length of the upper antennæ and by the presence of two terminal hooks on the telson; "Amphithoë Brusina;" Podocerus monodon, identified by Boeck with Podocerus falcatus, Montagu; Heller himself distinguishes it from Podocerus variegatus, "especially by the presence of a simple hook on the outer branch of the third uropods," (compare Amphithoides, Kossmann, 1880); Podocerus largimanus, with forty joints to the flagellum of the upper antennæ, yet given by Boeck as a synonym of Podocerus anguipes, Krøyer, which has that flagellum of six to eight joints; Podocerus longicornis, said by Heller to approach Amphithoë crassicornis, Costa, and by J. V. Carus, 1885 (probably on Nebeski's authority) entered together with the preceding species in the genus Amphithoë, without special notice of the secondary flagellum in each of these species; "Microdeutopus Titii," Cyrtophium lave, probably the same as Cyrtophium darwinii, Sp. Bate, Dr. Heller having apparently taken the account of the transverse ridge to mean a longitudinal carina; Cratippus crassimanus, without much doubt to be united with Cratippus tenuipes, Sp. Bate, and Exunguia stilipes, Norman, under the common name Colomastix pusilla, Grube; Caprella obtusa, which Boeck identifies with Caprella septentrionalis, Krøyer, and Mayer with Caprella acutifrons, Latreille, & juv.; Caprella monacantha, which again according to Boeck is Caprella esmarkii, Boeck, but according to Mayer, Caprella aguilibra, Say, & juv.;  $Caprella\ aspera = Caprella\ acanthifera$ , Leach;  $Caprella\ leptonyx = Caprella\ acanthifera$ juv.; and Caprella armata, according to Mayer another synonym of Caprella acanthifera, Leach.

Costa's Lysianassa filicornis is said to be a synonym of Lysianassa longicornis, Lucas; Lysianassa humilis, Costa, possibly of Lysianassa costa, Milne-Edwards, and Lysianassa ciliata, Grube, of Lysianassa audouiniana, Sp. Bate. Bocck regards Grube's ciliata and possibly Costa's humilis as belonging to his genus Aristias, of which he makes Anonyx tumidus, Krøyer, the type, with Lysianassa audouiniana, Sp. Bate, (wrongly given) as a synonym. Amphithonotus spiniventris, Costa, is renamed Dexamine spiniventris, Amphithonotus, Costa, being synonymous with Leach's genus Dexamine. Under the name of "Atylus Costa" are united Costa's two species Nototropis spinulicauda and Nototropis guttatus, though surely guttatus, in right of priority, should have been retained. The close agreement between Leucothoë articulosa, Leach, and Leucothoë denticulata, Costa, is pointed Both these species are united by Boeck under the older name Leucothoë spinicarpa. Abildgaard. Three species described by Costa under the names Gammarus punctimanus. Gammarus obtusunguis, Amphithoë semicarinata, are all referred, the two former as males, the last as female, to Gammarella brevicaudata, Sp. Bate. Ceradocus orchestiipes, Costa, which Sp. Bate transferred to Melita, here becomes Mæra orchestiipes. It is in all probability the Gammarus fasciatus of O. G. Costa. Attention is called to points of agreement between Mara grossimana, Leach, Mara scissimana, Costa, and Mara integrimana, Heller's own species. Megamæra brevicaudata, Sp. Bate, is transferred to the genus A species supposed to be Eurystheus erythrophthalmus, Sp. Bate, but with cleft telson, receives the name Mæra erythrophthalma. Since, however, Spence Bate's species is the same as Gammaropsis erythrophthalmus, Liljeborg, Heller's species, with the cleft telson, must not be confounded with it. The similarity of Amphithoë penicillata. Costa, to Amphithoë albomaculata, Kröyer, is noticed. It is pretty certainly the same as Amphithoë vaillantii, Lucas, 1849, if it may not be carried still further back to Amphithoë rubricata, Montagu. Erichthonius bidens, Costa, is said to be identical with Cerapus abditus, Templeton. Corophium crassicorne, Bruzelius, is identified with the earlier named Corophium acherusicum, Costa, an identification which Boeck accepts with a? Caprella tabida, Lucas, is made a synonym of Caprella acutifrons, Latreille.

A table is added of all the Amphipods found in the Adriatic up to the date of this work.

Valuable descriptions and figures are given of several of the previously known species, as well as of the species discovered by Heller himself.