

inner edge, with a dense row of slender spinules, in addition to the usual bristles. The propodal joint in the first pair (fig. 13) is quite simple, and scarcely dilated at all, forming therefore no palmar margin. In the two succeeding pairs (figs. 15, 17), however, this joint is conspicuously dilated, and forms, at the end of the inner edge, a more or less distinctly marked palmar margin (figs. 16, 18). The terminal joint or dactylus, in the first pair (fig. 13), is almost straight, in the two other pairs (figs. 16, 18), on the contrary, strongly curved, and denticulate at the inner edge, as also very mobile, admitting of being bent in toward the palmar margin of the propodus. In the male, these two pairs of legs (see Pl. X. figs. 14, 16) are much more powerful than in the female, the propodus being exceedingly dilated and filled up with strong muscles moving the curved dactylus.

The three succeeding pairs of legs (see Pl. X. figs. 1, 5) are very remarkable, not only by reason of their extraordinary length and slender form, but on account of their anomalous structure. They almost equal the whole body in length, if the caudal fan be excepted, and, in the specimens preserved in spirit, generally exhibit a strong elbow-shaped curve at the junction between the ischial and meral joints, the proximal section of the legs being more or less directed backward, whereas the terminal section extends at right angles with it anteriorly, reaching far in advance of the fore part of the body (see Pl. X. fig. 1). They all exhibit a very similar structure, except that the basal joint diminishes rapidly in length posteriorly, while the terminal section of the leg in a corresponding degree increases in length, though more slightly. Hence they all reach, when stretched out anteriorly, to about the same transverse line. Of the several joints, the basal one is quite remarkable for its considerable length, more especially in the first of the above pairs (fig. 5). The proximal part of this joint is somewhat dilated, and strongly curved, whereas the distal part is very slender, and, in the first of these pairs, projects even far beyond the tip of the exopod. The ischial joint is comparatively short, and somewhat dilated at the end, where it contains the muscles moving the terminal section of the leg. This is exceedingly slender, and, like the remaining part, but very sparingly beset with short bristles. The meral joint is a trifle longer than the carpal, and somewhat curved. The propodus, too, is somewhat shorter than the carpus, and slightly dilated at the base, tapering toward the apex, and exhibiting at the distal part of the inner edge a distinctly marked palmar margin, armed with long, slender spines. The terminal joint, finally, forms an exceedingly movable, almost straight, claw, spinulose at the inner half, and admitting of being bent closely in towards the palmar margin. As to the function of these peculiarly formed legs, it is difficult to form a definite opinion, without having observed the living animal. They would not seem to be specially adapted for the usual ambulatory motion, but are more likely used for the purpose of seizing hold of any delicate submarine objects, as Hydroids or Crinoids, fixed at the sea bottom.

The last pair of legs (see Pl. X. fig. 2) are rather elongate, though falling considerably short of the length of the three preceding pairs, nor do they exhibit their