

have often observed in hilly countries, whose base, as well as the upper stratum, was hard clay, that above the source of the rivulet the clay is found immediately under the vegetable soil, and below it there is the thickness of a foot of sand upon the clay, and which extends itself to a considerable distance. These strata formed by rivers are not very ancient, and are easily discovered by the inequality of their thickness, which is constantly varying, while the ancient strata preserves the same dimensions throughout; they are also to be known by the matter itself, which bears evident marks of having been smoothed and rounded by the motions of the water. The same may be said of the turf and decayed vegetables which are found below the first stratum of earth in marshy grounds; they cannot be considered as ancient, but entirely produced by successive heaps of decayed trees and other plants. Nor are the strata of slime and mud, which are found in many countries, to be considered as ancient productions, having been formed by stagnated waters or inundations of rivers, and are neither so horizontal, nor equally inclined, as the strata anciently produced by the regular motions of the sea. In the strata formed by rivers we
constantly