

Family THAUMASTOCHELIDÆ.

First pair of antennæ with flagella long, second with scaphocerite ; first pair of pereopoda unequal, chelate, large ; second symmetrical, chelate, small ; rhipidura foliaceous ; branchiæ filamentous cylindrical ; podobranchiæ and mastigobranchiæ present. Genera *Thaumastocheles*, *Callocaris*.

Family PYLOCHELIDÆ.

The carapace has no rostrum, and its lateral walls are compressed and very deep. The eyes stand on peduncles of moderate length. The first pair of antennæ terminates in two short flagella, and the second supports a small scaphocerite. The mandibles carry a synnhipod. The first pair of pereopoda is subequal, chelate. Second and third pairs long and slender, each terminating in a long styliform dactylos. Fourth and fifth pairs are short, and terminate in a small, and more or less rudimentary dactylos. Rhipidura with the branches rigid and tapering ; outer larger than the inner. Telson rigid anteriorly, and flexile posteriorly.

The respiratory apparatus is trichobranchiate. The filaments are long, slender, and cylindrical. The podobranchial plumes and mastigobranchial plates are wanting throughout all the appendages of the pereion, that is, from the first pair of gnathopoda to the posterior pair of pereopoda.

This family is established to receive the genera *Pomatocheles*, Miers, *Pylocheles*, A. Milne-Edwards, and *Cheiroplatea*.

The name is derived from that given to a genus by A. Milne-Edwards, and includes all those paguriform Anomura that are trichobranchiate.

Cheiroplatea,¹ n. gen.

Carapace having deep lateral membranous walls, produced anteriorly in advance of the dorsal frontal margin.

Ophthalmopoda broadest at the base, and tapering gradually to the apex.

First pair of antennæ having the peduncular joints long, each capable of being folded upon the preceding, and terminating in two slender flagella that are longer than the third joint of the peduncle.

Second pair of antennæ having a strong and small scaphocerite attached to the peduncle.

Mandibles carrying a triarticulate synnhipod.

Second pair of gnathopoda imperfectly chelate, and carrying a basephysis.

First pair of pereopoda with the two limbs correspondingly equal, being large and well developed, having the anterior or upper surface of the carpos and propodos

¹ χείρ, hand ; πλατύς, flat ; this name was chosen and the plate printed before I became aware that the somewhat similar name *Chiroplatys* had been previously used by Kirby for a genus of Diptera.