

1827. Of the synonyms given above, *Thalia* is pre-Linnean, and *Holothuria* is pre-occupied, while *Salpa* has been appropriated by the more important section of the family. *Orthocæla*, Macdonald, is a better designation, but must yield priority to *Cyclosalpa*.

By the majority of authors since the time of Blainville, *Cyclosalpa pinnata* has been placed as a species of *Salpa*, but Macdonald¹ in 1864 founded for it the new genus *Orthocæla*, on account of the straight condition of the alimentary canal, which forms a marked contrast to the coiled-up visceral mass found in the species of *Salpa*. Traustedt, though not recognising this as a separate genus, makes it a distinct section of *Salpa*.

The characters of the genus agree with those of *Salpa*, with the exceptions of (1) the extended condition of the alimentary canal, and (2) the curious form produced by the animals of the aggregated generation which are united to form, not a ribbon-like chain as in the species of *Salpa*, but a ring or circlet of generally about nine members.

This genus contains three species, viz.:—

Cyclosalpa pinnata, Forskåhl; *Cyclosalpa affinis*, Chamisso; and *Cyclosalpa dolicosoma-virgula*, Todaro—Vogt.

Cyclosalpa pinnata (Forskåhl).

Salpa pinnata, Forskåhl, Descr. Anim., p. 113, 1775.

Orthocæla pinnata, Macdonald, Trans. Roy. Soc. Edin., vol. xxiii. p. 171, 1864.

Salpa pinnata, Traustedt, loc. cit., p. 353, which see for further synonymy.

This is the only species of the genus in the Challenger collection, and it is only represented by a single specimen of the solitary generation, obtained on the surface of the Pacific between Papua and Japan. It measures about 1.5 cm. in length, and is not in a very good state of preservation.

Family II. OCTACNEMIDÆ.

Body flattened antero-posteriorly (?), probably attached.

Test gelatinous, thin, transparent.

Branchial Sac with no stigmata or openings into the peribranchial cavity.

Alimentary Canal placed dorsally and posteriorly. Coiled up along with the reproductive organs to form a visceral mass.

Life-History unknown.

This family is formed for the reception of the remarkable *Octacnemus bythius*, which was discovered by the Challenger Expedition, and was first described by Professor

¹ The genus *Pyrosomopsis* established at the same time by Macdonald is apparently the aggregated condition of a *Cyclosalpa*.