

to the seasons or insects, unless he were taught better by the operations of his more thrifty neighbor.

What I term the "chemistry of the dunghill" should be taken into consideration in any system for its preservation, but it would altogether exceed my limits to go fully into the subject at this time. Besides, farmers will find the subject is fully treated in many modern books in the hands of our farmers. In this regard Boussingault's *Rural Economy* and Johnston's *Agricultural Chemistry* should be consulted by every farmer.

Although we have so much already in print upon the subject, it may not be out of place to indicate the precautions necessary for the preservation of dunghills in the most advantageous manner. I have very often noticed the dunghill to be a recipient not only of the water from the barn and other buildings, but also from the adjacent fields. Consequently, during wet seasons the barn-yard must either be flooded or, as I have also noticed, a ditch is opened to permit the fluid to run off, carrying with it the larger portion of the useful constituents of the manure.

On the other hand, if the manure consists principally of the dung of horses, care should be taken that it be not kept too dry, or it will, in fermenting, become extremely hot and almost entirely useless.

The barn-yard, or other receptacle for manure, ought to slope from every direction to one point, which is best to be near the centre where there should be a shallow pit or tank to receive the drippings. The opening into the tank should be covered with an iron grating or strong wooden slats, sufficiently close together to sustain the manure.

The outer edges of the yard should be sufficiently elevated to prevent the flow of waters either in or out.

A pump of simple construction, which any farmer can make, should be placed in the tank, and a piece of hose provided, or what will answer nearly as well, light wooden troughs may be made by nailing two narrow boards together and providing simple supports, so that they can be extended to all parts of the yard. By means of the pump and troughs the liquid manure may be pumped from the tank and distributed to all parts of the manure yard.

If the subsoil to some depth should be a stiff clay, there will be little or no loss by filtration, but if loose or sandy, the bottom should be well puddled, and if it can be paved at a reasonable cost it will be all the better for it.

The water from the roofs of adjacent buildings should by no means be permitted to flow into the manure yard. This can be cheaply prevented by the use of tin or wooden spouting.