

*Holothuria lactea*, n. sp. (Pl. X. figs. 9 and 15).

Body elongated, oval. Mouth turned towards the ventral surface. Anus almost terminal. Tentacles small, twenty. A simple row of pedicels along each side of the ventral surface. The odd ambulacrum naked. Dorsal surface with small, very much scattered papilla-like prominences. Perisome soft and pliable, containing numerous crowded delicate tables consisting of a large rounded or stellate disk pierced by six very large holes arranged round a small central hole, and bearing a strongly constructed central spire built up of three rods and one transverse beam; the spire terminates in three very long smooth teeth. Colour, milk-white. Length about 110 mm.

*Habitat.*—Station 78, July 10, 1873; lat. 37° 26' N., long. 25° 13' W.; depth, 1000 fathoms; volcanic mud; two fragments. Station 169, July 10, 1874; lat. 37° 34' S., long. 179° 22' E.; depth, 700 fathoms; bottom temperature, 40°·0; blue mud; a single individual.

The ventral surface is evidently flatter than the dorsal, and does not bear any other ambulacral appendages than the simple row of pedicels along each side. These pedicels, only about twenty in each row, are not closely crowded but placed at some distance from each other, and measure about 8 mm. in length; their ends are slightly enlarged, the pedicels thus acquiring a clavate appearance. The terminal plates of these pedicels are not very well developed. The enlarged ends of the pedicels are strengthened by numerous crowded, almost smooth, more or less curved, transverse, unbranched rods. The pedicels also contain more or less deformed tables in great abundance. The very minute papilla-like dorsal ambulacral appendages are few and scattered; besides a rudimentary terminal plate and a great number of more or less deformed tables, they contain a few curved spicules. The twenty tentacles are small and seem to terminate in about four processes. The perisome is filled up by tables (Pl. X. fig. 9) which have a very characteristic shape. The disks of these tables have a very fine conformation, and their circumference is either rounded or stellate with six angles; they are pierced by six large peripheral holes and a small central hole; the diameter of the disks is about 0·2 mm. The spire (Pl. X. fig. 15, *b*) is more firmly constructed, and attains a length of about 0·24 mm.; it consists of three rods joined near the base by a transverse beam; from the apex, where the three rods are united, three long, slender, smooth, divergent teeth arise. In the pedicels and papillæ especially the disks of the tables are more or less deformed. A single short Polian vesicle is present. The small madreporic canal is attached by its tubercle to the dorsal body-wall in its middle line. The reproductive organs are situated on the left side of the dorsal mesentery, and consist of several genital tubes, each terminating in a bundle of short slightly branched sacs, within which the eggs are visible. The longitudinal muscular bands are simple and without retractors. Two wide and well developed respiratory-trees are present and do not seem to be in any