The eyes (figs. 7, 8) have an extreme diameter of about '18 mm., and are sessile upon the optic ganglia; their pigment is black, and the lens pale yellow. The otocysts are nearly as large as the eyes, and lie close to them; they contain about 100 pale yellowish, round and oval otoconia, measuring up to '02 mm. (fig. 9). The leaves of the rhinophorial club contain only a few hardened cells. A few generally rod-shaped spicules were present in the axis of the rhinophoria. In the skin were a great number of strong and hard spicules of very variable size and shape; their length reached about '65-'8 mm., and their diameter '02 mm.; the spicules were rod-like (Pl. III. fig. 30), regularly or irregularly cross-shaped, bifurcate at one or both ends (fig. 30), or six rayed (Pl. IV. fig. 10); the surface of the spicules was smooth or thickly covered (fig. 10) with fine points and tubercles. There were also large spicules in the dorsal and frontal appendages, but apparently none in the branchial leaves. In the interstitial connective tissue there were scattered here and there hardened cells, but no larger spicules.

The mouth tube appeared to be as usual. The bulbus pharyngeus is strong, compressed from before backwards, 4.2 mm. long by 3.5 broad and 3.5 high; the thick, short radula-sheath projects downwards about 1 mm. and is 8 mm. broad; the first half of the bulbus consisting of the labial disk, which resembles very much the collum uteri of the female; a little behind the middle of the bulbus is situated the usual circular furrow, somewhat emarginate above, in which is fastened the strong retractor bulbi. The muscular apparatus of the bulbus appeared to be as usual.1 The labial disk, as above mentioned, is large and strong; on the anterior margin is an oval perpendicular groove in which lies the perpendicular mouth slit, within which is visible the yellowishbrown margin of the labial plates. The labial disk is covered by a strong yellow cuticle, which is radially striate in the neighbourhood of the groove already mentioned; near the internal margin it is darker, and appears under the microscope to be rather destroyed. On the inner side of the anterior part of the buccal cavity, reaching to the margin of the mouth-slit, there is on each side the strong chestnut-coloured 2 (brownish-black in the anterior inferior margin) labial plate (figs. 11, 12). Both plates are separated above and below by a furrow; the anterior cutting edge of the left is sharper, and comes beyond the right hand one. The plates have a rounded triangular contour, the greatest diameter is 1.9 mm.; towards the posterior margin they become thinner, elsewhere they are about .6 mm. thick (fig. 12); the posterior thinner margin is nearly perpendicular, inclined a little obliquely backwards; the thicker under portion runs horizontally forwards, it has a broad longitudinal furrow; the convex anterior margin is the thickest, it thins off a little towards the upper angle; on the right plate (fig. 12) the margin falls off obliquely (fig. 12), and is slightly excavated along its length; on the left the inner half of the margin is strongly flattened and slopes behind; the corners are rounded (fig. 11), the posterior inferior especially; the attached outer surface is arched from above downwards, and a

<sup>1</sup> Bergh, loc. cit., p. 630.

<sup>&</sup>lt;sup>2</sup> Colour of the fruit of Æsculus hippocastanum.