

## 1880. ULIANIN, B.

Untersuchungen über Blastoderm- und Keimblätterbildung bei *Orchestia Montagu* und *Mediterranea*. Zoologischer Anzeiger. III. pp. 163–165. 1880. (Verhandl. d. zool. sect. d. VI. Versamml. russisch. Naturf. u. Aerzte.)

The results of the investigation are here given in summary. There is a notice of this paper by P. Mayer in Zoolog. Jahresber. (1880), II. Abt., pp. 53, 54. 1880. An account of the investigation was published in extenso in 1881. See Note on Ulianin under that date.

## 1880? WEBER, MAX.

Über den Bau und die Thätigkeit der sogenannten Leber der Crustaceen. Archiv für mikroskopische Anatomie. XVII. Bonn, 1880? pp. 385–457. Pls. XXXVI–XXXVIII.

“M. Weber has examined histologically and chemically, and described the so-called liver of terrestrial, freshwater, subterranean, littoral, and truly marine species of different orders, viz.:—several *Oniscidæ*, including the blind *Typhloniscus steini*, *Asellus aquaticus*, and the subterranean *A. cavaticus*, *Gammarus pulex*, *fluviatilis*, *puteanus*, *marinus*, and *locusta*, *Talitrus* and *Orchestia*, and *Astacus fluviatilis*. He comes to the conclusion that in the *Decapoda*, *Amphipoda*, and *Isopoda*, this gland is tubular and contains at least two sorts of cells, one of which secretes a fluid acting as a ferment (enzyme) on albuminous substances, and the other a pigment allied with a fatty substance and cholestearin, serving for the emulsion for fat. He calls the first ferment-cells, the second liver-cells, and the whole organ ‘hepato-pancreas,’ as it combines the function of the liver and that of the true digestive glands of the Vertebrates. During the embryonal stage the liver is developed and active in the *Crustacea*, as in the *Vertebrata*, which proves that its function is not only digestion, but also excretion. In some Amphipods and Decapods, there is a third sort of cells, probably reserve-cells, which are destined to supply, if necessary, the others.” (Dr. von Martens, Zool. Record for 1880. He says there is an abstract also in the Journal of the Royal Microscopical Society, iii. p. 424.)

## 1881. BUCKLEY, ARABELLA B.

Life and her Children. Fifth Thousand. London. 1881.

In a popular account of the Crustacea, pp. 153–177, the expression “insects of the sea” for these animals is approved and adopted. The figure, 57. C, to which the name *Caprella* is assigned, really represents *Proto ventricosa*, O. F. Müller.

## 1881. DELAGE, YVES.

Contribution à l'étude de l'appareil circulatoire des Crustacés édriophthalmes marins. Paris, 1881. pp. 173. 12 Plates. From Arch. de Zool. Exp. et Gen. Vol. IX. 1881.

This admirably lucid essay discusses the subject successively in regard to the Isopoda, Amphipoda, Læmodipoda, and Tanaidæ. An account is given of the ingenious methods of