(2) Cellepora tuberculata, n. sp. (Pl. XXVIII. fig. 9, and Pl. XXXV. fig. 7).

Character.—Zoarium a rounded, massive irregularly nodular growth. Zoœcia perfectly upright, very deeply immersed below and more or less free above; often assembled in sets of three or four together. Orifice suborbicular or elliptical, about 0"'007 wide; a few excessively minute denticles within the lower border. Operculum subtriangular, rounded, about 0"'006 in diameter. Pre-oral rostrum small, conical obtuse, most frequently represented by a mere transverse tubercle; on the back of which is a very minute avicularium with a semicircular mandible. Oœcium partially recumbent, free, with a round pore on each side in front. Interspersed avicularia rare, columnar, vicarious; mandible blunt, triangular; beak obtuse, not toothed.

Habitat.—Station 163B, off Port Jackson, 35 fathoms, hard ground.

The open honey-comb appearance of the surface in this form and the peculiar habit (if constant) are at first sight very characteristic.

(3) Cellepora albirostris, Smitt (Pl. XXXIV. fig. 7, and Pl. XXXV. fig. 3).

Discopora albirostris (forma typica), Smitt, Florid. Bryoz. pt. ii. p. 70, pl. xii. figs. 234-239; (nec. Hincks).

? Cellepora bispinata, Busk, Brit. Mus. Cat., p. 87, pl. cxx. figs. 1, 2.

Character.—Zoarium massive, or irregularly lobate; erect, or partially encrusting sponges or Fucus. Zoæcia (marginal) barrel-shaped, surface pearly, smooth or finely granular; imperforate or with a few punctures round the border. Orifice (primary) suborbicular or arcuate; two long, very slender, unarticulated oral spines above; rostrum (where fully formed) very long, straight and acuminate, solid with a minute avicularium with semicircular mandible on one side of the base, and overhanging a wide sinus. On the older zoæcia, often a long solid upright acuminate spine, arising apparently from the side of the zoæcium about the middle of its length. The rostrum is often developed into a very thick subcylindrical process obliquely truncated at the end and presenting on the oblique face a large avicularium with a blunt spatulate mandible and toothed beak (fig. 7d). A few interspersed immersed retentive avicularia, usually placed transversely on the front of a zoæcium, and varying greatly in size; the mandible elongated obtuse or subspatulate, the beak simple or rounded.

Habitat.—Station 151, off Heard Island, 75 fathoms, volcanic mud.

As Prof. Smitt remarks, the typical *Cellepora albirostris* in a fresh condition is readily recognisable by its greyish-brown colour and blackish-brown operculum. The zoœcia, he goes on to observe, in the growing edge of the colony are elongated ovate, presenting the greatest resemblance to *Cellepora bispinata*, Brit. Mus. Cat. In this I quite agree with