

Genus *Orcula*, Troschel, 1846 ; Semper, 1868.

(?) *Orcula hypsipyrge*, von Marenzeller, 1881 (Pl. V. fig. 6).

*Habitat*.—Station 233A, May 19, 1875 ; lat. 34° 38' N., long. 135° 1' E. (Japan) ; depth, 50 fathoms ; sand ; a single individual.

The specimen obtained by the Challenger Expedition has a length of about 120 mm., thus being much larger than the specimen described by von Marenzeller. The posterior extremity of the body is much more tapered than the anterior, and is destitute of any teeth. The colour in alcohol, is reddish or yellowish, brownish-grey, with the sucking-disks of the pedicels white. The pedicels are scattered all over the ambulacra and interambulacra, and do not present any arrangement in rows ; they are slightly more numerous on the ventral surface than on the dorsal. The perisome is thin and pliable, but its surface is rough from the outwardly directed spires of the tables. The tentacles are small and completely withdrawn into the body, and therefore I am not able exactly to state their number and position ; I counted only about thirteen tentacles. The five radial pieces of the calcareous ring (Pl. V. fig. 6, *a*) consist of several smaller parts and are prolonged posteriorly into two long processes, the narrow ends of which are joined to the corresponding ends of the adjacent pieces, exactly as stated by von Marenzeller. The interradial pieces are simple, without posterior prolongations. The length of the radial pieces is about 17 mm. A single madreporic canal and Polian vesicle are present. The retractors communicate with the longitudinal muscular bands near the anterior extremity of the body. The reproductive organs are well developed, and their tubes are about 20 mm. long, and slightly branched. The respiratory organs attain nearly the length of the body itself, and their branches are short and not very numerous.

Excepting the well-developed terminal plates of the pedicels, the perisome contains only calcareous tables (Pl. V. fig. 6, *b*) consisting of a more or less irregularly rounded, or even angular disk, with about twenty holes in it, and a spire composed of four, seldom more, rods, which are several times transversely connected. The spire is more or less conical, terminating in a single point or in several spines ; its length is about 0.14 mm.

To judge from the description of von Marenzeller, the tables in the type-specimen have more holes in the disk than is generally the case in those of the specimen brought home by the Challenger Expedition. No other difference seems to exist.

Genus *Phyllophorus*, Grube, 1840.

(?) *Phyllophorus incompertus*, n. sp. (Pl. V. fig. 8 ; Pl. VIII. fig. 5).

Body in contracted state ovate, about equally rounded at each extremity. Mouth closed by five prominences, each formed by three to six or more small papillæ with black retracted tops. Anus surrounded by very minute, almost inconspicuous