

upon it in a short time by the aid of one simple manure, and by subsequent culture. The manure alone used, save that improvidently supplied by its own resources, is plaster of Paris (gypsum), with the use in regular rotation of clover. These lands lie principally upon the ridge which divides the low flat lands of the Patuxent from those which border on the Chesapeake bay and its tributaries. They formerly were not very productive, under the old system of cultivation. By improvident culture they had become very barren and unproductive. A venerable and very intelligent minister of the Methodist church informed me that, forty years ago, the whole country embraced by these soils was as unpromising in its appearance and as unproductive in its crops as any section of the State, and afforded but a scanty support to a sparse and thinly settled population. Wheat was only sown in small patches around the dwelling-houses; tobacco gave but very slight return on any save new land, and the Indian corn made was barely sufficient, even in good seasons to supply domestic wants, and that the fields not in cultivation were scantily covered by a thin coating of inferior grass. But a change has come over the face of the country, and what a change!

Most abundant fields of corn, and waving wheat, rich pastures of the finest clover, and fields of tobacco now occupy what was once almost a desert waste; calling to mind what the scene here once was, and viewing it now, one might suppose that the former state of things was produced by war's desolation, the latter by the benign influence of peace, that the first marked the path of a destroying angel, blighting all that it touched, the latter, the result of mercy's goodness poured out with a lavish hand. The improvement has been made solely by the application of gypsum, crops of red clover, and more thorough cultivation than had been before practiced. The improvement by these means was not slow and gradual, but sudden and almost instantaneous. I well remember large tracts of this land which a few years ago did not produce more than two or three barrels of corn to the acre, which has since produced from twelve to fourteen and sixteen barrels to the acre. A field near Davidsonville, which, previous to 1840, only produced about two barrels of corn to the acre, two years afterwards, produced fifteen, no other means being used but a bushel or two of plaster to the acre, as I was informed by the unquestionable authority of its present owner, Mr. S. H. D. This increase of crop was produced solely by improved culture, plaster and clover.

The manner in which those agents acted was as follows: those soils contain all of the necessary elements of crops in fair proportions, except sulphuric acid, they had not a sufficiency of the peroxide of iron and alumina, nor of fine sand to absorb organic food from the atmosphere; there was a deficiency of organic matter in the soil, and the materials which were present could not, under the above circumstances, afford nutriment to crops. The addition of