

and limestone, commissioned other agencies to lay up a store of gypsum, salt, bitumen, clay, and other substances dug out of the earth for man's benefit.

*My eighth geological argument for the divine benevolence is based upon the perfect adaptation of the natures of animals and plants to the varying condition of the globe through all the periods of its past history.*

The very slight changes in climate, situation, and food, that will destroy most species of animals and plants, is hard to be realized by man, whose nature will sustain very great changes of this kind. So will most of the animals and plants that have been domesticated by man, and which accompany him into every soil and climate. But the great mass of animals and plants would perish by such a transplantation. They are adapted to a particular region, often of narrow limits; and to remove them from thence, even to one slightly diverse, is to cause their deterioration and final destruction. In other words, their natures are exactly adapted to the place of habitation assigned them. And it must have required infinite wisdom thus to fit the delicate machinery of animal and vegetable organization to the great variety of circumstances on the globe in which it is placed. But we find that same wisdom to have been manifested in all the vast periods of organic life. We have the most unequivocal evidence that the condition of the earth has undergone important changes. We cannot examine the remarkable flora and fauna of the older rocks, the gigantic sauroid fishes, the huge orthoceratites and ammonites, the heteroclitic trilobites, and the strange sigillaria and lepidodendra, calamites and asterophyllites, the lofty coniferæ, and the anomalous cycadeæ; we cannot examine these without realizing that a state of the globe very different from the present must have existed when they had possession of it. And when we contemplate also the enormous saurians and batrachians of the middle secondary rocks, and the colossal quadrupeds of the tertiary strata, we cannot doubt that a tropical or an ultra-tropical climate must have prevailed in high northern latitudes during their existence. We perceive that there has been a gradual decrease of temperature on the surface from the earliest times. In each successive race of organized beings which have been placed on the globe, there must have been, therefore, some change of constitution to adapt them to the