

The second pair of antennæ has the peduncle robust, and carries a broad scaphocerite that is rounded at the extremity, and armed on the outer distal margin with a strong tooth.

The mandibles have a large and broad psalistoma that is slightly serrate, and continuous with a small, smooth, lunate, molar process, and carry a stout three-jointed synhipod, of which the terminal joint is short and spatuliform.

The three pairs of siagnopoda correspond generically with those of *Acanthephyra*, as do also most of the other appendages, such variations only existing as may be supposed to accord with specific changes.

A. Milne-Edwards says that "the first pair of pereopoda is longer than the second; they are both didactyle," but in all our specimens of the several species the first pair of pereopoda is shorter than the second. The third and fourth pairs of pereopoda are long, and have the propodos more slender than the preceding joints, and the dactylos long, styloform, and slightly curved; the fifth pair resembles the two preceding, but terminates in a short, almost obsolete, dactylos, embedded in a thick brush of ciliated hairs.

The pleon has the dorsal surface strongly carinated, and is generally produced to a tooth on the third and following somites.

The telson is dorsally flat or grooved, and does not extend beyond the length of the inner plates of the rhipidura.

A. Milne-Edwards says that "the rostrum is remarkably short and slender, and carries about eight teeth above and the same below; it does not reach beyond the scaphocerite." This is correct of four out of five of the Challenger species, but *Notostomus longirostris*, as well as his own *Notostomus elegans*, has the rostrum longer than the scaphocerite, and all our specimens have the dentation on the former more abundant than described by A. Milne-Edwards from his type, *Notostomus gibbosus*.

There are several details in the above description which disagree with that given by A. Milne-Edwards, above quoted, but I have had the opportunity of showing the plates of this work to that author, and also of examining the animals from which his description was taken, and I feel assured that the various forms belong to the genus he has described, and I therefore adopt the name that he has proposed.

The branchiæ closely agree with those of *Acanthephyra*. The several pleurobranchiæ are implanted so near the pereopodal articulation, that it was only in the larger specimens I could be certain that they do not spring from the articulating membrane. The plumes are well formed and not so much laterally compressed, more especially the pleurobranchiæ, as in *Acanthephyra*.

The branchial arrangement of this genus is shown in the following table:—

Pleurobranchiæ,	.	.	.	...	1	1	1	1	1	1	
Arthrobranchiæ,	.	.	.	...	1	1	1	1	1	...	
Podobranhiæ,	.	.	.	1	...	...	...	...	...	...	
Mastigobranhiæ,	.	.	.	1	1	1	1	1	...	...	
					h	i	k	l	m	n	o