

ing the best specimen, they diminish gradually in number, and form a little below the middle of the stalk, one row only on each side, the individuals of which are 1.5 to 1.7 mm. apart.

The zooids of this *Umbellula* are large, 0.22 to 0.34 mm. in diameter, and have all one cylindrical tentacle, 0.28 to 0.58 mm. long, and 0.057 to 0.085 to 0.014 mm. broad. These tentacles were found in a very good state of preservation on the largest specimen, whilst the others did not show them at all, or only traces of them. I presume that they were not yet developed in the younger specimens; or that they are easily lost or not easily seen in certain cases because they are retractile.

Calcareous corpuscles of oblong form, with even surfaces, are only found in the muscular layers of the lowest part of the lower enlargement of the stalk. Their maximum length and width is 26 μ and 8 μ .

Size of the four specimens in millimeters—

	A.	B.	C.	D.
Length of the whole,	107 mm.	153	160	180
Length of the polypiferous part,	12	11 ¹	19	16
Length of the upper enlargement of the stalk,	8	10	30	41
Breadth of the same,	1.5	1.5	3	2.5
Length of the lower swelling,	19	23	31	34
Breadth of the same,	1	2.3	1.9	2.5
Length of the polyps,	01	...	17	13

Habitat.—Station 235, North Pacific Ocean, south of Yeddo, lat. 34° 71' N., long. 135° 39' E. Depth, 565 fathoms. Bottom temperature, 3° 3 C. Mud. June 4, 1875.

7. *Umbellula carpenteri*,² n. sp. (Pl. X. figs. 38–40).

Indistinctly bilateral in the fully-developed state. Calcareous corpuscles only in the lowest part of the stalk. Polyps forming a rosette at the end of the stalk, long, colourless. Stalk with an enlargement at its upper end, which is directly continuous with the club-shaped rachis, and having a long enlargement at its lower end. Stalk here and there, but not in all specimens, with brown-red streaks and patches. Zooids numerous on the dorsal and ventral sides of the rachis, and along the whole stalk; all provided with one singly branched tentacle. Axis quadrangular, with deeply excavated surfaces and rounded edges.

Five specimens of this *Umbellula* showed a very interesting gradation from a bilateral to an apparently irregular arrangement of the polyps. One terminal and two lateral polyps are shown in fig. 39, *A*, *B*. Four polyps all lateral, with a free end of the rachis are visible in fig. 39, *C*. A third specimen had one terminal polyp, two lateral on the right and one only on the left side. In a fourth there were eight polyps, of different sizes, so disposed that they formed a rosette surrounding a small dorsal area of the rachis of a stellate

¹ Tentacles retracted.

² Named after my old friend Dr W. B. Carpenter, C.B., F.R.S.