

inermis. Tentacula marginalia trifariam glandulosa." He described five different species, Two of these only appertain to the genus *Porpita* as above defined (*Porpita mediterranea* and *Porpita umbella*).

The best and most accurate anatomical descriptions of the genus are those given in 1853 by Kölliker of *Porpita mediterranea* (4), and in 1881 by Alexander Agassiz of the North Atlantic *Porpita linnæana* (57). Closely related to the latter is probably the tropical Atlantic *Porpita umbella* of Eschscholtz (1). The collection of the Challenger contains several specimens of a new species, taken in the Northern Pacific, and figured in Pl. XLV. as *Porpita fungia*. Three other distinct species seem to be *Porpita lütkeana* (25), from the Indian Ocean; *Porpita pacifica* of Lesson (22); and a new southern form, *Porpita australis*.

The phylogenetic origin of *Porpita* is to be found in the preceding genus, *Porpitella*, from which it is derived by multiplication and equalisation of the tentacles, not forming separated radial bunches.

*Porpita fungia*, n. sp. (Pl. XLV.).

*Habitat*.—Stations 253 to 255, Northern Pacific, between Japan and Honolulu; 14th to 19th July 1855; lat. 38° 9' N. to 32° 28' N., long. 156° 25' W. to 154° 33' W. Surface.

*Umbrella* (fig. 1, meridional vertical section).—The disc is flat, circular, of equal thickness throughout nearly its whole extent, like a coin. Its diameter is usually 20 to 25 mm., but amounts in the largest specimens to 30 mm.; its thickness (without the siphon and tentacles) is 4 to 6 mm. A meridional section (fig. 1) demonstrates that three-fourths of the thickness belong to the centradenia, one-fourth to the pneumatocyst.

*Exumbrella* (fig. 2).—The superior or apical face of the umbrella is flat or slightly convex, a little depressed in the centre. It is covered with numerous, irregularly scattered, conical tubercles, arising from the upper face of the pneumatocyst. Their number and size increase towards the centre. The peripheral half of the exumbrella is pierced by numerous irregularly scattered stigmata (*pe*). The regular octoradial striation and the numerous concentric rings, which shine through the silvery exumbrella, are due to the structure of the subjacent pneumatocyst. An elegant network of anastomosing canals, with narrow irregular polygonal meshes, is expanded everywhere in the exumbrella.

*Limbus Umbrellæ*.—The free membranous border or limbus of the umbrella overlaps the tentacular zone to the extent of 1 to 2 mm. It is flatly expanded or reflected upwards, and includes a series of marginal glands of the usual form (compare above). The numerous canal-branches of the exumbrella anastomose richly, form an irregular network, and unite in a circular canal inside the glandular corona; and from this arise the vessels of the centradenia and the subumbrella.