

lobulate, and rising in a tuft. Coenenchym very abundant, and presenting at its surface a great number of rounded pores disposed with regularity and separated by projecting papilliform grains. These grains are formed by the upper extremities of an equal number of cylindrical and vertical beams, which shut in tubuliform spaces, open above, and divided from space to space by cross partitions. Calicles circular. Septa very little developed, but distinct, and twelve in number. Horizontal floors present and well developed. The genus is remarkable for its alveolar appearance and the tubular structure of the parenchym."

The coral is figured by Milne-Edwards, *l.c.* (pl. i. fig. 3, a-c). A drawing of the growing tip of a frond, much enlarged, will be found on Plate II. figs. 10 and 11 of this paper. The following points require to be remarked concerning the structure of the corallum. The papilliform eminences described by Milne-Edwards as covering the surface of the corallum spring from the points of apposition of the walls of several of the coenenchymal tubes, very usually from the point of meeting of the mouths of four tubes (Pl. II. fig. 11). At these points the hard tissue consists of thickened vertical beams of calcareous matter, from which thin lamellar-like processes are given off. These processes form the walls between two contiguous tubes by crossing to join similar processes from adjacent beams. Each beam thus gives off four lamellar processes, which are disposed roughly at right angles to one another. The narrow summits of the thin laminæ forming the sides of the tubes fall short in their centres, by a considerable distance, of the level of the thickened masses from which they spring, and are excavated or hollowed out at these spots. It is across these excavations in the laminæ that the canals of the deep system pass in the fresh condition of the coral, by means of which the cavities of the tubes and polyps communicate freely with one another. The structure of the coenenchym of the coral might perhaps be better described by saying that it consists of a series of tubes of circular section, and of nearly uniform diameter, closely packed side by side more or less in regular rows, with their walls where touching fused together, and the spaces necessarily resulting from such an arrangement at the meeting-points of every three or four contiguous tubes filled in with calcareous matter, so as to form rods or beams of hard tissue, which are elevated above the margins of the tubes into papilliform prominences. Milne-Edwards distinguishes between the tabulæ of the coenenchymal tubes and those of the calicles, calling the first "traverses," and the second "planchers horizontaux," but they are essentially similar structures. Though twelve is a common number for the projecting plications of the margin of the mouth of the calicle, the number is very variable—11, 13, 14, even 15 or 16 of these so-called septa are to be counted not uncommonly. In the enlarged figure of a calicle (Pl. II. fig. 11) Dr Wild has drawn fifteen. The plications become less numerous at a slight depth in the calicle, and often here are only eight in number, with a mesentery of the polyp passing to each internal projection.