ventral ambulacra. Anus with teeth. Deposits—reticulate spheres or cups; large scales.

Habitat.—Bowen (Ludwig).

(Mus. Holm.) Two specimens, 18 mm. long, from Bowen in Australia. Besides the large scales and the cups, I find in the perisome other bodies, which seem to resemble the "buttons" in *Colochirus australis*, and are probably developmental stages of scales. For the rest, the specimens fully agree with those described by Ludwig. It seems not incredible that *Colochirus minutus* is a younger form of *Colochirus australis*.

## Colochirus australis, Ludwig, 1875.

Body quadrangular. The two dorsal ambulacra with one or two rows of papillæ. Two, seldom three, rows of pedicels in each of the ventral ambulacra. Anus with small teeth. Deposits—reticulate half spheres or cups; numerous knobbed buttons; large scales.

Habitat.—Bowen and Sydney (Ludwig), Port Molle and Port Jackson (Bell).

(Mus. Holm.) Two individuals from Port Jackson and one from Bowen. The largest, 70 mm. long. The papillæ, forming an alternating double row on the two dorsal ambulacra, pass out from a low hard knobbed wart. As usual in this genus, papillæ may also be found anteriorly and posteriorly on the three ventral ambulacra. Interambulacra naked. Those pedicels which form the outer row in the two lateral series seem either to issue from very low knobby warts or to be surrounded at the base by calcareous knobs. The larger and smaller scales do not imbricate, except at the posterior end of the body. The knobbed buttons, seldom of a more symmetrical form, often become developed into irregular spheres.

## II. Dorsal papillæ scattered on the ambulacra as well as interambulacra.

Colochirus australis, var. armatus, von Marenzeller, 1881; Ludwig, 1883. Colochirus armatus, v. Marenzeller, 1881.

Habitat.—Japan (v. Marenzeller and Ludwig).

This variety differs mainly from the species itself in that even the dorsal interambulacra carry small warts with papillæ, and in that three to four rows of warts are present along the dorsal ambulacra. The scales are also smaller and the skin thinner.

## Colochirus cylindricus, Semper, 1868.

Body cylindrical, slightly flattened below. Dorsal surface with crowded, larger and smaller tubercles with papillæ. Two to three rows of pedicels in each