

species and in number of individuals; most types of fresh-water animals have their representatives there (mit Ausnahme der Najaden und der Spongien). In this region in the Lake of Geneva he found, among others, "*Niphargus puteanus*, var. *Forelii*, Al. Humbert." References are given to Professor Forel's earlier writings on lake-fauna.

1878. GAMROTH, ALOIS.

Beitrag zur Kenntniss der Naturgeschichte der Caprellen. Mit Tafel VIII-X. Zeitschrift für wissenschaftliche Zoologie. Einunddreissigster Band. Leipzig, 1878. pp. 101-126.

The investigations were made on "*Caprella æquilibra* Sp. B. (?)." Its food Gamroth considers to be the larvæ of Bryozoa and perhaps the adult Bryozoa likewise. The work is one of importance, discussing the whole organisation of the creature in question, but it has been to some extent superseded by the later labours of Paul Mayer and Delage. Mayer points out that Gamroth erroneously attributes only one joint, instead of two, to the flagellum of the lower antennæ in *Caprella æquilibra*; that he figures on the first maxilla an inner basal plate (Kaulade) with setæ, as found in the normal Amphipoda, but not present in any of the Caprellidæ with which Mayer is acquainted; and that he leaves unnoticed the want of symmetry in the mandibles, and makes no mention of the Paragnath (lower lip). He calls the hairs on the lower antennæ "Strudelorgane," a term which Mayer considers appropriate, as well as Haller's "Ruderhaare," and "Fangorgane" which would suit Gosse's description. The "Frontal organ" or "Nackenorgan," which Gamroth discovered, one on either side the median line of the body, in front of the brain, and above the origin of the upper antennæ, is considered by Mayer to be a gland rather than, as Gamroth suggested, an organ of sense. His mistake in supposing that the colouring matter was in the epidermis instead of under it, is explained by Mayer by the fact that the Chromatophores do push excrescences in between the cells of the epidermis, giving an appearance as if the epidermis were itself pigmented.

1878. GEGENBAUR, CARL.

Grundriss der vergleichenden Anatomie. 2te Aufl. 1878.

Elements of Comparative Anatomy. By Carl Gegenbaur, Professor of Anatomy and Director of the Anatomical Institute at Heidelberg. Translated by F. Jeffrey Bell, B.A., Magdalen College, Oxford. The translation revised and a preface written by E. Ray Lankester, M.A., F.R.S., etc. London, 1878.

The Arthropoda occupy the fifth section, pages 228-305. The Crustacea are divided into a) Entomostraca, b) Malacostraca. The latter are divided into 1. Thoracostraca (Podophthalma), and 2. Arthrostraca (Hedriophthalma). The latter are exhibited as follows:—

"Amphipoda. *Gammarus*, *Orchestia*, *Hyperia*, *Phronyima*.

"Læmodipoda. *Caprella*, *Cyamus*.

"Isopoda. *Bopyrus*, *Cymothoa*, *Sphæroma*, *Oniscus*, *Asellus*, *Idothea*."

In the preface, pages xiii-xv, there are some important remarks on "Nomenclature of the Parts of the Digestive Tract." Mr. Lankester proposes "to distinguish the primitive digestive space which develops from the endoderm (in fact the gastrula stomach) as the 'enteron.' The anterior passage leading into this from the mouth, and formed by an ingrowth of