

is, however, a deep, triangular sinus between the third and fourth abdominal segments, the latter being strongly protuberant, projecting over the very small fifth segment. The second abdominal segment is subtruncate below, and has a deep semicircular sinus on the anterior lateral margin, near its lower extremity. Rami of the last pair of caudal stylets shorter than those of the second pair, and telson rather elongated and slit in two down the middle. Length about one-third of an inch. It resembles an English species of which a figure has been privately circulated by C. Spence Bate, Esq., under the name of *Lysianassa Chausica*, M.-Edw. Dredged in deep water by Lieut. White."

The *Lysianassa chausica* here referred to was afterwards identified by Spence Bate with *Lysianassa longicornis*, Lucas, as to which see Note on G. O. Sars, 1882.

*Gammarus subtener* has the "first, second and third joints of the abdomen armed above with a sharp central spine on the posterior margin, and with four or five minute spines, or sharp comb-like teeth on each side of the middle spine, the margin bearing these latter spines being a little concave. At the corresponding part of the fourth and fifth abdominal segments, there are also two or three spines similar to the central spine of the other segments though not quite so large." Stimpson thinks it no doubt closely allied to *Gammarus longicauda*, Brandt, a species which Spence Bate renames *Megamæra longicauda*, and inclines to identify with *Gammarus dentatus*, Krøyer. *Amphithonotus septemdentatus* is "strongly compressed and carinated, like *A. carinata*." *Amphithonotus occidentalis* is "closely allied to the Arctic *A. panopla*, Kr., and the east coast species, *A. cataphractus*, Stm., but differing from both in being more elongated, having less height and breadth." The generic name *Amphithonotus*, as already observed, is inadmissible, having lapsed as a synonym of *Dexamine* before it was adopted by Stimpson. Of the species which Stimpson here mentions for the sake of comparison, *Amphithoë carinata*, Krøyer, is now called *Atylus carinatus*, Fabr.; *Amphithoë panopla*, Krøyer, is called *Pleustes panoplus*, and *Amphithonotus cataphractus*, Stimpson, is called *Rhachotropis cataphracta*. In *Ampelisca pugetica* "the last three joints of the abdomen are separated from the preceding ones by a deep notch, and project into two sharp teeth."

1864. ZADDACH, ERNST GUSTAV, born 1817, died 1881.

Ein Amphipode im Bernstein, entdeckt durch Herrn Pfarrer von Duisburg und beschrieben von G. Zaddach. Taf. 1. 12 pages. Schriften der königlichen physikalisch-ökonomischen Gesellschaft. 5. Jahrg. Königsberg. 1864.

To the existing fauna of the neighbourhood in which this fossil was found Zaddach ascribes seven species of Amphipods, viz., the fresh-water "*Gammarus fluviatilis*, Raj.," four species which he dredged in the Bay of Dantzig, at some distance from the coast, and only two, he says, which live near the coast, *Gammarus locusta*, Mont., and *Talitrus saltator*, Klein. Of these he says that they frequently let themselves be thrown by the waves on to the strand, where, by help of their styliform uropods, they make powerful leaps, or with great dexterity bury themselves in the wet sand in order to be washed back into the water by the next wave, or gather round the remains of a dead fish for a meal, but never go beyond the narrow selvage of shore which is regularly washed to a greater or smaller extent by the waves. In these remarks Zaddach can scarcely be accurate. The sand-hopper, *Talitrus (saltator) locusta*, lives at the edge of high water-mark, and may follow down the ebb and retreat before the flow of the tide, but does not surely play with the waves in the manner described. The dexterous delving in the sand seems also more appropriate to species of *Urothoë*, *Lepidactylis* and *Eurydice* than to the slithering *Gammarus locusta*.