

have no doubt respecting the generic identity of these three species, to which *Bolina hibernica Patters.* must be added, probably as synonyme of Sars's *Mnemia norvegica*. The form of *Bolina elegans Mert.* does not differ at all from that of *Bolina alata*, but there are generic differences between them, the course of the chymiferous tubes in the lobes of the tropical *Bolina elegans* being different from that of the northern *Bolina alata* and allied species, and the surface papillate, as in *Leucothea*, *Chiaja*, and *Eucharis*. But whether *Leucothea*<sup>1</sup> *formosa Mert.*, *Alcinoe papillosa Delle Chiaje*, and *Eucharis multicornis Esch.*, belong to this or the next family, I am unable to determine, as the connection of the lobes with the spherosome is not accurately described. Again, *Leucothea* differs in having a complicated tentacular apparatus, which is simple in *Eucharis multicornis*. I believe Gegenbaur to be correct in assuming that *Eucharis Tiedemanni Esch.* differs generically from *Eucharis multicornis*; and that the latter is identical with *Alcinoe papillosa*, for which Lesson has proposed the generic name of *Chiaja*, so that *Alcinoe papillosa* should be called *Chiaja multicornis*,<sup>2</sup> and the name *Eucharis* retained for *Eucharis Tiedemanni*.

Gegenbaur has questioned the validity of the genus *Bolina*, and believes it to coincide with *Mnemia*. I believe he is mistaken in that respect. *Mnemia* has not the form of *Bolina*, but coincides with *Alcinoe Rang* in the structure of its lobes, which are not simple prolongations of the actinal side of their spheromeres, but rise as lateral folds above the actinal pole of the spherosome, and overlap the lateral spheromeres. On that account, I do not hesitate to consider the genera *Alcinoe* and *Mnemia* as belonging to a distinct family, for which the name of *MNEMIDÆ* must be retained, and to which the genera *LeSueuria* and *Eucharis* proper may also belong. *Beroe costata Reyn.* probably forms another genus of this family. The prolongation of the external row of flappers of the auricles, in the direction of the abactinal pole, along the furrows which separate the lobes of the spherosome from the lateral spheromeres, seems characteristic of this family. I have observed nothing of the kind in *Bolinidæ*.

I shall retain the name of *CALYMNIDÆ*, applied by Gegenbaur<sup>3</sup> to the whole sub-

<sup>1</sup> Most writers erroneously call this genus *Leucothoe*. Mertens gave it the name *Leucothea*.

<sup>2</sup> As this page came up from the printing-office, I noticed that I had not alluded to a very interesting paper by MILNE-EDWARDS, Note sur l'appareil gastro-vasculaire de quelques Acalèphes Ctenophores, published in the *Annales des Sciences naturelles*, 4e série, vol. 7, p. 285. Owing to the irregularity with which this important periodical has been re-

ceived at our university library. I did not know of Milne-Edwards's earlier investigations upon the same subject when I published my paper on the *Beroid Medusæ* in 1850, and had almost missed an opportunity of referring to this later communication, which I shall have to quote frequently hereafter.

<sup>3</sup> Gegenbaur writes *Calymnidæ*; but, the name being derived from *Calymma*, should be spelled *Calymmidæ*.