

by absorbents, such as dry mould, road-dust, peats, etc. Its value, as in the case of cattle, depends greatly on the food eaten.

The fermentation of manure is brought about by the action of bacteria, microscopic plants. Fermentation always entails a loss of organic matter; part of the nitrogen escapes. The looser the pile, the greater the loss. Therefore, keep the mixen moderately moist and closely packed, and cover it, when completed, with 9 or 10 inches of heavy soil.

Apply manure, if free from weed-seeds, in a recent state to heavy land; to light land give rotted manure. The reasons for this difference are obvious to any practical farmer.

Our own practice has always been to cart the manure over the heap; the horses and cart-wheels press it down tight enough; spread the dung level all over, load by load, trimming up the sides, as the height increases, till it is four feet high, when the earth should be spread on the top, as above.

A moderate heat will be generated in the mixen; in ten days or a fortnight before it is required for use, turn it carefully breaking up all lumps, and throwing the outside into the middle. The time for turning, of course, depends upon the weather.

Thus treated, the seeds of most weeds will be killed; as Mr. Shutt admits in his evidence before the House; and no very great loss of manurial constituents will be incurred.

In the year 1884, at Sorel, after we had nearly finished manuring a piece of land for potatoes, our dung, prepared as above, ran short by about two loads. We sent into the village for some, and put it into the drills as it came on to the farm. If any admirer of "recent manure" had seen the difference in the quantity of weeds in the two parts of the piece when vegetation showed itself, we think he would have been converted. (1)

Top-dressing on clovers, meadows, etc., a constant practice in Britain, is, or rather has been, a good deal cried down here. The question, often asked, is: does manure spread, and allowed to dry upon the field, lose any of its nitrogen? The answer is: in manure, so treated, fermentation is at once arrested. The following test was applied

to manure, in two different conditions, at the Ottawa experiment-farm, in 1892:

Manure.		Per cent.	Amount per ton in lbs.	P. c. lost on exposure.	Value at 17c. per lb.
		.516	10.3	\$1 75
1 Well rotted; after fermentation.	{ Before exposure.....	.505	10.101	1 72
	{ After ".....				
2 Rotting; during fermentation.	{ Before exposure.....	.490	9.8	1 67
	{ After ".....	.466	9.3024	1 58
No.					

LOSS OF NITROGEN IN FARM-YARD MANURE BY DRYING OUT IN THIN LAYERS.

But, it must be remembered, this by no means does away with the necessity of taking care in what situation dung is spread. We have seen a wide area, on by no means hilly land, covered by a slowly moving inundation of water from melting snow; and that this did not leave much goodness behind in the top-dressing of the previous autumn we may be sure.

Lastly, remember that light land does best with frequently repeated smallish dressings; heavy land, being more retentive may receive a greater quantity at wider intervals of time.

INJURIOUS INSECTS.

(Continued).

In our lectures, we also took upon ourselves to remind farmers of the reciprocal duties they owe to one another, especially as regards the destruction of the insects that prey upon orchards, crops, etc.

(1) The first lot of dung was derived from the same source as the second, so there is no argument to be founded on the assertion that perhaps the second lot was full of weed-seeds and the first lot free from them. Ed.