

are anteriorly produced beyond the frontal margin. The anterior and two-thirds of the lateral margins are smooth, whereas the posterior portion is armed with five prominent teeth. The median dorsal line is longitudinally armed with three or four prominent teeth, one being strongly marked on the frontal margin, a second imperfectly present over the gastric region, a third and fourth over the pyloric and cardiac regions, and evidence exists of a double row of bead-like tubercles longitudinally traversing the median line from the posterior to probably the anterior margin.

The inner line of the branchial region is posteriorly defined by a low ridge furnished with three or more small points or tubercles. From the gastric region to the lateral margins of the carapace, a strong ridge traverses the line of the cervical fossa in recent Crustacea, a circumstance that I believe is due to compression during fossilisation; the weaker parts yielding while the more rigid and stronger resist. Thus the fossa which is due to a reflexion or folding of the dermal tissue resists more decidedly the superincumbent pressure and remains rigid, while the surrounding structure yields. The cervical fossa, or as it may be called in this specimen, ridge, bifurcates into an anterior and a posterior branch, between the fork of which lies what Stimpson has called the hepatic region.

The posterior portion or pleon is broad, and symmetrically tuberculated; each somite generally carries, or is supposed to carry one large tooth or tubercle on the posterior margin in the median line, a similar but larger one near the lateral margin, centrally situated above the coxal plate, and another smaller in dimensions between this and the central, is situated on the posterior margin.

The animal appears to have no ophthalmopoda, although a semicircular notch in the frontal margin of the carapace seems to represent the orbit of the missing organ. This absence may, and I believe does arise from the soft and perishable nature of the eye when compared with the surrounding tissue, during the period of fossilisation, or it may be from the organ being hid, or reduced to a minimum condition as observed in the *Willemæsia*, or from its entire absence, as in *Eryoneicus*, but the presence of an orbital cavity determines that this ancient form has departed from a species in which the eye was an important feature.

Magazine, for the drawing of which the author is not responsible, a note and additions to the text were added by the editor after the paper had been seen by the author. A comparison of the figure in the magazine with that on pl. xxv. in the *Quarterly Journal of the Geological Society*, both of which were drawn under the superintendence of the editor of the Geological Magazine, will show that the form of the large chela and the ornamentation at the branchial margin of the carapace cannot belong to the same species. More than twenty species of *Eryon* have been described, but these are so various in their external form that it is difficult to imagine that they are not structurally, more than specifically distinct. As an example, Dr. Woodward, in a note to his *Memoirs on the Species of the Genus Eryon* (Desm.) from the Lias and Oolite of England and Bavaria (*loc. cit.*, p. 494), tells us that the diæresis "is absent in the outer caudal lamellæ of the Solonhofen species—a most important distinction: they differ also widely in form," and he describes all the English species as possessing it, "as in other Astacidae." The diæresis is absent from the following recent families: Eryonidae, Palinuridae and Scyllaridae, all of which belong to the Astacidea.