

The following table shows the arrangement of the branchiæ as observed in *Callianassa longimana*:—

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

By this it will be seen that all the branchial plumes are absent, except those of the arthrobranchiæ, and the mastigobranchiæ are wanting on every appendage except the first pair of gnathopoda, where one is seen in the form of a rudimentary bulb.

Geographical Distribution.—Eighteen species of this genus have been described, and, from the various localities recorded, they appear to be sparsely scattered all over the globe. Some are stated to belong to the western coast of North America, and two to the western coast of South America; two to the eastern coast of North America, including the West Indies; one is from Europe, two from the western coast of Africa, including Cape Verde; the rest from the Pacific and islands of the Indian Ocean.

This scattered distribution suggests that the small number of specimens found is due to the burrowing habits of the animal rather than to paucity of specimens.

Geologically, *Callianassa* has only been found in the more recent series of formations. The largest specimen, *Callianassa maxima*, A. Milne-Edwards, stated to have been found at a great distance from the sea, in alluvial soil, on cutting a canal in Siam. Another, *Callianassa crassa*, A. Milne-Edwards, was found in the Miocene sands of St. Paul, near Dax. Others have been recorded from the Calcaire grossier de Parmes, and the Environs of Gisors; the sands of Beauchamp, and the Chalk formation of Bohemia, according to Anton Fritsch, have yielded six species.

Callianassa occidentalis, n. sp. (Pl. II. fig. 2k).

The propodos is smooth, longer than broad, and broader than the carpos, which is also longer than the palm, or that portion of the propodos that does not include the pollex. Meros as long as the carpos, the lower margin compressed to a thin convex plate posteriorly serrate. Ischium long, flexed, imperfect.

Habitat.—Station 23, March 15, 1873; lat. 18° 24' N., long. 63° 28' W.; off Sombrero Island, West Indies; depth, 450 fathoms; bottom, Pteropod ooze. Associated with *Cheramus occidentalis*.

A solitary specimen of the larger of the first pair of pereopoda is all that was taken of this animal. This limb appears to differ from that of any known species, more particularly from that of *Callianassa major* (Say), the only one that has been taken in the same neighbourhood, and which is described as having the meros armed with a very strong tooth. It is not impossible that it may belong to the species *Cheramus occidentalis*, but it is too large to have belonged to the specimen with which it was taken.