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## XLIV. TERRESTRIAL ISOPODA, II.

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*Research Fellow of the University of St. Andrews.*

(Plates XLIX, L.)

The specimens here described were found in a tube containing a number of small land shells. One of them is a new species referred to the genus *Cubaris*, Brandt; the other I am unable to place in any known genus. I am, therefore, describing a new genus to which I have given the name *Rotungus*.

### Gen. *Rotungus*, gen. nov.

Body oblong oval, strongly convex, smooth. Cephalon small, convex, lateral and median lobes prominent; epistoma with median vertical ridge. Eyes large, situated dorsally. Antennae slender, 4th and 5th joints elongated, setae short and thick; flagellum two-jointed, 1st joint short, expanded distally, 2nd joint much longer, terminating in a style. First maxillae with outer lobe terminating in a series of curved spines, inner lobe narrow, flat, with two setaceous spines on the inner border. Segments of the mesosome strongly convex, 1st broadly expanded laterally and partly surrounding the cephalon, lateral plates of 2nd to 5th segments excavate, 6th and 7th almost truncate, posterior angles produced backwards. Maxillipedes with small terminal lobes. Thoracic appendages stout and of medium length, setose, 1st appendage with numerous tridentate setae. The lateral plates of the metasome are somewhat flattened and turned inwards, the median portion of the segments being strongly convex. Uropoda extending beyond the telson, basal plate broader anteriorly than posteriorly; exopodite cuneiform, articulating at the posterior margin of the basal plate, endopodite longer than exopodite, articulating at the inner anterior border. Telson elongated, roughly triangular, posterior margin truncate, anteriorly broader than the length.

This genus is distantly related to *Mesarmadillo*, Dollf.<sup>1</sup>, and *Saidjahus*, Budde-Lund<sup>2</sup>, it also exhibits a remote relationship to *Gelsana*, Budde-Lund<sup>3</sup>, and *Sumniva*, Budde-Lund<sup>4</sup>, but

<sup>1</sup> *Ann. Soc. ent. France*, 1892, p. 385.

<sup>2</sup> *Rev. Crust. Isop. Terr.*, 1904, p. 49.

<sup>3</sup> Sjöstedts *Kilimandjaro-Meru Exped.* 21 Crustacea, 2 Isopoda, 1910, p. 6, t. i.

<sup>4</sup> *Rev. Crust. Isop. Terr.*, 1904, p. 48, and *Isopoda von Madagaskar und Ostafrika in "Voeltzkow Reiseergebnisse"*, Bd. iii. *Abhandl. Senckenberg. Gesellschaft*, 1908, Bd. xxvii, p. 267.



differs from all of these in the form of the cephalon, maxillipedes, and uropoda. The undersides of the inner margins of the 1st and 2nd segments of the mesosome are devoid of teeth or grooves, a character present in many genera the species of which are capable of rolling themselves up into a ball.

**Rotungus pictus**, n. sp.

(Pl. xlix, figs. 1—10).

Body oblong oval, strongly convex, smooth. Cephalon (figs. 1 and 2) small, convex, partly surrounded by 1st mesosomatic segment, lateral and median lobes well developed; epistoma with median vertical ridge. Eyes large, situated dorsally. Antennae (fig. 3) slender, 4th and 5th joints elongated, setae short and thick; flagellum 2-jointed, 1st joint short, expanded distally, 2nd nearly three times as long, terminating in a style. First maxillae (fig. 4) with outer lobe terminating in four strong curved spines, and five smaller ones, inner lobe narrow, flat, with two setaceous spines on the inner border. Segments of the mesosome strongly convex, 1st broadly expanded laterally and partly surrounding the cephalon (fig. 5), lateral plates of 2nd to 5th segments excavate, 6th and 7th almost truncate, posterior angles produced backwards. Maxillipedes (fig. 6) with small lobes, outer lobe terminates in a multispinous process and five fine curved spines, the inner lobe has two very small spines at each side and two larger ones on the ventral surface. Uropoda (fig. 9) extending beyond the telson, basal plate convex dorsally and flattened ventrally, broader anteriorly than posteriorly; exopodite cuniform, sparsely setaceous, articulating at the posterior margin of the basal plate, endopodite larger than exopodite, rudder-shaped, setae long and prominent. Telson (fig. 10) elongated, roughly triangular, posterior margin truncate, anteriorly broader than the length. Length 5.5 mm. Colour (in alcohol) horny yellow anteriorly, mottled brown posteriorly.

*Habitat.*—Kobo, Abor country, 400 ft., 30-xi—8-xii-1911. Under bark. No. 8084/10 (S. W. Kemp).

*Type.*—In the collection of the Indian Museum.

