

The Dendrobranchiata have a few representatives in the ancient seas. *Penæus speciosus*, Münster, from the White Jura of Bavaria, is closely allied to the recent deep-sea genus *Gennadas*; and *Dusa monocera* bears a miniature resemblance to *Penæus monodon* of the Indian Ocean. The form of *Aeger* as restored in Salter and Woodward's Chart of Fossil Crustacea is evidently supposed by them to be of the same genus, and *Blaculea sieboldi* may belong to *Penæus* also.

The recent genera that belong to this division, with the exception of the Sergestidæ, are mostly pelagic in their habits. In Japan the species *Penæus canaliculatus* is of considerable size and is used as an article of food, a circumstance that would argue for its frequenting water sufficiently shallow to be within the reach of ordinary fishermen, but, in the record given, it is probable that many specimens are those of wanderers from the deeper waters of their ordinary localities. Only one specimen of *Gennadas* is stated to have been captured within 50 fathoms of the surface, while others have been taken beyond 3000 fathoms, and it is this deep-sea species that corresponds most nearly with *Penæus speciosus*, Münster; while *Dusa monoceros* of the same geological horizon bears a tolerable resemblance to *Penæus monodon*, which is an inhabitant of less than 30 fathoms. With the exception of a few species, such as *Petalidium*, that have been dredged, almost all the Sergestidæ have been taken within 50 fathoms of the surface, and none of these have been recorded as having been found in a fossil condition.

The division Phyllobranchiata is still more feebly represented. *Tropifer lævis*, Gould,¹ appears to me to approximate more nearly to the genus *Pontocaris* of the Crangonidæ than, as supposed by the author, to the genus *Nephrops* or *Scyllarus*, in consequence of the lateral position of the ophthalmopoda. The absence of any rostrum, and the presence of the ophthalmopoda as short and spherical bodies at the outer angles of the frontal margin of the carapace, bear comparison with *Pontocaris*, the carapace of which is longitudinally traversed by carina, and transversely divided by a cervical fossa. In the fossil specimen the ophthalmopoda are at the extreme fronto-lateral angles of the carapace, while in *Pontocaris pinnata* (Pl. XCI. fig. 1) the fronto-lateral angles project on the outer side of them, but in the younger forms of Crustacea the ophthalmopoda are more in accordance with the condition seen in the fossil specimen.

Urodella agassizii, Oppel, from the Upper White Jura of Bavaria, may find its congener in the genus *Crangon* of recent times, but the pereopoda are not sufficiently figured in clear detail for a fixed opinion to be given.

The common Shrimp that so abundantly frequents the shores of Europe, lives generally where the sand is fine and most abundant. They swim about in the shallow water that precedes the incoming tidal wave, or when at rest sink to the bottom and partially bury themselves in the sand, first by wriggling out a depression with their legs and bodies,

¹ *Proc. Zool. Soc. Lond.*, vol. xiii. p. 380, fig. 1.