

short, and carries a long ecpysis; the coxa supports externally a lunate calcified plate that articulates with a rudimentary mastigobranchia, that is independent of any branchial plume, while near it a plume is attached to the membranous articulation.

The first two pairs of pereiopoda are short, slender, and chelate, and have the carpos uniarticulate; the basis carries a long ecpysis, and the coxa bears a short mastigobranchial plate. The posterior three pairs are simple in character, decrease successively in length, and terminate in a sharp-pointed dactylos, of which the posterior is much the shortest.

The pleopoda are biramose, narrow, and subfoliaceous. The terminal pair forms the outer plates of the rhipidura, which are subequal in length with the telson.

The branchiæ consist of twelve plumes and five mastigobranchial plates that are short and club-shaped, but sufficiently long to be able to penetrate for some distance between the plumes; the arrangement may be seen in the following table:—

Pleurobranchiæ,	.	.	.	...	...	1	1	1	1	1
Arthrobranchiæ,	.	.	.	1	1	1	1	1	1	...
Podobranchiæ,	.	.	.	1	...	...	...	...	...	...
Mastigobranchiæ,	.	.	.	1	1	1	1	1	...	...
				h	i	k	l	m	n	o

Of these the anterior are the smallest and the posterior the largest.

The arrangement of the branchiæ corresponds most closely with that of *Notostomus*, *Calymarina*, and *Hymenodora*, and approximates to that of *Nematocarcinus*, *Campylonotus* and *Oplophorus*, from which it departs chiefly in the smaller number and less important condition of the mastigobranchial plates.

The plumes are attached to the body at a point nearer to the lower extremity than is usual in this order, they being generally suspended more centrally.

*Geographical Distribution.*—The species that belong to this genus were taken by the Challenger in the Atlantic, off the south-eastern coast of South America, at a depth of 2040 fathoms, off the north-eastern coast of Australia in 2440 fathoms, south of Japan in 2425 fathoms, and in the Indian Ocean, 600 miles south of Australia, at a depth of 2150 fathoms. Other species were obtained off New Zealand in 1100 and 700 fathoms, off the Kermadec Islands in 600 fathoms, close to Japan in 500 fathoms, and in the shallow sea between Australia and New Guinea in 200 fathoms.

*AcanthePHYRA acanthitelsonis* was taken in Mid Atlantic at only two stations, not far from the equator, in depths of 1500 and 1850 fathoms respectively.

*AcanthePHYRA brachytelsonis* has been found in five different localities, namely, off the Kermadec Islands in from 250 to 630 fathoms, south of the Philippine Islands in 500 fathoms, off the south-eastern shores of South America, associated with *AcanthePHYRA agassizii*, at a depth of 2040 fathoms, close to the southern shore of Japan at depths