

of the back divide the cephalo-thorax into four areas, the two anterior indicating the hepatic, and the posterior the branchial, regions.

The abdomen consists of six segments and the telson. A ridge runs along the dorsal surface of each segment in the middle line, and rises on the first segment into one, and on the four succeeding segments into two spines, directed forward. As in *W. leptodactyla*, not only are the eyes and eye-stalks absent, but there is no indication of a space for their accommodation in the position in which eyes are normally developed. The antennæ are placed one pair beneath the other. There is a lamellar appendage, which scarcely rises to the top of its basal segment, attached to the outer antenna. The flagella of the outer antennæ are 21 mm. in length, and the larger flagella of the inner antennæ nearly equal them. The parts of the mouth are normal. Four pairs of the ambulatory legs bear delicate chelæ sparsely spined along the upper edge, and the fifth pair end in a simple curved process. The first pair of ambulatory legs are not so long in proportion to the body or so slender as in *W. leptodactyla*. The first abdominal feet are style-like, and flattened at the end. The swimmerets have three joints, to the first two of which the palpi are attached. The telson and the caudal appendages are in no way remarkable. They, with the palpi of the swimmerets, the basal joints of the ambulatory legs, and the basal joints of the antennæ, are fringed with fine hairs.

*Willemoesia crucifer* certainly differs widely in general appearance from the recent Astacidæ, at the end of which family we should, however, be inclined to place it for the present. It has a very close resemblance to some fossil forms, particularly to the various species of the genus *Eryon*. It has been already remarked that *Willemoesia* in its flattened cephalo-thorax approaches the Palinuridæ: in all the living members of that family, however, the first pair of legs are monodactylous, while in *Willemoesia* they are didactylous. The fossil genus *Eryon*