

## AGRICULTURAL.

From the Complete Farmer.  
MANURES.  
Continued.

The path proper for the farmer to pursue in order to make the most of his manure, and preserve his own health and that of his family, is as plain as a turnpike. Whenever putrid fermentation is going on in any part of his premises, and consuming his substance by a slow and wasteful combustion, let him apply earth, or peat, or some other earthy substance in quantities sufficient to attract, imbibe, and retain all the effluvia. Health, profit, and cleanliness equally require such a proceeding. We shall say a word or two on the latter topic. If a man were to swallow daily a quantity of filthy matter, or to eat his food impregnated with vapors from a manure heap, or from some other putrefying and offensive substance, when he might by a little exertion avoid such nauseous vitals, and substitute something nourishing, palatable, pure, and wholesome, we should esteem him no better than a Hottentot. But a man may almost as well take filth into his stomach, as filthy effluvia into his lungs; he may as well dine with a crow or buzzard as sup with a toad on the vapor of a dunghill.

The farmer who arrests the rank vapors which emanate from decaying animal and vegetable matter, and instead of permitting them to pass into and contaminate the air he breathes, treasures up the invisible particles with which they are laden, and applies them to feed useful vegetables, causes the atmosphere to be healthy, and his plants to be thrifty by the same means.

The celebrated lord Erskine, in a speech delivered at one of the sheep shearings at Holkham, in England, made the following remarks on the subject:

'If we consider the subject of manure, we shall perceive one of the most striking beauties and benefits of divine ordination, and of that wisdom with which we are blessed a thousand ways without knowing it. This very substance, had it been useless, must have accumulated in heaps, intolerably noxious and perpetually pestilential; but by the blessing of Providence, it is every man's interest to remove these otherwise increasing mountains of filth, and by decomposition in various ways, in a great measure concealed from us, it gives increase to our fields, and adds to our means of industry, and the rewards of the husbandman.'

Those who cultivate the ground do not always act the provident part supposed by lord Erskine, in the sentence above quoted. On the contrary, farmers too often suffer manure to accumulate and waste in heaps, generating effluvia intolerably noxious and perpetually pestilential, without fear of fever or famine, both of which are courted by such conduct. Not only dung is too often allowed to waste its richness on the tainted air, but straw and other litter is suffered to grow mouldy and consume by what is sometimes called the dry rot, both of which might be prevented, or their bad effects obviated, by covering or mixing them with a suitable quantity of earth. Besides, dead animals, emptying of sinks, spoiled provisions, the refuse of the dairy, the pantry, and the cellar, are allowed to mingle their odours in a nauseating and deleterious profusion. Sometimes the highway is rendered almost impassable in consequence of a dead horse, sheep, dog, or cat undergoing the process of decomposition in a situation correctly calculated to annoy travellers. Some farmers hang dead lambs, cats, dogs, &c., in the forks of apple-trees, or throw them on hovels or stumps, at some elevation from the ground, to give the pestilential emanations a chance to diffuse themselves, without coming in contact with the earth, which might convert them from poi-

son to men and animals into food for plants. If however such animal remains are deposited in a barn-yard or manure heap, they are too often suffered to lie and rot on the surface, offending the senses and injuring the health of the whole village. Practices of this kind are well reprobated by Sir Humphrey Davy, who says, 'Horses, dogs, sheep, deer, and other quadrupeds that have died accidentally or of diseases, after their skins are separated, are often suffered to remain, exposed to the air, or immersed in water, till they are destroyed by birds or beasts of prey, or entirely decomposed; and in this case most of their organizable matter is lost from the land on which they lie, and a considerable portion of it employed in giving out noxious gases to the atmosphere.'

By covering dead animals with five or six times their bulk of soil, mixed with one part of lime, and suffering them to remain for a few months, their decomposition would impregnate the soil with soluble matters, so as to render it an excellent manure; and by mixing a little fresh quicklime with it, at the time of its removal, the disagreeable effluvia will be in a great measure destroyed, and it might be employed in the same way as any other manure to crops.

If, however, quicklime cannot readily be obtained to accelerate the conversion of dead animals into manure, it is probable that covering the carcasses with a pretty thick coat of unleached ashes, and placing over all a quantity of earth or earthy substance, would hasten decomposition, and secure the gases resulting from putrescence. Earth alone will answer a valuable purpose, and in time the largest animal will be decomposed in nothing but common soil.

Not only the carcasses of animals, but their excrements and urine are rendered of little value by long exposure to the air. Indeed, every moment of such exposure robs them of a part of their fertility, as well as contaminates the atmosphere. 'He who is within the sphere of the scent of a dunghill (says the celebrated Arthur Young) smells that which his crop would have eaten, if he would have permitted it. Instead of manuring the land he manures the atmosphere, and before his dunghill is finished, he has manured another parish, perhaps another county.' As few exhalations as possible ought to be suffered to rise from the excrements of animals. Fresh manure ought to be kept as carefully from the sun and rain as grass which has been cut for hay. When cattle have been yoked over night, it would be well to throw their droppings into small heaps or beds, and cover them at least with a sufficient quantity of earth to prevent fermentation, or absorb its products. This would cost but little labor, and would much enhance the value of the manure.

It has been, and we believe in some instances still is in vogue among farmers, to turn over and mix barn-yard manure several times before it is carried to the field. This practice, however, is exploded among the best informed cultivators. Mr. A. Young says 'no turning, but if circumstances of the richness, quantity, or weather, have occasioned too much fermentation, or this is suspected, scatter every now and then a quantity of the same earth over the surface, with which the yard was bedded. This may be so proportioned as to keep the mass from too much fermentation.'

It is remarked by the author of *Letters of Agriculture*, that 'Earth is a powerful absorber of all the gases which arise from putrefaction. The earth possesses not only the property of retaining the putrid steams which are formed from the dung of decomposing bodies within itself, but also of extracting the effluvia when floating in the air. The salubrity of a country depends on this latter quality; as the practice of burying the dung in the earth is founded

on the former. The stench proceeding from the dissolution of organized matter never rises through the ground to assual the nostrils, although it is sufficiently offensive from bodies corrupting in air or water. A strongly dunged field, after being ploughed, sowed, and harrowed, sends forth a healthy and refreshing smell, a proof that all the putrid vapors which otherwise would annoy us, are absorbed and retained for the nutrition of the crop. It is on this account that the poorest earth can be enriched in a very high degree by mere exposure to gases of putrefaction. Put a layer of common soil along the top of a fermenting dunghill, from twelve to eighteen inches thick, and allow it to remain there while the process is carrying on with activity, and afterwards separate it carefully from the heap, and it will have been impregnated with the most fertilizing virtues. The composts, which of late have attracted such universal attention, and occupied so large a space in all agricultural publications, originated in the discovery of this absorbing power of the earth, and in the application of it to the most beneficial of purposes.

A skilful agriculturist would no more think of allowing a violent fermentation to be going on in his dunghill, unmix'd with earth or other matter to fix and secure the gaseous elements, than the distiller would suffer his apparatus to be set at work without surmounting his still with the worm to cool and condense the rarefied spirit which ascends to evaporation. In both the most precious matter is that which assumes the uniform state; and to behold it escaping with unconcerned indifference, is a demonstration of the most profound ignorance.'

## GREAT BRITAIN.

From the Scotsman.

ON THE INFLUENCE OF CHEAP LITERATURE  
ON MORALS.

Among the various objections urged against the reduction of the stamp duty on newspapers, the alleged danger to the public mind from an effusion of immoral publications from the press, appears to us to be the most unfounded. It is easy to string together plausible sentences of declamation on either side of the question; but it is more difficult to arrive at a philosophical estimate of its merits. At the risk of being reckoned somewhat abstract and metaphysical, we shall attempt to express our views on the subject as plainly and briefly as possible.

In considering this question it is necessary to look at the mind itself, to which all publications are addressed. It is now generally admitted, that in our nature three classes of faculties may be distinguished: 1st. moral sentiments which generally and justly desire the production of good; secondly, animal appetites and propensities, which aim at individual gratification without regard to general advantage; and, thirdly, intellectual powers which may be employed in realising either the benevolent objects of our moral sentiments, or the selfish desires of our inferior instincts. Literature is addressed directly to the intellect, and it is only through it, as a medium, that it can conduce to the satisfaction of our desires, whether exalted or debased. From the constitution of the mind, and that of the external world, the power of literature is tenfold greater in administering to the gratification of the moral part of our nature than it is in satisfying the propensities. The press, for example may unfold the beauties of the external world; the innumerable facts and relations of science, descriptions of heroic deeds of valour, of generosity, of devotion, of unbending integrity and indomitable independence: it may lay before the mind the treasures of art, the touching strains of music, and the soul refining inspirations of the poet's fancy. It may teach, more-