

Psolus squamatus, by its small size and by having distinct oral and anal valves, and only two rows of pedicels around the sole. Its affinity with the two following species is much more apparent, and is such that it is almost impossible to draw a line of demarcation between them. Compare the above description.

Psolus operculatus (*Cuvieria*), Pourtalès, 1868, 1869. *Lepidopsolus* (?) *operculatus*, Verrill, 1867–1871.

Body oval, flattened, covered with finely and sparsely granulated scales, very compactly imbricated, but overlapping very little excepting near the mouth and anus. Oral aperture closed by five large triangular scales, alternating with and covering five narrow, tooth-shaped ones. Anus closed in the same way, but the scales are much less regular and constant. A double row of pedicels surrounds the soft sole, those of the outer row perforating the marginal plates; sometimes two or three pedicels are present anteriorly in the odd ambulacrum.

Habitat.—Sand Key and Florida Reefs (Portalès).

The species is doubtless nearly allied to *Psolus squamatus*, and appears to differ from it mainly in having larger, more regular oral valves, and in having only two rows of pedicels around the sole. Portalès does not describe the armature of the sole.

Psolus antarcticus (*Cuvieria*), Philippi, 1857; Semper, 1868; Studer, 1877; Bell, 1882. *Lepidopsolus* (?) *antarcticus*, Verrill, 1867–1871.

Habitat.—Strait of Magellan (Philippi, Studer), Portland Bay and Cove (Bell). According to Philippi, this species is nearly related to or identical with *Psolus squamatus*. Bell says that the body is much more flattened than in the last-mentioned form, and that the oral and anal valves are very much larger and more regularly arranged. Indeed, the oral valves consist of five large triangular scales, and the anal ones are also five but smaller. The scales covering the dorsal surface are large, so that only about five (Philippi) or ten to eleven (Studer) are placed between mouth and anus; they are also much less granulated or nearly smooth. Round the margin of the dorsal surface the scales are much smaller. Only a double row of pedicels is present round the sole. The deposits in the sole have not been described.

2. *Dorsal integument without scales* (?).

Psolus poriferus (*Cuvieria*), Studer, 1877 and 1879.

Dorsal surface furrowed, so as to present irregular poriferous spaces. Round the margin, however, poriferous scales seem to be present.

Habitat.—Royal Sound, Kerguelen (Studer).

The description given by Studer is very summary and unsatisfactory. The species is possibly identical with Bell's *Psolus ambulator*.