

(13) *Cellepora tridenticulata*, n. sp. (Pl. XXIX. fig. 3, and Pl. XXXV. fig. 17).

*Character*.—Zoecium lamellar, expanded, apparently unattached, uneven. Zoecia deeply immersed, surface shining, granular, imperforate. Orifice arcuate or subtriangular, with three, sometimes four, internal denticles within the lower border, and about 0".006–.007 wide. Rostrum (sometimes absent) a small rounded tubercle seated in a shallow depression, supporting on the summit, a minute avicularium with a semi-circular mandible. A strong articulated spine on each side of the orifice. Large interspersed prehensile avicularia (fig. 3*b*), apparently vicarious (certainly not rostral); usually immersed but sometimes more prominent and partially erect, with a short duck-bill shaped mandible, shutting down into a shallow boat-like beak, the edge of which is finely pectinate.

*Habitat*.—Station 186, off Cape York, lat. 10° 30' S., long. 142° 18' E., 8 fathoms, coral mud.

This well marked species is at once recognisable by the long articulated and indistinctly jointed oral spine on each side of the orifice. The limited development of the rostrum with its little imbedded avicularium is also a well marked feature, as is also the fine pectination of the border of the cup or beak in the interspersed avicularia. Another curious feature is the frequent occurrence on the surface of the zoarium of long tubular processes or tunnels, looking like enormously elongated zoecia. The nature of these appendages appears very obscure.

(14) *Cellepora vagans*, n. sp. (Pl. XXIX. fig. 10, and Pl. XXXV. fig. 11).

*Character*.—Zoarium encrusting, of a dark olive colour. Zoecia small, with a single row of puncta round the border; surface granular. Primary orifice (fig. 10*a*) orbicular or subclithridiate, the peristome much produced in front, with a wide sinus; afterwards rising into a hollow, conical pointed rostrum, which usually supports on one side a minute avicularium, with a semicircular mandible. Numerous large interspersed avicularia, whose mandible (fig. 10*c*) sometimes expands at the extremity into three or four branches, connected by a delicate membrane, capable of being spread over foreign bodies, and is sometimes pointed, but always more or less membranous towards the end.

*Habitat*.—Station 148, lat. 46° 47' S., long. 51° 37' E., 210 fathoms. Off Honoruru, Sandwich Islands, 20 to 40 fathoms.

The peculiarities of this species are: 1. The almost tubular production of the peristome even in the youngest zoecia; 2. the peculiar conical pointed form of the preoral rostrum, which sometimes represents merely an obtuse tubercle, but is more commonly of an acute conical shape, the apical portion of which, being denuded of the dark fuscous