

ambulacral appendages, and by having some darker transverse bands on the back. Even here the deposits of the pedicels and papillæ are considerably more developed than in the body-wall itself, though the tables never seem to attain the unusual length of the spire, nor to have the great number of transverse beams.

Holothuria arenicola, Semper, 1868. *Holothuria maculata* (*Sporadipus*, subgenus *Acolpos*), Brandt, 1835 ; Ludwig, 1881.

Pedicels all over the body. The tables have the smooth disk pierced by a larger central hole and several small peripheral ones ; their spire is built up of four rods and one transverse beam, and terminates in several teeth. The oval buttons regularly with six holes.

Habitat.—Philippine Islands, Amboina, Fiji Islands, and Surinam (Semper), Bonin-sima (Brandt), Mauritius (Haacke, Ludwig).

(Mus. Holm.) One specimen brought home from the Navigator Islands. Length, 100 mm. Colour—light yellowish-grey, with a row of distant darkish-brown spots along each dorsal ambulacrum ; also some minute scattered spots. Anus surrounded by five groups of small papillæ. Tentacles very minute. Calcareous ring of the usual shape. Two Polian vesicles and a bundle of three small madreporic canals on the right side of the dorsal mesentery. The tables greatly resemble those in *Holothuria impatiens*, but they have not the nine nearly equal holes in the disk, which on the contrary is perforated by a large central hole and a varying number of small peripheral holes. The spire terminates in twenty or more teeth. The buttons are very symmetrical, as a rule with six holes. Considering that the ambulacral appendages, which have a well-developed terminal plate, are quite retracted within the body-wall, it is uncertain whether they really are pedicels. The supporting rods of these pedicels are smooth, slightly enlarged, and perforated at the middle and the ends. The species is probably very nearly related to the preceding one, and distinguishable from it only by the shape of the buttons.

β . Disks of the tables spinous on the margin and more or less developed. Number of tentacles typical, twenty.

Holothuria signata, Ludwig, 1875.

Dorsal surface with scattered papillæ ; ventral surface with pedicels arranged in three longitudinal series. Tables with rudimentary spinous disk and the top of the narrow spire rounded, devoid of spines. The oval buttons with two to four holes, two considerably larger ; several developmental stages of the buttons not rare.

Habitat.—Tahiti (Ludwig).