

third of the body, stretches over about seven successive feet, and thus its length is a marked feature. The setigerous dorsal lobe of the foot is feebly developed, and projects so slightly that the tips of its bristles pass little beyond the bases of the ventral bristles. The dorsal bristles are translucent and somewhat slender, having fine serrations along the edge, and a peculiar tip (Pl. XIII. fig. 14, one of the shorter dorsal forms) which gives an indication of the bifid condition present in the ventral series.

The ventral is the chief setigerous lobe, and forms a well-marked cone in an antero-posterior view. The bristles are also translucent and somewhat slender, and the tips are distinctly bifid. The serrated region is long in the superior bristles (Pl. XIII. fig. 15), and shorter and broader in the inferior (fig. 16). The terminal hook is strongly curved, while the secondary process beneath stands outward at a wide angle to the long axis of the bristle.

The larger example is a female, and probably only the pair existed in the sponge. The translucency of both this commensalistic form and the *Syllis* is noteworthy. The specimen is not in a good state for minute examination, but in transverse section the typical structure exists. The ventral area is almost wholly occupied by the large rounded nerve-cords. The comparatively large ova are grouped chiefly at the bases of the feet.

Harmothoë, Kinberg.

Harmothoë benthaliana, n. sp. (Pl. XIII. fig. 3; Pl. XX. fig. 7; Pl. XA. figs. 9, 10).

Habitat.—Two specimens were dredged off the American coast at Station 45, May 3, 1873; lat. 38° 34' N., long. 72° 10' W.; depth, 1240 fathoms; bottom temperature 37°·2, surface temperature 49°·5; blue mud. It was accompanied by several peculiar types in other divisions of the invertebrates.

The head (Pl. XIII. fig. 3) is pale and appears to be devoid of eyes, but in the larger specimen four very minute eyes are present; the posterior situated within the posterior border and at the outer corner, the anterior, on the lateral eminence about the middle of the head. There is thus no possibility of confounding this form with *Harmothoë imbricata*, the eyes in which, besides, are very much larger. The tentacle is a simple tapering process, somewhat shorter than the palpi, and the tentacular and long dorsal cirri have a similar shape with very attenuate extremities. All these have clavate cilia. The palpi are rather long and gently tapered, as well as apparently smooth. The ventral cirrus is glabrous and proportionally large and long, the tip reaching the extremity of the elongated inferior lobe. The scales are pellucid and pale (Pl. XX. fig. 7), a few long and somewhat conical papillæ being visible at the posterior border,