

have been identified with each other by different writers in different genera, and therefore require a complete revision.

The type under consideration, for which I retain the name of *Pleurobrachia* as the most ancient applied to species of this particular conformation, is one of those which are deprived of peripheric lobes, that is to say, in which the gelatinous body is undivided, and the mouth constantly turned upward or forward when in motion; while the genus *Bolina*, to which I shall next call attention, is one of those in which one extremity of the sphere is split into two lobes, between which the mouth is situated, and in which this opening is almost constantly turned downward when the animal is moving, though sometimes, when the animal is at rest, it turns in the opposite direction, opening widely its two lobes. It will be obvious how great mistakes may arise from comparing two animals constructed upon the same plan, but kept in a reversed position when contrasted. Unhappily, all these animals have been figured without reference to the normal position in which they should be compared, and, no allusion to these prominent differences being made, it is hardly possible to reconcile the descriptions of one author with those of another.

The genus *Pleurobrachia* is limited to those species of *Cydippidæ* in which the body is nearly spherical or slightly elongated, and slightly compressed laterally; the locomotive flappers extending from near the margin of the mouth all round the sphere, in eight vertical rows, towards the opposite centre, where they approach much closer to each other than on the side of the mouth. The tentacular sacs are wide and arched sideways, their bottom rising toward the actinal pole, while the aperture is turned towards the abactinal side of the spherosome, and opens in the interambulacral space between the lateral pairs of spheromeres. *Pleurobrachia* differs from *Eschscholtzia* chiefly in the development of the rows of locomotive flappers, which, in the latter genus, do not extend beyond half or two thirds of the whole height. This is also the case with *Dryodora* (Gegenbaur's *Mertensia*, and Mertens's *Beroë glandiformis*); but *Dryodora* has simple tentacles, while they bear lateral threads of a uniform structure in *Eschscholtzia* and *Pleurobrachia*, and two kinds of appendages in *Hormiphora* (*Cydippe hormiphora*, *Gegenb.*). *Janira* is chiefly characterized by the prominence of the actinal diameter.

I know at present only three species of this genus sufficiently well to characterize them as distinct species:¹ one is the common *Pleurobrachia* of the shores

¹ After defining the natural limits of the genus *Pleurobrachia* in accordance with its structural peculiarities, it would be desirable to enter into a critical comparison of its species; but this is impossible, owing to the imperfection of the illustrations

relating to them. All I am able to do is to point out those I believe to belong here. About *Pleurobrachia Pileus Flem.* there can be no doubt: it is the common species of the German Ocean, with which *Cydippe Pileus Esch.* is identical. Judging