

CRUSTACEA.

PART III.

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ISOPODA.

Part II.

The present part deals with the remainder of the family Sphæromidæ. Of the sixteen species herein enumerated, seven belong to known forms and nine are described as new, including one new genus. The new species are as follows :—

Sphæroma australis.

„ *latifrons.*

„ *plumosa.*

Cymodoce inornata.

Cilicæa stylifera.

„ *ornata.*

„ *granulata.*

Cerceis nasuta.

Chitonopsis spatulifrons.

The species previously known are :—

Zuzara emarginata, Haswell. (*Hab.*—Griffiths' Point, Western Port, Victoria).

Cymodoce tuberculosa, Stebbing. (*Hab.*—Swan River, Western Australia).

„ *aculeata*, Haswell. (*Hab.*—Port Jackson).

„ *convexa*, Miers. (*Hab.*—New Zealand).

Cilicæa hystrix, Haswell. (*Hab.*—Port Stephens).

„ *spinulosa*, Haswell. (*Hab.*—Port Jackson; Port Stephens).

Bregmocerella grayanus, Woodward. (*Hab.*—Port Jackson; Flinders Island; Bass Strait).

In working out the various species I have been much impressed with the paucity of information relating to this important group. Many structural features have been met with, regarding which little or nothing has been recorded, and numerous little points of generic or specific import have been a source of frequent delay.

Adequate definitions of some of the genera are still required, and the whole group is in great need of revision. As regards the species herein described, I have attempted to supply full descriptions of all the characters of importance, whether generic or specific, hoping such will prove useful in any future revision of the order.

There are many characters presented by the various appendages of the body which have been usually neglected in descriptions; some are of generic and others of specific import. Such, for instance, as the number and relative length of the joints of the flagellum; the presence or absence of denticles on the spines of the first maxillæ. The pleopods are rarely described, yet they afford some excellent and reliable characters: a glance at some of the descriptions and figures will suffice to show how necessary it is to examine these appendages. For example, the outer rami of the first and second pairs of pleopods in *Zuzara emarginata* are armed on their outer distal margin with a series of spines, thus furnishing a character which alone would be almost sufficient to identify the species. The uropods are generally well described, but one feature, namely, the opposed or folding condition of the branches is frequently neglected. In the genus *Cymodoce* the branches are stated to be opposed or imperfectly folding. I have met with two species, namely, *C. aculeata* and *C. convexa*, in which the branches are completely folding, and a third, *C. tuberculosa*, has the branches opposed.

Family SPHÆROMIDÆ.

SPHÆROMA, *Latreille*.

SPHÆROMA AUSTRALIS, sp. nov.

(Figs. 24a-b.)

Station 19.

Body smooth, convex, about twice as long as broad, slightly increasing in width posteriorly, cephalon not quite equal in