

## LOSS OF VALUE OF MANURE BY EXPOSURE DURING SUMMER.



SOME experiments made at Cornell, show very plainly that manure rapidly loses its value by exposure. A pile of horse manure was put in a place exposed to the weather and where the drainage was so good that all the water not absorbed by the manure ran through and off at once. It remained exposed from April 25th, to September 22nd, at which time it was carefully scraped up, weighed and a sample taken for analysis.

It was found that the 4,000 had shrunk to 1,730 pounds during the six months, and analysis showed that this 1,730 was less valuable, pound for pound, than the original lot of manure. It had not only lost by leaching, but by the heating or "fire fanging" during periods of dry weather and, the value of the pile of 4,000 pounds had shrunk from \$5.60 to \$2.12—a loss of 62 per cent.

In summing up the results of this experiment, Director Robert says: "It seems safe to say that under the ordinary conditions of piling and exposure, the loss of fertilizing materials during the course of the summer is not likely to be much below fifty per cent. of the original value of the manure."

Further experiments showed that the liquid manure from a cow is worth as much per day as the solid manure, and that the combined value of the two is nearly ten cents per day, if valued at the same rate as commercial fertilizers; that from a horse at seven cents, that from a sheep at one and one-half cent, and that from a hog at one-half cent for liberally fed, thrifty shoats of medium size.

Director Roberts is careful to explain that these values will have to be modified to suit individual circumstances. What he means is that if farmers can afford to buy commercial fertilizers at current prices, then the manures of the farm are worth the prices given.

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To pick up windfalls for vinegar may not pay in product, but it will check the breeding of fruit worms. If stock be turned into the orchard for the purpose every tree should be protected if it is young enough to be injured. Remember, it costs much less to care for and preserve an orchard than to plant and rear one.

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ON many a small place apple trees are planted for ornament as well as for fruit. Let us recommend for this double purpose the Gravenstein. Shapely, a good grower, the fruit is large and excellent and for cooking it has no superior. As a flowering tree it is superb, being loaded with wreaths of choice, large flowers of a delicate white and highly perfumed. If one has room for but a single tree this variety should be planted.