At present this interesting species stands out alone, separated from any known Indian genus by many striking characters. In the form of the cephalon and mesosomatic segments there is a slight resemblance to certain species of *Mesarmadillo*, Dollf. In only one specimen was there an antennule, which unfortunately was lost, the proximal joint of which was very broad. The flagellum of the antenna is very distinct in form. Apart from the small lobes of the maxillipedes the mouth-parts present no points of special interest. The thoracic appendages are stoutly built and setaceous; the setae on the 2nd appendage are of four kinds, *viz.* short stout spines (fig. 8a), longer curved spines (b), still longer curved spines with a spinous collar about two-thirds from the base, and then a plain curved spine terminally (c), and much



shorter and broader spines with a tridentate terminal portion set in a spinous bifurcation (*d*).

***Cubaris marmoratus*, n. sp.**

(Pl. 1, figs. 1—8).

Body oblong oval, convex, smooth. Cephalon (figs. 1 and 2) small, anterior margin well defined, lateral lobes small, median lobe absent; epistoma dorsally sloping backwards, laterally concave. Eyes prominent, situated dorso-laterally. Antennae (fig. 3) small, slender and sparsely setaceous, 2nd to 5th joints grooved on their outer sides, 3rd joint elongated; flagellum 2-jointed, the distal joint being the longer and terminating in a long style. Segments of the mesosome convex, lateral plates of 2nd to 4th segments excavate, remainder truncate or nearly so, posterior angles slightly produced backwards. Segments 1 and 2 with notch and groove on their inner margins for reception of succeeding segments (figs. 4 and 5). Maxillipedes (fig. 6) small, lobes elongated, outer one terminating in a multispinous process with two small spines at its base and two longer ones on the inner margin, inner lobe has a single, comparatively large spine. Uropoda (fig. 7) not extending beyond the telson, basal plate narrow posteriorly, thickened and strongly raised, convex dorso-laterally, antero-dorsal surface expanded, ventral side almost flat; exopodite fairly large, truncate terminally with short style, articulating about the middle of the basal plate in deep concavity, endopodite twice the length of the exopodite, setaceous, terminally with two long whip-like setae, in section triangular. Telson (fig. 8) longer than breadth of the posterior margin, which is very slightly curved, as also the sides, expanded anteriorly, convex and smooth. Length 6.5 mm. Colour (in alcohol) dark grey with yellowish mottling.

*Habitat*.—Kobo, Abor country, 400 ft. Under bark. No. 8084A/10 (S. W. Kemp).

*Type*.—In the collection of the Indian Museum.

This species is characterised by the small and narrow lobes of the maxillipedes and by the form of the uropoda. In these latter the exopodites articulate in a deep groove in the middle of the dorsal face of the basal plate and extend inwards to the inner margin.

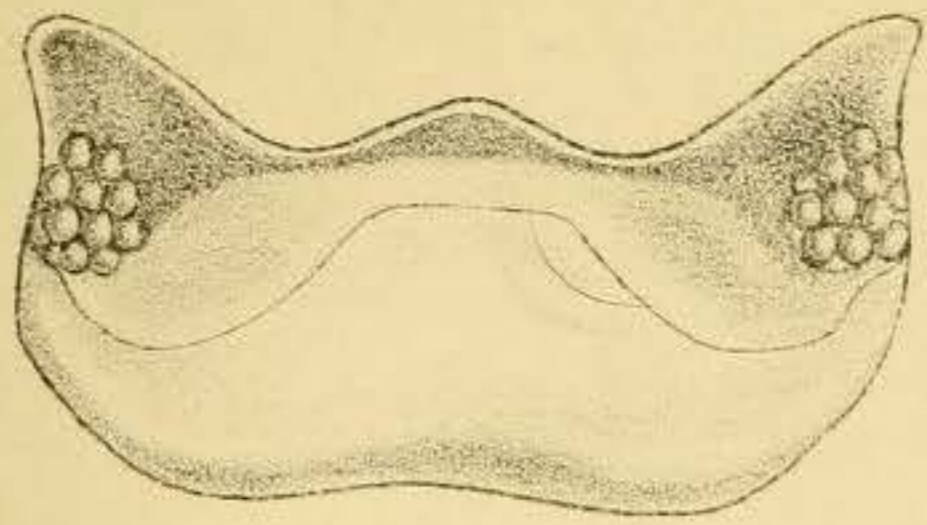


EXPLANATION OF PLATE XLIX.

