

the scars left after the falling off of the papillæ, which during the life of the creature, no doubt, cover the whole of the back. The *papillæ* (Pl. XII. figs. 14, 15; Pl. XIV. figs. 1-3) consist of a layer of circular muscle bundles surrounding another perpendicular layer; transverse sections of the papillæ showed a number of apertures, corresponding to the vessels and nerves (fig. 3, *a*), which ramify in their interior, and are occasionally accompanied by a renal branch; on the surface of the papillæ are a number of small unicellular glands. The scars left after the removal of the papillæ display a somewhat yellowish double contour, the outer line corresponding to the circular, and the inner to the perpendicular muscular coat; the central orifice was yellowish, and contained the nerve. When the whole of this layer is removed, another appears which displays a branching network of nerves and ganglia (Pl. XIV. fig. 5), partly visible with a hand-lens, which gives off twigs to the papillæ; on the surface of this layer are a number of depressions answering to the perforations of the upper layer; beneath the nervous "rete" is a layer of muscular bundles crossing each other in all directions. The deepest layer, which follows the last-mentioned, is also provided on its surface with a nervous ramification, beneath which are longitudinal and transverse muscles. Beneath this comes the *peritoneum*, which is easily separable, and is in this region of the body milky-white in colour, owing to the presence of an irregular meshwork of the fine whitish renal tubules (Pl. XII. fig. 20). There were no spicules in the skin.

The *mouth tube* is strong and thick-walled, and about 1.5 cm. long.—The *bulbus pharyngeus* (Pl. XIII. figs. 2-6) is unusually large (5.8 cm. long, 5 cm. in height, and 4.2 cm. in breadth); the radula-sheath, situated on the posterior portion of its under surface (figs. 2, *c*, 6, *c*), is about 23 mm. long by 17 mm. broad and 7 mm. high. The organ is divided all around into two halves by a prominent rather sharp edge (the margin of the mandibles) (fig. 3); the anterior half is smaller and narrower, and comes to a point in front; the posterior half is rounded behind in the neighbourhood of the large radula-sheath; the upper surface dips downwards, in front somewhat obliquely, and is still more inclined posteriorly (Pl. XIII. fig. 2); close to the top is the origin of the œsophagus, and on each side of this are the openings, one on each side, of the salivary glands (fig. 2, *d*). The anterior part of the upper side is flattened, broader upwards, narrower downwards (fig. 3); the posterior part is broad and somewhat convex behind the pharynx (fig. 3). The anterior part of the sides of the bulbus pharyngeus forms an angle with the upper surface, and in the neighbourhood of the edge is depressed; along the edge the posterior portion shows a deep depression, elsewhere it is convex. The lower surface of the bulbus pharyngeus is convex, with a slight depression at the entrance of the *arteria lingualis*; the posterior part is broader, with a strong prominence on each side of the radula-sheath (fig. 2). The colour of the bulbus pharyngeus is a dirty yellowish-red, inclining to red on the under side and posterior extremity; the anterior half of the upper side is whitish, and has a nacreous appearance. Several strong *adductor*