

1885. MURDOCH, J.

Seven new species of *Crustacea* and one Worm from Arctic Alaska. Proceedings of the United States National Museum. VII. Washington. pp. 518-522.

*Acanthozone polyacantha*, n. s., *Melita formosa*, n. s., *Melita leonis*, n. s. (G. H. Fowler, in Zool. Record for 1885.)

1885. PACKARD, A. S.

On the structure of the brain of the Sessile-eyed Crustacea. Read at Washington, April 14, 1884. Memoirs of the National Academy of Sciences. Vol. III. Part 1. 1884. Washington, 1885. pp. 97-110. 5 Plates.

The investigation appears to refer almost exclusively to Isopods, but in the section headed "Morphology of the Brain," Packard says, "the brain of the Isopods and Amphipods is a *syncerebrum*, though far less complicated than in the Decapoda. It will be remembered that Professor Lankester, in his memoir on *Apus*, designates the simple brain of that crustacean as an *archicerebrum*, while the composite brain of 'all crustacea, excepting *Apus*, and possibly some other Phyllopod,' he denominates a *syncerebrum*." "As seen in Fig. 1, the brain or supracæsophageal ganglion is a composite mass or group of four pairs of ganglia, *i.e.* (1) the brain proper or procerebral lobes, (2) the optic ganglia, (3) the first antennal, and (4) the second antennal lobes. These lobes are quite separate from each other in the Isopoda and Amphipoda as compared with the Decapoda."

On "the histological elements of the ganglia," he remarks that "there are in the Asellidæ, as in insects and Decapods, three kinds of elements in the brain and other ganglia, *viz.*: (1) ganglion cells; (2) nerve fibers; and (3) Leydig's *punksubstanz* (mark-substanz of Leydig and Rabl-Rückhard, and especially Dietl), which might be called the *myeloid* tissue or substance." "This is the central finely granular part of the brain, in which granules have short irregular fibers passing through them."

Pages 10 to 13 contain a "Bibliography of works on the nervous system of Crustacea."

1885. SARS, G. O.

Den norske Nordhavs-Expedition 1876-1878. The Norwegian North-Atlantic Expedition 1876-1878. Zoology. Crustacea. I. By G. O. Sars. With 21 Plates and 1 Map. Christiania, 1805.

Not only is the title-page of this fine work given in English as well as in Norwegian, but the two languages are employed throughout in parallel columns. The description of the Amphipoda extends from page 139 to page 233, with supplementary notes on page 270. They are figured on Plates 12 to 18, and Plate 20, Fig. 21, in this author's usual masterly manner. He reminds his readers on page 1 that the new forms to be discussed in the present work have already been briefly characterised in earlier papers, the *Prodromus descriptionis* of 1876, and the *Crustacea et Pycnogonida* of 1879. Hence, of the species here called new all belong in fact to one or other of those dates, with the exception of the very remarkable "*Hyperioopsis Vøringii*."

In Tribus I. Gammarina, the genera and species are distributed and numbered as follows:—  
Fam. 1. Lysianassidæ. Gen. 1. *Socarnes*, Boeck, 1870, with the note, "I retain for the