

fferent duct opens by a pore situated about 45 mm. behind the anterior extremity of the body. In the male the fascicles are very thick and composed of numerous small, oblong dichotomous cæca. The female fascicles, on the contrary, are very thin, each made up of about three branches, which carry one or two unusually large, short and thick, dichotomous cæcal sacs.

*Benthodytes sordida*, n. sp. (Pl. XXIV.).

Body elongated, slightly tapering towards the extremities, from three and a half to five times as long as broad. Tentacles fifteen; some of the ventral ones smaller than the others; their large discoidal terminal part with numerous retractile processes. Each of the dorsal ambulacra with three rather large conical processes arranged in pairs, and with some smaller ones. Integument soft and rather thin; the calcareous deposits completely dissolved.

Colour in alcohol, dark greyish-brown inclining to blue or violet; the back slightly lighter. Length, about 280 mm. Breadth, about 60–80 mm.

*Habitat.*—Station 156. February 26, 1874. Lat. 62° 26' S., long. 95° 44' E. Depth, 1975 fathoms; diatom ooze. One individual. Station 157. March 3, 1874. Lat. 53° 55' S., long. 108° 35' E. Depth, 1950 fathoms; diatom ooze. Four incomplete specimens. Station 158. March 7, 1874. Lat. 50° 1' S., long. 123° 4' E. Depth, 1800 fathoms; bottom temperature, 0.3° C.; globigerina ooze. One specimen. Station 298. November 17, 1875. Lat. 34° 7' S., long. 73° 56' W. Depth, 2225 fathoms; bottom temperature, 1.3° C.; grey mud. One specimen.

The elongated body appears to reach its greatest width at the middle, and becomes gradually depressed anteriorly and posteriorly. The dorsal surface is strongly convex, while the ventral is slightly so or almost flat. Anteriorly the width of the body decreases, so as to form a narrower neck-like portion immediately behind the considerably broader round and flat head-part. The mouth is situated on the ventral surface in the centre of the large discoidal head. Among the fifteen tentacles some of the ventral ones are slightly smaller; their large, discoidal ends have a diameter of up to 12 mm. and carry numerous retractile processes covered with some small papillæ. The pedicels round the body, of which the foremost ones belong to the dorsal ambulacra, while all the others communicate with the lateral ventral ambulacra, present the aspect of larger and smaller protuberances round the edge of the brim. The pedicels of the odd ambulacrum resemble minute round warts with a diameter of about 3 mm. The three pairs of larger dorsal processes are thus arranged: the first one at the first fourth of the body, the second in its middle, and the third at the third fourth of the body. These processes attain a length of about 15 mm., and the circumference at their base is rather considerable. Besides these, some minute processes are scattered over both of the ambulacra, the number of which I have not been able to determine.