

THE GLEANER:

AND NORTHUMBERLAND, KENT, GLOUCESTER AND RESTIGOUCHE
COMMERCIAL AND AGRICULTURAL JOURNAL.

OLD SERIES]

Nec aranturum sane textus ideo melior, quia ex se fila gignunt, nec noster vilior quia ex alienis libemus ut opes.

[COMPRISED 13 VOLUMES.]

NEW SERIES VOL. IV.]

MIRAMICHI, SATURDAY MORNING, NOVEMBER 29, 1845.

[NUMBER 8.]

Agricultural Journal.

APPLICATION OF MANURE.

Editor of the Cultivator.—It has been said that manure is the raw material of the farmer, from which he manufactures his agricultural products. Much, but not too much, has been said in modern days, upon the modes of increasing the raw material. Permit me to call the attention of cultivators, more particularly to its application. A good manufacturer is careful not only in procuring stock, but more especially, in working up this stock to good advantage. With too many farmers it seems to be the aim to make and apply manure, not stopping to inquire how it can best be applied. Green and rotted, composted and clear, it is too often applied, indiscriminately to all kinds of soil, when and where convenience or custom may direct. There can be no question that long manure is best adapted to hood crops, and well rotted compost for a top dressing. But the principle, which I would particularly invite attention, is that given by the Creator to Adam, and legible in all nature's works, viz: that seed produces seed after its kind; in other words, that like produces like. Look upon the stately trees of the forest. How have they attained their great dimensions? Who has been their cultivator, and what the mode of their cultivation? He, who does all things well is their culturist, and their food, the decayed leaves and branches that are annually deposited at their roots. Man has been slow in learning the simple principle from the Great Teacher. It is but a recent thing that the vine dressers of France have discovered that the prunings form the best manure for the vines. It has long been observed that hog manure is exceedingly well adapted for a crop of corn. Does not the fact that hogs are generally fattened upon corn, furnish the reason of its adaption? An experiment of a good farmer in this vicinity, bears directly upon this principle. Cutting the tops of corn for fodder, he places the bottom stalks between the rows, and upon these stalks he turns back furrows; without further manuring or plowing, he plants his corn, and his crops are above the average of those in the neighbourhood. A similar experiment with potatoes has proved that the tops well covered at the time of digging, will furnish sufficient manure to ensure an equally good crop the succeeding year. Onions it is well known succeed best when sowed on the same ground year after year. Is not the rationale found in the fact that the tops are always left on the ground. Rye, has been known to grow on the same land for a course of years, with undiminished yield, with no other manure than that furnished by the stubble plowed in. Chip manure is universally recommended for promoting the growth of young fruit trees. The wherefore is found in the simple principle we lay down, that like produces like. Nature has furnished all seeds with nutriment in themselves the best adapted for the future plant. Who can doubt but that the pulp of the apple was designed as food for the seed as well as to gratify man's appetite? The blade of wheat and the sprout of the potatoe, as they first shoot forth, feed solely upon the parent stock.

The principle we have thus briefly illustrated and endeavored to prove, has important practical inferences. If the principle is true, no top dressing can be better adapted for grass than the aftermath left to decay on the ground. The manure from stock fed on hay should also be applied to grass lands, while that derived from grain should be applied to farinaceous crops. It is not necessary to carry these inferences further. They will suggest themselves to all readers of reflection.

BERKSHIRE.

RULES FOR PLOWING.

We think it would be proper for Agricultural Societies to establish some general standard for good plowing. We find but a small proportion of all the plowing in the country, performed in what could

be called a proper manner. One of the greatest and most common errors, is making too wide furrows. This error is more or less prejudicial according to the nature of the soil—the injury being greater as the soil is more compact and tenacious. If the land to be plowed is *steward*, the object is the subversion of the sod in such a manner as that the decomposition of the vegetable matter shall be rendered most valuable and available to succeeding crops, and at the same time leave the soil loose and permeable to the roots of growing plants. To consider in detail all the circumstances which promote decomposition, would require more space than we have at disposal; it may however be remarked that air, heat, and moisture, are essential requisites. But in the case under consideration, it is necessary in the first place, that the vegetable substances in the soil be placed in such a situation as to check life, else their growth will be promoted by the very principles which would otherwise produce decomposition. A complete subversion of the sod is therefore the first requisite, and this should be done in a manner most favorable to its decomposition and the benefit of the crop to be put on the land.

