

[Pl. XXXV. fig. 1, *a-d*. *a* Carapace seen from right side, *b* from above, *c* from below, *d* from behind. Magnified 60 diameters].

Section MYODOCOPA.

Family I. CYPRIDINIDÆ, Baird.

Shell mostly hard and compact in structure (sometimes thin and flexible), usually smooth or finely punctate, but sometimes cavernous and strongly ribbed, notched at the antero-inferior angle, so that when the valves are closed there remains a large aperture for the protrusion of the antennæ. Anterior antennæ large, geniculated at the base, many-jointed, and having several long ringed setæ. Basal portion of the posterior antennæ broadly triangular, bearing a small secondary branch (different in the two sexes), and a large natatory branch, which is mostly nine-jointed, and bears several long ciliated setæ. Mandibles rudimentary, the palp very large, geniculated, pediform, four-jointed; first joint large and thick, bearing at the apex a slightly setose appendage like a rudimentary branchial plate; last joint very short and strongly clawed. Three pairs of subpediform jaws, the first pair having four spinous lobes, of which the external is largest and two-jointed, its first joint large, elongated, and subquadrangular, last very short, and beset with numerous spines or claws; second pair short and stout, composed of several setose or unguiculate segments; external segment short, three-lobed, beset with short, finely-ciliated setæ, and bearing at the base a very large semilinear branchial plate, which is provided with numerous marginal setæ; third pair smaller, composed of three spinous lobes, beneath which is a membranous subovate plate, bearing numerous finely-ciliated setæ. Feet, one pair only, forming a very long, flexuous, subcylindrical annulose body, and armed towards the apex with long prickly spines. Postabdomen large, composed of two broad closely adpressed laminae, and armed on the posterior margin with a series of strong curved claws. Two compound pedunculated eyes, between which is a large simple eye, and a short cylindrical tentacle. Male of less height than the female; eyes more developed; copulative organs of complex structure; ova and embryos borne beneath the shell of the female.

The Cypridinidæ, owing to their considerable size and frequent capture in the surface-net, have attracted more general attention from zoologists than any other division of the Ostracoda; but, compared with the Cypridæ and Cytheridæ, the number both of species and individuals is very small. They appear to be most abundant in the warm surface-waters of the tropical seas, contributing largely to the phosphorescence of those regions. The males only (at any rate of those species which have been thoroughly examined) are endowed with swimming power, the females being non-natatory, and passing their lives wholly at the bottom, a condition imposed upon them by the absence of the tuft of long