

zung des Kopfes mit den folgenden Segmenten, und wäre es auch nur das vorderste des Bruststückes, der sogenannten Prothorax, zur Regel geworden." He divides the Crustacea into seven orders, the Amphipoda standing sixth, between the Isopoda and Decapoda. At page 89 he defines the Amphipoda (Flohkrebs), as "Getrennt-schechtliche Kriebsthiere mit entwickeltem Bruststücke, von den Seiten her zusammengedrücktem Leibe, und kiemenlosen Postabdominal-Gliedmassen." The illustrations are taken from "*Amphithoë Jurinii*," M.-Edw.; *Gammarus neglectus*, Lillj.; *Gammarus locusta*, Montagu; *Caprella linearis*, L.; and *Phronima sedentaria*, Forsk. Fig. 10-14, "*Gammarus neglectus*, Lillj. Partie eines sehr vergrößerten Embryos," exhibits the heart with six "seitliche Spaltöffnungen." Of the eyes it is said, "Die zusammengesetzten, sitzenden Augen werden von der zu einer Hornhaut umgewandelten, ganz glatten, niemals facettirten Körperdecke überzogen."

1878- KIRK, T. W., born 1856 (Chilton).
1879.

Additions to the Crustacean Fauna of New Zealand. The Annals and Magazine of Natural History. Vol. II. Fifth Series. London, 1878. pp. 465-466.

On Additions to the Carcinological Fauna of New Zealand. [Read before the Wellington Philosophical Society, 31st August, 1878.] Transactions of the New Zealand Institute. Vol. XI. pp. 392-397. 1879.

"*Caprella novæ-zealandiæ*, sp. nov.," is described. It is said to approach "*C. geometrica*, Say, from which it differs, however, in the form of the spine on the cephalon, in the length of the antennæ, and in the articulation and arming of the second pair of gnathopoda." Mayer considers that this, together with *Caprella caudata*, G. M. Thomson, is probably a local variety of *Caprella æquilibra*, Say. A second species is described as "*Caprella lobata*, Guérin."

In Notes on Some New Zealand Crustaceans, [Read before the Wellington Philosophical Society, 11th January, 1879]. Trans. N. Z. Inst. Vol. xi. pp. 401-402, Mr. Kirk mentions the capture of *Podocerus cylindricus*, Say, and *Pleustes panoplus*, Kröyer, at Worsler Bay. He says, "these are both Arctic species, and their occurrence on our coast is somewhat remarkable." It has since been suggested that the *Pleustes* is a variety.

1878. LEYDIG, FRANZ.

Ueber Amphipoden und Isopoden. Anatomische und zoologische Bemerkungen. Zeitschrift für wissenschaftliche Zoologie. XXX. Bd. Suppl. pp. 225-274. Mit Tafel IX-XII. Leipzig, 1878.

On the antennæ of the Amphipoda, Leydig distinguishes:—

1. Gewöhnliche Borsten. These ordinary bristles, for most of their length dark-rimmed, but with bluntish ends of finer, clearer structure, and often a fine hair given off some way short of the termination, are found on other parts of the body as well as the antennæ.
2. Fiederborsten. These plumose bristles, spoken of by Humbert as "capsules sensitives," may, Leydig says, be sensitive, but they are not capsules, they are modified pores (Hautcanäle). For the explanation of the like in other Crustacea and in insects, he refers to his own work Ueber Geruchs- und Gehörorgane der Krebse und Insecten., Archiv f. Anat. u. Physiol., 1860. Between this and the preceding class he places a sort of Halbfiederborsten, such as are found on the rim of the head and the back of *Gammarus puteanus*.
3. Cylinder oder Keulen. In these cylinders or clubs, the end swelling into a sort of knob