

Mr. Salter says—"It is, I should think, doubtful, judging by the figures, if it be a crustacean at all."¹

The genus *Palæocarabus*—of which the species *Palæocarabus russellianus*, being the best preserved, may be accepted as the type—is very near the Astacidea with its short and stunted scaphocerite; but *Anthropalæmon*, of which the species *Anthropalæmon frosartii* appears to be the most perfect in preservation, has no scaphocerite, nor can this be due to its want of preservation, inasmuch as the peduncle of the second antennæ is well preserved and minutely figured by the late Mr. J. W. Salter.²

Among the specimens of the Challenger collection, I found in one of the bottles a dismembered specimen of a deep-sea genus belonging to the Galatheidæ, that so closely resembled the fossil *Anthropalæmon* that it might I think be accepted as belonging to the same genus. The fossil specimen is recorded from the "slaty band" of the black-band ironstone of the Carboniferous limestone of Lanarkshire. The genus *Pemphix*, von Meyer, appears to possess all the characters of a Galathæan; while the genera *Glyphæa* and *Scapheus* approach the Callianassidæ, to which family the genus *Megacherus* appears also to belong.

The genus *Clytia*, as restored by Reuss, except for the accidental additions of a somite too many to the pleon, is suggestive of the genus *Phoberus*, A. Milne-Edwards, in which the appendages are a little more robust than is seen in the Challenger species, *Phoberus tenuimanus*; and the genus *Thaumastocheles* has its prototype in the recently discovered *Stenocheles* of the Chalk formation of Bavaria.

Münster's species of *Palinurella pygmæa* from the White Jura bears a near resemblance to a young specimen of *Palinurus* of the recent seas, of which the common Rock or Spiny Lobster (*Palinurus vulgaris*) may be considered as the type. It is generally called the "Crawfish" by the Cornish fishermen, and is very plentiful all round the shores of Europe, being very abundant at the entrance to the English Channel. It appears to be essentially a northern and southern form. It is represented in the South Indian Ocean by *Palinurus edwardsii*, which ranges from the Cape of Good Hope to New Zealand, by *Palinurus trigonus* in Japan, *Palinurus frontalis* on the coast of South America, and by *Palinurus longimanus* from the Antilles. Besides these species which are only separated from each other by small differences that have only been appreciated by the minute observations of modern research, there are a large number of allied forms, which are more widely separated in organisation, but which may readily be determined by having the flagella attached to the first pair of antennæ very much longer and more slender than in those already referred to. These were placed by the late Dr. Gray of the British Museum under the generic name of *Panulirus*.

¹ *Quart. Journ. Geol. Soc.*, vol. xvii. p. 533, 1861.

² *Quart. Journ. Geol. Soc.*, vol. xvii. p. 531, figs. 1, 2, 1861.