

matter, and of the various changes through which it has advanced, from the creation of its component elements to its actual condition; the second, embracing the past history of the animal and vegetable kingdoms, and the successive modifications which these two great departments of nature have undergone, during the chemical and mechanical operations that have affected the surface of our planet. As the study of both these branches forms the subject of the science of Geology, it is no less important to examine the nature and action of the physical forces, that have affected unorganized mineral bodies, than to investigate the laws of life, and varied conditions of organization, that prevailed while the crust of our globe was in process of formation.

Before we enter on the history of fossil animals and vegetables, we must therefore first briefly review the progressive stages of mineral formations; and see how far we can discover in the chemical constitution, and mechanical arrangement of the materials of the earth, proofs of general prospective adaptation to the economy of animal and vegetable life.

As far as our planet is concerned, the first act of creation seems to have consisted in giving origin to the elements of the material world. These inorganic elements appear to have received no subsequent addition to their number,