

The first pair of antennæ has three short joints to the peduncle and the remains of a slender multiarticulate flagellum, to which I have given its probable length as well as a second branch, because I am not aware of any species of *Macrura* that has not a second flagellum attached to the first pair of antennæ.

The second pair of antennæ has very little of it represented in the specimen, but it evidently carried an ovate scaphocerite; that on the right side of our figure is half lost, whereas of that on the left there is the impression only; the rest of the organ is wanting on each side except what I take to be the impression of the distal joint of the peduncle, and the first articulus of the flagellum on the right side.

The first pair of large chelæ is well shown on the right side, although part of it is expressed by the impression only. That on the left I have restored in outline from that of a specimen of *Polycheles crucifera*, in order to show the near resemblance of the same part in the two genera.

All the other appendages are lost, or hidden beneath the body of the animal, excepting those that go to form the rhipidura, the outer plates of which are only determinable by the impression left on the rock. They are broad, leaf-like, and rounded at the extremity, without any sign of a diæresis or division in the outer plate, or a tooth at the outer distal angle; telson is broad at the base, and tapers abruptly to the extremity.

This species bears a generic resemblance to *Polycheles* of the recent seas, especially to *Polycheles crucifera*, in the form of the carapace, although it is deprived of its strong lateral armature, of which a trace only remains at the posterior branchial margin.

It bears, however, a nearer resemblance to *Polycheles helleri* and *Polycheles baccata* in the form and breadth of the pleon, but differs from all in the absence of a prominent longitudinal carina which is conspicuous in most of all the known recent species of the Eryonidæ, excepting the genus *Eryoneicus*, on the median dorsal surface of the pleon.

The fossil also differs from the recent species of the same family in having a broad and open orbital notch, instead of a narrow cleft in the dorsal surface of the carapace, which is filled up with the upper surface of the base of the rigidly attached ophthalmopod.

The first pair of antennæ, so far as I am able to interpret the evidence at my disposal, has not the inner margin of the first joint of the peduncle produced to an elevated ridge, a circumstance that is largely due to the distance at which these appendages are separated from each other.

The second pair of antennæ, if I understand correctly the parts represented in the specimen, approximates more nearly to the recent forms than to those of any fossil *Eryon* that I have met with, differing from the latter in carrying a distinct scaphocerite at the base. It is true Desmarest states that the second pair of antennæ is provided with a large scale, but he does not show it in his figure of the animal, and although it has been, I believe, generally accepted by authors who have written on the subject, I am not aware