

eight meridional arches, and open on the periphery of its inferior polar area into the gastral cavity of the central siphon. Their dichotomous branches run along the convex outer surface of the centradenia, enclosed in the numerous radial folds which fit into the corresponding meridional furrows of the subumbrellar face of the pneumatocyst.

Central Siphon (fig. 2, in profile; fig. 3, in longitudinal section).—The large central polypite is a thick-walled cylindrical tube, the length of which surpasses the vertical main axis of the umbrella. Its distal end opens by a four-lobed mouth, whilst its proximal or basal part is conically dilated and closed by the supporting plate separating it from the centradenia (fig. 3). In the periphery of the latter open the eight radial main canals.

Sexual Siphons (figs. 2, 3, *sx*).—A corona of eight sexual polypites surrounds the base of the central siphon, and separates it from the tentacular zone. These are much smaller than the central siphon (about half as long, and many times thinner). Their thin cylindrical basal part is beset with numerous gonophores; their spindle-shaped distal part opens by a four-lobed mouth.

Tentacles (figs. 1–3, *t*).—The tentacles are very numerous, and occupy a broad convex zone of the subumbrella, between its equator and the girdle of sexual siphons. After removal of the tentacles, their insertion forms an elegant reticulate girdle, with rhomboidal meshes (fig. 2, *tu*). The tentacles are arranged in four to five transverse rows, and in eight prominent radial bunches; the longest of each bunch surpassing the diameter of the umbrella.

Genus 4. *Porpema*,¹ Haeckel, 1888.

Porpema, Hkl., System der Siphonophoren, p. 30.

Definition.—Porpitidæ with a lenticular or subglobular strongly vaulted umbrella, including a campanulate pneumatocyst with radial marginal lobes. Tentacles very numerous, equally disposed in several concentric circles, not forming radial bunches.

The genus *Porpema* has the same strongly vaulted umbrella and the same campanulate and radially lobate pneumatocyst as the preceding genus *Porpalia*, from which it differs in the equal distribution of the tentacles along the whole margin of the umbrella. The tentacles are very numerous and densely crowded in several parallel circles (as in *Porpita*), and they are not grouped into radial bunches.

The new genus *Porpema* was established for an Indian species, *Porpema lenticula*, which I observed in 1881 in the Indian Ocean, between Aden and Bombay. Another species, described in the following pages as *Porpema medusa* (Pl. XLVII.), was found in the Challenger collection; this was taken in the South Atlantic, Station 327 (between Buenos Ayres and Tristan da Cunha). A third species (*Porpema pileata*) was sent me from Chili; it will be described in my Morphology of the Siphonophoræ.

¹ *Porpema* = Mantle, cloth, *πόρπημα*.