Gonophores.—The medusiform gonophores arise in clusters from branched gonostyles, and possess in both sexes of the Apolemidæ a well-developed umbrella with four radial canals and a connecting ring-canal; Dicymba (Pl. XVIII. figs. 4, 6) is besides distinguished by the possession of four rudimentary tentacles which are placed at the distal end of the radial canals and bear a red ocellus (as in Desmophyes and Lilyopsis). The ovarium (or the manubrium of the female Medusa) includes a single large ovule surrounded by an irregular network of spadicine canals (figs. 3, 4). The spermarium (or the manubrium of the male Medusa) is a large club-shaped sac with a central spadix (figs. 5, 6). The corms of Apolemia are dieccious and bear in each cormidium a single gonodendron, all of the same sex in one corm. The corms of Apolemopsis and Dicymba are monecious and bear in each cormidium two gonodendra, a male and a female; they arise separately from the common trunk on the base of the cormidium.

Synopsis of the Genera of Apolemidæ.

I. Subfamily DIOYMBIDE.

Nectosome with two opposite nectophores only. Cormidia monogastric, each with a single siphon and cyston.

Internodes of the siphosome naked. Corms monœcious. Cormidia monoclinic, with two gonochoristic gonodendra (a male and a female),

39. Dicymba.

II. Subfamily APOLEMOPSIDE. Nectosome with two opposite rows of nectophores. Cormidia polygastric, each with several siphons and cystons. Internodes of the siphosome naked. Corms directions. Cormidia diclinic, with a single gonodendron (either male or female),

40a. Apolemia.

Internodes of the siphosome covered with bracts. Corms monœcious. Cormidia monoclinic, with two gonochoristic gonodendra,

40b. Apolemopsis.

Genus 39. Dicymba, Haeckel, 1888.

Dicymba, Hkl., System der Siphonophoren, p. 39.

Definition.—Apolemidæ with two large opposite nectophores only. Internodes of the siphosome naked. Cormidia monogastric and monoclinic, each with a single siphon and cyston, and with two separate gonodendra, a male and a female. Corms monœcious.

The genus Dicymba is represented by a new interesting Apolemid, which I observed living during my voyage through the Indian Ocean, from Aden to Bombay, in November 1881. The special organisation of the single parts which compose the polygastric corm, is similar to that of the common Apolemia; but their disposition and number are different. The nectosome of Dicymba is composed of two large opposite nectophores only (as in Praya and Diphyes). The cormidia, which are separated by long free internodes, are monogastric, each provided with a single siphon and a single cyston only, besides numerous palpons. The medusiform structure of the gonophores is also peculiar. These differences seem to be so important, that Dicymba might be separated from the true Apolemidæ as the representative type of a new family Dicymbidæ.

¹ Dicymba = Double boat, δικύμβα.