

epidermis, appears of an ivory whiteness, and with a finely granular surface and porcelanous aspect. The mode in which the partially membranous mandible of the larger avicularia sometimes spreads like a duck's foot over foreign bodies is very curious. In colour and superficial aspect, this form might be confounded with *Cellepora mamillata*, but they are in reality quite distinct.

(15) *Cellepora mamillata*, var. *atlantica*, Busk (Pl. XXXV. figs. 4, 5, and 13).

*Cellepora mamillata*, Bk., Brit. Mus. Cat., p. 87, pl. cxx. figs. 3, 4, 5.

*Character*.—Zoarium encrusting, mamillated. Zoecia erect, very irregularly disposed, deeply immersed. Surface finely granular, not punctured. Primary orifice suborbicular, with a straight lower margin. An acute pre-oral rostrum, with an avicularium near its base overlooking a small notch. Interspersed avicularia of two kinds, prehensile, with a duck-bill shaped mandible, and retentive with a long spatulate, membranous mandible.

*Habitat*.—Off Bahia; 10 to 20 fathoms (Pl. XXXV. fig. 4). Station 148, lat. 46° 47' S., long. 51° 37' E., 210 fathoms, hard ground, gravel and shells (Pl. XXXV. figs. 5 and 13).

[Coast of Patagonia, Darwin; Australia.]

Notwithstanding a slight (but constant) difference in the operculum, with respect mainly to the points of attachment of the ocluser muscles, and the apparent absence of the retentive kind of avicularia in the Australian specimens of *Cellepora mamillata*, the correspondence, in all other respects, with the South Atlantic form is so close as to leave little doubt as to the specific identity of the two forms.

§ 2. Operculum pedunculate or produced downwards, usually with an articular notch on each side. No median columella in the mandibles.

§§ a. *lobate, branched, or massive.*

(16) *Cellepora rudis*, n. sp. (Pl. XXVIII. fig. 7, and Pl. XXXVI. fig. 7).

*Character*.—Zoarium (in a single specimen) consisting of a short thick cylindrical stem rising from a broad base, and dividing into two rounded lobes. Aspect rugose and coarse. Zoecia completely immersed and very confusedly heaped together. Orifice subquadrangular, large (nearly 0".01 wide), depressed. Pre-oral rostrum, in the ordinary zoecia, merely a tubercle supporting an avicularium, with a blunt elliptical mandible, pointing downwards; in the fertile zoecia the rostrum is developed into a broad hollow process, from which the raised border passes back on each side of the orifice to the sides of the oecium. Oecium deeply immersed, having on the front a crescentic disc, marked