

The head (Pl. XXIII. fig. 3) forms a small rounded eminence at the base of the tentacle, and is somewhat concealed by the nuchal fold. No trace of eyes is visible in either specimen. The tentacle is a simple filiform process, which arises from an enlarged base and tapers gently to the extremity. The first pair of feet had lost the dorsal (tentacular) cirri, and the ventral only reached the base of the bristles. The latter are much more boldly spinous than the succeeding dorsal series. The palpi are long and finely tapered.

The first pair of scales project far forward like a prow, and instead of being smaller than their successors, as in the ordinary Sagalionidæ, they are conspicuously larger. All the scales (Pl. XXVII. fig. 6) are coated externally by Foraminifera, and fimbriated round the border. The cilia are long and slightly tapered toward the tip.

The feet are covered with numerous short papillæ, and the ventral cirrus is of moderate length, reaching almost to the tip of the setigerous lobe. Numerous long papillæ occur between the feet. The dorsal division bears a series of very fine bristles, with faintly marked spikes at the tip. Nothing so definite as Kinberg's¹ figure of the spikes in *Psammolyce petersi* could be observed, but perhaps these delicate processes may have been affected by their calcareous surroundings.

The ventral branch has stoutish flattened bristles (Pl. XIII A. fig. 14, from the middle of the series) with brownish shafts and a single bifid joint at the tip. The latter becomes much more elongated superiorly and inferiorly (Pl. XIII A. fig. 15). The distal end of the shaft is smooth.

This appears to differ both from the *Psammolyce arenosa*,² Delle Chiaje, which is probably the *Psammolyce herminia* of Aud. and Ed.,³ and *Psammolyce albicans*⁴ of De Quatrefages, by the shape of the first pair of scales and the structure of the ventral bristles. At least no mention is made of their peculiarities. M. de Quatrefages now places the *Leanira quatrefagesi* of Kinberg under the same genus, to which it certainly does not belong.

From the *Psammolyce rigida* of Grube, from the Red Sea, it is distinguished by the eyes which are at the corner of a quadrangle. It seems to be closely allied to his *Psammolyce umbonifera* from the Atlantic,⁵ but as he does not describe the bristles minutely it is difficult to determine.

Psammolyce differs from *Thalenessa* and *Sigalion* in the structure of the body-wall, since the surface of the somewhat thin cuticle is studded with papillæ which are often coated with and joined together by extraneous deposits. The hypoderm is thin. The dorsal longitudinal muscles show no appreciable fold externally, and meet in the middle line dorsally. The ventral longitudinal muscles are reniform in transverse section (being rounded inferiorly, dimpled superiorly). The fasciculi both of these and of the

¹ Freg. Eugen. Resa, Taf. ix. fig. 43, Gs.

² Annélides, p. 107, pl. ia. figs. 1-6.

³ Descriz. e not., t. v. pp. 58 and 107, Tav. 98, figs. 4, 5, &c.

⁴ Annelés, p. 282.

⁵ "Gazelle," &c., p. 521.