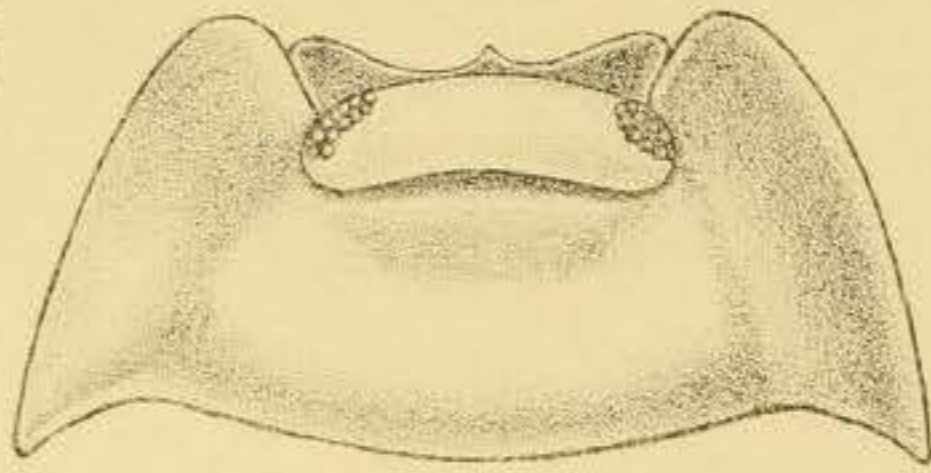
*Rotungus pictus*, gen. et sp. n.

- FIG. 1.—Dorsal view of the cephalon.  
,, 2.—Anterior view of the cephalon.  
,, 3.—Right antenna.  
,, 4.—First maxilla, terminal portions of the outer and inner lobes.  
,, 5.—First mesosomatic segment and cephalon.  
,, 6.—Left maxillipede, terminal portion.  
,, 7.—First left thoracic appendage.  
,, 8.—Types of setae present on the 4th joint of the 2nd thoracic appendage.  
,, 9.—Left uropod, dorsal view.  
,, 10.—Last metasomatic segment, telson and uropoda.

