

uppermost turning often arises a series of short diverticula or villiform lateral branches (compare 4, p. 18, Taf. vi. figs. 6–9, and 8, p. 315, Taf. xii. fig. 7).

*Siphosome*.—The tubular trunk beyond the nectosome in all Apolemidæ is very long, and attains in the extended state a length of two or three feet or more. It bears a great number of ordinate cormidia, separated by long internodes of equal length. These are naked in *Dicymba* and *Apolemia* (similar to those in the polygastric Calyconectæ), whilst they are densely covered with innumerable bracts in *Apolemopsis* (as in *Agalmopsis*). The trunk is much shortened in the highly contracted state; the internodes then nearly disappear and the entire corm is covered by a carapace of scales, the densely crowded bracts.

*Cormidia*.—The two subfamilies of Apolemidæ are similar in the general conformation of the cormidia, and the structure of their single parts; they exhibit, however, an important difference in their composition. Each cormidium of the Dicymbidæ has only a single siphon and a single cyston, surrounded by numerous bracts and palpons; whereas in the Apolemopsidæ each cormidium possesses several (two to four or more) siphons, and the same number of cystons. The Dicymbidæ, therefore, have monogastric cormidia (like the Rhizophysidæ, Pls. XXIII., XXIV.), whilst the Apolemopsidæ possess polygastric cormidia (like the Salacidæ, Pl. XXV.). The number of bracts (usually twenty to forty in each cormidium) seems to be in all Apolemidæ about the same as the number of palpons and palpacles, so that perhaps each bract, together with an appertaining palpon and a single palpacle, represents originally a medusome, the organs of which are modified and dislocated; the bract corresponding to the umbrella, the palpon to the manubrium, and the palpacle to the single tentacle.

*Bracts*.—The hydrophyllia, as the metamorphosed umbrellæ of the medusomes, exhibit in all Apolemidæ hitherto observed the same peculiar form. They are ovate, club-shaped or pyriform, with rounded distal end and pointed proximal end; the latter is attached to the stem by a short pedicle, which is raised or lowered by a muscle. The convex outside (exumbrella) is armed with numerous whitish patches composed of cnidocysts, whilst the concave inside (subumbrella) is smooth. Near the latter there runs in the median line of the bract a simple bracteal canal, which arises from the axial canal of the trunk and ends blindly towards the distal end; sometimes it is provided, near the latter, with a small cæcal diverticulum directed towards the lower face (compare 7, p. 320, Taf. xviii. figs. 1–3, and 8, p. 316, Taf. xii. fig. 8).

*Siphons*.—The feeding polypites have in all Apolemidæ the same structure; the single siphon in the monogastric cormidia of *Dicymba* (Pl. XVIII. figs. 1, 2, s), however, is relatively larger, whilst the several siphons (two to four or more) in the polygastric cormidia of *Apolemia* are smaller, and are more like the palpons. The four segments of the siphon (Pl. XVIII. fig. 2, s) are usually distinct, and already very well represented in the oldest figure, given by Lesueur. The short pedicle, to which is attached the single