

that therefore its young may be widely different from the adult, and is not likely to resemble the young of other genera, considering the typical peculiarities of *Cestum*; when it is further remembered that the tentacular apparatus of *Sicyosoma* trends in the direction of the mouth, as in *Cestum*,—this supposition will appear more probable than that of Gegenbaur, who regards it as an adult form of a very low organization.

SECTION IV.

THE NATURAL FAMILIES OF THE CTENOPHORÆ LOBATÆ.

Eschscholtz was the first to perceive the affinities which unite these *Acalephs* into one natural group, to which he gave the name of *Beroidæ Lobatæ* in the account of his investigations published in the *Isis* for 1825. Four years later, he changed that name to *Mnemiidæ*, in his "System der Acalephen;" but, as we have already seen, the *Ctenophoræ Lobatæ* constitute a natural sub-order, and not simply a family. Lesson, on the other hand, regarding the whole type of *Ctenophoræ* as one family, subdivided it into eight tribes, three of which, the *Leucothoæ*, the *Seuroæ*, and the *Calymmeæ*, belong to the *Ctenophoræ Lobatæ*, while his *Callianiræ* embrace *Cydlippidæ* as well as genuine *Lobatæ*. Gegenbaur unites all these *Acalephs* into one family, called by him *Calymmidæ*. It is not difficult, however, to trace different patterns among them. In the first place, I would call attention to the very peculiar form of the genus described by Gegenbaur under the name of *Euramphæa*. It differs from all other *Ctenophoræ* by the remarkable prominence of the actinal diameter, which gives this type a very elongated appearance, strikingly contrasting with the prominence of the cœliac diameter in others. Again, the compression of the sides, combined with the sudden dilatation of the anterior and posterior spheromeres into broad lobes projecting from the actinal part of the narrow sides of the body, and the equally prominent projection of the abactinal part of the broad sides of the body, extending sideways much beyond the abactinal pole, give this *Acaleph* a very unusual appearance, and show it to be the type of a distinct family, for which I propose the name of *EURAMPHLEIDÆ*. Besides the genus *Euramphæa*, I am inclined to refer to it another *Acaleph*, thus far very imperfectly known, because it was described and figured from a mutilated specimen by Chamisso, and has not been observed since; but the parts preserved agree so fully with Gegenbaur's *Euramphæa*, that the close affinity of the two can hardly be doubted. I allude to Chamisso's *Callianira heteroptera* (*Nov. Act. Acad. Nat.*