16. The Staphylinid Fauna of South Africa. (Thirty-third Contribution to the African Fauna.)—By Dr. Max Bernhauer, Horn, Nied. Oesterreich.

(Translated from the German MS.)

(With Plate XIV.)

Through Sir Guy A. K. Marshall and Dr. G. Arrow, the British Museum in London has kindly submitted to me for study their material collected in the Cape Province, Orange Free State, Natal, South West Africa, and Rhodesia, for which material I here express to these gentlemen my warmest thanks.

I am describing below the new species in this material, and am also including some new ones obtained by English collectors in the Belgian Congo.

The types of the new species described below are in the collections of the British Museum and in my own.

The most interesting fact is the discovery of a representative of a new tribe, which I describe as follows:—

Eparchiini n. Trib.

This tribe is intermediate between the Omaliini and the Oxytelini. From the Omaliini it differs by the absence of ocelli and the non-carinate base of the venter; from the Oxytelini by the absence of a ventral costate edge on the second abdominal segment and by the strongly developed trochanters of the hind legs, which are a third of the length of the hind femora, or slightly longer. The prosternum is narrow; the front coxae are large, conical, strongly produced. Epimera of the prosternum as well as exposed spiracles are entirely absent.

Eparchium n. g.

Body moderately short, with broadened abdomen, moderately densely clothed with fine, long, black hairs. Head strongly elongated, much longer than broad, parallel-sided, narrow, scarcely constricted behind, with very large, very dorsally situated eyes, with the temples VOL. XXX, PART 4.

unmargined below, much longer than the longitudinal diameter of the eyes seen from above, with two long, deep, punctured and posteriorly slightly convergent grooves in front, at the posterior end of which there is a larger puncture; antennae moderately long, slightly thickened towards the apex, the third joint a little longer than the second, the following ones scarcely longer than broad, the eleventh shorter than the two preceding ones combined; anterior margin of labrum slightly rounded; mandibles short and broad, both untoothed; maxillary lobes short, the inner one at the apex with long hairs towards its apex, the outer one slightly broadened towards the apex, membranous along the inner margin and with dense and long hairs; maxillary palps short, the basal joints broader than long, the terminal joint as long as the two preceding ones together; labium broad, undivided, with the anterior margin rounded, labial palps almost of the same shape as the maxillary palps. Thorax oblong, almost cylindrical, deeply and broadly transversely depressed before the anterior margin; the epipleurae slightly visible from a lateral view. Elytra much shorter than the thorax, strongly broadened posteriorly, conjointly emarginate posteriorly, each rounded off at the suture as in the case of Thinobius. Abdomen broadened posteriorly, with narrow lateral margins. Mesosternum short, the middle coxae touching. The legs moderately slender; the tibiae without spines; tarsi all five-jointed, with the first four joints of the front tarsi short, the last one almost as long as the preceding ones together, with the first joint of the middle tarsi scarcely longer than the second, the last joint of the much more slender hind tarsi much longer than the second; this and the following ones elongated, the last joint being shorter than the two preceding ones together.

Nothing is known of the habits of this interesting insect. Genotype.—E. paradoxum n. sp.

Eparchium paradoxum n. sp.

(Plate XIV.)

Deep black, sometimes with an indistinct, or even entirely absent, large, bright, reddish-yellow spot in the middle of the two first exposed tergites; the antennae, palps, tarsi, anterior tibiae, and also parts of the other tibiae yellowish. The head is much narrower than the thorax, with slightly rounded posterior angles, with two large transverse punctures on the disk above, fairly smooth, very sparsely punctured, though more densely punctured before the base and

especially behind the eyes. The thorax is as broad as the elytra across the shoulders, imperceptibly narrowed posteriorly, sparsely and finely punctured, shining, more visibly punctured in the broad transverse depression. The elytra are moderately densely and finely punctured, densely covered with yellowish hairs and slightly shining. Abdomen fairly strongly and densely, distinctly coarsely punctured and with dense yellowish hairs, moderately shining. Length 2.5-3 mm.

Cape Province: Matjiesfontein (22nd-23rd October 1928); Worcester (September 1928) (R. E. Turner).

Gen. Lispinus Er.

