integument of the carapace. The carapace is longer, narrower and more rectangular in a dorsal view than it was at the last stage, and it makes only about one-third of the total length of the body.

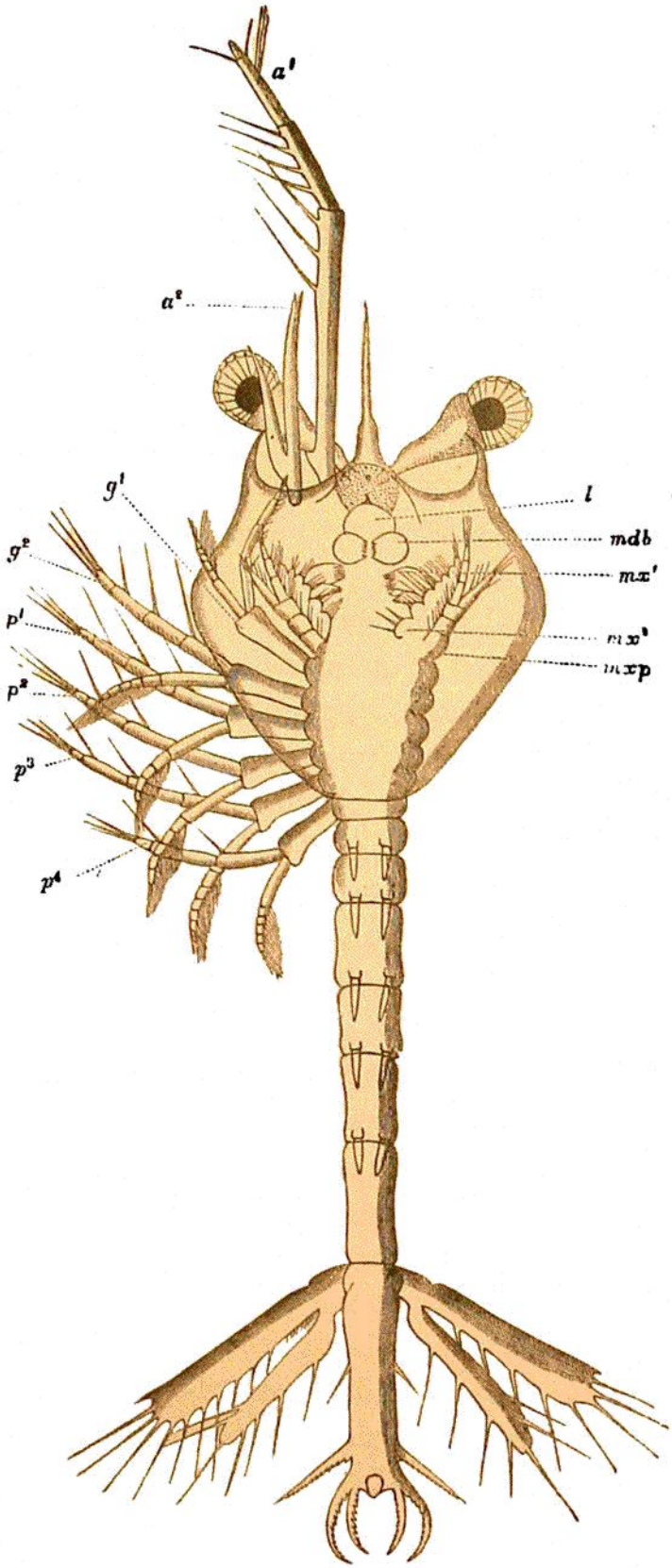

FIG. 56.—*Lucifer* in the Acanthosoma stage, from a drawing by Willemoes Suhm. a^1, first antenna; a^2, second antenna; l, labrum; mdb, mandibles; mx^1, first maxilla; mx^2, second maxilla; mxp, maxilliped; g^1, first gnathopod; g, second gnathopod; $p^{1\text{-}4}$, pereiopoda.

Up to this time, Professor Brooks says the mode of motion has been short, jerking Nauplius-like leaps, and the two pairs of antennæ have been, as they were when the larva left the egg, the chief organs of locomotion. The structure of these appendages has remained extremely constant through all the moults, but they now entirely change their character and lose their locomotive function.

The change which is undergone by the larva at the end of the Zoea series is very much greater than at any preceding moult, except that between the Nauplius and the first Protozoea, and in some respects it is even greater than it was at that time. After the moult it is about $\frac{70}{1000}$ of an inch (or 1·75 mm.) long, with seven pairs of long-jointed, biramose, swimming feet, fringed with long slender hairs. The swimmerets are also present as functional appendages with long fringing hairs.[1]

Professor Brooks' figure was drawn from a Zoea which was captured at the surface of the ocean, carefully examined, and compared with one previously examined (*loc. cit.*, fig. 43), and found to agree with it exactly. It was then placed alone in a small beaker of sea-water. The next day it was found to be moulting, and a drawing was made from it

[1] It should be here noticed that by swimmerets and swimming feet Professor Brooks does not mean the pleopoda that are so named in Crustacea generally, but the immature pereiopoda and their accompanying branches.