

vesting it, and but few places any where can be found where strangers would meet with a more cordial welcome, or sooner find themselves "at home." The soils of this county shall only be described as far as their varieties have been examined. We have in the upper part of this county, in the neighborhood of Smithsville, those rich alluvial soils which I described in a former report, under the name of "West River Soils," which are found with some slight modifications, (depending on culture and the rotation of crops,) in various parts of the county, extending from the Anne Arundel border on the bay shore far down the county, and also on the Patuxent border. This soil even in its poorest condition can be improved to a very great extent solely by the addition of plaster and clover. It has fine texture, and belongs to the class of sandy loams, as their coarse quartz sand and gravel in almost every case exceed fifty per cent. There are hundreds of instances where these lands have been increased ten fold in productiveness by the sole application of one or two bushels of plaster per acre.

The examination of all the varieties of this soil shows the presence of a large quantity of phosphoric acid in it, with abundance of potash and soda. Their texture can be improved by the addition of small quantities of magnesian lime, which should be applied on the surface, and then suffered to lie there some time before being turned under; it would materially improve their cohesion and make them much better adapted for wheat. On these loamy soils neither bone dust, Mexican or Columbian guano would act well. The application of one hundred pounds of good Peruvian guano will supply to the wheat crop an abundance of the phosphate lime with that naturally existing in the soil, and be sufficient for the crops succeeding it. I scarcely deem it necessary to advise the use of plaster, as that is already used by every one. Whenever marl, especially that which is mixed with clay can be procured, it should be applied to these soils. There is no application which, while it may increase a present crop, will so materially conduce to the permanent improvement as the clayey shell marl. Though they may be fertile, yet they are not what they can be made by the application of this substance or by the application of magnesian lime. I have said that these soils extend on the Patuxent and Chesapeake, far down the county. Now between these is another very distinct soil, differing in its fertility, being very poor, differing in its texture, and very distinct in its appearance.

It is generally level and flat—very compact, hard in dry and exceedingly miry in wet weather. Its color and consistence is that of a light clay. It produces but little, plaster does not act