

II. Tentacles fifteen.

Psolus cataphractus (*Stolinus*), Selenka, 1868; Bell, 1882. *Holothuria cuvieria*, Cuvier, 1817. (?) *Cuvieria cuvieria*, Jæger, 1833. (?) *Psolus cuvierius*, Semper, 1868.

Dorsal integument very smooth and stone-hard. Mouth and anus stellate, the latter not situated on a conical tail. Pedicels of the sole in three longitudinal series; round the sharp margin, which surrounds the sole, is a row of small pedicels without supporting terminal plates. Deposits—reticulate cups, which in the dorsal integument are more closely crowded and partly grown together so as to make it uncommonly hard.

Habitat.—Australia (Selenka).

Psolus ambulator (subgenus *Hypopsolus*), Bell, 1882.

Body like that in the preceding, without any tail. Each lateral ventral series of pedicels composed of five or six rows, and the odd series of about ten rows. The very large dorsal scales, which form about six not very regular rows of about four or five scales in each, are covered by a rather thick integument, and do not imbricate with one another. Five very large triangular scales surround the mouth; the five anal scales are particularly small. Many of the large scales have one, two, or rarely three small pores in their integument, which communicate with a small pit in the plate itself. Round the margin the scales are small and imbricating. Tentacles unknown.

Habitat.—Australia (Bell).

(Mus. Holm.) One specimen from Australia, which is certainly to be referred to this species of Bell; moreover, as will be seen from the following description, the general appearance and organisation of the species examined by me are much the same as those in Selenka's *Psolus cataphractus*; a resemblance in several important respects so striking that there is but little doubt they are identical. Thus, further investigations will certainly prove that *Psolus cataphractus* and *Psolus ambulator* are synonymous.

The specimen in question has the following measurements:—length of the sole 37 mm., breadth of the sole 12 mm.; height of the anterior part of the body 17 mm., height of the posterior part of the body 8 mm. Thus the animal does not attain more than half the size of that examined by Bell. Tentacles fifteen, somewhat unequal. Each lateral ambulacrum with three or four rows of pedicels; the unpaired ambulacrum with a broader series of pedicels. The five triangular oral valves are very considerable, while the anal valves are particularly small, giving to the anus an irregularly stellate aspect. The scales of the back are of various shapes, very large and thick, so that there are only four or five between the anus and the oral valves, and only about five across the back from brim to brim. The brim, or the lower part of the sides, forming the margin of the animal, is supported by a number of small scales. The whole back is covered by