The Carleton Sentinel.

Devoted to Agriculture, Literature, and General Intelligence.

Published and Edited "Our Queen and Constitution." By James S. Segee.

NUMBER 52. TUESDAY, JUNE 17, 1851. VOLUME 3.

AGRICULTURE.

[From the Albany Cultivator.]

HOW SHALL OUR WORN-OUT FARMS BE RESTORED TO FERTILITY?

EDITORS OF THE CULTIVATOR—A few days ago, an enterprising, inquiring young farmer, asked me the question—"How shall I bring up my poor old farm?"—As this question is often asked me, and being persuaded that there are many young farmers scattered about, who really wish to be told how to go to work with the means immediately within their reach for the improvement of their land, I shall now attempt to give the substance of my reply to the young farmer, so far varying it as partly to answer the general question propounded at the head of this communication. To advanced farmers, my remarks may be quite common place, but it should ever be borne in mind that there are those behind that want to come along up.

I am aware that the course I am now about to advocate for the renovation of our worn-out lands, involves, what, if you please, may be called a good deal of hard work; but, for wise reasons, it is our allotment, in any and all the various walks of this life, to be beset with difficulties that must be surmounted, and to reap our most substantial advantages and enjoy our choicest pleasures, only as the reward of patient and strenous exertion. To all such as are unwilling to use the means within their reach for the improvement of their soil, because there is work in it, I would say:—You are not fit to farm it here in New England, at least, and it would be better for yourself, and all concerned, that you should immediately abandon the business, and go where you may find a virgin soil, and enjoy the inexpressible pleasure of giving it a clean thorough skinning. The question very naturally arises here, which I will not now discuss,—Whether a diligent and careful husbandry of the means for making manure, and a liberal application of that manure to the soil, is not, in the long run, the *easiest*, as well as the most agreeable and profitable course of farming in this land of barrenness?

Much of our soil, under a long course of wearing tillage, has been deprived of its vegetable matter; and in supplying this material, we also supply valuable inorganic elements which are contained therein. We are led by observation to conclude that the presence of vegetable mould is a grand essential to fertility; we find that nature, every where, in making her choicest soils endows them liberally in this respect; its presence makes the soil more permeable to heat and moisture and more retentive of the same; it keeps land from packing down too hard, and helps the roots of plants to penetrate and range about at pleasure,—to find that genial air, and health-giving water and pasture, which cause the crops to mature into bountiful harvests. The absorbent and retentive properties of vegetable matter, make its presence desirable in the compost heap, also; for there it imbibes and retains those liquids and gasses of the manure, which too many of our farmers, from negligence, or the want of a proper appreciation of their value, permit to run to waste. So we see, that by gathering up the waste substances on our farms that are rich in vegetable matter, and mixing them with the excrements of our farm-stock, we not only return to our tillage fields an important deficiency, but with it, we also carry on rich fertilising saline matters, which would otherwise too often be lost. In other words, there are means within our reach, by which we may more than double the quantity, without detriment to the quality, of our manure.

The first material I shall name, is swamp muck. The farmer who has an abundance of muck at his command, who understands how to manage it, and is willing to go at it resolutely, may be sure of making his land productive. I know several men who, in a very few years, have added barn to barn, and filled them too, as the result of a vigorous and thorough system of muck-composting. To manage muck to the best advantage, the arrangements for draining the swamp should be so complete, that men and cattle need not work up to their knees in mud and water. This being done, a quantity of the muck may be got out into heaps on dry ground, to be used when wanted. It pays well to keep two years stock beforehand in these heaps. The atmosphere will act favorably upon the muck, and it will be lighter to handle and draw; it will also crumble down to a fine powder, mix up better with the manure, and more completely absorb its liquids and gasses. It is also well to get a year ahead with the compost, for by giving it more age and ripeness, the gasses of the manure will all be developed and absorbed by the muck, and retained in the form of salts, and that, in turn, will expel all acidity, and thus the compost will be very much more effective upon the crops.

