

Family II. CYCLOPIDÆ, Baird (in part).

Body elongated, in general outline similar to that of the Calanidæ ; anterior antennæ of moderate length, rarely longer than the cephalothorax ; those of the males alike on both sides, and geniculated for clasping ; posterior four-jointed, and without a secondary branch. Mandibular and maxillary palps well developed or occasionally rudimentary. Foot-jaws much like those of the Calanidæ. First four pairs of feet alike, two-branched, and adapted for swimming only ; fifth pair rudimentary, alike in both sexes. Heart wanting. Eyes of the two sides coalescent in the median line. Ovisacs two.

The absence of an internal branch of the posterior antenna, the rudimentary character of the fifth foot, alike in both sexes, and, in the male the modification of both right and left anterior antennæ, to act as clasping organs, distinguish this Family from those already described, while, from the Harpacticidæ it is separated chiefly by the structure of the foot-jaws and first pair of swimming feet. Except the genus *Oithona*, no members of the Family have been observed in the Challenger gatherings.

Oithona, Baird, 1843.

Body much elongated, slender ; head quite distinct from thorax. Anterior antennæ long and slender. Mandible-palp elongated, two-branched ; secondary branch composed of several joints. Maxillæ stout, and provided with a short two-branched palp. First pair of foot-jaws long and slender, four-jointed (not unlike those of *Calanus*) ; second pair also as in *Calanus*, but indistinctly jointed. All the branches of the first four pairs of feet are three-jointed ; fifth pair rudimentary, bearing two small setiferous papillæ.

This genus partakes of the characters both of the Cyclopidæ and Calanidæ, and is perhaps in general appearance more like *Acartia* (*Dias*) than any other genus ; in this situation it was placed by Dana. But inasmuch as some of the most important features of the Cyclopidæ are present in *Oithona*, it seems best to consider it as belonging to that Family. The geniculated form of both anterior antennæ in the male, the absence of a secondary branch in the posterior antennæ, the very rudimentary form of the fifth pair of feet, and the presence of two ovisacs, are all characters in which it agrees with *Cyclops*. The structure of the internal organs also conforms to that of *Cyclops*.

Oithona challengerii, n. sp. (Pl. XL. figs. 1-10).

Length, 1-14th of an inch (1.8 mm.). Cephalothorax narrow, tapered towards the anterior extremity, and produced into a curved beak (fig. 2) ; abdomen nearly as long as