

CHAP. V.

ORGANIC REMAINS OF PLANTS AND ANIMALS.

PERHAPS geology might never have escaped from the domain of empiricism and conjecture but for the innumerable testimonies of elapsed periods and perished creations, which the stratified rocks of the globe present in the remains of ancient plants and animals. So many important questions concerning their nature, circumstances of existence, and mode of inhumation in the rocks, have been suggested by the examination of these interesting reliquæ, and the natural sciences have in consequence received so powerful an impulse, and been directed with such great success to the solution of problems concerning the past history of the earth, that we scarcely feel disposed to dissent from the opinion of Cuvier, "that without (fossil) zoology, there was no true geology."

The stratified crust of the globe may, without exaggeration, be said to be full of these monuments of the vanished forms of life : they are of extremely various kinds ; lie in many different states of preservation ; occur very unequally in rocks of different kinds and ages ; and thus present a large field of contemplation to the philosophic geologist.

Fossil Plants.

The organic remains both of plants and animals occur abundantly in the earth ; the latter are most numerous. Of fossil plants, many are terrestrial, a few are fluviatile, others are marine. In the present system of nature terrestrial plants are, probably, ten times as numerous as the marine tribes, and it does not appear that the ratio of the fossil tribes is very different.