

in its top. Buttons of the usual shape with six holes. The dorsal pedicels alone have supporting rods which are spinous and tapered towards the ends.

*Habitat.*—Sandwich Islands and Society Islands (Selenka), Philippine Islands, MacKean's Islands, Sunda Islands, Mozambique and Aden (Semper), Zanzibar (Selenka), Java (Selenka, Ludwig), Navigator Islands (Semper, Ludwig), Nicobar Islands and Hong Kong (Ludwig), Darros Island (Bell), Ualan (Brandt), Bowen (Ludwig).

(Mus. Holm.) Two specimens from Navigator Islands, one from Port Dendor and one from Peru. Moreover, the Godeffroy Museum has specimens from the following localities: Tahiti, Massua, Eoa, Fiji Islands, Rockhampton, and New Britain. In all these specimens the ambulacral appendages appear to be of nearly equal size on the dorsal and ventral surfaces; but, at the same time, I always found the ventral ones cylindrical, and the dorsal, on the contrary, more papilliform. The ventral have a well-developed terminal plate and bilaterally symmetrical, perforated supporting plates; the dorsal have a rudimentary terminal plate and numerous simple spinous or slightly branched or even perforated rods. Besides, the ventral appendages are always more numerous than the dorsal. Thus the forms examined by me apparently present examples of dorsal appendages forming a transition between pedicels and true papillæ, and show that it is rather difficult to draw a line of demarcation between them. That the forms I have seen really belong to this species is proved by the whole internal and external organisation. The colour varies from dark brown to light reddish-brown. A single Polian vesicle and madreporic canal are present. The genital tubes are slender, and slightly dichotomously branched. The strongly-developed Cuvierian tubes are of a violet or reddish-colour. The disks of the tables are sometimes not very well developed, sometimes round or angular, with a large central hole, and several peripheral ones, and their margin is often uneven.

*Holothuria lagæna*, Haacke, 1880; Ludwig, 1883.

*Habitat.*—Mauritius (Haacke, Ludwig), Mozambique (Bell).

(Mus. Holm.) One specimen from Mauritius presented by Professor Möbius. From the description of Ludwig as well as from my own researches, I cannot find any other character distinguishing this form from the true *Holothuria vagabunda*, than the fact that it has "papillæ" instead of pedicels on the back; but even in the later species the dorsal appendages present a great resemblance to "papillæ," and I am therefore much inclined to annul this species. A re-examination and comparison of both forms will therefore be necessary.

*Holothuria difficilis*, Semper, 1868. *Mülleria parvula*, Haacke, 1880 (according to Ludwig, 1883).

The dorsal papillæ very thinly scattered. Ventral surface with pedicels. The disks of the tables well developed, with numerous peripheral holes, and the spire