It is obvious that a narrow furrow, lightly laid over, would more perfectly than a wide one, divide the soil and adapt it to the support of a crop. It is not many months however, since we heard a farmer remark that he would not care it six or seven inches of a field be intended to plow, could all be completely turned over at once. Few would probably attempt to defend this proposition, and yet the practice of many is so much in accordance with it, they not only turn over as much at once as they possibly can, but in some cases they attempt to cover with the furrow slice that which is not even loosened by the plow.

On the relative advantages of flat and angular furrows, we are aware that much diversity of opinion prevails. For very loose and porous soils, flat furrows may be equally as good, if not better, than those laid at any angle; but excepting for such, we should decidedly prefer furrows laid in such a manner as would admit a space for air underneath.

As to the proper depth of plowing, good farmers also differ. Since the introduction of the subsoil-plow, however, we think the question more easily settled, as the loosening of the sub-stratum by that implement, at once secures all the advantages of deep tillage, while it allows a surface furrow so shallow as to be liable to none of the objections urged against deep plowing.

From English Papers by the last Mail.

From the Dumfries Courier.
RURAL AFFAIRS.

During the whole of last week the weather was favourable, with the exception of an occasional passing shower, the only effect of which was to moisten for a brief space the blade, to be brushed off by the first passing breeze of the elements, in restoring equilibrium. Harvesting, accordingly went briskly forward wherever such tasks remained to be performed; and between the beginning and end of the week the majority of fields must have been completely cleared in the remotest situations. The barometer, which has risen gradually of late, stood lately at 30.2 inches; and, should the present week resemble the last, the probability is that every sheaf of grain, whether plump or imperfectly filled, will be in the barnyard in the wildest straths of the North and West Highlands. As for the islands, it is satisfactory to know that they were earlier this year than the mainland, and that weeks have elapsed since harvest home was celebrated among crofters and other Skye, Mull, and the lonely Iona. In the middle and lower districts of Nithdale, the fields are all bare, and the plough again in motion converting stubble into tilth; although only a few days have elapsed since crop remained exposed between Sanguhar and Cumnock, including the Knees of Corsoncon; but with sunshine and stirring gales substituted for rain, even these remnants may have dis-

appeared in one of our most backward sections of country. From what we have seen Saturday last effected perfect wonders in winding up operations; and tedious and protracted as autumn work has been, it is now, we rejoice to think completely ended all over the South of Scotland.

Everywhere the farmers are busy with their potatoes, and would be to blame did they miss so good an opportunity of raising the tubers dry and clean. When the soil is clammy so much mud attaches, that it is impossible to judge correctly of outward appearances, with a view to drawing searching lines of distinction, in separating sound from affected roots. In the good old times when, however careless the management, the murphies always grew, pitting went forward simultaneously with lifting; but during the present year stern necessity dictates the exercise of greater caution. As weeks may elapse before the full extent of the evil is discovered, pitting should be avoided in the first instance, and the produce deposited in thin layers in barns and other outhouses, wherever convenient; and where this arrangement is found impossible, it might be spread on the ground taking care to cover up at night with straw, or some other description of matting—fern, for example, where it grows in abundance. The pits, too, should be made roomier than usual, and well ventilated in every instance. After storing some time the pits should be examined once a week, and ventilation attended to with unceasing anxiety. Some have recommended kiln-drying, as in the case of oats intended for meal; and, could this be done, it would be found of all cures the most effectual in arresting the progress of farther putrefaction. But we doubt the means of effecting so great an object, to say nothing of the expense and trouble incurred. Before steam navigation became so common, and when preserved meats were utterly unknown, the crews of Indiamen bound on a long voyage, were under the necessity of subjecting their stores of tubers to the influence of powerful artificial heat; sprouting, it appears, commenced on this side the Cape of Good Hope, and but for the precautions adopted, the whole stocks on board would have become rotten before the vessel had reached either of the three great ports—Madras, Bombay, Calcutta.

That insects have been detected in potatoes, we are aware, from personal observation; but, as this is not generally the case, we regard them as a consequence, rather than the cause of the existing epidemic. Insects of all kinds prey upon weakened, rather than vigorous, vegetation of whatever description, just as vultures, eagles, and the larger feathered carnivorous tribes prefer carrion to untaunted animal food.

