

monodon, whereas in the specimens now under our observation in the Challenger collection, taken in the same haul, the female has a median groove, but in the male there is none, the dorsal carina being entire.

There are, however, some minute details that are at variance, although not sufficiently important to justify specific separation.

Both *Penæus monodon* and *Penæus semisulcatus* carry three teeth on the lower margin of the rostrum, but according to de Haan's figure they are situated, or at least two of them, posterior to the most anterior tooth on the upper margin, whereas in our specimens of *Penæus monodon*, they are all in advance of that position. In de Haan's figure there is also shown what may be considered as a supraorbital tooth, but judging from the specimens I have examined, it is rather the result of a somewhat sudden curve or bend in the orbital margin than a distinct tooth.

Desmarest has evidently mistaken the species, for he says that it has seven teeth on the upper margin of the rostrum and five below. Milne-Edwards says that it has eight or nine teeth above and three below; and de Haan says that it has eight teeth on the upper margin and three below. In the Challenger collection there are four specimens, all of them adult. Three of these are females and one is a male. The females have seven teeth on the dorsal crest, the male six, and all have three below. Mr. Miers,¹ of the British Museum, says in relation to this species that he thinks it to be synonymous with de Haan's species, *Penæus semisulcatus*. Moreover, he says, "In two specimens from Australia (Shark Bay) and one from Ceylon, the rostrum is 6-7-toothed above, the teeth towards the apex separated by much wider intervals than in the other specimens referred to *P. semisulcatus*, there is a short dorsal carina which does not reach to the posterior margin of the cephalothorax, and is not canaliculated above, and the gastro-hepatic sulcus is very deep and strongly defined." For the latter he proposes the name of *Penæus monodon* if the two species be distinct.

Such a difference can scarcely be recognised as a specific character, for the greater enlargement of the interdental spaces may be and probably is induced by age, sex, or local variation; and, as I have shown above, the postrostral groove cannot be accepted as more than a collateral feature, since it is found in the females and not in the males of the same species.

The flagella of the first pair of antennæ are subequal, whereas *Penæus semisulcatus* is described by the author as having the internal branch twice the length of the external.

De Haan described the female as having the sternum between the posterior pair of pereopoda divided by a median cleft and reflexed. ("Sternum feminarum inter pedes quintos rima media continua divisum et reflexum.") These exist as two flattened calcified plates—which I distinguish by the name of *thelyca*—extending from the base

¹ *Proc. Zool. Soc. Lond.*, p. 299, March 5, 1878.