

minute, about 0.024 mm. in diameter, and irregularly formed. Towards the extremities of the pedicels the deposits are more asymmetrical and sometimes rod-like.

There is no doubt that this species is nearly allied to Semper's *Ocnus imbricatus*, and mainly differs from it by the possession of buttons, and by the fact that the scales do not imbricate. Both forms seem to be very typical representatives of the genus *Ocnus*, and are characterised by a hard, thick perisome containing scales, as well as other deposits, and by the arrangement of the pedicels in distinct simple rows.

Genus *Colochirus*, Troschel, 1846.

Colochirus spinosus (Quoy and Gaimard), 1833 (Pl. XIV. figs. 3, 4; Pl. VI. fig. 12).

Habitat.—Port Jackson (Australia); depth, 6 to 7 fathoms; fifteen to eighteen specimens.

The largest specimen attains a length of 80 mm. The body is oval or elongate, more tapered posteriorly than anteriorly. In most of the specimens the mouth, and especially the anus, are turned upwards, the body acquiring thus the appearance of an Acidian. The mouth is closed by five projections of the perisome, and the anus is surrounded by about five conical teeth, which in most cases are difficult to discover because they have their place within the anal aperture. The anal portion of the body is covered with imbricating scales, which decrease in size towards the aperture itself. Excepting a simple row of six to eight sharp, conical prominences along each side of the body, the surface of the animals is almost smooth, but presents numerous small pits from the completely retractile pedicels and "papillæ." The two ventral tentacles are much smaller than the remaining eight. A single madreporic canal and Polian vesicle are present. The ventral pieces of the calcareous ring are narrower than the rest.

The ambulacral appendages are very minute and retracted in all the specimens, so that it is almost impossible to decide whether two kinds are really present. They are scattered without order all over the body, but are a little more crowded on the ventral than on the dorsal surface; only along the odd ambulacrum is a double row of ambulacral appendages traceable. As far as I can find, the only difference existing between the dorsal and ventral appendages is that the latter possibly has the sucking-disk slightly larger, and the terminal plate very slightly more developed, but both of them are strengthened by supporting rods of about the same shape. Each of the conical prominences along the sides of the body is in possession of an ambulacral appendage.

The calcareous deposits have about the same appearance as those in *Colochirus inornatus*, to which the species in question bears the nearest resemblance. The rounded or oval reticulate thick scales never attain a greater size, the largest having a diameter of from 2 to 3 mm. The cups are knobbed (Pl. VI. fig. 12a), very