A barn cellar for the reception of the compost should by all means be had, if the construction of the buildings and the shape of the ground will admit of it. A layer of muck a foot deep may in the fall be spread over the cellar bottom, and when enough manure has accumulated under the scuttles in the stable floor to make a coat over the muck of 7 or 8 inches, the same may be spread. Then another coat of muck and manure, as before, and so on. If it can be so contrived as to get a year's stock of manure ahead, the compost may lay in the cellar till after haying, and then, at leisure, be carted out into large compact heaps on the field where wanted. The heaps should be nicely laid up to prevent unnecessary loss by evaporation.

The most perfect way of composting muck, and, on the whole, about as cheap a way as any, is to have the planks of the cattle stalls just long enough for the animals to stand up or lie down upon, and immediately behind them let there be a trench, four inches deep and fifteen or eighteen inches wide. Into this trench, each morning, put a suitable quantity of muck, and all the liquid and solid excrements from the animals will fall upon it, and the whole, when thrown out, will be thoroughly intermingled. In this way, a very much larger proportion of the muck can be used than any other, because all parts of it come into immediate and intimate contact with the manure-droppings, warm from the stock, and a powerful action at once takes place. A warm place may be provided in or about the barn to hold a number of loads at a time of the muck, and then it can be taken up on a wheelbarrow, and deposited in the trench. This may by some be called extra labor; but it comes at a season of the year when it can be done about as well as not, and a compost thus prepared, will produce extra good crops, wherever applied. I did this kind of work with my own hands two winters; I found that it took, on an average half an hour longer, each morning, to do the "chores," and I also found, in the spring, that my manure heap was very much larger and better by the means.

If compost may still be made in the trench, and thrown out at stable windows, in the usual way. In this case, it would be a matter of economy, in the long run, to build a shed-range in front of the stable windows, to protect the manure from bleaching by storms, or evaporation by sun.

If the idea of a trench seems too particular and notional a mode of farming, the planks of the stable floor may be laid with an opening of one-half inch between them, and so arranged that they can readily be taken up, and a layer of muck of 2 or 3 feet deep thrown under, to catch and hold the urine from the stables. In the spring, this will be found to be strong and good. The solid manure may be thrown out at the windows and afterwards mixed with muck, in the yard or in the field. If in the field, it is a good way to draw the muck to the spot where wanted, and drop it in two winrows, as long as the heap is to be when done, with a space say of 6 or 8 feet between the winrows. Spread into this space, of the muck from each side, a suitable layer, and then drive up to the ends with the manure, and throw on a layer of it. Then another coat of muck and of manure and so on, until the heap is about five feet high,—the last layer being of muck. Two parts of muck may be used to one of manure. The heap should be laid up as lightly as possible, in order to promote fermentation. It should not be too high, for the bottom courses will not decompose, if too much compressed.

In the spring, the barn yard and sheds should receive a good coat of muck, which should be occasionally plowed and worked over, and carted out in the fall, and another coat supplied. Each cow, yarded at night through the summer and fall, will prepare for use at least six loads of muck. The borders or one end of the yard may be the highest, so as to afford a dry place in a wet time, or there may be another yard for such times. If the yard is very large, it may be well to divide off a part of it for summer use, so as to concentrate the cattle droppings, and lessen their exposure to evaporation. I find that the compost prepared under sheds, is much stronger than that made in the open yard; and I strongly suspect that it would be economy to have more shed room than most of us do.

The hog-yard must not be neglected. If possible, it should be so located as to receive the horse manure, and the washings from the house. Muck should be added at suitable intervals, and the hogs will show a specimen of workmanlike and thorough composting,—paying particular attention to tossing about the horse manure, and mixing it with the other materials, so as to prevent injury from burning. Horse-manure, if left in a heap by itself, becomes almost worthless by over-heating.

Muck and unleached ashes, in the proportion of four or five bushels of the latter to a-half cord of the former, is a good compost. I have never failed of raising large, sound, mealy potatoes with a dressing of this kind liberally spread upon a light warm loam. This mixture also makes a capital dressing for grass ground.

Muck and good fresh lime, in the proportion of five cords of the former to a hogshead of the latter, (my hogs-