

varieties are thus mentioned. "Var. *a. corallinus*. Var. *b. violaceus*." In Order 4, Lemnodi, are given *Caprella phasma*, *Caprella linearis*, *Caprella acutifrons*. *Auceus forficularius* and *Praniza coeruleata* are now placed in the 5th Order, Isopodi.

To judge by the figure Costa's *Gammarus fasciatus* must belong to the *Mæra* and *Melita* group. It is not mentioned in the Brit. Mus. Catalogue, and is quite distinct from the earlier *Gammarus fasciatus*, Say, which is there described and figured. The three last segments



Fig. 23.

of the peræon and the three first of the pleon are dorsally produced backwards into small teeth, the fourth and fifth of the pleon into large ones. The side-plates of the peræon are represented as low and all nearly alike. The lower hinder angle in the first three segments of the pleon is produced sharply backwards. The upper antennæ have a long peduncle, the first joint long, the second still longer, the third not

very short. No secondary appendage is shown. The second gnathopod has a large hand, with bidentate palm. The fourth peræopod is rather longer than the fifth. The first joints are but slightly dilated. The branches of the third uropods extend far beyond those of the second and third. In spite of some differences it seems tolerably clear that this is the *Ceradocus orchestipes* of Achille Costa, said by him to have been "found by Prof. O. G. Costa in the Gulf of Tarentum," though he gives no reference to *Gammarus fasciatus*. Since the name *Gammarus fasciatus* lapses as pre-occupied by Say, and since *Ceradocus* is recognised by Heller as identical with *Mæra*, O. G. Costa's species will become a synonym of *Mæra orchestipes*, A. Costa.

1844. DE KAY, JAMES E.

Zoology of New-York, or the New-York Fauna ; comprising detailed descriptions of all the animals hitherto observed within the state of New-York, with brief notices of those occasionally found near its borders, and accompanied by appropriate illustrations. Part VI. Crustacea. Albany, 1844.

The Crustacea belonging to "Order III. Amphipoda," and "Order IV. Lœmipoda," are described on pages 35 to 41. In the preliminary list of works consulted, no mention is made of Rafinesque, on whose lucubrations, had he seen them, this author might have thrown much light. De Kay includes in his definition of the Amphipoda the old statement not universally applicable, that the mandibles are furnished with a palpus. Of the species which he figures his descriptions are probably independent, though only one of the species is new. For *Orchestia longicornis*, Say, "Pl. IX. fig. 28 & 28A. Female," he says :—"Eyes oval. Lower antennæ longer than the body ; the third joint, under the lens, armed with series of short spines, the fourth joint, with about thirty articulations, minutely spinous beneath. Second pair of feet with the hands dilated, oval, smooth, with two obtuse spines on the anterior margin ; one at the lower angle, and the other more elevated in the middle ; the thumb much curved, acute at its tip, which rests on the interval between the two tubercles (see fig. 28, A.). The two posterior pairs of feet longest. Upper pair of antennæ short, not extending beyond the second joint of the lower pair. Length, 0.5-1.0. These small crustaceans are well-known under the name of *Sand-flea* or *Beach-flea*, occurring along the shores of Long island, digging holes in the sand in which they conceal themselves, and living upon dead animal substances. They furnish an abundant supply of food to the numerous birds along that coast."