form, but amongst these polyps the terminal one was easily recognisable, as the axis ended in its base, and the other seven could be interpreted as lateral polyps arising from a shortened rachis. The fifth specimen finally showed eight polyps, arranged in the form of a rosette, and surrounding like a cup a ninth middle polyp; but this was not the terminal one in which the axis ended, one of the eight had this signification.

The stalk has at its lower end a small bulb, which is continuous with a long enlargement, the transverse section of which is very evidently quadrangular. At the upper end the stalk begins again to enlarge at a certain distance from the polyps, and forms a club-shaped swelling directly continuous with the rachis. At this point the ventral surface is convex from right to left, whilst the dorsal aspect is flat or slightly concave. The whole upper swelling is also generally curved longitudinally, convex on the ventral, concave on the dorsal side.

The zooids show the same arrangement as those of *Umbellula huxleyi*; the only differences are, (1) that zooid-like bodies are situated between the polyps of the dorsal side of the rachis, (2) that their tentacles, the length of which is 0.3 to 0.5 mm., are generally, but perhaps not in every case, provided with two to three branchlets, and (3) that the zooids seem to be fewer on the lowest part of the stalk. The calcareous corpuscles of the end-bulb are of the same kind as those of *Umbellula huxleyi* but smaller, scarcely surpassing 15  $\mu$  in length.

	A.	В.	C.	D.	E.
Length of the whole polypidom, .	51.5 mm.	105	280	393	485
Length of the polypiferous part, .	5	16		47	
Length of the polyp bodies,	7.5	11	15	16	14
Length of the polyps with tentacles, .		•••	43		83
Breadth of the upper swelling of the stalk,	•••		5.5	3	6
Breadth of the lower swelling of the stalk,			2.0	2.3	3.5
Breadth of the stalk in the middle, .		•••	0.6	1.0	1.3

Habitats.—Station 156, South Polar Sea, south-west of Australia, lat. 62° 26′ S., long. 95° 44′ E. Depth, 1975 fathoms. Diatomaceous ooze. February 26, 1874.

Station 157, lat. 53° 55′ S., long. 108° 55′ E. Depth, 1950 fathoms. Diatomaceous ooze.

## 8. Umbellula magniflora, n. sp. (Pl. XI. figs. 41, 42).

General appearance of *Umbellula huxleyi*. Polyps forming a bunch at the end of the stalk, without any trace of bilateral arrangement, and no distinct rachis. Stalk with a long swelling below, and a flattened and curved enlargement at its upper end. Zooids numerous on the upper enlargement of the stalk at the bases of the polyps, and also on the lower swelling of the stalk and in its neighbourhood. Calcareous bodies none. Axis quadrangular, with concave surfaces and rounded edges.