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DESCRIPTION OF A REMARKABLE TERMITOPHILOUS
ISOPOD.

BY W. F. PURCELL, PH.D.,

First Assistant in the South African Museum.

The three specimens of the curious Crustacean described in this paper were discovered by Dr. Hans Brauns in the galleries of a Termite, which he identified as *Hodotermes viator*.

Dr. Brauns pointed out to me the resemblance between this Crustacean and a South African Staphylinid beetle, *Trilobitideus mirabilis* Raffr. (*Revue d'Entomologie*, v. 18, pp. 1-3, pl. 1, figs. 1-7, 1899), which was discovered by Mr. Raffray and Dr. Brauns in the nests of the ant *Dorylus helvolus* L. This resemblance is truly remarkable, especially as regards the form and sculpturing of the head and the 2 anterior thoracic segments.

GEN. PHYLLONISCUS n. g.

Body very broad, lightly convex in the middle portion but strongly expanded and deplanate laterally. Head semicircular, foliaceous, strongly expanded horizontally towards the front and sides, its width being three-fourths that of the first thoracic segment, its anterior margin entire and evenly convex between the sharp lateral angles. Eyes absent. Inner branches of first maxillæ with 2 very unequal pincilli near apex on inner side, the distal one being very much shorter than the proximal one. Antennæ, when at rest and folded, completely covered and hidden by the broad head (as in fig. 2), the flagellum very short, 4-jointed. Legs short and, excepting the anal pair, completely covered by the tergites. Anal legs with the basal segment broad, flattened, parallel-sided, transversely truncated at the apex, the outer half of which is sinuated for the reception of the exopodite; exopodite produced for half its length beyond the apex of the penultimate abdominal segment, terete, stylet-shaped, the endopodite lamelliform, quadrate, narrowed at the base but expanding slightly towards the truncated apex, which bears a minute

bristle-like stylet at the inner angle. Telson short, reaching to apex of basal segment of anal legs, the posterior margin convex at the sides, but produced backwards in the middle portion, the apex emarginate.

PHYLLONISCUS BRAUNSI n. sp.

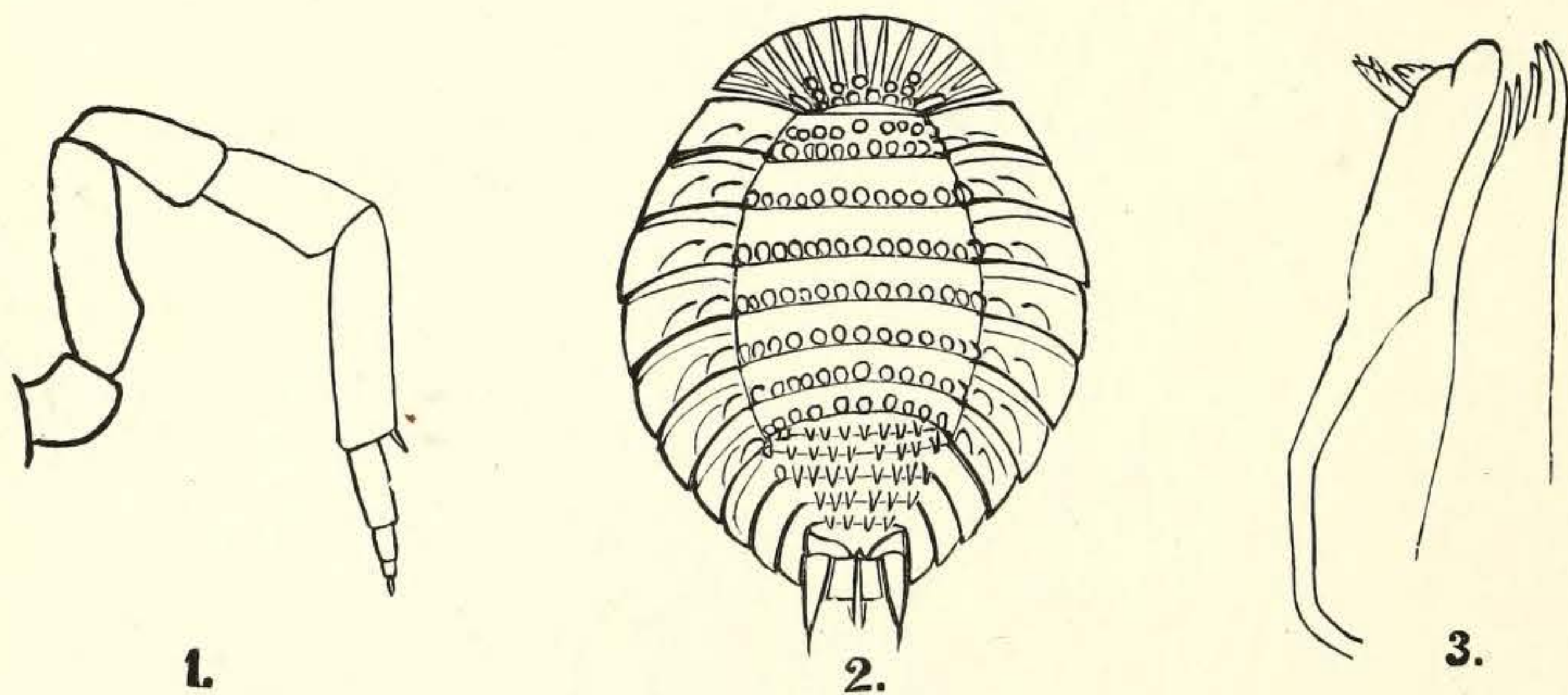
Types.—3 ex. (No. 9863) from the subterranean galleries of *Hado-termes viator* at Willowmore, Cape Colony (*Dr. H. Brauns*).

