

the marsupium containing such larvae is accordingly exceedingly distended, more than twice as deep as in a female with eggs recently laid. The marsupial lamellae are exceedingly large; the marsupium covers the whole lower surface of the thorax.

Of the sub-family Plakarthriinae, a single small female of *Plakarthrium picum* (Chilt.) has been examined. ~~The~~ lamellae overlap each other only slightly moderately. It contains in my specimen five very large eggs still nearly circular; there is plenty of room for their development in the flat marsupium. Judging from the shape and the biology of the animal, this shape of the marsupium is scarcely much altered during the development of the brood. The third sub-family, the Sphaerominae, present various modes of development of the brood.

Of the hemibranchiate Sphaerominae I have seen adult females of eight genera; of two genera, *Hemisphaeromina* (n. gen.) and *Cassidinella* (Whitel.), nothing is known, but the former genus is closely allied to *Sphaeroma* (Bosc); *Cassidinella* seems to be only a sub-genus of *Cymodoce* (Leach) and it is therefore most probable that, as to propagation, they agree respectively with *Sphaeroma* and *Cymodoce*. *Sphaeroma rugicauda* (Leach) is mentioned above; *S. serratum* (Fabr.) has the same number of pouches with large slits, and all species of the genus in its restricted sense (see below) probably agree closely with each other. I examined a rather large specimen of *S. serratum* with the young nearly full-grown, ~~which~~ being greyish with black spots; I counted ninety one young, which occupied by far the largest part of the inner space of thorax and, besides, a good deal of abdomen, as the external organs of the body, excepting musculature, were scarcely discernible. In the other genera of hemibranchiate Sphaerominae, as in *Sphaeroma*, the brood is developed in internal pouches; but, nevertheless, various deviating structures are observed. In *Cymodoce pilosa* (M.-Edw.) five pairs of large slits - first pair between first and second, last pair between fifth and sixth sternites - are observed; the slits are placed at some distance from the mesial line. Of *Bregmocerella Grayana* (Woodw.) I have seen two females in which the marsupium well developed, and the mouth parts metamorphosed as in *Cymodoce*. One of them has no eggs; on the lower surface of thorax I found two pairs of small, very low sub-cylindrical tubercles placed, as are the slits in *Cymodoce*, at some distance from the mesial line, each tubercle with a minute aperture on the end. In the other female the black eyes ~~are~~ and a rather small number of young are visible through the quite membranous ventral skin, on which it is possible, with some difficulty, to find the minute thickenings with their central hole. That these tiny apertures correspond with the slits in *Sphaeroma* and *Cymodoce* is certain, but it is difficult to understand how the eggs can pass in, and quite incomprehensible how the young are able to pass out through them. I suppose that at the birth of the young the skin must split at the apertures, but perhaps some other occurrence may exist. As mentioned above, the marsupial lamellae are small and far from reaching each other at the mesial line in *Exosphaeroma* (Stebb.), *Cladus* (Miers), and *Zuzara* (Leach). In a specimen with marsupium, but

The marsupium reaches nearly to the base of abdomen, but it is