

disks have quite a smooth margin, and the number of holes seems, as a rule, to be nine. The buttons (Pl. VII. fig. 9, *d*) are smooth and mostly regularly formed with six holes in two rows; their length is about 0.08 mm. The rods in the pedicels (Pl. VII. fig. 9, *e*) have commonly the form given on the plate. A bundle of very large, unbranched Cuvierian organs, about 50 mm. long, is present.

The specimen obtained at the Sandwich Islands mainly differs in its uniform brown colour and in the smallness of its slightly darker coloured warts.

*Holothuria vagabunda*, Selenka, 1867 (Pl. VII. fig. 10).

*Habitat*.—Tongatabu (Friendly Islands); one individual. Samboangan (Philippine Islands); one individual. Fiji Islands; a single specimen.

I am in great uncertainty with regard to the ambulacral appendages of the dorsal surface, they may be considered either as pedicels or papillæ. Some of them have a more or less obviously conical form and resemble papillæ, others are more cylindrical; a closer examination proves that the former are devoid of a true sucking-disk, have the terminal plate very rudimentary and the walls strengthened by numerous spinous transverse rods, while the latter have a small though distinct sucking-disk, a much larger terminal plate and comparatively few supporting rods; these rods are only collected around the terminal plate, and are not distributed over a greater space as is the case in the papillæ, and, like those in the ventral pedicels, they generally resemble elongated plates with two more or less incomplete rows of holes, or bilaterally symmetrical, fenestrated, more or less elongated plates. Evidently, then, the dorsal ambulacral appendages are of two kinds, viz., pedicels and papillæ. The ventral appendages are slightly more numerous than the dorsal ones; in the specimen from Tongatabu they seem to be much more numerous and crowded; this, however, depends upon a higher degree of contraction of the ventral perisome.

The colour of the individual from the Philippine Islands is pale brown, while the specimen from Tongatabu is darkish brown. I cannot with certainty state the number of tentacles which are fully retracted within the body, but I believe there are eighteen in the specimen from Tongatabu. A single madreporic canal is present. The individual from Tongatabu is provided with three Polian vesicles, while the other has only one or two. Cuvierian organs of a reddish-brown colour are present. The deposits obviously resemble those in the typical *Holothuria vagabunda*; scattered among the common tables with the wide annular apex of the spire provided with eight to ten teeth, others are found with their spire much more tapering towards the apex, which becomes very narrow and comparatively inconsiderable. The disks of the tables (Pl. VII. fig. 10, *a*) are often uneven in the margin and even spinose, but there are also many disks to be found which have the margin rounded, smooth, and slightly undulating. The