

nutrimental quality of the humus, and humic acid, which flows from our dunghills, has been proved, and established upon philosophical principles. If it be admitted that lime acts beneficially upon surplus vegetable matters, chiefly by the paramount affinity which it possesses for humic acid, the advocates for a very moderate degree of fermentation in the masses of dung, acquire a strong position, since it is obvious that a protracted fermentation terminates in the production of a cold humus mass, which consists of little else than black carbon, effete inorganic matters, and the said humic acid, soluble in the saline alkalies, but fixable by the action of lime. But, independent of the final conversion of manure into a substance replete with a matter injurious to crops, amounting to at least one-fourth;—observe, for instance, fresh dung that has been drawn out into a field, and thrown into a heap to rot, as it is called, and allowed to ferment without a covering of earth, or anything to fix the ammonia, which is constantly escaping during fermentation, or count the loads, and you will be surprised at the decrease in quantity, and the decrease in quality is equally great, if not greater. I will now give you a description of a plan, practised in Norfolk, for making a manure heap: many agriculturists are acquainted with it, but some of you may not, and may perhaps feel curious about it. It has obtained the name of the “Norfolk Pie.” “The custom is to carry out all the manure made in the separate yards during the winter, as opportunity may offer, into the fields intended for turnips, calculating the quantity at ten loads per acre. In the first instance, a platform of earth is made to receive the manure, and then a proportion of cow dung is cast over it, which is considered the weakest manure, upon that pig, which is held to be the best; then some from the store and fold cattle, followed by horse dung, and then more of the pig’s, always compressing the heaps by casting over it. Then plough round the heap, and throw a light coat of earth over the top and sides, to keep it from fermenting. It remains in this state to within a fortnight of sowing the turnips, when it is turned over, and in its fermented state it is put into ridges of 27 inches, the ground turned over it by the plough, and the seed sown immediately after.” This method of preparing a mixture produces a certain degree of fermentation, while it tends to confine the gases that are extracted, producing also that slight degree of internal action, which Mr.

Gerardin alludes to, as required, in order to “destroy the cohesion of the vegetable fibre, predisposing it to a decomposition and solution, which is useful to manure before spreading it on the land.” But, like all other attempts to regulate a movement which is always progressive when once excited, it is subject to great uncertainty. Every vegetable, and animal substance, deprived of the vital principle, is from the same moment brought into a state of decay, or slow combustion; and when with such substance we combine others, replete with nitrogen, with fecal and urinous excretions, all blended together, more or less, in straw yards, stables and cow-houses, and, of necessity, requiring a lapse of time, and exposure to varying atmospheric influences, it will be evident that no two compressed, or other compound masses as above described, can be expected to become exactly similar in any given number of days. In the essay the evidences of Thuer, Schmalz, Hassanfrabz, &c., have been appealed to. The chemist last named, it is said, “manured two similar lands, one with long dung, in which the straw had only commenced to putrify, the other with perfectly decayed manure, capable of being easily cut with the spade. These two lands were cultivated in same manner; the second produced larger, stronger, and more vigorous plants the first year than the former; but the second year, when neither was manured, the former produced larger, and stronger, and more vigorous plants the first year than the former; but the second year, when neither was manured, the former produced larger and stronger crops than the second; the third year the former still had a slight advantage over the latter.” “An experience of more than seven years,” says Pickett, “has convinced me that we shall be great gainers by using manure as soon as it comes from the stables.” “For six years,” observes M. de Roublesdorf, “I have followed these principles on the farm I cultivate. With the single exception of sheep dung, all the others were conveyed to their destination and spread, even when the land was covered with snow, as soon as they were taken from the stable. It is to this circumstance that I attribute the good state, continually increasing, of my land, as regards manure.” My own practice has been, and I am decidedly in favor of it, to take out all the manure made during the winter, early in the spring, or as soon as the frost will permit, in a