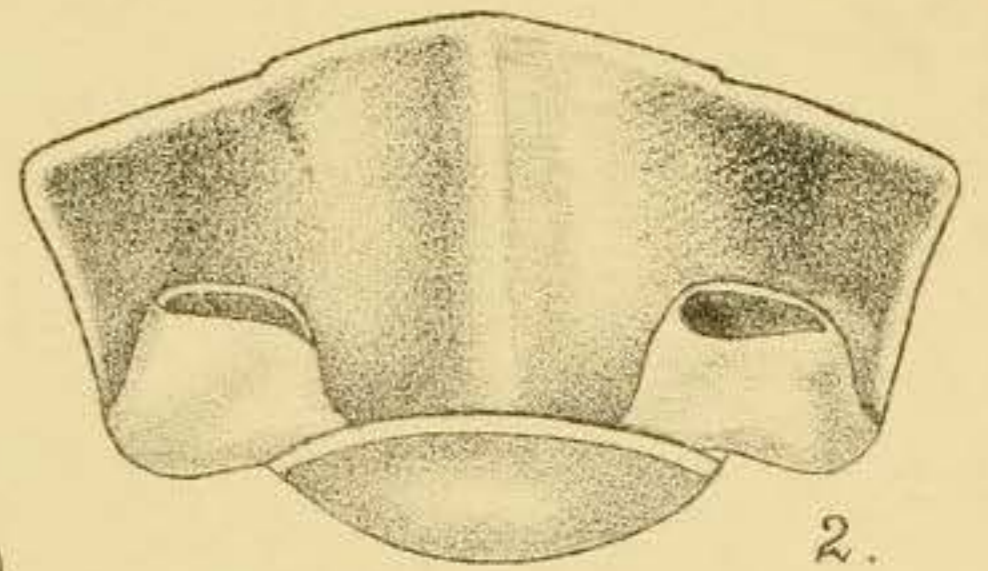




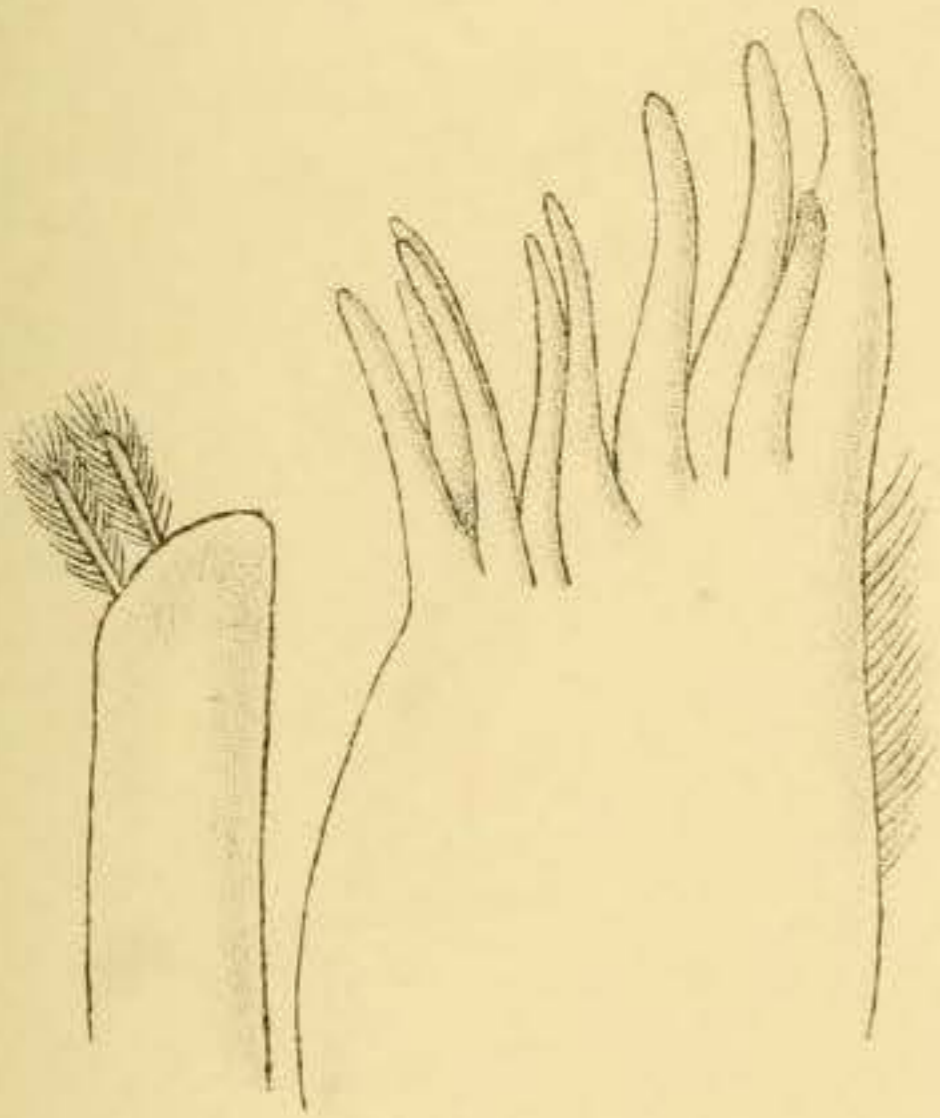
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