

if it were so uniformity ought to be restored in proportion as we recede from the tropics towards the antarctic temperate regions. But, instead of this, the differences continue to increase;—so much so, that no faunas are more in contrast than those of Cape Horn, the Cape of Good Hope, and New Holland. Hence, other influences must be in operation besides those of climate;—influences of a higher order, which are involved in a general plan, and intimately associated with the development of life on the surface of the earth.

403. Faunas are more or less distinctly limited, according to the natural features of the earth's surface. Sometimes two faunas are separated by an extensive chain of mountains, like the Rocky Mountains. Again, a desert may intervene, like the desert of Sahara, which separates the fauna of Central Africa from that of the Atlas and the Moorish coast, the latter being merely an appendage to the fauna of Europe. But the sea effects the most complete limitation. The depths of the ocean are quite as impassable for marine species as high mountains are for terrestrial animals. It would be quite as difficult for a fish or a mollusk to cross from the coast of Europe to the coast of America, as it would be for a reindeer to pass from the arctic to the antarctic regions, across the torrid zone. Experiments of dredging in very deep water have also taught us that the abyss of the ocean is nearly a desert. Not only are no materials found there for sustenance, but it is doubtful if animals could sustain the pressure of so great a column of water, although many of them are provided with a system of pores, (260,) which enables them to sustain a much greater pressure than terrestrial animals.

404. When there is no great natural limit, the transition from one fauna to another is made insensibly. Thus, in passing from the arctic to the temperate regions of North