

of our earth, now well known to geologists,¹ when none of these organized beings as yet existed, and when, nevertheless, the material constitution of our globe, and the physical forces acting upon it, were essentially the same as they are now,² shows that these influences are insufficient to call into existence any living being.

Physicists know, indeed, these physical agents more accurately than the naturalists, who ascribe to them the origin of organized beings; let us then ask them, whether the nature of these agents is not specific, whether their mode of action is not specific? They will all answer, that they are. Let us further inquire of them, what evidence there is, in the present state of our knowledge, that at any time these physical agents have produced any thing they no longer do produce, and what probability there is that they may ever have produced any organized being? If I am not greatly mistaken, the masters in that department of science will, one and all, answer, none whatever.

But the character of the connections between organized beings and the physical conditions under which they live is such as to display thought;³ these connections are therefore to be considered as established, determined, and regulated by a thinking being. They must have been fixed for each species at its beginning, while the fact of their permanency through successive generations⁴ is further evidence that with their natural relations to the surrounding world were also determined the relations of individuals to one another,⁵ their generic as well as their family relations, and every higher grade of affinity,⁶ showing, therefore, not only thought, in reference to the physical conditions of existence, but such comprehensive thoughts as would embrace simultaneously every characteristic of each species.

Every fact relating to the geographical distribution of animals and plants might be alluded to in confirmation of this argument, but especially the character of every

ings, and their relations to one another and to the world in which they live, exhibit thought, and can therefore be referred only to the immediate action of a thinking being, even though the manner in which they were called into existence remains for the present a mystery.

¹ Few geologists only may now be inclined to believe that the lowest strata known to contain fossils, are not the lowest deposits formed since the existence of organized beings upon earth. But even those who would assume that still lower fossiliferous beds may yet be discovered, or may have entirely disappeared by the influence of plutonic agencies, (POWELL'S *Essays*, etc., p. 424,) must acknowledge the fact that everywhere in the lowest rocks known

to contain fossils at all, there is a variety of them found together. (See Sect. 7.) Moreover, the similarity in the character of the oldest fossils found in different parts of the world, goes far, in my opinion, to prove that we actually do know the earliest types of the animal kingdom which have inhabited our globe. This conclusion seems fully sustained by the fact that we find everywhere below this oldest set of fossiliferous beds, other stratified rocks in which no trace of organized beings can be found.

² See, below, Sect. 21.

³ See, below, Sect. 16.

⁴ See, below, Sect. 15.

⁵ See, below, Sect. 17.

⁶ See, below, Sect. 6.