Country has been undertaken, and will be completed in the present year, its principal object being to ascertain by what means the River Ottawa can be rendered navigable and connected with Lake Huron so as to enable vessels to pass by that route from the most Western Waters into the River St. Lawrence and the Ocean. These projected works are alluded to, in order to show that the attention of the Government, Parliament and People of Canada, has been fixed upon this important portion of the Province.

P. M. VANKOUGHNET,

Minister of Agriculture, &c.