

dorsal muscles appear to be coarser than in the genera above mentioned, and they have a somewhat regular arrangement, since the lines for the most part converge in transverse section to the hilum. The external process is probably homologous with the folded or spiral part in other forms. The ventral muscles are tightly bound down by the broad, oblique, muscular fibres, which pass from the body-wall to the ventral area, as in *Thalenessa fimbriata*. The muscles, moreover, encroach superiorly and laterally on the nerve-area, while a strong series of vertical fibres from the alimentary canal anteriorly pass to the median region. The latter probably cause the area to be drawn upward, making a deep median ventral groove. The nerve-cords, which appear to be somewhat rounded or ovoid, occupy each side of the median fibres. Bands of connective tissue form a layer above them, and to this the muscular fibres seem to be attached, though, as formerly mentioned, some median fibres pass through. So far as observed, the structure of the proboscis posteriorly agrees with the typical form.

*Psammolyce fijiensis*, n. sp. (Pl. XXI. fig. 6; Pl. XXII. fig. 4; Pl. XXIV fig. 6; Pl. XIII.A. fig. 18).

*Habitat*.—A fragment of the anterior region was dredged off Levuka, Fiji.

The diameter of the fragment is 4.5 mm., inclusive of the bristles.

The entire dorsum is covered by somewhat coarse grains of sand, the scales likewise having the same coating. An ochreous tinge occurs here and there, and indeed is prevalent along the sides and on parts of the scales. The ventral surface again has this ochreous hue throughout most of its extent, relieved only by the long pale cuticular papillæ.

On removing the first pair of scales, the head appears as a well-marked rounded eminence, with two distinct black eyes near the anterior border dorsally. Beneath each is a much larger eye, which occupies the anterior ventral edge of the head, and looks downward and outward. It is not visible from the dorsum. The posterior region of the head is covered by the nuchal fold. At the anterior border a winged tentacular base, nearly as broad as the head, extends forward, diminishing gradually to its articulation with the filiform tentacle, the extremity of which reaches the tips of the bristles of the first foot. The wing on each side of the tentacular base may represent a modified antenna. The palpi are short and small, barely reaching the tip of the last mentioned bristles. Their surface is smooth, with the exception of a few blunt papillæ on the filiform tip. The first foot carries a slender tapering cirrus on its outer edge, and inferiorly a shorter process of the same kind. The extremity of the former reaches the tip of the bristles.

The first pair of scales (Pl. XXII. fig. 4) entirely differs from the others, being prow-shaped. Moreover, the right considerably overlaps the left, and is more elongated