

Bate with his own *Amphithoë littorina*; both are by Boeck made synonyms of Rathke's *Amphithoë podoceroïdes*. All three should in my opinion fall into the synonymy of *Amphithoë rubricata*, Montagu. The description of *Gammarus dubius* is quoted by Bate and Westwood, vol. i. pp. 397-398. It seems likely to remain in the doubt in which both they and the author of the species left it. The description of the antennæ points to some species of *Calliopius* or *Amphithopsis*, but the two "papillæ," which seem to be meant for the telson, would be inconsistent with these genera. *Gammarus nolens* is likewise left among the doubtful species by Bate and Westwood, vol. ii. p. 19. It had been, without sufficient reason, re-named by White *Typhis nolens* and subsequently *Anonyx (?) nolens*. It is as likely to be the *Hyale nilssonii* of Rathke as any other species that I am acquainted with, but the description is not sufficiently definite to entitle it to displace Rathke's specific name.

1827. MEYER.

Supplemente zur Lehre vom Kreislaufe. 1 Heft, Mit 1 ill. Kupfert. Bonn, 1827.

Zenker, 1832, says that this author described the circuit of the blood and of vegetable sap more as a poet than a naturalist, maintaining that not only in the sap of plants, but also in the blood of animals monads are found, and that all trunks are zoophytes, inhabited by hamadryads. He quotes from him the following passages relating to *Gammarus pulex*:—

"Pag. 56: Globulos sanguinis, ait, recto pergere tramite et hoc (i.e. hanc directionem) ipsis utpote animalculis prudentibus ("sinnigen thieren") esse innatum.

"Pag. 69: Succos Gammari Pulicis effusos in monades atque in globulos campanuliformes majores distribui, qui inter se plures haberent monades, idem auctor narrat.

"Pag. 70 legitur: Gammari P. corpore disrupto globuli succi duplicis generis profluunt. Majores campanulati lentius moventur, diversas versus directiones, minores monades velociter diversas sequuntur regiones et varia velocitate, et sic plures fluminis instar!

"Pag. 74. denique prodit auctor noster, sibi ex Gammari extremitate (pede) abscissa in massa musculari (?) coræ acervum globulorum separatorum et vortice convolutorum videre contigisse, cujus rei libenter ipsi fidem habeamus, nam si phantasie lusibus obtemperemus, tunc omnia cernere possumus, quæ imaginatio nobis proponat."

Zenker's last observation would apply to his own ternary and quinary distribution of the parts of *Gammarus pulex*.

1828. AUDOUIN, V., et MILNE-EDWARDS, H.

Mémoires pour servir à l'histoire naturelle des Crustacés. Paris, 1829. Troisième Mémoire sur l'Anatomie et la Physiologie des Crustacés. Recherches anatomiques sur le système nerveux. Lues à l'Académie royale des Sciences. (Extrait des *Annales des Sciences naturelles*, mai 1828).

The authors here say, p. 115, "parmi les Crustacés des ordres inférieurs que nous avons examinés, ce sont les Talitres qui nous ont offert le système nerveux le plus simple et le plus uniforme. Le corps de ces animaux se divise en trois parties assez distinctes, la tête, le thorax et l'abdomen; mais chacune d'elles est formée d'anneaux qui ont entre eux la plus grande ressemblance, et dont le nombre total est de treize. Ces divers segmens présentent à leur face inférieure deux ganglions nerveux placés sur les côtés de la ligne médiane, et réunis