

basal joints are short and subequal; the fourth joint is much longer, rather longer than any two of the preceding, and curved; the distal joint is short.

The *chelipedes* are stout and have the usual structure.

Of the *thoracic appendages* the three posterior differ from the three anterior in having the basal joint stout and swollen; the three anterior pairs of ambulatory limbs are slender.

All the *abdominal appendages* are present, and well developed.

The *uropoda* are biramose, each branch consisting of two joints; the outer branch is more slender than the inner.

*Description of the Male.*—The male specimens (fig. 1) are of about the same length as the female.

The cephalothorax is long and rather narrow, and is prolonged into a slight obtuse process at its anterior extremity. The cephalothorax equals in length the first three segments and half of the fourth segment. The eyes are large and oval.

The first free segment of the thorax is the shortest; the second segment is nearly twice the length of the first; the third is half again as long as the second, the fourth and fifth are subequal, and about half again as long as the third; the last segment of the thorax is shorter than the fourth and fifth, and about as long as the third; the lateral margins of the segments are rounded, and the transverse diameter is greatest in the middle and diminishes anteriorly and posteriorly, so that the segments are separated by a well-marked constriction, the first free segment is separated from the cephalothorax by a conspicuous notch, but it is not narrower anteriorly; the last thoracic segment is closely applied to the first abdominal segment, and is narrower anteriorly, but gradually increases in width posteriorly.

The abdomen equals in length the last two thoracic segments; the first five segments are subequal in length and diminish imperceptibly in width from before backwards; the terminal segment of the abdomen equals the two anterior in length; it terminates in a rounded extremity.

The *antennules* (fig. 5) are about equal in length to the cephalothorax; the basal joint is long and stout, and much longer than the rest of the appendage; the two following joints decrease progressively in length and in breadth; the two distal joints of the appendages are each somewhat longer than the third, but narrower.

The *antennæ* (fig. 5) are shorter and more slender than the antennules; the basal joint is very short, the two following are somewhat longer and subequal; the fourth joint is much the longest and is about equal to the two last taken together; the appendage terminates in two short slender joints which appear to represent the flagellum.

The *maxillipedes* are shown in fig. 6; each is furnished with a long four-jointed palp.

The most characteristic appendages of the male *Paratanais dimorphus* are, however, the *chelipedes*; they appear to be not unlike the chelipedes of the genus *Leptocheilia* in general form, but are rather more massive; this species, however, cannot be classed in the