

well on it, and at the best cultivation meets with but small returns. It is seen in the neighborhood of Port Republic; on the ridge section between the Chesapeake and the Patuxent near St. Leonards; near Lower Marlboro', and in various other parts of the county, and forms a large part of its soils. I do not give all of its localities, because those who are interested in its improvement will at once recognize it by this description, and the intercourse is so general amongst the inhabitants of this county, that it is unnecessary to point out its special localities.

This soil is mainly deficient in phosphate of lime, and should therefore be manured with manures containing most of this substance. Should marl be convenient, then it should be applied according to directions in my former Report. This will at once supply the needful quantity of phosphoric acid and lime, and do all that these soils require for productiveness. When marls are not convenient, then a small quantity of *air-slacked* oyster shell lime should be used, (from forty to sixty bushels per acre, with bone dust,) good Mexican or Columbian guano.

WHITE OAK SOIL.—This exists to some extent in this county, and for its treatment I refer to my former Reports; what was there said experience has demonstrated to be true, and I can only now repeat the directions I then gave to the owners of these soils. Wherever my directions have been carried out, either as regards their culture or manuring, there crops have increased at the cheapest rate, and permanent fertility has been the result. What I said as to the improvement of these soils has now been published more than six years, and I have yet to learn that any one has failed to reap large returns for all that he has expended in following the directions then given. If there has been any better mode discovered, those who have followed it should make it known for the public good. He who has a secret for the improvement of land and does not reveal it for the benefit of his brethren, does not do his duty, for the concealment of that which may benefit, is equivalent to the perpetration of a direct injury.

There are several other varieties of soil in this county which could be described so far as their outward appearance is concerned, but as I have not examined their inward and special qualities, I will not here say any thing of them. If allowed, I shall do this hereafter.

In this county there are on hill sides, even in the most productive lands, small spots, known as "knolls," which are barren and require constant manuring, even to be capable of producing tolerable crops. They are "eye sores" to their owners, and detract no less from the appearance of the fields, than from their average production. These knolls are always less loamy than the more