

stand aloof from all assistance, from any thing else. This is just as wise as one who, traveling to a distant city, would travel on foot, because he knew that in this way he could get there, and refuse a rail road conveyance because never having ridden on it before. We must not inclose ourselves in a nutshell, the world is before us for our instruction, and we should learn useful lessons from all that it teaches. The farmer can hope for but little progress if he trusts to his own exclusive experience; he cannot profit but little from the experience of others, unless by knowing the conditions on which their success depended. Let him study as he may or reflect as he can, still he has no materials for a rational system. The success of one particular practical operation in the culture or manuring of a soil may mislead him, nay, will do so, unless used exactly under the same circumstances as to the nutrient composition of the surface soil and sub-soil, and the mechanical or physical texture of the same. Farmers in particular districts of country plow deep, and thereby improve their soil, and increase their crops; with shallow plowing their labor meets with no return, and their capital gives no interest. In other sections, on a different soil, shallow plowing is remunerative, deep plowing destructive, not only to the crop which succeeds it, but for many others for many years.

On the WHITE OAK LANDS of the Eastern Shore, and on those also in Baltimore and in Anne Arundel, Charles and St. Mary's counties, the plowing of the land to the depth of ten inches would, nay, it has prevented a good crop in the first season, and the land thus treated has failed to regain its pristine fertility for many years afterwards. Examples of this I have known, and can give. In the heavy clays of Frederick and Washington counties, and in the granite soils of Harford, Howard and Montgomery counties, this system (deep plowing) is what the nature of the soil requires. In these counties if a farmer should plow only three or four inches deep, his crop would entirely fail. Let the practice of the latter be followed by the former, or vice versa, and what will be the consequence? Disappointment and unrequited labor. Let the farmers know the causes which produce this state of things and they will avoid them. Practice, without science, can only be of a limited, restricted, narrow use. Practice, with science, will extend its benefits as far as the one is known and the other followed. The most insignificant things are the subjects of both art and science. The painter, the sculptor, the architect, the constructor of ships which "go down to the great deep," all follow certain scientific laws, and by these laws they work and do their labor, and