

tains specimens of this species, taken in different parts of the Pacific (*e.g.*, Stations 175, 222, 265 to 279, &c.).

A second species may be the Mediterranean *Diphyopsis campanulifera*, described as *Diphyes campanulifera* by Eschscholtz, first observed by Quoy and Gaimard in the Strait of Gibraltar.

A third species is described in the following lines as *Diphyopsis compressa*. It inhabits the Tropical and Subtropical Atlantic. The Challenger collection contains many specimens of it, taken between Stations 327 and 353.

Diphyopsis compressa, n. sp. (Pls. XXXIII., XXXIV.).

Diphyes compressa, Hkl., 1866, MS. Canar.

Habitat.—Tropical and Subtropical Atlantic, Stations 327, 334, 348, 352A. Canary Islands, Lanzerote, December 1866 (Haeckel).

Nectophores (fig. 1, the two nectocalyces in their natural connection, seen from the left side; fig. 2, from the ventral side; fig. 3, from the dorsal side).—The two large swimming bells are of nearly equal size and similar form; their usual length is between 25 and 30 mm., the breadth between 10 and 15 mm., the thickness 5 to 7 mm.; the first or apical nectophore, however, is a little larger, longer as well as thicker, than the distal one. The former encloses on its ventral side a campanulate hydroecium (and above its top a somatocyst); the latter an incomplete subcylindrical hydroecial canal.

Apical Nectophore.—The first, superior, anterior or proximal nectocalyx, appears in the lateral view (fig. 1) as a broad triangle, the dorsal side of which (*nd*) is the longest and slightly convex; the opposite ventral side (*nv*) is more convex, one-fifth shorter, and twice as long as the obliquely bevelled basal side. The ratio of the three sides therefore is = 5 : 4 : 2. Seen from the ventral side (fig. 2), or from the dorsal side (fig. 3), the nectophore appears as a very long and narrow isosceles triangle, the two equal lateral sides of which are four times as long as the basal side. Seen from the basal face (fig. 8) it appears nearly rectangular, three times as long as broad, with a small triangle imposed on the dorsal side. The exumbrella therefore has the form of a bilateral pentagonal pyramid, which is very strongly compressed from both sides. Its surface exhibits five prominent ridges, one odd dorsal and two pairs of laterals, meeting in the slender pointed top of the nectophore. The odd dorsal ridge (figs. 1, 3, *nd*) runs in the median dorsal line of the exumbrella and ends below in the odd dorsal tooth of the mouth of the nectosac. The two dorso-lateral ridges run along the lateral faces of the nectosac and end below in the smaller dorso-lateral teeth of its mouth (*n*¹, *n*²). The two ventro-lateral ridges run along the ventral face of the hydroecium and end in two small ventral teeth (fig. 8, *n*⁵ *n*⁶)