

it abounds. As it will furnish sulphuric acid, it may answer the purpose of gypsum, besides contributing the humus and soluble salts needed by plants.

It should be tried on tobacco beds as soon as the fly appears, and in fact upon all crops infested by insects. It would be well, also, to try its effects upon the young wheat when threatened by the Hessian fly.

It will be likely to prove useful as a disinfectant of night soil, a manure to be considered in the next chapter.

NIGHT SOIL.

When we reflect that the whole of the inorganic matters of animal excrements are derived from the soil, and that a very small proportion of those from man are returned thereto, we have no difficulty in accounting for the necessity that impels us to collect matters which contain them from every quarter.

In China, we are informed that not a particle of either urine or fæces is lost; it is all saved and applied to the soil, which accounts for the fact that the soil of that country continues productive after being cropped for thousands of years. In Belgium and Holland it is saved and applied in a different manner, but they are nearly as successful in avoiding waste.

In France most of this important material is totally neglected, in spite of the warnings of science, and even at the large establishments for making *poudrette*, in the vicinity of Paris, the material is so unartistically manipulated that the *poudrette* produced does not contain one-tenth of the most valuable of the contents of the night soil and urine.

In some of the best farms in Great Britain the night soil, with the liquid waste from the kitchen, laundry, &c., are conducted through pipes into tanks and from thence spread upon the land, producing the best results. But in the cities it is nearly all wasted. In London nearly the whole passes into the Thames to pollute its waters.

Whether, as has been suggested, the celebrity of the malt liquors of that metropolis is due to the use of this *anamalized* fluid in its manufacture, it is difficult to determine.

Public attention has of late been much drawn to the subject of properly utilizing night soil and sewerage, both in Europe and in this country, as well for the purpose of promoting public health in cities and towns, as to restore to the soil these valuable matters now wasted.

Some parties in New York recently took out a patent for a combination of certain materials, which being thrown in the proper quantity into a privy sink, will completely destroy the detestible odor without injury to the manure. If this can be done at a sufficiently low cost, the material could be taken out and transported throughout the State without inconvenience to any one,