

habit of our common Shrimp, for which purpose the ophthalmopods have become protected by the frontal margin of the carapace.

They are mostly inhabitants of the warmer seas, abounding in tropical and subtropical regions, becoming scarce in the temperate, and gradually disappearing towards the subarctic regions. One specimen alone of *Betanus truncatus* is recorded by Dana from Cape Horn, where it was dredged in 10 fathoms of water, with which exception none of the family has been observed further south than New Zealand (50° S. lat.), or further north than the English Channel (52° N. lat.).

It is essentially a sublittoral form, for the instances of its being found beyond 20 fathoms are few, and these are suggestive of doubt, inasmuch as *Alpheus avarus* is recorded in our collection as being taken off Tongatabu at a depth of 18 fathoms, and in Mid-Pacific at 2675 fathoms, south of Japan.

I am not aware that any species of this or the allied genera has been found fossil.

The family of the Pasiphæidæ is but poorly represented in the Challenger collection, there being only three genera, *Pasiphæa*, *Orphania*, which are deep-sea forms, and *Leptochela*, which, if found at the bottom, lives within 50 fathoms of the surface. It is interesting to compare these species with a fossil form that has been much discussed among geologists, but it appears to me that if the interpretation of *Pygocephalus huxleyi* of Woodward<sup>1</sup> be correct, there can be little doubt that it is closely allied to the genus *Pasiphæa*, and that it differs from *Pasiphæa cristata* (Pl. CXLI. fig. 1) in little that cannot be considered as of merely specific importance.

<sup>1</sup> *Trans. Geol. Soc. Glasgow*, vol. ii. fig. 2, p. 243.