

1852. DANA, JAMES DWIGHT.

*On the Classification of the Crustacea Choristopoda or Tetradecapoda.* The American Journal of Science and Arts. Second Series. Vol. XIV. November, 1852. New Haven. Number XLI. Appendix. pp. 297-316.

"The term Choristopoda, applied to the Tetradecapoda, alludes to the subdivision of the thorax into segments, each devoted to a separate pair of legs; this is a prominent peculiarity of the species, distinguishing them from all the Podophthalmia, and with rare exceptions from the Entomostraca."

"The Amphipoda are uniformly characterized by having—

"1. The three posterior pairs of thoracic legs thrown backward and more or less obliquely forward, and constituting one series, while the four anterior pairs are thrown forward and outward, in another series; this arrangement may be represented by the figures 4:3, (or 2 + 2:3, as the four pairs of the first series are often in two sets of two pairs each).

"2. The branchial appendages thoracic.

"3. The abdominal members in two sets, the three anterior pairs subnatatory, the three posterior styliform—an arrangement represented by the figures 3:3."

From these he distinguishes the Isopoda, and places *Arcturus*, *Tanais*, &c., in an intermediate group or tribe called Anisopoda.

"The Amphipoda contain two prominent divisions, distinguished by the organs of the mouth, the eyes and general habit, the Gammarus and Hyperia sections, as laid down by Edwards. The addition of the Læmipoda to the Amphipoda introduces a third division. The sections are hence:—

"Subtribus I. CAPRELLIDEA.—Maxillipedes elongati, palpiformes. Caput oculique mediocres. Abdomen obsolescens.

"Subtribus II. GAMMARIDEA.—Maxillipedes elongati, palpiformes. Caput oculique mediocres. Abdomen appendicibus sex natatoriis sexque styliformibus instructum.

"Subtribus III. HYPERIDEA.—Maxillipedes abbreviati, lamellati, operculiformes. Caput grande, oculorum corneis plerumque tectum. Appendices abdominales ac in Gammarideis, latius lamellatæ.

"The Caprellidea have the habit of certain of the Anisopoda, and their short abdomen calls to mind the Isopoda. They therefore properly stand first among the Amphipoda."

The first subtribe, Caprellidea, contains:—Fam. 1. Caprellidæ, with the genera, 1. *Proto*, Leach; 2. *Protella*, Dana. "Mandibulæ palpigeræ. Branchiæ segmentis 3tio 4toque affixæ. Pedes 3tii 4tique obsoleti articulo 1mo styliformi excepto.;" 3. *Caprella*, Lamk.; 4. *Ægina*, Krøyer; 5. *Cercops*, Krøyer; 6. *Podalirius*, Krøyer. Fam. 2. Cyamidæ, with one genus *Cyamus*.

On subtribe II. Gammaridea, he remarks:—" [Among the Gammaridea, the author finds that the posterior caudal stylets offer important characters for distinguishing natural groups or genera, and upon this ground, some new genera have been recognized among the Corophidæ and Gammaridæ, and others that have been rejected are sustained. Thus *Iphimedia* is distinct from *Amphithoe*, *Mæra* and *Dercythoe* from *Gammarus*, etc.] " He then gives Fam. 1. Dulichidæ. G. 1. *Dulichia*, Krøyer. Fam. II. Cheluridæ. G. 1. *Chelura*, Philippi. Fam. III. Corophidæ. Subfam. 1. Clydoninæ.—"Styli caudales sex simplices, subulati." *Clydonia*, Dana, Amer. J. Sci. [2], viii, 140.

"Subfam. 2. Corophinæ. Antennæ plus minusve pediformes. Styli caudales 1mi 2dique biramei. A. Digitus nullus 2-articulatus. 1. *Styli caudales 3tii minuti, simplices, 2di 1mque ramo externo cultriformi.*" G. 1. *Corophium*, Latr.; G. 2. *Siphonocetes*, Krøyer. "2. *Styli caudales 3tii minuti, v. c. exserti, simplices, 2di 1mque ramis extus non præcipue*