

dorsal face, or the dorsal circumference of the ostium, is provided with four descending lobes or triangular teeth, which are wanting or but slightly indicated in *Hippopodius*. The two basal apophyses of the lateral ventral wings are also more prominent than in the latter, and the mouth of the nectosac therefore surrounded by six teeth. The general form of nectophores in *Polyphyes*, therefore, is intermediate between that of *Hippopodius* and of *Vogtia*. Another difference seems to be indicated by the monoclinic cormidia and the position of the gonophores, which are attached to the base of the siphons in the two latter genera, separated from it by an interval in *Polyphyes*. (Compare the preceding description of *Hippopodius*.)

The typical species of this genus, described in the sequel, was observed by me in 1866 in the Canary Islands, and detached nectophores of it found again in the Challenger collection (Station 352, Tropical Atlantic). The characteristic form, however, of the nectophores, with the six strongly prominent teeth, figured in Pl. XXIX., is more developed in the specimens from Station 352 than in those which I observed myself in Lanzerote. These latter approach more to the southern Mediterranean form described by Kölliker as *Hippopodius neapolitanus* (4).

*Polyphyes unguolata*, n. sp. (Pl. XXIX. figs. 1–8).

*Habitat*.—Tropical and Subtropical Atlantic; Station 352, April 13, 1876; lat. 10° 55' N., long. 17° 45' W. Surface.

Canary Islands, Lanzerote; December 1866 and January 1867 (Haeckel).

*Nectosome* (fig. 1).—The swimming column is composed of five or six pairs of obliquely opposed nectophores, the size of which increases from the rounded top towards the bevelled base. The general outline of the compressed nectosome is ovate seen from the broad side, more lanceolate seen from the narrower side. The connection of the united nectophores is very firm, each embracing the base of the superjacent nectophore by the two lateral wings of its ventral groove; and also the opposite basal apophyses of the opposite superior nectophore.

*Nectophores* (figs. 1, 2, lateral view; fig. 3, apical view; fig. 4, basal view; fig. 5, ventral view; fig. 6, dorsal view).—The largest nectocalyces have a diameter of 15 to 20 mm., and possess the form of an inverted horse's hoof, the lower face of which is turned upwards. Five faces may be distinguished in the wedge-shaped horse-shoe, which represents an obliquely bevelled segment of a cone; an inferior basal face, an exterior dorsal face, an interior ventral face, and two paired lateral faces. The basal face, directed obliquely downwards and outwards, contains the reniform or subcircular mouth of the nectosac (figs. 3, *w*, 4) and the crescentic velum (*v*); it is surrounded by six prominent paired teeth, four dorsal and two ventral triangular apophyses; the two lateral dorsal