

Curios. X. Pl. 31, *Fig. 3*), the type of Eschscholtz's genus *Hapalia*, afterwards called *Polyptera* by Lesson.¹ Fully to appreciate the peculiarity of the form of the *Euramphæidæ*, it must be borne in mind that the lobe-like prolongations of their most prominent spheromeres trend in the direction of the coeliac diameter on the actinal side of the body, as in the *Mnemiidæ* proper, while the appendages on the abactinal side rise as keels from the broad side of the animal and project in the direction of the diaceliac diameter, like the most prominent spheromeres of the *Mertensidæ*, except that in the family of *Euramphæidæ* they are still more prominent and assume the shape of elongated horns. In consequence of this arrangement, the appendages of the actinal and those of the abactinal side of the spherosome stand crosswise.

The *BOLINIDÆ* constitute a second family among the *Ctenophoræ Lobatæ*, including part of Eschscholtz's *Mnemiidæ* and of Gegenbaur's *Calymnidæ*, part of Lesson's tribe of *Callianiræ*, his *Leucothoææ*, and part of his *Calymmeæ*. Lesson's attempt to subdivide the *Ctenophoræ* into minor groups was a failure, the tribes he adopted being entirely artificial. The characters he assigns to the *Callianiræ* exist only in a few of them; for neither *Mnemia* nor *Bolina* has prominent ribs, the rows of locomotive flappers being nearly on a level with the surface of the spherosome: while *Leucothea*, which he separates, as a tribe, from *Bolina*, is closely allied to it; and *Chiaja*, which he refers to the *Callianiræ*, is identical with *Eucharis multicornis*,—and yet Lesson places *Eucharis* in another tribe. Under such circumstances, the first step we have to take in order to ascertain the general relations of all these *Acalephs* is to compare them more minutely with one another. I shall, of course, take as my standard the representative of the whole type which I know best,—the *Bolina alata* of the American coast of the Northern Atlantic. The characteristic form of this *Acaleph* is determined by the prominence of the anterior and posterior spheromeres over the lateral pairs, and the equable convergence of the eight spheromeres towards the abactinal pole, which gives a rounded form to that side of the spherosome, while the anterior and posterior spheromeres extend beyond the actinal pole, and the shape of two lobes, more or less expanded in different genera, but always closely connected with the actinal region. Upon the sides arise two auricles in the prolongation of the lateral rows of locomotive flappers.

Mnemia norvegica Sw. and *Bolina septentrionalis Mert.* have exactly the same form, and agree so fully in the details of their structure with *Bolina alata*, that I

¹ Lesson's name cannot be retained, not only because it is preoccupied, but also because it is of later date than that proposed by Eschscholtz (*Isis*, 1825, p. 742) for the same *Acaleph*. In his "Sys-

tem der Acalephen," Eschscholtz does not mention this genus, not even as synonym, but refers the species upon which it was founded to the genus *Mnemia* as *M. Chamissonis*.