

### SAVING MANURE.

As the period of the year when farmers yard or stable their stock is approaching, it is all-important that proper measures should be taken to preserve intact all the elements of fertility usually to be found in the manure heap. It is indisputable that a large portion of the farming community do not collect so great an amount of nutriment to return to the soil as it is in their power to do; and it is also undeniable, that a still larger number do not pay the attention to what they do accumulate that they ought.

The value of manure depends, in a high degree, upon the ammoniacal properties it contains. As this salt has a great affinity for water, rains and moisture will soon carry it away, and after two or three leachings the pile is rendered almost worthless. In addition to ammonia, nearly all the other components of farm yard manure, as potash, soda, &c., are likewise soluble, and are readily removed by water. When manure is thus exposed for any length of time, nothing but insoluble material is left—that which is comparatively valueless is given to the soil with the vain expectation of promoting the elements of fertility.

Many experiments have been made for the purpose of testing the relative worth of manure properly cared for, and that exposed to the action of the weather. One of these, by Lord KINNAIRD, under the auspices of the Royal Ag. Society, in which potatoes was the crop grown, the yield averaged upwards of four tons in favor of covered manure. Upon two acres of wheat—which was fed with manure that was cared for—the produce amounted to 108 bushels 52 pounds; while upon another two acres, treated with an equal amount of uncovered manure, the yield was but 83 bushels 57 pounds. In the growth of straw the produce was very marked—the first field produced 9,842 pounds, while the yield of the second was but 6,864 pounds.

Chemical analyses have also aided in giving light upon this subject. It has been substantially demonstrated that covered contained double the nitrogenized properties possessed by the unsheltered, and that while the latter contained only *eight-tenths* per cent. of potash and soda, the former had fully *two* per cent. The proof of this analysis is fully “worked out” in the growth of the straw in the experiments mentioned.

There are several things to which the farmer should give his attention in the care of the manure heap. Putrefaction, or decomposition, needs to be promoted; such absorbents as will prevent the dissipation of ammonia into the atmosphere ought to be employed; and the robbery, by leaching, of whatever sun and air have seen fit to leave prevented. To accomplish the first of these objects comparative dryness of situation is required. Dampness is a necessary element of decay, but we think all that is absolutely wanting for this purpose is contained by the voidings of cattle. Another requirement is the compactness of the heap. Heat is sooner generated where the manure is somewhat solid—the moisture is better preserved, and “fire-fanging,” or burning, is not so much to be feared. The following mode practiced by Mr. MENCH, of Triptreehall, England, is considered the most perfect in use. The whole of his cattle, sheep and pigs are kept under cover, on spurred wooden flooring, which permits their droppings to fall through the openings into cellars or chambers beneath. To accomplish the end sought more effectually, the straw is all cut up into short lengths, and saturated with liquid oil cake, or linseed, and mixed with ground corn, and in this way his entire amount of straw is used solely as food, no bedding being required.

This system, when first brought into vogue, was assailed by many of the writers on agricultural subjects, and condemned in no measured terms, “as preposterous, expensive, unsatisfactory in its results, and contrary to the nature of animals so fed.” The *Cyclo-pædia of English Agriculture*, in reply to the assertions, says: “These points must be decided not by theory, but by prolonged experience. With regard to the point which lies in the way of this article—the value of manure made by Mr. MENCH’s plan—it appears a self-evident proposition, that the manure so obtained must, from the absence of anything like active fermentation, be superior to all other kinds derived from the ordinary modes pursued, just in proportion to the loss sustained from fermentation by one or the other of these.” The great gain in value of manure thus made, is claimed upon the assumption that ammonia—the very base of enriching substances—is almost wholly retained, that the mode most effectually prevents the escape of this element of fertility.

In Belgium, according to SCHWARTZ, manure is accumulated in the stables. The cattle are placed upon a kind of platform raised above the pavement of the stable, and the droppings being withdrawn from under them, are trodden down and allowed to accumulate upon the floor.