vegetables are piled into stupendous monuments of the operations of life and death, during almost immeasurable periods of past time. "At the sight of a spectacle," says Cuvier, * "so imposing, so terrible as that of the wreck of animal life, forming almost the entire soil on which we tread, it is difficult to restrain the imagination from hazarding some conjectures as to the causes by which such great effects have been produced."

The deeper we descend into the strata of the Earth, the higher do we ascend into the archæological history of past ages of creation. We find successive stages marked by varying forms of animal and vegetable life, and these generally differ more and more widely from existing species, as we go further downwards into the receptacles of the wreck of more ancient creations.

When we discover a constant and regular assemblage of organic Remains, commencing with one series of strata, and ending with another, which contains a different assemblage, we have herein the surest grounds whereon to establish those Divisions which are called geological formations, and we find many such Divisions succeeding one another, when we investigate the mineral deposits on the surface of the Earth.

^{*} Cuvier rapport sur le progrès des sciences naturelles, p. 179. GEOL. I