

foliaceous plates, of which the inner is the larger, and exhibits a notch, from which a bundle of long hairs projects, but no stylamblys is apparent.

The sixth pair of pereopoda forms part of the rhipidura or caudal fan. It articulates with the posterior angle of the sixth somite; the basal joint is short and broad, and carries two sub-foliaceous plates; the external is large, triangular, narrow at the base, and broad at the extremity, the outer side is the longest, and projects forwards; a diæresis marks the external distal portion, but does not traverse the breadth of the plate, which is strengthened in the middle by a longitudinal ridge; the inner plate is much smaller than the outer, and like it is traversed by a longitudinal ridge, and both are fringed along the distal margins with closely-set hairs; the external plate has a similar row along the line of diæresis.

The specimen above described was taken in the dredge off Sombrero Island, in about 450 fathoms of water, on a bottom of Globigerina ooze. There is only one perfect specimen in the collection, but fragments of a second, consisting of the gnathopod and first pair of pereopoda, appear to be parts of a more spinous variety, perhaps those of a male form.

The branchial arrangement of this species may be tabulated as—

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|------------------|---|---|-----|-----|-----|-----|---|---|---|-----|
| Pleurobranchiæ, | . | . | ... | ... | ... | ... | 1 | 1 | 1 | 1 |
| Arthrobranchiæ, | . | . | ... | ... | 2 | 2 | 2 | 2 | 2 | ... |
| Podobranchiæ, | . | . | ... | ... | 1 | 1 | 1 | 1 | 1 | ... |
| Mastigobranchiæ, | . | . | ... | 1 | 1 | 1 | 1 | 1 | 1 | ... |
| | | | | h | i | k | l | m | n | o |

The branchial appendages are generally long. The podobranchiæ are the longest, and almost entirely cover and protect the arthrobranchiæ and pleurobranchiæ, particularly those of the four anterior pairs of pereopoda. The mastigobranchiæ form inter-branchial plates similar to those of the *Homarides*; they are long and broad, reach to the extreme length of the branchial plumes, and are sparingly covered all over with long hairs that spread out and penetrate between the branchial filaments. The hairs are generally smooth and pointed. The inner surface of the carapace that covers the branchial chamber is similarly beset with hairs of the same kind, this, with the mastigobranchial plates, and pleura or floor of the branchial chamber, forms a division in which the several branchiæ of each appendage are shut off from the rest (Pl. VII. fig. 1, 1br); the pleurobranchia lies beneath and rests upon the floor of the chamber, the arthrobranchiæ meet in the centre, one on each side above the pleurobranchia, by a single row of short filaments that nearly touch each other at their extremities; the podobranchia covers and overlaps the whole, while long, slender, and somewhat stiff hairs play between the several plumes of the branchiæ, as well as between the numerous filaments that compose them, and probably keep the whole of the complex structure in constant motion.

The posterior pair of pereopoda possesses no podobranchia, arthrobranchia, nor