

DEFINITION OF THE FAMILY.

NEBALIIDÆ.

Anterior part of body covered by a large compressed bivalvular carapace, connected with the body only along the cephalic part, its valves admitting of being moved by a distinct adductor muscle and extending down the sides so as to enclose between them all the oral parts as also the greater part of the other limbs. A tongue-shaped rostral plate present in front, movably articulated to the carapace. Trunk covered over by the carapace and composed of eight subequal segments. Posterior part of body tapering backwards and consisting of two more or less distinctly defined subdivisions, pleon and tail, each composed of four segments. Eyes pedunculated and mobile, but without faceted cornea. Both pairs of antennæ strongly developed, subpediform, with the peduncle geniculate; anterior pair, or antennulæ, with the peduncle four-jointed and bearing a setose lamella at the end, besides the flagellum; posterior pair with a single multiarticulate flagellum. Mandibles comparatively small, with the cutting part rudimentary, the molar tubercle well developed, palp very large, triarticulate. First pair of maxillæ with two incurved masticatory lobes and a very elongate and slender reflexed palp; second pair lamellar, with distinctly defined palp and exognath. Eight pairs of subequal phyllopodous legs present on the trunk posterior to the oral parts; endopodite more or less produced, with the inner edge and apex densely setiferous, but without projecting lateral lobes. Four pairs of powerfully developed biramose pleopoda on the succeeding part of the body, followed by two pairs of rudimentary caudal limbs. Penultimate segment without limbs. No telson. Caudal rami simple, forming two diverging plates edged with spinules and setæ. Ova deposited within the lower part of the carapace, and supported between the branchial legs. Development direct, without metamorphosis. Internal organisation on the whole rather similar to that in the Amphipoda.

Remarks.—As the fossil forms referred to the Phyllocarida are still very imperfectly known, none of the limbs having as yet been found preserved, it is rather difficult to point out the characters which should be regarded as exclusively distinguishing the recent family Nebaliidæ. There is however at least one character, well seen in the fossil forms, which seems to distinguish them very sharply from the Nebaliidæ, viz., the presence of a strongly developed telson, no trace of which is found in any of the recent forms.

As above stated the recent Phyllocarida were formerly only represented by a single genus, *Nebalia*. The two new genera, added by the Challenger Expedition, chiefly