

the polyps and those of the tentacles of enormous length, 2.0 to 2.8 mm. Pinnules of the tentacles brown. Zooids very numerous; the ventral forming a nearly continuous plate. Rachis short, without a longer enlargement below. Stalk here and there very light brown. Axis nearly cylindrical.

Of this very remarkable species I had only one young specimen at my disposal, and it is, therefore, possible that the characters given are not fully sufficient. Nevertheless, they are of such a kind that this form can be easily distinguished from all others at present known.

The stalk has a long enlargement towards the lower end, with here and there a very slight brown tint, the seat of which is in the longitudinal nutrient canals. Its calcareous needles are extremely numerous, those of the upper part are 0.19 to 0.26 mm. long, those of the lower half are shorter and broader, and measure 0.076 to 0.20 mm. in length, and 0.019 to 0.045 mm. in breadth, all of them are warty, and have the typical three edges, but those of the lower part show the first character better, while in the others the edges are more prominent, and the surface less uneven. The breadth of the stalk is 0.58 mm. in the upper part, and 1.0 to 1.4 and 2.0 mm. towards the base.

The rachis has the aspect of a flat rhomboid expansion of the stalk, which contains the end of the axis in the middle, and bears on the dorsal side one large and two undeveloped polyps. The whole ventral surface of the rachis, with the exception only of a narrow middle line, is studded with wart-like zooids 0.28 to 0.42 mm. in size, which are also found on the dorsal side of the rachis, on a small space below and between the polyps. Two or three zooids are also found on the end of the stalk in the neighbourhood of the rachis, the lowest at a distance of 4 mm. from the great mass of zooids. All the zooids are surrounded by calcareous needles, of the same size as the smaller needles in the polyps, about 0.30 to 0.50 mm. in length.

This *Umbellula* is remarkable from the white colour of the body of its developed polyp, and of the aboral aspect of the central stems of its tentacles, while all the pinnules of the tentacles and their oral sides are of a deep brown. The white colour is occasioned by calcareous needles, the largest of which, measuring more than 2.0, even 2.85, mm. in length, and disposed in eight lines on the body of the polyp, are directly continuous with those on the stems of the tentacles. The brown colour, on the contrary, lies in the outer epithelium of the tentacles, and is brighter at the aboral side of the pinnulæ, where the epithelium is also strengthened by needles of about 0.30 to 0.34 mm. in length. The undeveloped polyps are small, pyriform bodies of 2.0 to 2.5 mm. in length without tentacles, but with large sized needles in eight rows.

The axis measures in the stalk 0.28 to 0.45 mm. in diameter. The length of the whole polypidom including the polyp, 160 mm.

*Habitat.*—Station 234, North Pacific Ocean, south of Yeddo, Japan, lat. 34° 7' N., long. 138° 0' E. Depth, 565 fathoms. Bottom temperature, 2° 3 C. Mud. June 4, 1875.