

also very interesting and important, since it forms a wide coronal sinus in its proximal part, as in the Peromedusæ. This sinus, as in *Nauphanta*, communicates at its distal margin with the marginal corona of pouches, and at its proximal margin by four perradial gastral openings with the central stomach. This original arrangement has disappeared in most of the other Discomedusæ, as the four interradial septal nodes between the gastral openings have undergone retrograde formation, and the four perradial gastral pouches separated by them are therefore no longer present; both these and the coronal sinus have consequently become merged into the central stomach.

*Atolla wyvillii*, Hæckel (Pl. XXIX.).

Umbrella, quite flat, discoid, about six times as broad as high. Radius of the central umbrella disk almost twice as large as that of the peripheric corona of the umbrella; disk and corona separated by a very deep coronal furrow. Œsophagus, constricted in the middle, quadrangularly prismatic, two to three times as broad as high. Genitalia, eight elliptical pouches, grouped in pairs, in the periphery of the œsophagus, their perradial distances less than the interradial, 19 to 22 (16 to 32?) rudimentary sense clubs, and the same number of short tentacles (half as long as the radius of the umbrella) alternating with them. Tentacular pedalia broader and shorter than the rhopalar pedalia. Rhopalar canals rudimentary, much narrower and shorter than the tentacular. Marginal lobes elliptical and obtuse. Horizontal diameter of the umbrella, 58–66 mm.; vertical diameter, 10–12 mm.

*Habitat*.—Antarctic Ocean of the eastern and western hemispheres, in a depth of about 2000 fathoms. The Challenger captured five specimens of this remarkable species, which I was able to examine, preserved in spirits. The state of preservation was unfortunately only imperfect, in spite of the tough nature of the body, the epithelia being almost entirely wanting. All five specimens were mature females. Three of these were taken on 3d March 1874. Lat. 53° 55' S., long 108° 35' E. Depth, 1950 fathoms. Station 157, in the Antarctic Ocean nearly in the middle between the Kerguelen Islands and Melbourne. The two other specimens were taken 11th February 1876. Lat. 42° 32' S., long 56° 27' W. Depth, 2040 fathoms. Station 318, South Atlantic Ocean, St Mathias Bay, not far from the coast of Patagonia. Bottom temperature, 0.4° C. The three Indian-Antarctic and the two Atlantic-Antarctic correspond completely in structure and show no specific difference. The horizontal umbrella diameter in the first three (from Station 157) amount respectively to 66, 68, and 50 mm.; the diameter of the last two (from Station 318) to 40 and 38 mm. The smallest specimen of the latter (38 mm.) had only 19 tentacles and 19 pairs of lobes; all the four other specimens had 22 tentacles and 22 pairs of lobes. I have named this highly interesting species after Sir Wyville Thomson, the scientific director of the Challenger expedition.

The umbrella (figs. 1–4) of *Atolla wyvillii* forms a circular, thick, perfectly flat disk,