three are produced into a short spine. Abdominal segments comparatively elongated, first pair subequal; last segment very long and cylindrical, terminating in a rounded median projection. First pair of antennæ with unequally sized flagella, the outer much longer than the inner; second pair of antennæ with a rudimentary exopodite, setose; chelæ extremely slender, with a minute three-jointed exopodite; fossorial limb stout and strong, also with a rudimentary exopodite. Abdominal limbs well developed, with a two-jointed exopodite; uropoda long, with a multiarticulated endopodite and exopodite, the former considerably longer than the latter.

This genus is closely allied to the last, and is as it were an exaggerated likeness of it; the slenderness of the body is more marked in the present genus, the rostrum and the various spines which exist along the sides of the body in the last genus are here much more strongly marked.

The remarkable form of the chelæ and the presence of an exopodite on these and the following pairs of appendages serve, however, to distinguish *Leiopus* from *Typhlapseudes*; the latter character connects *Leiopus* more closely with *Apseudes*, but the extreme slenderness of the chelæ is peculiar to the genus.

As in *Typhlapseudes* there appears to be no great distinction in *Leiopus* between the males and females.

Leiopus leptodactylus, F. E. Beddard (Pl. XV. figs. 5-12; Pl. XII. fig. 1).

Leiopus leptodactylus, F. E. Beddard, Proc. Zool. Soc. Lond., 1886, pt. i. p. 116.

This species is represented by a large number of individuals, dredged in the North Atlantic from a depth of 1000 fathoms.

The largest specimens attain a length of 13 mm.

The body is flattened, depressed, extremely elongated and narrow, it is wider anteriorly and gradually diminishes posteriorly.

The cephalothorax, comprising the head and the first segment of the thorax, is rather more than twice the length and about equal in breadth to the first free segment of the thorax. The head is prolonged in front into a long rostrum; laterally are the two ocular lobes which are large and conspicuous and pointed anteriorly; there is no trace of any eyes. Behind the ocular lobes are two longish spiny processes which represent the epimera of the first thoracic segment; they, as well as the ocular lobes and the rostrum are much more developed than in the last species. The dorsal surface of the head is convex anteriorly as well as posteriorly by reason of the paired postero-lateral convexities.

The first segment of the thorax is as wide as the head, the following segments decrease in width, the first of them suddenly, the rest more gradually; the length of these segments increases up to the fourth, the fifth being subequal in length to the fourth, and the sixth rather shorter.