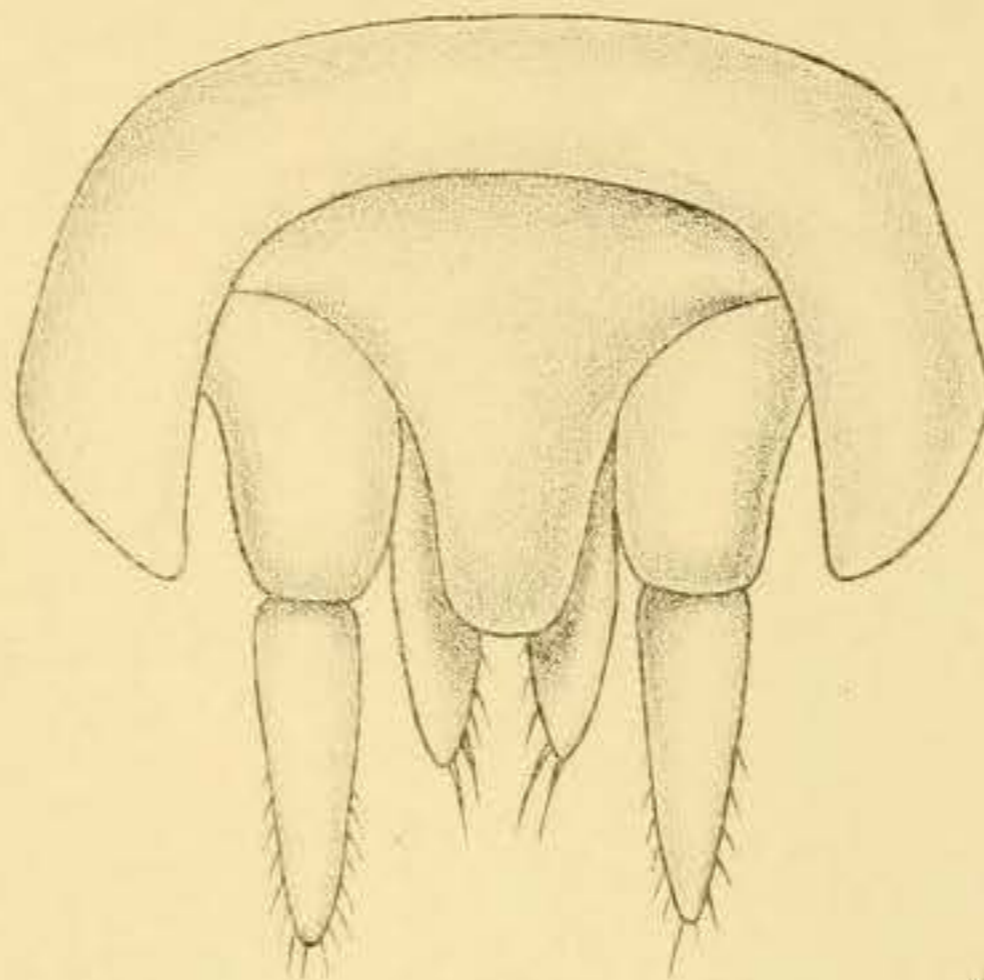
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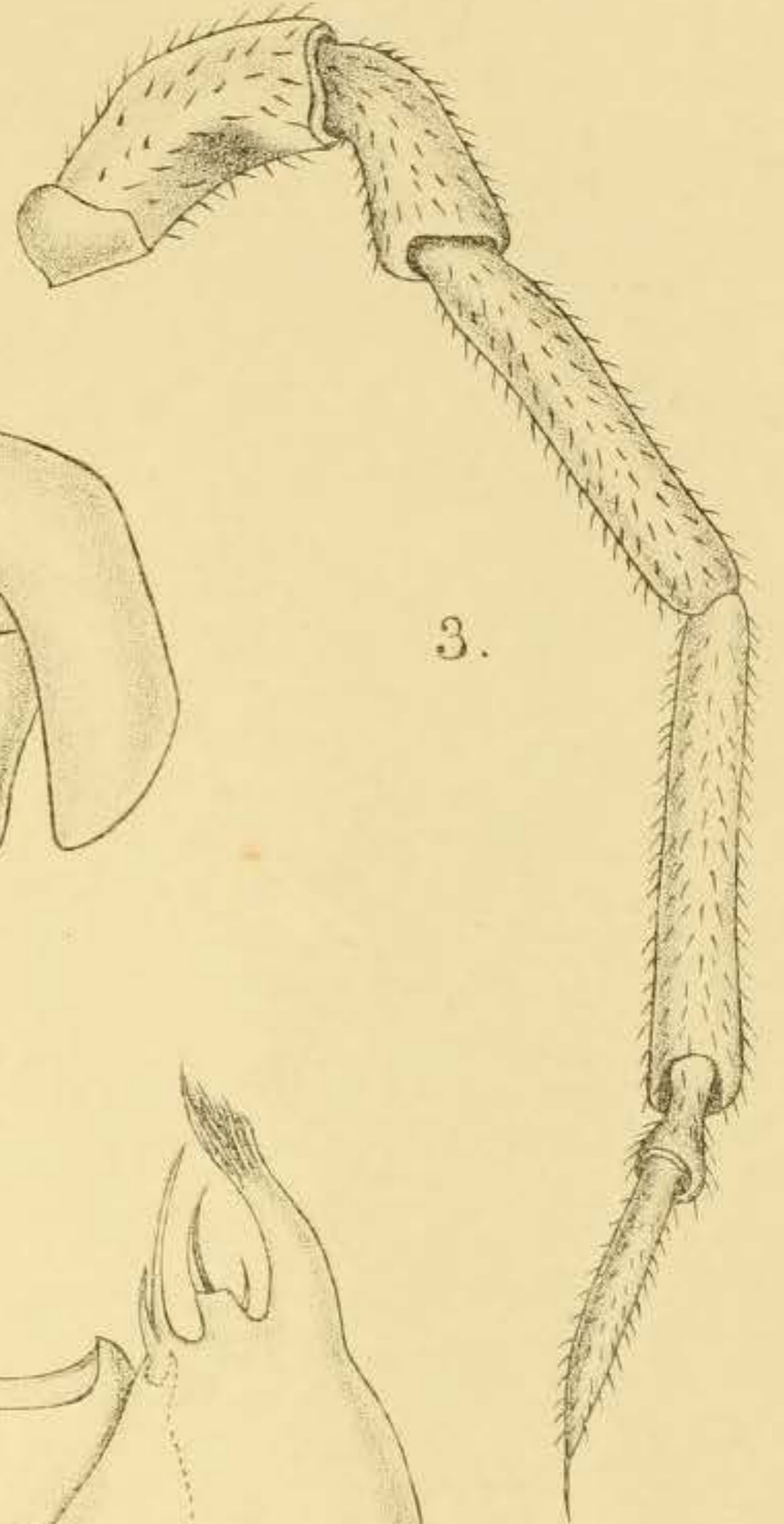
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