

HOLOTHURIA HAMATA, n. sp.

(Plate V.; Plate VI., fig. 2.)

Two examples from Suez Bay, 5-9 fathoms, dredged by Mr. Cyril Crossland.

One of the specimens was narcotized in alcoholic sea water before preservation, and has retained more or less the proportions of the living animal. It is 225 mm. long and 54 mm. broad. The other specimen was put immediately with strong spirit and is greatly contracted.

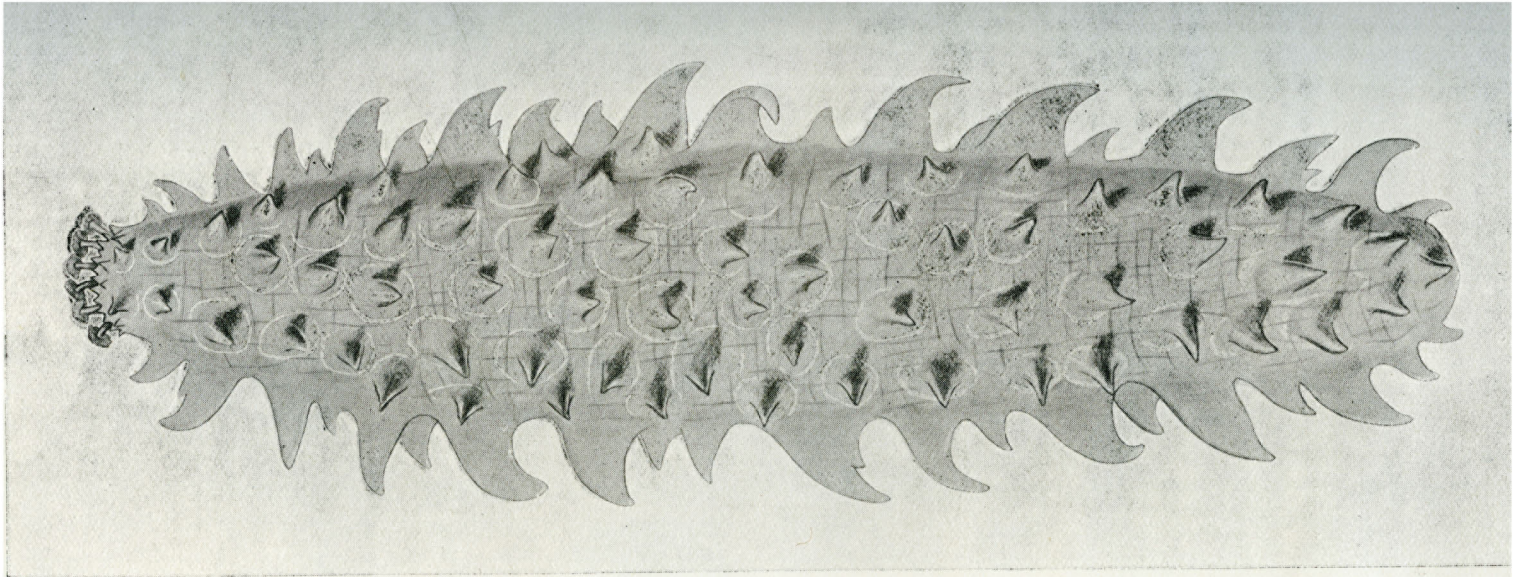
*External Characters.*—After several years' immersion in strong spirit the animals have lost all colour, and are of a uniform yellowish-brown, slightly darker on the bivium than on the trivium. I have the advantage of some manuscript notes of the species made by Mr. E. Hindle some years ago, when the spirit had evidently not extracted all the colour. He wrote as follows:—"Each dorsal papilla is light brown, surrounding this is a band of light gray, and finally there is an outer band of brown spots, marking off the light gray band from the brown background of the dorsal surface. This arrangement of bands of colour varies slightly, but every papilla on the dorsal surface shades off into a light gray, which is marked by a few brown spots. The ventral surface is light gray faintly marked by a few small light brown spots." Ambulacral appendages papillæ only, which are to some extent non-retractile. Those on the bivium are somewhat irregularly scattered, but nevertheless show an arrangement into four rows. Along each side of the body are 20 large claw-like outgrowths, which give the body a characteristic appearance. These processes increase in length towards the middle of the body, where they are 20 mm. in length. On the ventral surface there are two rows of broad papillæ, about 30 in each row.

There are 20 dark brown tentacles surrounded by papillæ.

*Internal Anatomy.*—There is one Polian vesicle on the ventral side and one stone canal on the right side of the dorsal mesentery. As in *Holothuria spinifera* and the related species, the stone canal is very large. Of the two respiratory trees the right is the longer, but the left more bulky. There are no Cuvierian organs.

*Spicules.*—Both the specimens examined by me have been preserved for some years, and the spicules show signs of disintegration. The spicules are very closely packed and consist of tables and buttons. The tables have usually a very irregular and indefinite shape, probably due to their having been partly dissolved. The most perfect form has a disc 100  $\mu$  in diameter, having a large central hole and about ten peripheral holes, and the tower is surmounted by numerous blunt spines reminding one very much of the tables of *H. aculeata*. The most common type, however, has fewer holes and the edge of the disc is spinous. The tower has four upright and one transverse beam. The buttons are knobbed and are extremely irregular in shape. They have an average length of 40  $\mu$ .

*Remarks.*—This form has affinities with *H. spinifera* and the related species. Nevertheless the large claw-like outgrowths on the sides of the body make the identification of this form easy. But the two specimens under examination are very different in external appearance, owing to the fact that one specimen has undergone great contraction.



*Holothuria hamata*, n. sp.

