

provided with supporting rods and terminal plates, but possibly the latter are more developed in the ventral pedicels. The pedicels always run out from the above mentioned hard, whitish elevations or points, which are pierced by them.

Only a single madreporic canal and Polian vesicle are present. The three ventral pieces of the calcareous ring (Pl. VI. fig. 11*d*) are narrower than the rest, and the posterior margin of the ring is uneven on account of the presence of short prominences.

The perisome is very hard and thick from the occurrence of three kinds of deposits, which bear a great resemblance to those in *Colochirus spinosus* and *Colochirus inornatus*. The scales do not attain any great size, excepting in the extremities of the body, where they are rather large, broad, visible to the naked eye, and slightly cover one another at the edges. The buttons (Pl. VI. fig. 11*a*) are very numerous, and vary greatly in form, size, and general appearance, scarcely any two being alike. They are distinctly knobbed, and pierced by holes varying in number from three or four to sixteen or more. The largest buttons attain a diameter of 0.2 mm. or more. Sometimes the buttons are almost smooth without knobs. The cups (Pl. VI. fig. 11*b*) are very flat, and do not seem to be present in very great abundance. They are mostly built up after the same plan as those in *Colochirus inornatus* or *Colochirus spinosus*, with the inner surface bluntly knobbed and the outer provided with more pointed knobs or spines. Sometimes an incomplete network covers the concave part of the cups. Their largest diameter measures about 0.06 mm. The pedicels are strengthened by simple or branched, broader or narrower, perforated rods (Pl. VI. fig. 11*c*) and by a well-developed terminal plate.

*Colochirus quadrangularis*, Lesson, 1830 (Pl. XIV. figs. 7, 8; Pl. VI. fig. 7).

*Habitat*.—Station 203, October 31, 1874; lat. 11° 6' N., long. 123° 9' E.; depth, 20 fathoms; mud; one specimen.

So far as I can find, no satisfactory description has been given either of this species or of *Colochirus tuberculosus*, so that it is very difficult, if not impossible, to get a correct idea of their appearances and distinguishing characters. Notwithstanding this, I cannot hesitate to refer the animal brought home by the Challenger Expedition from the Philippine Islands to the species in question.

The body, which has a length of about 90 mm., is distinctly quadrangular, with a simple row of large conical processes along each angle. The number of processes in each row is from twelve to sixteen. Anteriorly and posteriorly the odd ventral ambulacrum is provided with two or three processes. The flat ventral sole-like surface is marked by three longitudinal series of retractile pedicels, each series being composed of five or six rows. The ventral narrow interambulacra are naked, as well as the three dorsal ones. The longest process has a length of about 12 mm. and a breadth at the base of about