

Subfamily GASTROPODA.

Genus *Psolus*, Oken, 1815.*Psolus disciformis*, n. sp. (Pl. IX. fig. 6).

Body rounded, oval, depressed, with the anal portion slightly conical. Within the anal aperture five small tooth-like papillæ. Tentacles ten (?). The dorsal scales are numerous and imbricating, smaller round the margin of the dorsal surface and round the anal and oral apertures. Most of the scales carry one or two minute papillæ, visible to the naked eye, and apparently running out from a hole in the scale; these papillæ are always strengthened by rudimentary minute terminal plates. The oval sole provided with three double rows of pedicels, the pedicels of the lateral ambulacra being much more numerous and crowded than those of the middle ambulacrum. The sole is supported by regularly formed, smooth oval, roundish or even elongated disks with the margin slightly uneven, and with no holes or a few minute ones; moreover, the sole contains a few smaller x-shaped bodies or larger concave cup-shaped plates with a few large holes and an uneven knobbed rim. Pedicels with well-developed terminal plates, and irregular, perforated, rod-like plates. Colour, white. Length of the largest specimen, 25 mm.

Habitat.—Station 311, January 11, 1876; lat. 52° 45' 30" S., long. 73° 46' W.; depth, 245 fathoms; bottom temperature, 46° 0; blue mud; two specimens.

In both of the specimens examined by me the anal portion of the body is more distinctly conical and prominent than the mouth. No oral or anal valves are present, but the scales seem to overlap each other in the neighbourhood of the two apertures more distinctly than on other parts of the body. The margin of the dorsal surface is formed by minute plates. The scales between the mouth and anus amount to about thirty or more. The scales themselves are roundish, and their diameter slightly exceeds 1 mm. The minute dorsal papillæ are remarkable in having a network resembling the rudimentary terminal plates of pedicels, and I am almost tempted to believe these "papillæ" to bear some relation to the ambulacral system. At both extremities of the sole the lateral double-rows of pedicels are in direct communication with one another. That which especially distinguishes this species from the forms hitherto known is the very peculiar discoidal smooth plates (Pl. IX. fig. 6a) present in the ventral sole, and which are far more numerous and crowded than the scattered x- or cup-shaped plates (Pl. IX. fig. 6b); the diameter of these disks and plates measures about 0.14 mm.

Psolus murrayi, n. sp. (Pl. XV. figs. 5, 6; Pl. VI. fig. 4).

Body not depressed, elongate, cylindrical, with the posterior end tapered, caudiform. The elongated rectangular sole provided with three simple rows of pedicels, those in the