

single specimen, in "length, 57 mm., was taken off the west coast of Australia;" "through the long and coarsely denticulated legs this species," Bovallius says, "is easily distinguished from the others." Detailed descriptions are given of all the four species.

Of the species described by J. C. Fabricius in 1775, under the name *Oniscus spinosus*, mention is not made.

1886. BOVALLIUS, CARL.

Amphipoda Synopidea. With 3 Plates. (Presented to the Royal Society of Sciences of Upsala the 10th May 1886.) Upsala, 1886.

Bovallius here divides the Amphipoda into five tribes, distinguished as I. Tanaidea; II. Gammaridea; III. Synopidea; IV. Hyperidea; V. Caprellidea. In the diagnosis the distinction between the Amphipoda Gammaridea, and the Amphipoda Synopidea, is made to depend upon the eyes and the maxillipeds; in the former the eyes are described as "oculi mediocres, sessiles," in the latter as "oculi grandes, maximam partem capituli occupantes, sessiles;" but when we compare the size of the eyes in such a species as that which has been named *Calliopius grandoculis*, with the size of the eyes in the various species assigned to *Synopia*, this distinction seems untenable; the maxillipeds of the Gammaridea are said to be "non coaliti, palpus quattuor-articulatum gerentes," while those of the Synopidea are described as "plus minusve coaliti, palpus quattuor-articulatum gerentes," but surely in both tribes the maxillipeds are coalesced at the base, and in the Gammaridea the fourth joint of the palp is occasionally wanting, as in *Normania*, Boeck, and occasionally both the third and fourth joints are absent, as in *Lafystius*, Krøyer. The further character assigned to the Gammaridea, "urus mediocre, triarticulatum," is not universally applicable, since in the family Dulichidae, Dana, the uropod-bearing portion (urus) of the pleon has only two joints; and lastly, the character "telson sæpissime fissum," seems out of place when in so many genera the telson is not cleft.

His tribe Synopidea Bovallius divides into three families; 1. Synopidae; 2. Trischizostomatidae; 3. Hyperopsidae. He admits that the Synopidae "resemble the true Gammarids in more points than those of the two following families do." In the diagnosis of this family, he says that "the eyes occupy the upper median part of the head, and are distinctly faceted." To the genus *Synopia*, Dana, he assigns six species, of which he gives descriptions, and, of all but the last, figures; all the species, he says, "are closely allied and seem rather to deserve the name of varieties than of species," but, "as their differences seem to be constant," he keeps them distinct under the following names; 1. *Synopia ultramarina*, Dana; 2. *Synopia caraibica*, n. s.; 3. *Synopia angustifrons*, Dana; 4. *Synopia Scheeleana*, n. s.; 5. *Synopia gracilis*, Dana; 6. *Synopia orientalis*, Kossmann. Of these *Synopia scheeleana* had long ago been figured for this Report, having been taken by the Challenger at the surface in the Pacific and elsewhere. One or two minute differences between the description by Bovallius and my own are noticed in the account of the species.

To the family Trischizostomatidae, Sars, the genus *Trischizostoma*, Boeck, is assigned without companions, and with the single species *Trischizostoma raschii*, Boeck. New descriptions and figures are given of the adult female and young male. For my opinion on the proper name for this genus, see Note on A. Costa, 1853.

The third family Hyperopsidae has the single genus *Hyperopsis*, Sars, and the one species "*Hyperopsis Voerinoi*," Sars, the figures and details being borrowed from G. O. Sars' recent work on the Crustacea of the Norwegian North Atlantic Expedition 1876-1878.