

The pleopoda and rhipidura correspond with those of the genus *Palæmon*.

Observations.—The solitary specimen in the collection is only about a third of the length of that described by Dana, but it appears to have its parts completely developed. It corresponds so closely with the description of Dana's species that I have no doubt of its identity with it, and I attribute certain differences to the young condition of the specimen under examination; but it is difficult to completely examine it without injuring it. In the Challenger specimen the ophthalmus is much larger in proportion than in Dana's figure, and, with the utmost care, I have not been able to detect the hepatic tooth on the carapace, nor has Dana shown it in his figure or alluded to it in his description of this species, although he mentions it in his generic diagnosis. The dactylos of the posterior three pairs of pereopoda is biunguiculate, a fact that is overlooked by Dana.

Bithynis, Philippi.

Bithynis, Philippi, Wiegmann's Archiv f. Naturgesch., Jahrg. xxvi. p. 161, 1860.

Macrobrachium, Spence Bate, Proc. Zool. Soc. Lond., p. 363, 1868.

Palæmon (*pars*), Dana, U.S. Explor. Exped., Crust., p. 584.

„ Stimpson, Proc. Acad. Nat. Sci. Philad., p. 110, 1860.

„ (Division 2), Milne-Edwards, Hist. Nat. Crust., tom. ii. p. 395.

Like *Palæmon*, but differing in having a tooth on the hepatic region and no tooth corresponding with the second antennæ (the "spina branchiostegiana" of Stimpson), in having the carpos of the second pair of pereopoda long and cylindrical, and this appendage developed in the adult to a greater length than that of the entire animal, and more or less unequal, and in having the pleon shorter in proportion to the length of the carapace.

Geographical Distribution.—Species of this genus are more or less present in the fresh-water streams of tropical Asia, America, and Africa; when they have been taken in the sea it has been only at the mouths of the rivers they are found to inhabit.

Mr. Kingsley¹ says that this form is far from being uncommon in salt water and instances several species, as *Bithynis spinimanus*, *Bithynis grandimanis*, *Bithynis jamaicensis*, *Bithynis forceps*, &c. Milne-Edwards says that *Bithynis ornatus*, *Bithynis carcinus*, and other long-armed forms are found in different parts of the Indian Ocean, and that *Bithynis jamaicensis* inhabits the Antilles.

There is undoubtedly a peculiarity belonging to this group that distinguishes it at once from the typical form of *Palæmon*, and although there is evidence of specimens having been taken in the sea, yet in several instances they are supposed to be marine, because the locality to which they belong has been alone recorded, without any special notice of their having been found in fresh water as their normal habitat. *Bithynis*

¹ Bull. Essex Inst., vol. x. p. 66.