British Museum Collection), as well as in other specimens less distinctly pronounced. In an unnamed specimen (No. 44930) this squamose enlargement exists on the preceding as well as on the penultimate joint, especially on the inner side. In some species it is not present at all, the penultimate joint of the peduncle being subeylindrical, but I have not seen any species among the numerous specimens in the British Museum Collection in which the scaphocerite can authoritatively be pronounced to be present, except in *Eryon speciosus* (Münster) (No. 44808), where it appears to exist on each side; but the condition of the specimen is fragmentary.

The oral appendages, so far as my own observations go, have not been made out; but Dr. v. Willemoes-Suhm quotes Quenstedt as having stated that Eryon had a very large mandible, one of the teeth of which was preeminently strong, and that the palpi were present at the base of the first and second gnathopoda. They are reduced but not wanting in *Polycheles* and its allies, but are homologous not with the basecphysis but with the mastigobranchia, originating as they do in the coxal joint. No other observer since Quenstedt has seen them in Eryon; we are not, however, justified in excluding his evidence until the specimens from which he obtained his information have been reexamined. The second and third siagnopoda are broad, foliaceous, of extreme tenuity, whereas the basecphyses, judging from what we know of other forms, are more or less long, narrow, and tapering, unless degraded to a rudimentary condition, when they retain a more or less distinctive rod-like character. Quenstedt could scarcely have mistaken them for any other parts, as the Rev. Dr. Norman suggests, if we are to assume any resemblance in their structure to those of other Crustacea.

The pereiopoda are extremely like those of *Polycheles crucifera*. The first pair is long, having the carpos short, the fingers of the chela long, slender, and overlapping at their extremities; the three succeeding pairs are short and chelate, with narrow propodos and slender fingers; the fifth pair is short, and not chelate, the dactylos being long and styliform.

One great anatomical distinction between *Polycheles* and *Eryon* appears to lie in the character of the ophthalmopoda, which occupy the same position in relation to the antennæ in both fossil and recent forms. In the recent genera, with the exception of *Eryoneicus*, the latero-anterior angle of the carapace is largely developed and overrides and covers a large portion of the peduncle of the eye, leaving only a deeply incised orbit that allows a portion only of the base to become visible on the dorsal surface. Even this is entirely obliterated in *Willemæsia*.

In *Eryon* the increased development of the antennal region of the carapace is wanting, consequently the organ of vision, instead of being covered and hidden from view, is exposed upon a peduncle, which in some species appears to be projected on a prominence.

If we examine the specimens from the Lias of England, we shall find that the latero-