

tentacles. The first species observed was taken by Eschscholtz in the tropical Pacific, and described in 1829 as *Porpita cœrulea*.<sup>1</sup> It is probably the species of which Huxley afterwards gave a very accurate anatomical description. Another species of this genus, also taken in the tropical Pacific (near the Marianne Islands), is *Porpita radiata* of Brandt.<sup>2</sup> I have been able to compare the excellent (hitherto unpublished) figure and description left by its discoverer, Mertens. Two specimens of a third species, described in the following pages, were found by me in the Challenger collection, from Station 244. It exhibits in several points a remarkable similarity to the interesting deep-sea Medusa, *Pectanthis asteroides*.<sup>3</sup> I call it therefore after this Trachynemid.

The phylogenetic origin of *Porpitella* is to be found in *Porpalia*. It may be derived from this ancestral form by flattening of the highly vaulted umbrella and the pneumatocyst, which thus become more or less discoidal.

*Porpitella pectanthis*, n. sp. (Pl. XLVI.).

*Habitat*.—Station 244, Northern Pacific, between Japan and Honolulu; June 28, 1875; lat. 35° 22' N., long. 169° 53' E. Surface.

*Umbrella* (fig. 1, from above; fig. 2, from below; fig. 3, meridional section).—The disc is a biconvex lens, the horizontal diameter of which amounts to 12 or 15 mm., and is three times as great as its vertical axis (4 to 5 mm.). The meridional section (fig. 3) demonstrates that the larger superior half of the umbrella is occupied by the discoidal pneumatocyst (*p*), the smaller inferior half by the lenticular centradenia (*uc*).

*Exumbrella* (fig. 1).—The superior or apical face of the umbrella is slightly convex, and exhibits an elegant radial striation, crossed by numerous concentric rings. Sixteen more prominent ribs bear a number of conical papillæ, and between these numerous more delicate, also denticulate, ribs radiate from the centre. The stigmata open at the apex of the conical papillæ. An elegant pigment-star with sixteen brown rays indicates the course of the main ribs.

*Limbus Umbrellæ* (figs. 3, 7, *um*).—The free margin of the umbrella is prominent at the periphery of the lenticular body, and about one-third or one-fourth as broad as the length of its radius; it is circular, divided by sixteen slight incisions into sixteen flat marginal lobes (fig. 1). Its thickened edge includes a series of marginal glands (fig. 7, *us*).

*Subumbrella* (fig. 2).—The inferior or basal face of the umbrella is slightly convex, and divided into four different parts of nearly equal breadth. The central part is occupied by the large sterile central siphon; this is surrounded by three circular concentric zones; the first zone is occupied by sixteen smaller sexual siphons (bearing

<sup>1</sup> 1, p. 179, Taf. 16, fig. 5.

<sup>3</sup> Zool. Chall. Exp., part xii. p. 20, pla. vii., viii.

<sup>2</sup> 25, p. 40.