

change. It is he, and he only, who has given a date to geology, as far as regards the mineral nature of the layers; but neither Saussure nor Werner has determined the fossilized organized species in each sort of layer, with that necessary exactness which is so requisite, from the prodigious number of known animals which they contain.

Other men of science indeed studied the fossil relics of organized bodies; they collected and published drawings of them by thousands: their works will be valuable collections of materials; but, more engrossed with animals or plants, considered as such, than with the theory of the earth, or regarding these petrifications or fossils as curiosities rather than historical documents, or, in truth, contenting themselves with partial explanations on the relative bearings of each relic, they have almost always neglected to seek for the general laws of position, or the relation of fossils with the layers.

IMPORTANCE OF FOSSILS IN GEOLOGY.

And yet the idea of such a research was very natural. How was it overlooked that it is to fossils alone that must be attributed the birth of the theory of the earth; that, without them we could never have surmised that there were successive epochs in the formation of the globe, and a series of different operations? Indeed, they alone prove that the globe has not always had the same crust, by the certainty of the fact that they must have existed at the surface before they were buried in the depths where they are now found. It is only by analogy that we extend to primitive formations that conclusion which fossils enable us definitively to ascribe