

a decomposed soupy mass will remain which may be dried, pounded up and applied to the soil. Or the bones may be collected in a pot, tight box, or barrel, and covered with lye. This will reduce them to a soft pulpy mass. Here you have precious stuff, dilute it and you will have the very best liquid manure. Or if preferred, it may be mixed as above directed, with loam or muck, and applied in that form. Every farmer and gardener, should rigidly economize the bones. Let none be lost. It is better to plough or dig them under, than do nothing with them. But by the above methods, all of which are simple and practicable, this valuable manure, so much of which is now wasted, may be turned into speedy and profitable use.

#### HOW TO APPLY MANURE.

Observation and experience should determine the mind of the farmer in regard to the best plan of applying manure, whether to plough it under deep, or leave it on the surface. The advocate of surface manuring speak against manure being turned under too deep, while the advocates of deep manuring charge surface manuring with fertilizing the atmosphere. But there is a medium course, and each theory is supported by plausible arguments. However, there are true philosophical principles against burying manure too deeply in the earth: the loss of the saline matter of the manure, by solution and infiltration will be great in porous soil, and the evaporation, to which so much loss is attributed by those holding opinions averse to surface manuring, would be only a small drop in the bucket, compared to the loss by solution. In porous soils, it is well known that manure will penetrate to a great depth, and much animal matter may descend beyond the reach of surface-growing plants. Humus is formed by the decay of decomposition of vegetable matter, which, in the philosophy of nature, is manipulated on the surface; hence, the rule in the application of manure should be taken from the indications of nature and science. The decay and consumption of one crop for the nourishment of another, the droppings of animals, and defoliation of trees and plants are all left on the surface. This seems to contradict the idea of loss by evaporation. It will, therefore be best to adopt the plan of deep cultivation, but keep the manure and vegetable matter as near the surface as possible. There is always some loss by evaporation, but much less by infiltration. It should be a leading idea with farmers to be close observers of such natural operations, in the growth of spontaneous and cultivated vegetation, and accommodate their practice so as to imitate nature as nearly as possible.—*"Articula" in Journal of the Farm.*

#### FREQUENT HOEINGS.

The *Minute Farmer* concludes an article on hoeing with the following suggestive paragraphs:—"Frequent hoeings, even during the driest seasons, contribute to the benefit of the crop. By the loosening of the soil, the air, and especially night air,

charged with moisture, even in times of severe drouth, obtains ready access to the roots of plants, and becomes condensed in the soil. Very often during a hard Summer drouth, we have seen corn leaves and other vegetation roll up during the day time, but come out again at night in consequence of the falling of the dew, or the prevalence of moist air. Where the ground is not stirred, it becomes crusted over, "baked," as it is called, and hence the moisture from below does not find its way up to ground is frequently hoed, the reverse is the case; hence, the benefit of repeated hoeing during the Summer months. Upon this point, one of our late English journals mentioned the fact during the extremely dry season of 1826, a gentleman was in the habit of hoeing, with his own hand, three drills of turnips, daily. The result was that the three drills thus hoed were a good crop, while the yield upon the remainder of the field, hoed less frequently, came almost to nothing."

#### THE EXCELLENCE OF ORCHARD GRASS.

We have lately came upon several statements touching the value of orchard grass, and records of profitable experience with the same, all of which seem worthy of repetition, and ought to carry weight with the readers of these columns.

Simon Brown, of the *New England Farmer*, a well-known agricultural authority, says cows are very fond of this variety; as a pasture grass it affords an early bite; as a crop for hay, sowed with red clover, it is of high order; sheep seek it in preference to other forage; it exhausts the soil, less than rye-grass or timothy; it will endure considerable shade, and, because its fibrous roots extend to long distances and run deep, it has special power in resisting the effects of drouth. For these reasons Mr. Brown thinks we do not cultivate orchard grass (sometimes called rough cock's-foot) to half the extent which would prove profitable.

Another writer in the same paper bears similar strong testimony, and says orchard grass does not incline to head out the first year, but grows leaves that make the softest and best of hay for milch cows and for young stock. He directs that the first crop be cut as soon as it begins to lie down or look gray. At the second mowing the clover will have made stems, and perhaps blossoms, and thereby add much weight and virtue to the hay.

The late Judge Buel used to say he preferred orchard grass to almost any other; and here we have that veteran, A. B. Alan (with whose testimony we close the case), writing as follows to a friend:—"Orchard grass is the earliest and latest of all grasses we grow, and a great yielder in good land. I have seen two tons per acre, year after year, among apple trees, which grew so large and close together as to completely shade the ground. What other grass will do this? I have written an article on this subject on an average, perhaps, of every three years, for the past twenty years, and yet how little good it seems to do; farmers continue to inquire after it, as if a word had never been said."

#### ALSIKE CLOVER.

The following is an extract from a farm journal: