

be declared that the intelligence and industry manifested in the accumulation and preservation of manures is the best index of agricultural knowledge and improvement. The manure heap is a fair exponent of the thrift and knowledge of the farmer. Our numerous and valuable agricultural societies could do no better thing to conduce to agricultural improvement than to give liberal premiums to those having the most perfect modes for the collection and preservation of manure; that being attained, fertility of soil and increased production would necessarily follow. For the comfort of the stock, as well as for the preservation of the manure, the water falling on buildings adjacent to it should be conducted from the barn yards. To this species of manure lime in no state should ever be applied. That which is perfectly air-slaked is useless; water-slaked is quite prejudicial, and quick or caustic lime entirely deprives it of its most valuable properties. The use of this was quite frequent in our State previous to the publication of my last report. I am happy now to state that it is much less so than formerly, and hope soon to find it entirely discontinued.

In following out the recommendations which I have given above, to throw into the pits contiguous to stables and barn yards refuse matter of every kind pertaining to dwelling houses, I allude particularly to the fluid and solid excrements that usually accumulate about them. From these is prepared a manure called in commerce *POUDRETTE*, of very great strength and value.

The solid excrements of the human species are rich in phosphates of lime and magnesia, whilst the urine, or liquid excrement, is one of the most powerful and quick manures known, containing a large proportion of the elements of ammonia, (the most valuable part of Peruvian guano,) besides phosphates of lime, magnesia, potash and soda, all very quick and powerful manures.

An appeal to chemical analysis is not necessary to show the value of these, if we consider that before the period of full growth a large part, and afterwards all the food taken is, in an altered form, passed off as excrements from the body. The same elements then that originally produced all the corn, meat, &c., used as food, can be restored to the soil and continual fertility kept up, provided no part of the crop was exported. In every case nearly all that is consumed on the land can be restored to it, thus giving enough for the support of the population resident upon it. In China, which supports a larger population to the square mile than any other part of the earth, and where agriculture has obtained a high degree of practical perfection, human excrements are preserved with the greatest care, there being tanks placed along the most frequented highways for its collection. In French Flanders, too, and Belgium, districts of country where agriculture is at the highest degree of perfection, this manure is sought after and preserved with the greatest zeal. This should be the case every where.