which, however, in old specimens are not unfrequently abraded in places. Near the mouth and anus the scales are smaller and grouped around the openings, where a number of them are transformed into wart-like tubercles. The scales bordering the margin of the dorsal surface much smaller. The sole with reticulate cups or spheres.

Habitat.—Arctic Ocean, north from Norway (Danielssen and Koren, Hoffmann), north from Nova Zembla (v. Marenzeller), Greenland (Düben and Koren, Lütken, Norman, Duncan and Sladen, Ludwig), Newfoundland (Lütken), Grand Manan (Stimpson, Ludwig, Verrill), New England (Ayres), Massachusetts (Lütken, Bell, Gould, Verrill), Massachusetts Bay to Greenland (Verrill), Sitka (Brandt), Japanese Sea (Bell), (?) Kurile Islands (Pallas), (?) St. Paul in Bhering Sea (Middendorff). (Mus. Holm.) Numerous specimens from different localities of the Arctic Sea.

Psolus squamatus (Cuvieria), Düben and Koren, 1844; Koren, 1844; Sars, 1861; Bell, 1882. (?) Holothuria squamata, O. F. Müller, 1788. Lophothuria squamata, Verrill, 1873.

Body depressed, like that of the preceding species. Lateral series of pedicels composed of two to four rows. Odd ambulacrum always naked, though it possesses some pedicels in its anterior and posterior portions. Scales large, imbricating upon one another, with rather uneven margin, and covered with fine granules only. The sole, devoid of the cup-shaped bodies, is supported by more or less scattered, irregular, reticulate slightly spinous or knobbed plates.

Habitat.—West coast of Scandinavia from Bergen to Lofoten and Finmark (Sars Düben and Koren, Danielssen and Koren, Möbius and Bütschli, Barrett and M'Andrew), British Islands (Norman, Hodge), Gulf of St. Lawrence (Bell), coast of New England (Verrill).

The characters distinguishing the three last species appear to be very unimportant, and there may be a question whether they are distinct or not. However, Psolus boholensis has an Ascidia-shaped body, while the other two have it depressed, and the anal portion not prolonged into a conical tail. None of them have the large oral valves, peculiar to several of the following species.

Psolus peronii (subgenus Lophothuria), Bell, 1882.

Habitat.—(?)

Judging from the description of Bell, the general appearance of this species must be very like that of *Psolus squamatus*, and it is distinguished mainly by "a very large number of scales, only slightly imbricated near the margin," and by the possession of cup-shaped deposits in the ventral sole.

Psolus ephippifer, Wyville Thomson, 1877 and 1878.

Habitat.—Heard Islands (W. Thomson).

This Antarctic species is easily known from the Arctic forms, Psolus fabricii and