

"2. The abdominal members in two sets, the three anterior pairs subnatatory, the three posterior styliform."

Of the intermediate Anisopoda, he says, "They have—

"1. Like *Amphipoda*, the three posterior pairs of thoracic legs in one series, and the four anterior in a different series.

"2. Like *Isopoda*, the three posterior pairs of abdominal members are not styliform, only the last having this character."

In discussing the question whether the Amphipoda or Isopoda should rank the higher, he remarks, in favour of the Amphipoda, the position of the branchiæ on the thorax, as thoracic branchiæ characterize all the higher Crustacea. On the other hand, he considers that they show inferiority, by the elongated abdomen, with natatory appendages below, and by the usually long antennæ, both these being Macroural characters. Further, the anterior set of legs includes four pairs, an evidence, he considers, of less concentration of force in the cephalic ganglia; they have a less compact body, are less apt to take to a habitat on dry land, and above all, have often the two "dorsal cords" distinct between the ganglia, while in the Isopods there is but a single cord. This double cord is seen in none of the higher Crustacea.

In Tribe III. the Amphipoda (p. 805), he recognizes two types of structure, one, the Hyperidea, with small, operculiform maxillipeds, large faceted eyes covering most of the large head, the extremity of the abdomen broad and depressed, the natatory abdominal appendages usually oval, lamellar; "in the other type, the outer maxillipeds are elongated and palpiform, the eyes are small, the head of moderate size, the abdomen, when not obsolete, narrow, and the natatory abdominal appendages usually slender. This second type comprises two groups. In one section, the Caprellidea, the abdomen is obsolescent. In the other, the Gammaridea, the abdomen is fully developed, with three pairs of natatory appendages, and as many of stylets." This section embraces the typical Amphipods, the Gammari, Talitri, and the like. His three subtribes, Caprellidea, Gammaridea, and Hyperidea, he divides and subdivides into families and subfamilies, which are defined as follows:—

Subtribe I. Caprellidea. Family I. Caprellidæ.—Corpus anguste elongatum, fere filiforme. Antennæ 2dæ longitudine mediocres. [Species non parasiticæ.]

Fam. II. Cyamidæ.—Corpus late depressum. Antennæ 2dæ rudimentariæ. [Species parasiticæ].

Subtribe II. Gammaridea. Fam. I. Dulichidæ.—Habitu Caprelloidæ. Corpus lineare, epimeris obsoletis. Pedes 6 postici longi, subprehensiles. Abdomen 5-articulatum.

Fam. II. Cheluridæ.—Corpus fere cylindricum, epimeris mediocribus. Abdomen abnormale, segmentis 4to 5toque coalitis et oblongis, stylis inter se valde dissimilibus.

Fam. III. Corophidæ.—Gressoriæ, pedibus partim lateraliter porrectis. Corpus plus minusve depressum, sive latum sive lineare, epimeris perbrevis, interdum obsoletis. Abdomen formâ appendicibusque normale. Antennæ sæpe pediformes.

Fam. IV. Orchestidæ.—Saltatoriæ, pedibus nullis lateraliter porrectis. Corpus compressum, epimeris magnis. Abdomen appendicibus normale. Antennæ non bene pediformes. Styli caudales 1mi 2dique biramei; 3tii simplices, brevissimi et ultra 2dos non prolongati. Mandibulæ non palpigeræ. Maxillæ 1mæ palpo sive parvulo et 1-articulato sive obsoleto instructæ.

Fam. V. Gammaridæ.—Saltatoriæ vel natatoriæ, pedibus nullis lateraliter porrectis. Corpus sæpius compressum, raro subdepressum, epimeris sive magnis sive parvis. Styli caudales laxiores, duobus altimis oblongis sæpiusque ultra 2dos prolongatis, raro simplicibus. Mandibulæ sæpissime palpigeræ. Maxillæ 1mæ palpo 2-3-articulato (rarissime 1-articulato) instructæ.

Subtribe III. Hyperidea. Fam. I. Hyperidæ.—Antennæ 2dæ exsertæ. Abdomen in ventrem se non flectens. Pedes 5ti 6tique 7mique formâ longitudineque mediocres, 5tis 6tisque non percrassis nec prehensilibus.