Revision of the species at present known from South Africa.
1. Body large, narrow, elongated; thorax as long as broad. Length 6 mm.
aciculatus Bernh.
Body smaller, under 4 mm., less narrow, shorter; thorax considerably broader
than long
2. Elytra considerably longer than the thorax
Elytra not or only slightly longer than the thorax 6.
3. Coloured black 4.
Coloured reddish-yellow to rusty-red 5.
4. Thorax and elytra convex, strongly shining natalensis Bernh.
Thorax and elytra flatter, dull
5. Rusty-red, convex, narrower; front part of body strongly and fairly densely
punctured; thorax approximately one-fourth broader than long, an integu-
mentary sculpture scarcely visible even under fairly strong magnification;
elytra about one-fourth longer than the thorax, sometimes also shorter,
strongly and fairly densely and rugosely punctured, the ground puncturation
being very fine, scarcely visibly shagreened, shining. Length 2.8-3 mm.
Pondoland: Port St. Johns (October 1923-April 1924); Zululand: Eshowe
(April 1924); Natal: Kloof, 1500 feet (September 1926) (R. E. Turner)
pondoensis n. sp.
Reddish-yellow, fairly plain; front part of body fine and moderately densely
punctured, the ground puncturation very fine, but very distinctly shagreened;
thorax nearly one-third broader than long; elytra nearly a third longer than
the thorax, exceptionally finely and sparsely punctured, the longitudinal
ground striation exceptionally dense and very distinct, dull. Length 3-3-1
mm. N.W. Rhodesia: Mwengwa (27° 40' E., 13° S.) (26th June 1913);
Shigariatombwes (8th June 1913) (H. C. Dollman) dollmani n. sp.
6. Elytra distinctly a little longer than the thorax, quadrate, not broader than
long, rugosely punctured all over, with numerous fine superimposed punctures,

slightly yet distinctly shining; thorax scarcely broader than the elytra,

moderately broader than long; rusty-red; front part of body with fine and

separated punctures, moderately shining; abdomen indistinctly and sparsely

punctured. Length 2.8 mm. Zululand: Eshowe (R. E. Turner)

rugulipennis n. sp.

6. Elytra as long as the thorax, shorter than breadth of both combined, only indistinctly longitudinally striate along the suture, exceptionally densely and coarsely sculptured, not shining, longitudinally distinctly and fairly strongly rugulosely punctured towards the sides; thorax distinctly a little broader than the elytra, approximately one-fourth broader than long; for the rest very similar. Length 2.8 mm. Pondoland (15th-31st August 1923) (R. E. Turner) paradoxus n. sp.

Lispinodes rhodesianus n. sp.

Differing from *Lispinodes africanus* Bernh., to which it is nearly related, by the longer thorax, longer elytra, and entirely dull upper surface.

Rusty-red, dull; the head and abdomen a little darker, sometimes also the elytra are darkened; antennae, palps, and legs reddishyellow. Head about as broad as the thorax, moderately rounded, exceptionally finely shagreened and very finely and sparsely punctured; antennae short, the penultimate joints strongly transverse. Thorax a little narrower than the elytra, as long as broad, narrowed posteriorly, flattened and plain, sculptured like the head. Elytra narrow, about twice as long as the thorax, about half as long again as their combined breadth, scarcely more strongly punctured but with the punctures a little more separated, dully shagreened. Abdomen dully shagreened. Length 2–2·5 mm.

N.W. Rhodesia: Shigariatombwes (8th August 1913) (H. C. Dollman).

This species also occurs in the Belgian Congo: Elizabethville (6th October 1912) (congoensis Bernh. i. 1).

Phloeonomus ruficollis n. sp.

Distinguished by the small size, colour, and sparse puncturation. Black, shining; the thorax reddish-yellow, partly brownish; the head and elytra pitch-brown; bases of the brownish antennae, the palps, and the legs pale yellowish. Head is half as broad as the thorax, transverse, shining, with few strong punctures, anteriorly with one longitudinal depression above the bases of antennae; antennae short, the last 6 joints dark, forming a well-marked-off club. Thorax a little narrower than the elytra, about a third broader than long, the sides strongly rounded, strongly narrowed anteriorly, very convex, very shining, scarcely punctured. Elytra nearly twice as long as the thorax, distinctly broadened posteriorly, shining, with

some rows of coarse punctures which disappear posteriorly. Abdomen fairly shining, not distinctly punctured. Length 1.3-1.5 mm.

Cape Province: Montagu (23rd-30th September 1914); Worcester (September 1928) (R. E. Turner).

Phloeonomus caffer n. sp.

Clearly distinguished from the preceding species by the larger size and more elongated shape, the colour, longer elytra, and denser sculpture.

Black, moderately shining; thorax dark reddish-brown; elytra, antennae, palps, and legs pale reddish-yellow. Head exceptionally finely shagreened, with very fine and separated punctures, slightly shining. Thorax a little narrower than the elytra, nearly half as broad again as long, rounded on the sides, moderately narrowed anteriorly, moderately convex, with the punctures very fine and not very scattered and superimposed upon an exceptionally fine shagreen, yet fairly shining. Elytra twice as long as the thorax or slightly longer, strongly and densely punctured, fairly shining. Abdomen shining, scarcely punctured. Length 1.8 mm.

Pondoland: Port St. Johns (5th-30th April 1923) (R. E. Turner).

