

of side-plates (epimera) only carries a little further the reduction observed in some Amphipoda, especially *Gammarina gressoria*. Where the action of the pleon keeps up a fresh supply of water to the branchiæ, Krøyer thinks that the side-plates covering the branchiæ may attain their fullest development without interfering with respiration, but that in the Læmodipoda, there being no pleon to fulfil this office, the branchiæ have to be left free. The absence of a pleon he connects with their mode of life, which leads them to cling and climb, and only very rarely to swim. Important as this mark of difference is, Krøyer urges that its weight is much diminished by the discovery of two new genera of Læmodipoda, in one of which the pleon, though small, has five segments, in the other only two, but in both is furnished with two pairs of jointed limbs. Thus, he considers, a transition is established to those Amphipoda, such as *Corophium*, in which the pleon is less strongly developed. He mentions that the genus *Cerapodina* wants feet on some of the segments of the peræon in common with the Læmodipoda, but that argument only rests on the faulty description of *Cerapodina*. He considers that the Læmodipoda, as a family or division of the Amphipoda, come nearest the *Gammarina gressoria*, referring to the pediform antennæ among other marks of resemblance. He characterizes the family as follows:—"Pleon rudimentary or only little developed. No Epimera. The first of the seven peræon-segments united with the head along an oblique line, its pair of feet projecting under the maxillipeds. Feet generally wanting on the third and fourth peræon-segments. All the feet are in general claspers, that is to say, furnished with hand and movable finger. Only two or three pairs of branchial vesicles (on the second and third [3rd and 4th], or on the second, third and fourth peræon-segments). Antennæ more or less pediform, the upper always larger and stronger than the lower. Eyes very small, circular." Of the family he makes two subdivisions:—" *Caprellina*. Form generally very elongate, thin, cylindrical. Branchial-plates bladder-like. The lower antennæ of moderate size, and the feet of moderate strength. Often a palp on the mandibles. " *Cyamea*. Form generally very flat and broad. Branchial-plates very large, sword- or sabre-shaped, sometimes bipartite, in the males furnished with special appendages at the base. The lower antennæ rudimentary. Feet extraordinarily developed. Mandibles without palp."

The general form, he says, has ceased to be a striking distinction between the two subdivisions, since the discovery of a thin *Cyamus* in *Cyamus gracilis*, and a stout *Caprella* in *Caprella dilatata*. To the *Caprellina* he assigns four genera, 1. *Leptomera*, Latr., 2. *Cercops*, Kr., 3. *Ægina*, Kr., 4. *Caprella*, Lam. All these he defines; the two new ones as follows:—" *Cercops*. "Quinqve pedum paria, omnia manu armata subcheliformi. Mandibula palpo instructa triarticulato. Flagellum antennarum inferiorum biarticulatum, articulo ultimo primum ferme longitudine æquante. Tria vesicularum branchialium paria (annuli thoracici secundi, tertii & quarti). Abdomen distinctum, qvinquearticulatum, appendicibus quatuor elongatis, biarticulatis." *Ægina*. "Quinqve pedum paria, omnia manu armata subcheliformi. Mandibula palpo instructa triarticulato. Flagellum antennarum inferiorum biarticulatum, articulo ultimo fere rudimentari. Duo vesicularum branchialium paria (annuli thoracici tertii et quarti). Abdomen minutissimum, sed sat distinctum, biarticulatum, appendicibus quatuor elongatis, duabus anterioribus biarticulatis, posterioribus uniarticulatis."

Latreille's *Naupredia* (*Naupridia* in Milne-Edwards) is dismissed by Krøyer as founded on a misconception, and the identity of *Proto*, Leach, with *Leptomera*, Latreille, being pointed out, the claim of *Proto* to priority is vindicated. Why Krøyer himself does not adopt it is not explained.

"*Caprella Januarii* Kr. (Tab. VI. fig. 14-20)" from Rio-Janeiro, is described with much detail. This species is identified by Spence Bate with the earlier *Caprella æquilibra*, Say. Mayer agrees with Spence Bate, and points out that Krøyer, usually so exact, does