Siphosome (figs. 4-6, i).—The common trunk bears in its upper part very numerous buds of cormidia (i), in its lower part ten to twelve or more well-developed eudoxomes. These are soon detached from the stem and swim about as free Eudoxiæ of the special form represented in Pl. XLII. as Cuboides crystallus (compare their description above, p. 112, Genus 13). When fully contracted the entire siphosome, with all cormidia, is hidden in the hydrocium (figs. 4-6).

Family VII. DIPHYIDÆ, Eschscholtz, 1829 (sensu restricto).

Diphyidæ, Esch., System der Acalephen, 1, p. 122.

Definition.—Calyconectæ polygastricæ, with two nectophores at the apex of the long tubular trunk. Cormidia ordinate, eudoxiform, separated by equal free internodes, each siphon with a bract.

The family Diphyidæ, as defined in my system, comprises only those polygastric Calyconectæ which bear two permanent nectophores on the top of the stem. I exclude, therefore, those forms, formerly united with them, which possess only a single nectophore (Monophyidæ). I exclude, further, on practical grounds, the monogastric independent forms, which are connected with the Diphyidæ by metagenesis, the so-called Diphyozooids, the families (IV. and V.) Eudoxidæ and Ersæidæ. The Diphyidæ are very common in all the seas of the world, far more frequent than all other Siphonophoræ, and richer in different species than the other Calyconectæ.

The first Diphyid was described in 1804 by Bory under the name Biphora bipartita (13, vol. i. p. 134). Cuvier founded for it the genus Diphyes (in 1817, 91), and Chamisso figured the same as Diphyes dispar (16, p. 365, Tab. xxxiii. fig. 4).

The naturalists of the "Astrolabe," Quoy and Gaimard, discovered in 1826, in the Straits of Gibraltar, a greater number of Diphyidæ, and distinguished in this family six different genera:—1. Diphyes (campanulifera); 2. Calpe (pentagona); 3. Abyla (trigona); 4. Cymba (sagittata); 5. Enneagonum (hyalinum); and 6. Cuboides (vitreus) (20). These and some other Diphyidæ were described and figured by the same authors in 1833 in the Zoophytes de l'Astrolabe (2, pp. 81-106) as fifteen different species of the genus Diphyes, nearly every species of which is now the type of a special genus.

Eschscholtz (1, p. 122) gave the first accurate description and a better systematic arrangement of the Diphyidæ; they form, in his System der Acalephen, the first of the three large families of Siphonophoræ. He distinguished six genera; three of these (Eudoxia, Ersæa, Aglaisma) are monogastric, and form now our family Eudoxidæ (p. 103); the three others (Abyla, Cymba, Diphyes) are polygastric; one of these (Cymba) is according to my observations a Monophyid, so that only Diphyes and Abyla remain as types of true Diphyidæ.