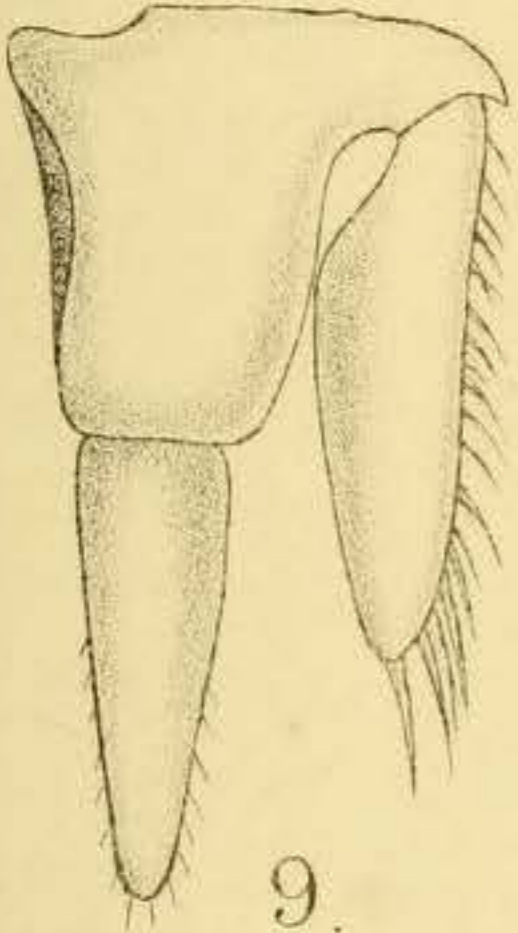
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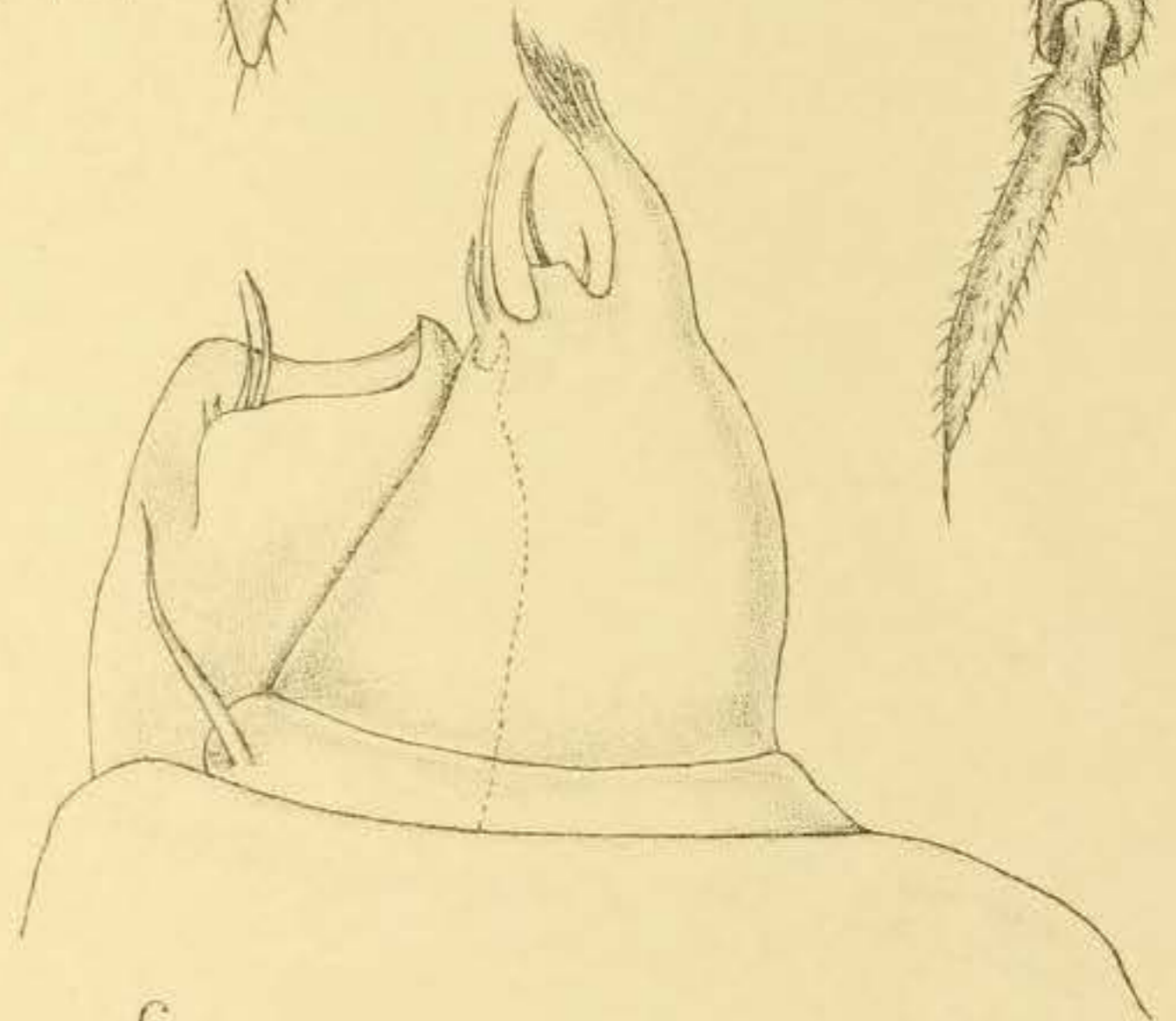