Phloeonomus turneri n. sp.

Closely related to caffer, separated from it by the much larger and broader form and by the following additional points:—

Head more shining, apart from the shagreen scarcely punctured. Thorax slightly less short, the sides more strongly narrowed anteriorly, with a feeble longitudinal depression on each side of the middle part, more strongly and very acutely but not densely punctured, strongly shining notwithstanding the ground sculpture. Elytra are less strongly and more densely punctured, slightly shorter in relation to the thorax. Coloured pitch-black, the thorax more brown, the elytra reddish-yellow, the entire antennae, palps, and legs bright pale yellow. The joints of the antennal club exceptionally short, at least three times broader than long. Length 2 mm.

Pondoland: Port St. Johns (5th-30th April 1923) (R. E. Turner).

Trogophloeus (Carpalinus) capensis n. sp.

To be placed very near arcuatus Steph., separated from it and allied forms by the much shorter and broader thorax and shorter elytra.

Black, densely grey-haired; the first antennal joint and the legs reddish-yellow. Head considerably narrower than the thorax, with very fine and dense hairs, with very large bulging eyes and scarcely indicated temples; antennae fairly long, the penultimate joints distinctly transverse. Thorax moderately narrower than the elytra, nearly half as broad again as long, strongly narrowed posteriorly, with a deep and broad, crescent-shaped, transverse depression before the base, in front of which there is only a very feeble indication of two shallow impressions, with exceptionally fine, scarcely visible, and dense puncturation. Elytra a little broader than long, very finely and very densely punctured, with a very feeble small impression on each side behind the scutellum. Abdomen with shagreen-like punctures, dull. Length 2.6 mm.

Pondoland: Port St. Johns (7th-13th August 1923) (R. E. Turner).

Trogophloeus (Taenodema) punctiger n. sp.

Resembling *impressus* Lac. very closely in form, separated at once by the smaller eyes, much longer and strongly prominent temples, shorter thorax, and much more scattered puncturation on the thorax and elytra.

Black, fairly shining; the first and last joints of the otherwise black antennae and the legs reddish-yellow; the thorax and elytra brownish. Head a little narrower than the thorax, with two strong frontal grooves, very finely and densely punctured; eyes moderately large; temples well developed, half as long as the longitudinal diameter of the eyes, projecting cheek-like; antennae short, the penultimate joints transverse. Thorax much narrower than the elytra, about a third as broad again as long, strongly rounded and narrowed posteriorly, with two strong longitudinal grooves before the scutellum, with another strong longitudinal impression near the lateral margin, with moderately fine and not very dense puncturation, shining. Elytra considerably larger than the thorax, nearly as long as their combined breadth, with strongly prominent shoulders, fairly strongly and not very densely punctured, shining. Abdomen with shagreen-like sculpture, dull. Length 2 mm.

N.W. Rhodesia: Namwala (30th March 1913) (H. C. Dollman).

Trogophloeus (Taenosoma) parcepunctatus n. sp.

Separated from the closely related foveolatus Sahlb., with which this new species shares an entirely non-shining anterior part of the body, by the following points:—

The head is coarsely rugulosely punctured; the temples are a little longer; the antennae less dark, with the first joint bright yellowish-red. Thorax likewise with much stronger, coarsely rugulose, but just as dense puncturation, without a depression, entirely plain. Elytra a little shorter, with the punctures a little stronger and distinctly more scattered. Legs reddish-yellow. Length 1.5 mm.

Natal: Kloof, 1500 feet (September 1926) (R. E. Turner).

Anisopsis carinata Fauv., var. rugulipennis n.

Separated from Anisopsis carinata Fauv., though scarcely specifically, by the different colour.

Deep black; a large triangular spot at the posterior angles of the elytra reddish-yellow; the first five antennal joints, the palps, and the legs dirty reddish. Length 3.2 mm.

Natal: Drakensberg, Van Reenen (November 1926) (R. E. Turner).

Oxytelus (s. str.) crenulicollis n. sp.

Closely resembles O. crenaticollis Fauv.; differs in being larger, partly paler coloured, and in the following additional characters:—

Head considerably broader, only slightly narrower than thorax in \$\mathcal{Z}\$, more strongly transverse, the longitudinal striation near the eyes nearly twice as dense. Thorax is similarly shaped, a little more densely sculptured, however, on the sides. Elytra are much more finely punctured, and also along the inner half punctato-striate, whereas in crenaticollis they are all over finely acicularly punctured. Eyes are considerably larger; the temples smaller, in \$\mathcal{Z}\$ not longer than the longitudinal diameter of the eyes seen from above, whereas in crenaticollis the diameter is considerably shorter than the temples, to where they curve. The colour is pitch-black, the head and thorax being often paler, the elytra whitish-yellow, the abdomen partly yellowish, the antennae entirely reddish-yellow, the palps and the entire legs paler reddish-yellow. Length 4.5–5.5 mm.

