and Carmarina among the Carmarinidæ). The sucking-tentacles beset the whole umbrella margin, closely crowded in several rows over each other, as in Pectyllis, not in separate bunches as in Pectanthis. The radial mesogonia are much less strongly developed than in the two other genera. The structure of the æsophagus, with its eight curious adradial, ectodermal, oral funnel cavities, and the eight pair of endodermal side pouches alternating with them, is quite peculiar, and, as far as I know, does not exist in any other Craspedota.

Pectis antarctica, Hæckel (Pls. V., VI.).

Pectis antarctica, Hæckel, 1879, System der Medusen, p. 266, No. 288.

Umbrella almost hemispherical; about 1½ times as broad as high. Exumbrella finely radially ribbed, with thirty-two more prominent ribs towards the margin. Stomach quadrangularly prismatic, nearly as long as the radius of the umbrella. Oral cavity with eight pairs of hemispherical side pouches. Oral margin fleshy and thickened, quadrate, with four radial oral tentacles. Eight genitalia, egg-shaped sacs having folds, in the proximal half of the radial canals, connected with the base of the stomach by eight narrow radial mesogonia. 11 to 13 blind radial canals (3 larger and 8 to 10 smaller) between each two radial canals. Umbrella margin, thickened into a roll; thickly beset with numerous rows of sucking-cups (about a thousand), forming thirty-two connected groups. Between these numerous (8 to 16?) free auditory clubs. Horizontal diameter of the umbrella, 36 mm.; vertical diameter, 24 mm.

Habitat.—Antarctic portion of the Indian Ocean, S.S.E. from Kerguelen Island. Lat. 60° 52′ S., long. 80° 20′ E. Depth, 1260 fathoms. Station 152. 11th February 1874. From this habitat I had only one single specimen for examination, but it was complete and well preserved.

The umbrella showed, in a perfectly uninjured state, the peculiar natural shape represented in figs. 1 and 2, Plate V.; fig. 11, Plate VI. A deep exumbral circular furrow runs externally round the umbrella, about half-way up its height, dividing it into an upper, nearly hemispherical, umbrella cone, and a lower, shallow, funnel-shaped, umbrella margin. The largest transverse diameter of the umbrella (at the opening of the umbrella-cavity) amounted to 36-40 mm., and was nearly double that of the largest vertical diameter (in the axis of the umbrella).

The exumbrella (or the external, convex surface of the umbrella) is traversed throughout by a very large number of fine radial ribs, amounting in the periphery of the umbrella to 500 to 600 (Pl. V. fig. 1; Pl. VI. fig. 20). Besides these there are also thirty-two more prominent radial ribs, running the whole length, and thirty-two less prominent "costæ exumbrales" (fig. 20, cs) alternating with them.

The gelatinous substance of the umbrella (fig. 2, ug) is nearly of equal thickness in the upper aboral half of the umbrella, and nearly as thick on the radial section as the