

	Fathoms.	Habitat.
<i>Alpheus parvimanus</i> , Kingsley, . . . . .	...	Panama.
„ <i>parvi-rostris</i> , Dana,	8	Balabec.
„ <i>prolificus</i> , n. sp.,	18	Pacific Ocean.
„ <i>pugilator</i> , A. Milne-Edwards, . . . . .	...	Cape Verde Islands.
„ <i>pugnax</i> , Dana, . . . . .	...	Hawaiian Islands.
„ <i>rapax</i> , Fabricius,	10	Asiatic Seas.
„ <i>ruber</i> , Rafinesque,	6	Europe.
„ <i>rugimanus</i> , A. Milne-Edwards, . . . . .	...	Cape Verde Islands.
„ <i>socialis</i> , Heller, . . . . .	...	Australia.
„ <i>spinicercus</i> , Costa, . . . . .	...	Mediterranean.
„ <i>spinifrons</i> , Milne-Edwards, . . . . .	...	Chili.
„ <i>spiniger</i> , Stimpson,	18	Asiatic Seas, Loo Choo.
„ <i>strenuus</i> , Dana, . . . . .	...	Australia; Tongatabu.
„ <i>streptochirus</i> , Stimpson,	20	Cape Verde Islands.
„ <i>sulcatus</i> , Kingsley, . . . . .	...	Panama.
„ <i>tridentulatus</i> , Dana, . . . . .	...	Rio Janeiro?
„ <i>ventrosus</i> , Milne-Edwards, . . . . .	...	Mauritius.
„ <i>websterii</i> , Kingsley, . . . . .	...	United States.

Observations.—The genus may be divided into three divisions—

- A. Those without rostrum or supraorbital teeth.
- B. Those with rostrum but without supraorbital teeth.
- C. Those with rostrum and with supraorbital teeth.

This arrangement, however, can only be considered as convenient for purposes of classification, since the above characters are found to exist in various degrees, and Mr. J. S. Kingsley,¹ in regard to *Alpheus minus*, Say, says:—“In some specimens the ocular spines are present, while the rostrum is wanting; in others the front is truncate, no spines being present. The proportions of the joints of the carpos of the second pair of pereopoda also vary,” and he continues “the relative lengths of rostrum and ocular spines can be of no great importance when they vary as I have shown.”

If these observations of Mr. Kingsley be justified by further experience of this intricate genus, then many of the recorded species must be merely varieties. For instance, Dana² considers his species of *Alpheus leviusculus*, of which I have figured (Pl. XCVIII. fig. 1) a variety, to be itself only a variety of *Alpheus edwardsii*, and says further that it is near to *Alpheus bi-spinosus* of de Haan, which de Haan considers a variety of *Alpheus avarus* of Fabricius, but which Stimpson affirms to be distinct.

Alpheus avarus, Fabricius, appears to be not very distinct from *Alpheus edwardsii* of Audouin. Yet the figure given in this Report of *Alpheus leviusculus* bears but little resemblance to Audouin's figure of *Alpheus edwardsii*.

Again, some of the species correspond in almost every point except in the presence

¹ Bull. U.S. Geol. Survey, vol. iv., No. 1, p. 191, 1878.

² U.S. Explor. Exped., Crust., p. 543, pl. xxxi. fig. 3.