

There cannot be less than 50 to 70,000 bushels of soot per annum swept from perhaps 100,000 chimneys in Baltimore alone, little of which is saved for its proper uses.

ALCALINE SALTS.

Many of these contain the constituents of plants, and are otherwise useful to the soil, but with the exception of common salt, their cost is such as not to permit them to be profitably used as manure in our State. Experiments have been made with many of these salts in Europe, and to some extent in this country, and it has been shown that the nitrate of potash, or saltpetre and nitrate of soda, are highly beneficial to grain crops, but it rarely happens that the excess of crop they produce will bring the cost of the salts. And the same may be said of the sulphates of potash and soda.

Many experiments have also been tried with artificial silicates of lime, potash, and soda, which seem to show that they must be produced at much lower prices than has hitherto been the case, before they can be used by our farmers.

COMMON SALT OR CHLORIDE OF SODIUM.

It has been clearly proven by carefully conducted experiments, that both chlorine and soda are essential constituents, hence the utility of common salt when applied to soils in which these elements are deficient. It has been found, however, that a small excess is fatal to crops. If the proportion of common salt in a soil exceeds 2 per cent., grasses and grains will cease to grow, and their places will soon be supplied by the salsola and other marine plants.

In the small work of M. J. Pierre, before noticed, is the most complete *resumé* of the use of common salt for manure that I have heretofore met with. He records numerous experiments which have been made with different proportions of salt upon different crops. We gather from these experiments that the most useful dose of salt for an acre of wheat is four to six bushels. The smaller quantity is best adapted to the production of the grain, but when we apply six bushels, there is a considerable increase in the proportion of straw. With more than six bushels, there is a still larger increase of straw, and if the land has been also dressed with stable manure, the stalks of the grain are apt to fall.

English farmers have related to me, that the growth of grass is much promoted by the use of salt, and that the quality of the grass is also improved. If salt be applied to part of a pasture field, the cattle will browse for years thereon in preference to the part not salted, and they will only resort to the latter when the first has been closely eaten down.