

the North Atlantic Ocean and in the Arctic Ocean (Sea of Kara). *Elpidia glacialis* seems able to exist under very various conditions; the individual brought home by the Challenger Expedition proves that it lives at the greatest depth, up to 2600 fathoms, while those from the Arctic sea are found at depths of only 50 to 150 fathoms. The southern form differs in various points from the northern one, but the difference is of very little importance. The dorsal surface bears only three pairs of processes, the first on the anterior part, the second in the middle and the third on the posterior part of the body. The number and position of these dorsal processes seem to be highly variable. Some of the tentacles do not quite agree with the figure given by me in the above cited memoir on *Elpidia glacialis*, but that dissimilarity is accounted for by the fact that only the two larger processes were extended in the first individuals I saw, the other ones being retracted. The small hat- or wheel-shaped deposits scattered in the integument of the northern form have not been detected, but, from the fact that the comparatively very large spicula are rather deformed, I suppose that these very minute deposits have already been dissolved. It seems that the size of the animal considerably surpasses that stated above, and this is especially the case with the individuals brought home by the Norwegian North Atlantic Expeditions. *Elpidia glacialis* is easily distinguished from all other known forms of the same family by the peculiar shape of its calcareous deposits, and from the other species of the genus *Elpidia* by its singular calcareous ring, of which I have given a detailed account in my above-mentioned memoir. As to the ambulacral system and the wrong opinion expressed by myself and Drs Danielssen and Koren, I refer to the anatomical part of this report.

*Elpidia verrucosa*, Théel (Pl. III. figs. 1, 2).

*Elpidia verrucosa*, Théel, Prelim. Report on the Holothuridæ, p. 15.

Body sub-ovate, nearly twice as long as broad. Mouth anterior, terminal. Anus posterior, slightly dorsal. Tentacles of apparently equal size, their terminal part bearing small retractile processes. Pedicels rather large, nine along each side of the ventral surface. The anterior part of the ventral surface destitute of pedicels. The dorsal surface with two pairs of processes in its anterior part. Integument extremely brittle and hard, with numerous, rather large, pyramidal papillæ, crowded especially on the back, each papilla containing a calcareous deposit, composed of four long, spinose, arcuate arms, directed towards the inside of the body, and one or two central large and straight processes, directed outwards from the body.

Colour in alcohol, light violet with some darker spots. Length, about 52 mm. Breadth, about 28 mm.

*Habitat*.—Station 299. December 14, 1875. Lat. 33° 31' S., long. 74° 43' W. Depth, 2160 fathoms; bottom temperature, 1.1° C.; grey mud. One specimen.

This species, of which only a single individual is preserved in the collection, has the