

radial masses thus derived splits again. Thus, in the entire coral there are forty-eight radially-disposed masses of soft tissue occupying the corresponding septal interspaces. The anatomy of the coral was not followed further, none of the specimens being in very good condition, having mostly suffered from breakage and deliquescence before reaching the surface. Some specimens contained numerous large ova.

Cycloseris.

Cycloseris tenuis (Pl. X. figs. 6, a).

Fungia tenuis, Dana, Zooph., 1846, p. 290, pl. viii. fig. 1.

MM. Milne-Edwards and Haime considered Dana's *Fungia tenuis* from the Pacific Ocean as probably identical with their *Cycloseris sinensis*.¹ *Fungia sinensis* has, however, according to their description, eight complete cycles, whereas Dana's has only six systems, and instead of being circular is subangular. The Pacific species thus seems to be distinct. I figure a specimen dredged off Tongatabu.

Diameter of the corallum, 20 mm. Extreme height from centre of the base to the inner tip of the septa, 5 mm.

Station 172, off Tongatabu, Friendly Islands. 18 fathoms.

Family EUPSAMMIDÆ, Milne-Edwards and Haime.

Balanophyllia.

Balanophyllia bairdiana, Milne-Edwards and Haime (Pl. XII. figs. 4-7).

Four specimens, dredged in 40 fathoms off the South Australian coast, seem referable to the above species, of which the type is in the British Museum. Two of the specimens are young, and the other two, though differing in size, apparently adult. The larger adult specimen, on comparison with the type, which is not in good condition, is seen to differ from it in that it has a well marked though very thin epitheca at its base (see fig. 4), the type having almost none at all though adult. The specimen further differs from the type in that its costæ are less prominent and its septa more numerous. The larger of the young specimens very closely approaches *Balanophyllia florideana*, Pourtalès (Deep-Sea Corals, p. 41, pl. iv. figs. 5, 6), a specimen of which is also in the British Museum.

Adult corallum straight, flabelliform or elongate, compressed, conical, with truncated base of attachment much compressed. A thin epitheca present at the base, extending for from one-third to two-thirds the height of the corallum. Costæ close set, covered with fine sharp denticulations, formed in the young coral by double rows of granules, in

¹ Milne-Edwards and Haime, Hist. Nat. des Cor., tom. iii. p. 52.