

immense amounts to the whole agricultural community, and these are: 1st It would be the means of preventing the production of a large share of weeds. All the seeds that are put on the land in the dung would be destroyed by this, method, and this advantage alone would pay the cost of the pits and the interest on the value of the manure, on most farms. 2nd It would prevent the breeding of millions of destructive beetles and other insects, which are propagated and nourished and matured upon dung, and go out from these fields to destroy the crops of the whole farm.

Little does the farmer suspect, that while he is hauling the dung upon the land, he is preparing a nursery for the benefit of so many of those insect pests. It would be time well spent to gather the droppings from the pastures and lanes, and cart them to the pit for the same reason, and if all the bones were picked up and burned and thrown in along with all the ashes that could be scraped up, and if possible a sprinkling of *slaked* lime now and then, the farmer would soon realize that the manure pit was his bank and would be watching every opportunity to make a deposit where there are no dishonest officials to steal or speculate with.

Perfect manure has no attractions for the insects because it is a plant food and not in any way capable of sustaining insect life, and if the manure pits are well protected, the conclusion is that there will be a far less number of them to contend with.

There is another matter which is very important that must here be spoken of, and that is *smut* on the grain. Now when green dung is put on land in the spring and this land is then put into grain we are very often troubled with this black substance growing in such large quantities upon the heads of grain as to curiously injure the value of the crop. Now this smut is an unnatural growth caused by the food being given to the plant in too great a quantity at the wrong time. It is easy to understand that if a plant has only moderate nourishment, and a medium growth has been attained up to the time when the heads appear, that if an unusual amount of rich food is then presented to the roots, that these feeders will consume and throw this food up into the stalk so rapidly, that nature cannot in these small cells [that have not been enlarged at an early stage by high feeding] convert this surplus of food into a natural growth, and consequently she is compelled to throw it off in this unnatural manner.

Now this is caused by the dung decomposing at the wrong time, and if it was a perfect manure when put on the land, the plant would have a vigorous growth from the beginning, and smut would never appear.

J. M. JOCELYN. (1)

Notes from Western Ontario

Mr Editor,—The present season is now so far advanced that I can state with a certainty the results of 1884.

The fall wheat crop is the best we have had for many years, not so much on account of quantity as quality. 64 lbs. per bushel is a very common thing, and from 30 to 40 bushels per acre, spring wheat is also remarkably good. The same may be said of all the other grain crops. One reason for this result has been a remarkable absence of rust and mildew. There was a little frost about the 12th inst., but not enough to prevent corn ripening, so that it also will be good.

Roots are all good, potatoes extra. The only drawback to general prosperity among farmers is low prices. Cheese dairying will be a fair average, prices having kept up well, although quantity is short. Apples are the best as regards quantity I have seen for many years, the codlin moth that has been so destructive of late years having almost disappeared.

In some directions farmers are advancing. Wire fences are becoming common. New and more commodious buildings are taking the place of the old. Underdraining is largely prosecuted, while on the other hand troublesome weeds as such oxeye daisies, ragweed, &c., are on the increase.

Bee keeping has of late received quite an impulse. This industry seems well adapted to dairy sections, especially where white clover is abundant.

F. MALCOLM.

Innerkip, Sept. 18th 1884.

(1) I will make a few remarks on this article next month

A. R. J. F

HORTICULTURAL.

Asparagus—Practice vs. Theory.

I notice what Mr Garfield wrote about his planting an acre of asparagus, and ignoring the experience of writers because of what he calls their "fussiness." Well, he has put 12 cords of rotted and 10 cords of partially rotted manure to an acre, making but little over three-quarters of an inch of top spreading plowd in. His asparagus will probably grow well at first, and he will imagine he has beaten the books, but in the end he will find he has beaten himself. The asparagus grows in a night; it is succulent and prolific when properly cultivated, and that means when manured so richly that it is almost impossible to make the soil richer. Its roots, like small ropes, penetrate five and six feet down, and rich as its bed should be made, it will still require a constant and liberal top dressing of the richest kind in the Autumn, forked in and raked smooth as soon as the ground will permit. The writer also, over 25 years ago, made an asparagus bed in his garden. He dug a trench four feet wide, in deep, black loam, and threw out even the clay, until the trench was four feet deep. He covered the bottom to a depth of a foot with bones, pounding up the large ones. He filled in between the bones with the richest liquid refuse of the slaughter-house; then filled up the trench with alternate layers of the richest stable manure and thin layers of the rich, black soil, and left it in the Autumn, ridged like a house roof; in the Spring it required but little to even it. In this he planted the seed in two rows only, and waited three years before he cut a head! It has had occasional top dressings and forkings-in since, and after 25 years of cutting the bed is good and prolific still.

The probability is that Mr. Garfield will, after a year or two, find his crop yields thin, spindling, grass-like stalks, instead of stems as thick at least as his finger. The nature of asparagus and its return for liberal treatment, will be found the same whether it be grown by the acre or in a yard-bed 40 feet by 4, and friend Garfield will find, when too late, that he had better have followed the books, notwithstanding their "fussiness."

Bucyrus, Ohio.

"ASPARAGUS."

Value of Liquid Manure.

The average stock feeder and general farmer has a very imperfect idea of the value of the liquid droppings of his animals. He thinks the liquid is rich in fertilizing matter, but, as compared with the solid droppings, he rates its value as much less. I write this article with the endeavor of showing the farmer, in a familiar way, the basis of value in the liquid and solid droppings. We may regard all the manure, both liquid and solid, as coming from the food. This is not strictly correct, as all the waste of the body is carried off in the liquid excrement, and the new matter to supply this waste of the body is secreted from the blood, which is formed from the food. All farmers understand that a part of the food is indigestible—that the alimentary matters which the digesting fluid does not act upon are passed in the solid excrement—but they do not seem to realize that all the alimentary matters which are digested and not used to supply waste in the system, are passed in the liquid excrement. The careful German experiments proved that about ninety-five per cent of all the valuable fertilizing matters digested were recovered in the liquid excrement. It will be understood that all the fertilizing matter in the liquid excrement is in solution, that is, ready to become plant food, and therefore has a greater value per quantity than the same elements in the solid manure, which