

*E. diaphana* Ag., p. 322, Pl. 34, figs. 1-9.—*Thaumantias diaphana* Ag., Mem. Amer. Acad., IV. p. 300, figs. 1 and 2.—*Nahant* (Agassiz); *Naushon* (A. Agassiz).

*Laomedea Lamx.*<sup>1</sup>—*Campanularia Lmk.* (p. p.).

*L. amphora* Ag., p. 311, Pl. 30.—*Massachusetts Bay* (Agassiz).

7th Family. OCEANIDÆ Esch.<sup>2</sup> (So restricted as to exclude the *Nucleiferæ* Less., and the *Geryonopsidæ* Ag.).—*Eucopidæ* Gegenb. (p. p.).  
*Oceania* Pér. and LeS. (restricted).—*Thaumantias* Esch.—*Callichroma* Dujard.—*Epenthesis* Mc Cr.—*Phialidium* Leuck.

*O. phosphorica* Pér. and LeS.—*Thaumantias cymbaloides* Esch.—*T. hemisphærica* Esch., Forbes, Nak. Med., Pl. 8, fig. 2.—*English Channel* (Péron and LeSueur).—*Thaumantias inconspicua* Forbes, Pl. 8, fig. 3, *Hebrides*.—*T. punctata* Forbes, Pl. 10, fig. 1, *Isle of Man*.—*T. lineata* Forbes, Pl. 11, fig. 1, *Zelland*.—*T. pileata* Forbes, Pl. 11, fig. 2, *North Ireland*.—*T. sarnica* Forbes, Pl. 11, fig. 4, *Guernsey*.—are probably different stages of growth only of *T. hemisphærica*.—*Oceania ampullacea* Sars, belongs also to this series.

<sup>1</sup> Without a renewed comparison, it is impossible for me to refer to their proper genus, the many species of *Campanularia* and *Laomedea* already described, since it is known that among them there are types of different genera; belonging even to different families.

<sup>2</sup> Compare note 2, p. 346. It is far more difficult to define correctly the families of this sub-order, than those of the Tubularians, for the simple reason that comparatively few free Medusæ of this type can be referred with certainty to the Hydroids from which they arise, and the medusa-buds of a large number of the Hydroids, have not been observed at all. Under these circumstances, the attempt at a classification, here presented, should be considered as containing hints, rather than mature results. Starting, however, from principles which have proved a safe guide, whenever the data on hand were sufficient, I have considered as belonging to distinct families all those free Medusæ and Hydroids which have distinct patterns. Thus, the Agauridæ are separated on account of the flat-topped bell, and the position of their re-

productive organs, even though their mode of reproduction is unknown. To the characters assigned to the *Circidæ* by Forbes, I would add their elongated, cylindrical form. The *Polyorchidæ* are quite remarkable for their branching, chymiferous tubes, and their pendent, reproductive organs; the *Melicertidæ* for their eight radiating tubes, their lobed, reproductive organs, and their wide and short actinostome; the *Laodicidæ* for their flat form, the extensive lobes of their actinostome, and their peculiar marginal appendages. The free medusa of *Lafca cornuta* Lamx., lately observed, and the peculiarities of this Hydroid, show that this family cannot be united with the *Oceanidæ* proper, and still less with the *Geryonidæ* with which Forbes associates them. Gegenbauer has appreciated their difference correctly; but he has given them a name which cannot be retained. All these families are destitute of eyes, and have only an accumulation of pigment upon the base of the tentacles, or cirrhi alternating with them. The *Eucopidæ* and *Oceanidæ*, on the contrary, have distinct eyes; but in the *Eucopidæ* they are at-