One curious fact may be mentioned. Some of the diseased potatoes when boiled become as hard as stone; while upon others, boiling has the usual effect. We saw the potato-raising going on the other day in a field near Thornhill, composed of wetish nelm land and dry sandy knolls; on the latter the disease was much more extensive than the other.

From the Glasgow Herald.
THE POTATO DISEASE.

It is gratifying to observe, that the reports of the state of the potato crop are more favourable from some quarters, than we had reason to expect; and it is to be hoped the injury already commenced in other districts, will be rendered of comparatively minor importance by the practice, which cannot be too generally adopted, of making potato flour or starch of the diseased potatoes. If this be done as soon as the disease appears, and before the potato has begun to decay, the flour will be sweet and wholesome and when delayed until a more advanced stage of decomposition, it may still be valuable as starch. A person in my neighbourhood, with no better machine than a common grater made by punching holes in a piece of tin, and a tub of water made 3 lbs. of beautiful potato flour from 20 lbs. of diseased potatoes in little more than an hour. Flour, of similar quality, sells in shops

at 3d per lb, which would be 9d for 20 lbs. of potatoes, or nearly 25s per boll of 6 cwt., or £4 4s per ton, from which the price of the labour has to be deducted.

To manufacture potato flour on a large scale small machines to be driven by the hand, like a turnip slicer, could be made in a couple of days by any clever millwright. I understand that Mr. Wood of Greenock (Port-Glasgow) has turned his attention to the subject, and from his experience in such matters, it is to be hoped he will succeed in making a cheap and useful machine.

After making ample allowance for labour, and inaccuracy of calculation, it is evident that diseased potatoes reduced to flour will yield as much money to the grower as sound potatoes in their original state. But no time must be lost, for the decomposition, when once begun, proceeds very rapidly. Any labouring man should immediately purchase as many potatoes as he conveniently can, and set his wife and children to reduce them to flour. The process is a simple one, and is, I believe, practised on a small scale, in most cottages.

I cannot help fearing that over confident persons, like myself, will not discover the extent of the destruction caused by the potato murrain until it be too late. Had I been aware, in time, of the rapid progress of the disease, and of the easy process of converting the potatoes into flour, I might have prevented the total loss of about 35 tons; and I will therefore take the liberty, of stating my case, as a warning to others.

On the 6th Oct., we began to dig our potatoes which looked remarkably well, and were considered of excellent quality, and quite free from disease. The following day, however, we discovered some diseased potatoes by a closer inspection, but none at all decayed. We continued to dig them till the 11th, when the best pit was closed; the weather having been dry all the time, and the land in beautiful condition. On the 22d (only 11 days) the best made pit fell in; and on opening it, the potatoes were found to be a mass of putrefaction, and the other pits were nearly as bad. I believe that the potatoes can be converted into flour, and the safest and cheapest way of preserving them is by pulling the shaws, and covering them with the plough or hoe.—I am &c.,

A FARMER.

From the Liverpool Times.

ON THE METHOD OF PRESERVING POTATOES THROUGH THE WINTER MONTHS.

As there is too much reason to fear that the quality of the whole of the potato crop this year is more or less affected by the incessant wet, and that many potatoes which look well at present will be injured in the pits, or, as they call them in this county, the "hogs," if they are not very carefully stored, it may be useful at the present season, when farmers are every where getting up their crops of this indispensable root, to describe a method of storing them which has been adopted for several years with complete success on two farms with which we are connected, and on which from forty to fifty statute acres of potatoes are grown every year. The three great points to be looked to in storing potatoes, are these:—first, to keep them dry; second, to keep them cool; and, third, to keep them well covered from the light and frost. All of these objects may be gained by the following method of storing them: in the first place, the holes in which they are placed should be extremely shallow, (if any holes are made at all,) and the foundations of the hogs should not be more than three feet or three feet and a half wide. On these the potatoes should be placed in such quantities that there will not be more than from eight cwt., to half a ton in a running yard. To keep the potatoes dry, a small drain should be formed all round the pits or hogs, and the heaps should be well covered with sods and earth. To furnish them with a sufficient supply of fresh air, which is the only way to prevent their heating, a row of tiles should be placed under the pota-