and eight adradial). On the inner margin of the umbrella is a very strong coronary muscle, which is divided by means of sixteen subradial septa into the same number of quadrilateral portions. The septa are attached to the central ribs of the sixteen marginal lobes.

"Just internal to this powerful coronary muscle are attached to the subumbrella eight horse-shoe shaped gonades or sexual glands, which alternate with eight three-cornered deltoid muscles (four perradial and four internadial). In the centre there arises a large and almost cubical manubrium, on which four wide perradial buccal pouches (bursa buccales) are separated by means of four strong internadial buccal columns. On the edge of the mouth are found eight oral tentacles. The cavity of the manubrium opens into a large central stomach, which is filled for the most part with extremely long and

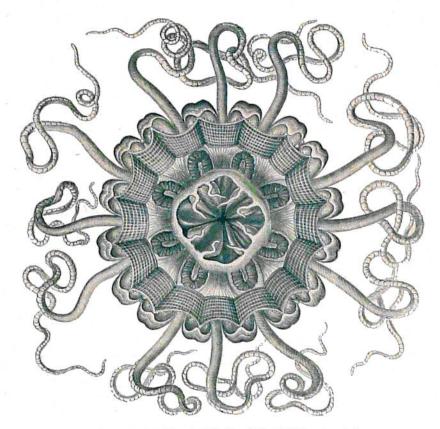


Fig. 201.—Periphylla mirabilis, Hacckel; half the natural size.

numerous gastral filaments; and this, by means of four long perradial slits (or gastralostia), communicates with a colossal annular sinus. About half way up the stomach are four interradial cathammata or septal knots, in which the subumbrella and the exumbrella are fused. Complicated pouches pass downwards from the circular sinus to the umbrella margin.

"Periphylla mirabilis (see fig. 201), 160 mm. high, 120 mm. broad, was taken by the Challenger, on the east coast of New Zealand, when the trawl was lowered to a