

ovarial opening without exposure." In the specimens I examined the marsupium seems not to run so far forwards as is pointed out by Wyville Thomson. Owing to the want of the necessary material I could not find the genital pore, but I am tempted to believe that it is situated more anteriorly than Wyville Thomson supposes.

The "sole" is supported by more or less irregular perforated flat cups (Pl. VI. fig. 3, *b*) with more or less numerous obtuse spines. Very often the "cups" are undeveloped, resembling irregular, reticulate, knobbed or spinous plates. A single madreporic canal and Polian vesicle are present.

Among the numerous specimens from Marion Islands, not a single one is provided with a marsupium on the dorsal surface, though there are females as well as males to be found. They resemble the true *Psolus ephippifer* almost completely, and differ only, so far as I can find, by having a slightly more distinctly marked conical anal portion. However, the presence or absence of a marsupium in the females may possibly be of such importance as to justify their separation into two species, in which case the forms from Marion Islands probably may be referred to *Psolus operculatus*, Pourtalès.

Subfamily SPORADIPODA.

Genus *Thyone*, Oken, 1815 ; Semper, 1868.

Thyone fusus, var. *papuensis*, nov. (Pl. VII. fig. 1).

Habitat.—Station 186, September 8, 1874 ; lat. 10° 30' S., long. 142° 18' E.; depth, 8 fathoms ; coral mud ; a single specimen.

Though it may appear very strange, it is nevertheless true that the form brought home from Torres Strait is closely allied to the northern *Thyone fusus* ; indeed, so much is this the case that I cannot find out any difference of importance, although I have had at my disposal a vast collection of northern forms from the west coast of Sweden, and have had the best opportunity of making comparisons between them.

The specimen from Torres Strait measures 34 mm. in length ; its pedicels are small and very numerous, and are distributed over the ambulacra as well as interambulacra. Traces of an arrangement of the pedicels in longitudinal series are recognizable not only along the ambulacra but even along the interambulacra. Like the northern form, the anus is armed with calcareous teeth. Even the calcareous ring (Pl. VII. fig. 1, *a*) does not deviate in general appearance from that of the northern type ; only with regard to the size, some difference seems to exist. Thus, the length of the ring in the specimen brought home by the Challenger Expedition is about 16 mm., while in a specimen of the typical *Thyone fusus*, about 70 mm. long, it is only 14 mm. long. But in both forms the posterior long prolongations seem to be composed of several smaller parts.