

its first joint deeply excavated at the base, the lower border of the sinus forming at its outer angle a strong curved spine. The outer branch of the third pair of feet in both sexes has the basal joint produced externally into a stout thumb-like prominence (fig. 7), and the two following joints have deeply sinuated margins, bordered with chitinous plates. The fifth pair of feet in the *male* (fig. 8) is strongly prehensile, each branch ending in a broad, clumsy, claw-like joint. In the *female* (fig. 10) each limb is simple, three-jointed, the last joint bearing three long, subequal apical setæ. The first segment of the *female* abdomen (fig. 1) is tumid, and equal in length to the two following segments; in the *male* (fig. 13) the abdominal somites are all of nearly equal length and shorter than broad, the last somite in both sexes dilated at the distal extremity and forming two angular lateral processes. The caudal laminæ are about twice as long as broad, the setæ subequal and rather shorter than the abdomen. In some adult *males* (fig. 12), the abdomen is distorted, bearing beard-like bunches of hairs or fimbriated marginal processes: in these specimens the caudal laminæ are also twisted and strongly setiferous. The pleural eye consists of a strongly pigmented ring, covered by a highly refracting lens, the whole appearing to be loosely attached just beneath the integument, and situated near the base of one of the foot-jaws. The vulva forms a prominent black, conical papilla on the front of the first abdominal somite.

The description given above applies to specimens which I believe to represent the completely developed adult form of the species:—these are figured in Pl. XI. A less fully developed form, which appears to me to belong to the same species, and which is undoubtedly identical with *Pleuromma gracile*, Claus, is shown in Pl. XII. and Pl. XXXI. figs. 13, 14. The chief points of difference are to be found in the length of the abdominal somites (figs. 14, 15), in the double hook of the first pair of feet (fig. 8), in the absence of the two hooked spines of the female antenna (Pl. XXXI. fig. 13), and in the want of a denticulated plate in the male antenna; the fifth pair of feet in the male (Pl. XII. figs. 10, 11) are of somewhat different shape, and in the female (fig. 12) have only two, instead of three, joints. In a still earlier stage of development (fig. 13), the branches of the female fifth foot end in three straight spines, like the prongs of a fork. A similar condition is shown in Pl. XI. fig. 11, drawn from specimens taken along with the adult form figured in the same plate. Fig. 9 in Pl. XI. represents what I believe to be an immature form of the fifth foot of the male. In some males of the immature form the antennæ bear numerous very largely developed sensory organs, club-shaped or pyriform (Pl. XII. fig. 2). These are sometimes so numerous and so closely packed that I at first doubted whether they were not parasitic growths; this, however, is certainly not the case. But the most important distinction between the normal form of the species and the *Pleuromma gracile* of Claus is that, in the former the *right* male antenna is the geniculated one, in *gracile* the *left*. This is a difference which I cannot yet satisfactorily explain. But considering the variable situation of the pleural eye, and the very fluctuating characters