Colour white, the lateral parts and the head semi-transparent.

Form very broadly ovate, widest at the fourth thoracic segment.

Head with the posterior margin slightly sinuous in the middle part and almost straight or slightly sinuous in the slightly oblique lateral parts; basal part of upper surface with 3 transverse arcuate rows of low tubercles, the expanded part of head with 13–15 rounded radiating ribs (counting 1 along the posterior margin on each side).

Thorax.—Convex mesial portions of segments I–III straight behind, of IV almost straight, of V–VI slightly and broadly sinuated behind, provided in segment I with 2 transverse rows of low rounded



Phylloniscus braunsi n. sp. Fig. 1, left antenna from below ($\times 90$ times). Fig. 2, dorsal view of the Isopod ($\times 6$ times). Fig. 3, outer and inner branch of one of the maxillæ of the first pair (outer branch on right of figure) ($\times 90$ times).

tubercles (9 in the anterior and 10 in the posterior row, the median tubercle being absent or rudimentary in the latter), and in II–VII with a single posterior row of 11–15 tubercles, those in the posterior segments conical and directed backwards; the epimera of all these segments subsimilar, the anterior margins being slightly convex and the posterior margins sinuated, the upper surface provided with a large basal tubercle, a small one and an oblique ridge near posterior margin.

Abdominal segments each with a transverse row of conical tubercles above, the median tubercle from the second segment on being absent; segments I and II very short, III and IV with the epimera continuous with and similar to those of the thorax, except that the tubercles are absent.

Antennæ with the second segment lobate at base externally, subequal to the fifth in length, the third or fourth segments subequal but together longer than the fifth; flagellum about as long as the fourth segment of the scape and much shorter than the fifth, its basal segment forming half, its second segment a quarter, of the whole length, the segments becoming successively narrower, the apical segment very minute.

Length in millimetres (to apex of telson) 5·8; width of fourth segment 5; of head $3\frac{1}{4}$.

Since the above went to press I found four other specimens of *P. braunsi* at Matjesfontein, Cape Colony, under a stone in the galleries of a dark-coloured *Hodotermes* (evidently *H. mossambicus*).