

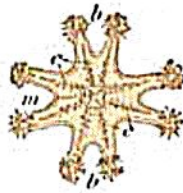
Fig. 39.



LUCERNARIA,
Seen in profile.

a Peduncle. — b b Tentacular bunches.

Fig. 40.



LUCERNARIA,
Seen from above.

m Mouth. — c c Ovaries. — b b Tentacular bunches.

fundamental differences which distinguish the Polyps from the Acalephs, and at the same time incline more and more towards uniting the Hydroids as well as the Siphonophoræ with the genuine Acalephs. Incidentally, I would also remark that I entertain no doubt respecting the Hydroid affinities of Lucernaria (Figs. 39 and 40). Moreover, their resemblance to the young Medusæ is very

great (Figs. 41, 42, and 43), especially during the incipient stage of their Strobila state of development.

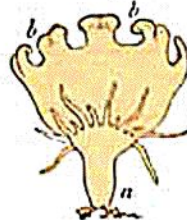
Fig. 41.



Scyphostoma of
AURELIA FLAVIDULA, Pér. & LeS.

In this stage of growth, Aurelia is simply a Hydroid.

Fig. 42.

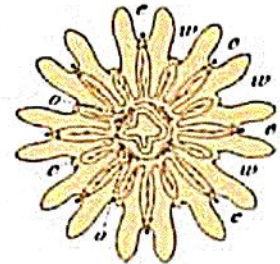


Strobila of

AURELIA FLAVIDULA, Pér. & LeS.

a Scyphostoma reproduced at the base of a Strobila b b, all the disks of which have dropped off but the last.

Fig. 43.



Ephyra of

AURELIA FLAVIDULA, Pér. & LeS.

c Mouth. — e e Eyes. — o o Ovaries. — w w Tentacular spaces.

The types referred to the class of Polyps are not less diversified than those referred to the class of Acalephs; nor do the different writers upon that subject agree more closely in the views which they entertain respecting their affinities. The type which has always been considered as forming the bulk of the class of Polyps is that of the Corals. The Actiniæ have been by turns associated with them, and separated from them. As we have already seen, the Hydroids have also, for a long time, been united with them by all naturalists, until doubts arose respecting the correctness of this combination, in consequence of the discovery of alternate generations among them. Besides these we find, further, the Bryozoa united with the Polyps even to this day by many naturalists; though the researches of Milne-Edwards and Audouin,¹ published more than twenty years ago,

¹ EDWARDS (H. MILNE) et AUDOUIN (J. V.), Recherches sur les animaux sans vertèbres faites aux îles Chausey, Ann. Sc. Nat. II. p. 20. — Milne-Edwards alone published more extensive accounts of those observations: Recherches Anatomiques, Physiologiques, et Zoologiques sur les Polypes; Ann. Sc. Nat. 2de sér. 1838, IV. p. 321;

1840, VI. p. 5; 1841, VIII. p. 321; and 1842, IX. p. 193. The opinion that the Bryozoa are not Polyps, but a low type of Mollusks, had already been expressed by K. E. v. Baer, in 1827, in his Beiträge zur Kenntniss der niedern Thiere, Nova Acta Academiæ Naturæ Curiosorum, Vol. XIII.