

state the mass is invested with a fleshy substance, variously coloured, and having numerous, short, conical, polypiform, confluent cells, arranged in rows between the ridges. This sketch, (Pl. V. fig. 4,) shows the appearance of the coral in the water; the polypi are retracted and concealed. This zoophyte sometimes attains considerable magnitude; a very beautiful specimen in the British Museum is four feet in circumference. The base of the meandrina, like that of the fungia, is adherent to the rock, with which, being formed of a like material, it becomes identical. As one fleshy mass expires, another appears, and gradually expands, pouring out its calcareous secretion on the parent mass of coral; thus successive generations go on accumulating vast beds of stony matter, and lay the foundations of coral reefs and islands. We may compare, observes Mr. Lyell,\* the operation of the zoophytes in the ocean, to the effects produced on a smaller scale on land, by the plants which generate peat; in which the upper part of the *sphagnum* (page 48) vegetates, while the lower is entering into a mineral mass, in which the traces of organization remain when life has entirely ceased. In corals, in like manner, the more durable materials of the generation that has passed away, serve as the foundation over which their progeny spread successive accumulations of calcareous matter.

27. APPEARANCE OF THE LIVING CORALS.—In

\* Principles of Geology.