

Colochirus challengerii, n. sp. (Pl. XIV. figs. 1, 2 ; Pl. VI. fig. 11).

Body elongate, quadrangular, tapered towards each extremity. Mouth closed by five valvular projections. Anus surrounded by several sharp teeth, and the anal portion of the body slightly turned upwards and provided with overlapping scales. The ventral tentacles considerably smaller than the rest. Body-wall hard, leathery, almost inflexible, and its surface covered with numerous small, rounded, white, hard, calcareous protuberances, which are more crowded on the ventral than on the dorsal surfaces. Each protuberance penetrated by a small retractile pedicel. These protuberances are very closely disposed even on the two dorsal angles, giving these the aspect of two longitudinal rough and hard ridges. Along the four angles of the body a simple row of larger, scattered prominences, perforated by the pedicels, is visible. No arrangement of the ventral pedicels in distinct rows. Deposits—larger and smaller, thick reticulate scales ; numerous irregular knobbed buttons with as many as sixteen or more holes ; and small flat knobbed cups made up of a central \times -shaped rod and a knobbed ring. Length about 150 mm. Colour in alcohol, dark brownish-grey, with lighter longitudinal bands along the ambulacra and with all the protuberances whitish.

Habitat.—Station 186, September 8, 1874 ; lat. $10^{\circ} 30'$ S., long. $142^{\circ} 18'$ E.; depth, 8 fathoms ; coral mud ; three specimens.

This very characteristic species is nearly allied to *Colochirus spinosus* and *Colochirus inornatus*, and forms together with them a remarkable exception to the general rule in having no distinct longitudinal rows of pedicels on the ventral surface. I cannot agree with Semper in referring them to the genus *Thyone*, but von Marenzeller is doubtless right in regarding them as more nearly related to *Colochirus* on account of their general habit, the conformation of the calcareous ring and of the calcareous deposits, &c.

In two of the specimens not only the anal but even the oral portions of the body are bent upwards. The ventral surface with its two interambulacra is almost flat, slightly convex or slightly hollowed ; a ridge is distinguishable along its odd ambulacrum only anteriorly and posteriorly, and by reason of this the extremities of the body present a more or less distinct pentangular aspect, while the rest of the body is quadrangular, with the two dorsal angles very well marked. The oral as well as the anal portions of the body are scaled, while no overlapping scales are to be found on the rest of the body, which is covered by a great number of small, hard, rounded, whitish elevations or protuberances penetrated by the pedicels. Like *Colochirus spinosus* this species is marked out by series of larger conical calcareous points or processes, and these are to be observed not only along the ventral lateral ambulacra, but even on the dorsal angles. I counted as many as eight or nine such points. So far as I can find, no distinction of importance exists between the dorsal and ventral pedicels. Both are