drains discharge themselves depends | nage of large portions of a field, comeability of the soil.

15th. The specefic gravity of water being greater than that of air, it invariably displaces the latter in the soil; but upon its removal, air again occupies the space originally held by it, and thus a continuous action is produced in the soil.

16th. Water when frozen expands, and thus, by its power, the hardest substances become broken up, or have their external surface abraded by its actions.

The foregoing is merely a state ment of those principles which will ever be coming into operation during the processes of draining; and by observing which the operator can seldom err. Of all scientific practices that of draining is of itself the simplest of application; the merely perforating the subsoil with a hollow drain, at a sufficient depth, must necessarily draw off the accumulation of water held in suspension in the adjacent soil. If this be tenacious, from thirty to thirty-six inches, in most cases, will be sufficient, keeping in mind that, although a greater depth might be desirable, the cost of the drainage ought always to govern the proceeding. On the contrary, if the subsoil is porous and charged with water, flowing from a higher level, then the drains must be sufficiently deep to earry off the water, that the soil near the surface may not be rendered wet by capillary action, bearing in mind that the more complete and minute the disintegration of the soil, the hog-pen, have a yard, strongly and greater the disposition of the water permanently enclosed, and of suffifrom below to ascend towards the crent size to afford ample accommasurface. In some cases drains from dation to the number of swine your

cession of beds of gravel, sand, and forest scrapings, loam from the roadclay, a few deep drains judiciously side, saw-dust; refuse hay, straw,

upon their inclination and the per- membering that the drain should always be cut so as to intercept the water passing in the gravel or sand before it reaches the clay, and in a pararell direction with the edge of the deposit. In some cases the mently perforating the clay in one continuous line from one gravel bed to another to the lowest level will also equally well effect the object. The drains must invariably be deep enough to release the gravel altogether, and a previous knowledge of their extent and situation ought to be ascertained. No other describtion of draining is so difficult to p 2form as this, or when doite, repays so largely for the operation. We might go on multiplying precedents ad infinitum; but it is not our integtion to raise discussion, so much as to point out general principles as obiviate it.

> Water is the source of sustention of the animal and vegetable kingdoms. The agriculturist, more espicially than all others, becomes subjected to its influence. The smallest quantity, either in excess or deficiency, is to him severe injury of proportionate gain. If, therefore, we have cleared away any of the impadiments by which Its withdraw can be effected, we have not toiled entirely in vain, even if we only succeed in obtaining attention.-Irish Farmer's Gazette.

HOC-YARD COMPOST.

In the immediate vicinity of your forty to fifty inches will be requisite. intend to keep. Into this cast as In soils alternating in quick suc- much good muck, chipmanure, sodar placed will generally effect the drai- haulin, and weeds that have not