

improve the physical character of these soils, and thus deep plowing, turning up a few inches of these clays, not only renders these soils of good texture and good color, but also supplies to a great extent the necessary quantities of Lime, Magnesia and Potash. The deficiency of Phosphoric acid is to be supplied by means of bone-dust, the Phosphatic Guanoes, or any good Superphosphate—the other mineral deficiencies are all very cheaply supplied. Limes, containing a fair proportion of Magnesia should be used on them.

It will be seen that the chief deficiencies of this class of soils can be removed by proper cultivation, and this once done will be permanent as to the physical deficiencies; these defects in soil, where natural means are not at hand to counteract them, being always the most difficult and expensive to be overcome.

The nutrient substances that are deficient can be supplied with little labor and cost, all of which can be reimbursed by the first crop and give a very handsome per centage of profit, in addition to permanent improvement of the soil. These lands are level, or gently rolling, and produce in great perfection all the various grains, grasses, fruits and vegetables of this favored section. They as a general thing, are as well timbered and watered, and healthy, in many instances having on them deposits of marl capable of rendering them speedily and permanently very productive.

These lands in many instances can be purchased very cheaply even at present, though they have for the most part increased more than a hundred per cent. in value since I first published the Report of my examination of them, now fifteen years since, and this, too, in the face of most disadvantageous circumstances; their improvement being mainly due to the mode of cultivation and manuring then suggested, which has not only thus increased the value of the lands, but at the same time these lands have returned remunerative crops for all the outlay of capital on them.

They can be purchased, with good improvements, at from ten to one hundred dollars per acre, in good neighborhoods and in locations very accessible to water navigation and Railroad transportation. Much of them without special improvements are to be obtained at less prices.

BLACK GUM SWAMP SOILS.

These are characterized by their black color, light, porous, chaffy texture, and by the large quantity of very decomposed vegetable matter which they contained, amounting in the specimens which I have analyzed, from thirty-five to as much as sixty per cent. They are very productive in corn, but wheat does not flourish on them, owing to their porous texture. This