

slightly bent in the plane of compression. Near the margin of the calicle all the costæ are well marked as slightly prominent thick ridges with rounded edges. The primary and secondary costæ extend on one face of the corallum nearly to the base of the pedicle; on the other face, where they are less marked, they cease somewhat higher up. The tertiary and quaternary costæ are much less developed than the others, and are well marked only close to the calicle; beneath they are indicated only by slight separating striæ. The two lateral primary costæ are thickened and prominent, but much less so than in other species of the genus; their edges are notched here and there irregularly; the outline of the calicle is oval, very slightly angular at the ends of the oval. There are six systems of septa and four cycles; twelve pali opposite the tertiaries. All the septa are exsert; the exsert quaternaries are all higher than the tertiaries, and are fused externally to the side of the primaries and secondaries. The septa are straight, and their faces are almost smooth, being very sparsely covered with extremely minute spinules. The columella is elongate, and composed of thin twisted lamellæ.

The coral resembles *Acanthocyathus grayi* and *Acanthocyathus spiniger* in colour, and though the lateral spines are represented in it only by little developed laminæ, there can be no doubt that it falls naturally within the genus *Acanthocyathus*. From *Acanthocyathus grayi* it differs in the more marked exsertness of its septa, and in these being slighter and smoother, also in the greater extent of the costæ, further in the dulness of its surface, the surface in *Acanthocyathus grayi* being smooth and glistening. It resembles *Acanthocyathus spiniger* in the exsertness of its septa, but differs from it in being bent, and in the very small development of its alæ, also in having the costæ less sharply ridged, and only the primary and secondary at all prominent.

Height of the corallum 17 mm. Long diameter of the calicle 18 mm., exclusive of the alæ. Short diameter 13 mm. A single specimen only obtained.

Station 210. Off the Philippine Islands, lat. 9° 26' N., long. 123° 45' E. 375 fathoms.

Paracyathus.

Paracyathus de filippii (Duch. and Mich.).

Pourtalès, Ill. Cat. Mus. Harvard, No. 8, p. 38.

Paracyathus confertus, Pourtalès, Ill. Cat. Mus. Harvard, No. 4, p. 11.

Numerous specimens. Off Fayal Island, Azores. 50 fathoms.

One specimen. Station 190. Arafura Sea. Lat. 8° 56' S., long. 136° 5' E. 49 fathoms.

Heterocyathus.

Heterocyathus philippinensis, Semper.¹

Numerous specimens. Off Malanipa Island, Southern Philippine Islands. 20 fathoms.

¹ Ueber Generationswechsel bei Steinkorallen, Z. f. Wiss. Zool., Bd. xxii., 1872, s. 264.