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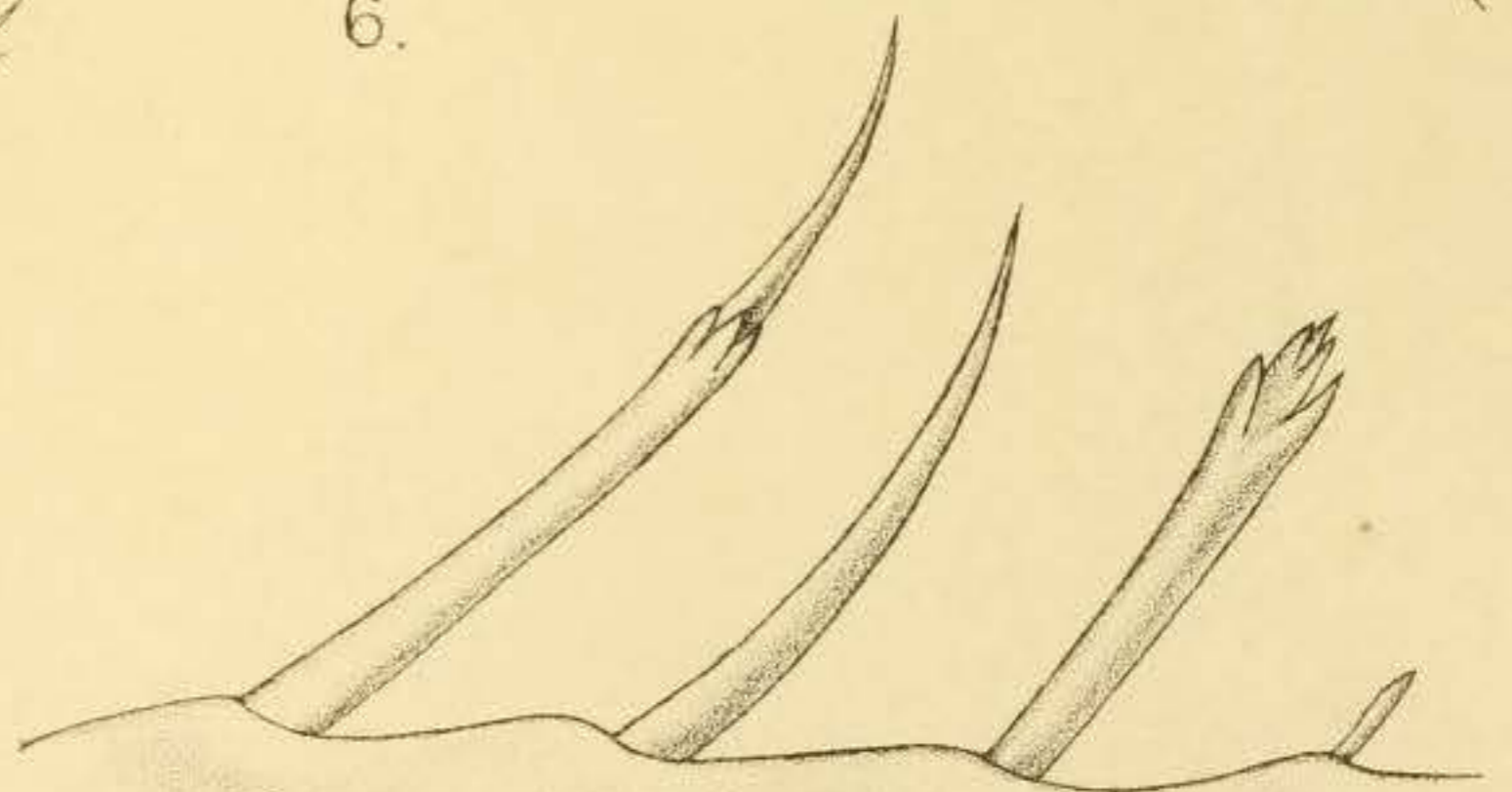
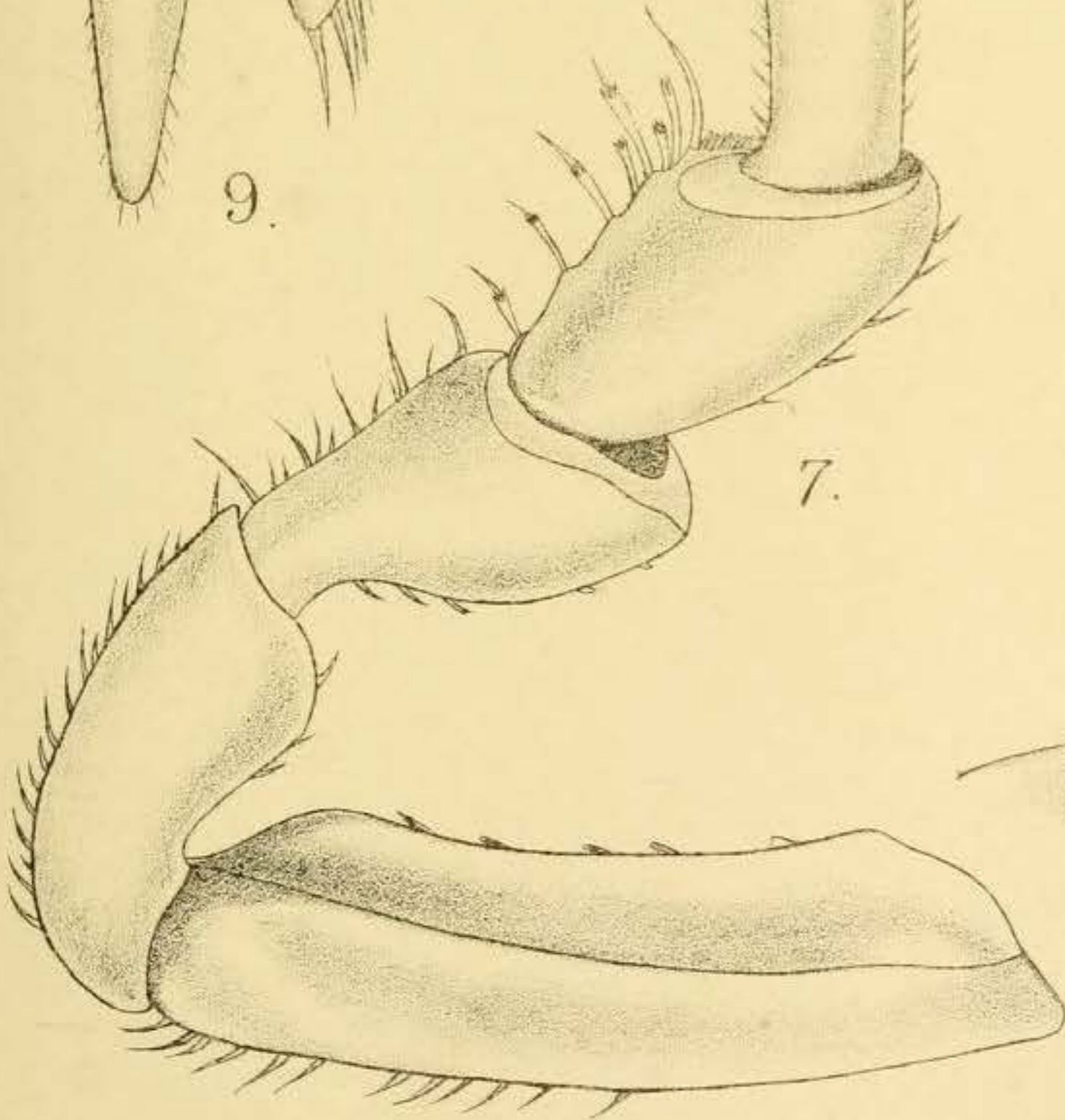
9.



7.



6.



c.

b.

d.

a.

8.

H.G.K. del.

A. Chowdhary, lith.

ROTUNGUS PICTUS, gen. et sp. nov.



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