

298. November 17, 1875. Lat. $34^{\circ} 7' S.$, long. $73^{\circ} 56' W.$ Depth, 2225 fathoms; bottom temperature, $1.3^{\circ} C.$; grey mud. One specimen.

The body is 140 to 145 mm. long and reaches its greatest breadth, about 55 mm., anteriorly at the mouth or immediately behind it; it tapers slightly backwards. The height of the body decreases gradually forwards so that its anterior, nearly semi-circular end becomes rather thin and discoidal, and presents the aspect of a distinct head-part. The ventral surface is completely flat, while the dorsal, on the contrary, is convex. Another slightly smaller individual obtained at the same station (157) has its body very much swollen and almost ovate on account of the great quantity of Diatomaceæ, &c., which fills up the alimentary canal. The mouth is placed almost 25 mm. from the anterior extremity of the body, being thus situated in the centre of the anterior, flat, discoidal part of the under surface. The large anus is ventral, and is placed 10 mm. in front of the posterior extremity of the body. The odd ambulacrum is in connection with a number of small, round, retractile pedicels which are close set and disposed in an indistinctly alternating double row. The pedicels on the edge of the brim, which surrounds the body, are numerous and minute; excepting the anterior ones, which communicate with the dorsal ambulacra, all these pedicels belong to the ventral lateral ambulacra. The back is furnished with five pairs of very minute processes, of which the first is almost inconspicuous, and situated 45 mm. behind the anterior extremity of the body, while the last slightly larger pair is 75 mm. to 80 mm. distant from that extremity. The enormous dorsal appendage which arises 10 to 15 mm. from the posterior extremity of the body attains a length of 110 to 120 mm., and is almost of an equal breadth throughout, 30 to 35 mm., or slightly tapering towards the free end; it is flat, about 10 mm. thick, and forms a more or less distinct edge along each side. The rounded terminal part of the appendage is provided with two processes, of which the one is extended and digitiform, and measures 5 to 6 mm. in length. Those processes communicate with two wide canals, which penetrate the appendage in its length and open into the dorsal ambulacra (Pl. XXXVII. fig. 10). The eighteen tentacles are almost of equal size, or the ventral ones slightly smaller; their large discoidal convex end carries round the edge about sixteen small, simple, retractile processes.

The perisoma is rather thick, and contains deposits in the form of four-armed cruciform bodies of various dimensions. The deposits in the outer layer of the dorsal integument (Pl. XXXV. fig. 13) are closely crowded, with their arms rather arcuated, and supplied with a number of strong, short spines directed outwards; the largest deposits have their arms 0.4 mm. to 0.24 mm. long, while those of the smallest reach only 0.06 mm. in length. The calcareous bodies of the inner layer of the dorsal integument (Pl. XXXV. fig. 14) are remarkable for having their arms very slender, almost straight, and giving off very long and narrow spines in all directions. The deposits of the ventral surface (Pl. XXXV. fig. 16) do not lie so close set, and are commonly smaller and of a