

is not a little dependent on the chemical quality, and texture of the subjacent rocks, for these, by their decomposition, have furnished, in general, the soil ; which does not indeed feed, but is a channel of nutrition for the vegetable world.

Let any one compare, for example, the glorious trees and rich pastures of the vales of Severn and Avon, situated on lias and red marl, with the stunted oaks and poor herbage of a great part of the broad vale of York, which is filled by gravel *drifted upon* the same red marls and lias ; or, in the vale of York itself, contrast the finely wooded and fertile region about Thirsk, where these strata come to the day, with the naked plains between North Allerton and the Tees, and he will see the importance of attending to geology in estimating the agricultural condition of a country. Through a great part of England, the various ranges of secondary limestones have characters of outline and surface by which they may be fully represented in a painting. Whoever has admired the Sussex Downs, or Yorkshire Wolds, will seldom fail to recognise, in other situations, those broad, rounded, and gracefully swelling hills melting into gentle hollows, that smooth short herbage, and that pleasing though dry and treeless surface, which belongs to the chalk of most parts of England. Different from these, in many respects, are the tracts of the Gloucestershire and Oxfordshire oolites, with their tabular summits and intervening woody vales of clay, and the older limestones below the coal wear other and bolder aspects, and all are different from the intersecting outlines and rugged surfaces of the primary strata of slate, mica schist, and gneiss.\*

But besides these general characters of *district scenery*, it is a familiar truth that every different kind of rock has peculiar forms in the mass, particular arrangements of the structural lines, and even modes of wasting, and vegetable accompaniments, which are often

\* See on this subject the remarks which accompany each system of strata in Vol. I. p. 164. 215. 227, &c.