Pectinia profunda (Dana).

Ctenophyllia profunda, Dana, Zoophytes, p. 172.

A single specimen was obtained having an elongated narrow form like a young specimen of Manicina arcolata. It is about 8 cm. long and the sides are very undulate, so that closely approximated, lateral folds are formed, by the fusion of which, during development, the transverse ridges would arise. The pedicel of attachment is very small, and a dense epitheca seems to be present covering the corallum up to nearly 1 cm. from the margin, but this in reality is largely of foreign growth, as of small shells, worm tubes, and calcareous algæ, and must be very variable in different specimens at different localities. The costæ are sharp-edged, dentate, narrow, lamellate, radiating to the pedicel. The septa are thin, of three, four, or five sizes—many septa of higher orders being developed at the curved exterior margins of the series. The columella is lamellate, continuous, and joined at the sides by vermiform processes from the lower edge of the septa. No endotheca is developed as seen in the calicinal valleys from above, but in section rudimentary dissepiments are found at the basal parts of the centres.

The specimen is a young form; and, owing to the absence of the soft parts, and the continuity of the columella, it can only be concluded that the form is a compound one by the extremely sinuous edges of the corallum, through the lateral coalescence of which transverse ridges are already developing. It very closely agrees with the *Sphenophyllia flabellum*, Moseley, so much so as to lead me to think that that form may probably be a young example of the same species. Unfortunately, little or nothing is known of the young stages of any of the species of the genus.

Locality.—St. Thomas, reefs.

Genus 7. Trachyphyllia, Milne-Edwards and Haime.

Trachyphyllia, Milne-Edwards and Haime, Cor., ii. p. 340. ,, Duncan, Rev. Madrep., p. 82.

Trachyphyllia amarantus (Dana).

Manicina amarantum, Dana, Zoophytes, p. 189, pl. ix. fig. 1.

The specimens of this species differ not inconsiderably in the size of the calicinal series, in the state of development of the paliform lobe, and in the thickness of the septa, and consequently in the size of the denticulations of the costæ and septa. According to these differences, the specimens are strong and thick or comparatively delicate and thin.

Locality.—Mactan Island, Philippines.