N.W. Rhodesia: Mwengwa (27° 40′ E., 13° S.) (18th March 1914) (H. C. Dollman).

Oxytelus (Tanycraerus) incognitus n. sp.

Strikingly like O. laqueatus Marsh. in shape, size, and colour, but separated by the following characters:—

The head is smaller and longer, exceptionally dully shagreened in front, not shining, slightly less strongly and more densely longitudinally striated posteriorly, little shining; antennae longer, the penultimate joints less transverse. Thorax is a little less broad, more strongly and sinuously narrower, considerably more densely punctured; the central furrow is not uninterrupted and deep as in *laqueatus*, but interrupted in the middle, the lateral ones a little more deeply impressed. Elytra are very similar, but more striato-punctate. Length 4.5 mm.

Cape Province: Cape Town; Table Mountain (1906) (W. Bevins).

Oxytelus (Tanycraerus) aluticeps n. sp.

This species is very near O. grandis Epp., which appears not to be uncommon in the Congo region, in having the same shape and colour, but is distinguished from it by the entirely different sculpture on the head and in being by a good half smaller.

Black, shining; the thorax pitch-brown; the elytra, the bases of the otherwise brownish antennae, the mouth, and the legs bright reddish-yellow; the base of the abdomen dirty yellowish in part. The head is shorter, not shining, and simply punctured all over as in grandis, but dull striately shagreened, only the anterior part and the extreme base being shining. Thorax distinctly shorter, nearly more than half as broad again as long, distinctly impressed on the sides, without any indication of lateral grooves next to the distinct central furrow, with the punctures a little finer and perhaps more scattered. Elytra distinctly longer than the thorax, with the punctures fine and nearly in rows. Length 4 mm.

Belgian Congo: 18 miles S.W. of Elizabethville (1928) (H. S. Evans).

Oxytelus (Tanycraerus) turneri n. sp.

Separated at once from the closely related O. micans Kr. by the different colour, larger and broader body, and the head, which even in \mathcal{P} is broadened posteriorly, much more shining, and not shagreened anteriorly.

Deep black; the legs dark pitchy. Head as broad as thorax in 3, narrower than thorax in 2, more strongly broadened in 3, less strongly

in φ , shining, with two feeble longitudinal grooves transversely depressed behind these, punctured finely and not very densely, anteriorly sparsely, more strongly laterally; eyes with very fine facets; temples well developed; antennae short, strongly thickened and club-like towards the apex, the penultimate joints more than twice as broad as long, the last joint large and longer than the two preceding ones together. Thorax is slightly less short than in micans Kr., the sides less rounded, broadly depressed near sides, with the three centre grooves much less deeply and less strongly depressed, with the puncturation denser. Elytra are more densely and strongly longitudinally striated. Abdomen with very fine and scattered punctures. Length 2·5–3 mm.

Natal: Drakensberg; Van Reenen (November 1926) (R. E. Turner).

Oxytelus (Tanycraerus) okahandjanus n. sp.

Also belonging to the *micans* Kr. group, distinguished by the long elytra.

Q.—Black, shining; the elytra brownish; the bases of the rusty-brown antennae, the palps, and legs dirty yellow. Head much narrower than the thorax, feebly rounded posteriorly, with the grooves on vertex not very deep, with fine and scattered punctures, shining, with few stronger punctures; temples shorter than the longitudinal diameter of the eyes; antennae less short than in the previous species, otherwise very similarly shaped, the penultimate joints scarcely twice as broad as long. Thorax a little narrower than the elytra, about a third broader than long, the sides gently rounded, with a broad, shallow depression near the sides, with the central groove not very strong and without distinct lateral grooves, with fine and scattered puncturation. Elytra about one-third longer than the thorax, finely and not very densely punctato-striate. Length 2.8 mm.

S.W. Africa: Okahandja (3rd-11th December 1927) (R. E. Turner).

Oxytelus fulgidus Fauv., var claripennis n.

Distinguished from the uniformly coloured typical form only by the bright yellow elytra.

Cape Province: Aliwal North (December 1922). Orange Free State: Harrismith (March 1927) (R. E. Turner). Natal: Van Reenen. Rhodesia: Salisbury (G. A. K. Marshall).

Oxytelus (Tanycraerus) punctus n. sp.

Distinguished among the species with only one distinct thoracic groove by the dense and strong puncturation on the front part of body.

2.—Brownish-yellow to reddish-yellow; the head darker; the thorax reddish-brown to yellowish-red; the elytra uniformly coloured or with the base reddish; the entire antennae, the mouth, and the legs reddish-yellow. Head narrower than the thorax, with the puncturation strong and dense, longitudinally rugulose posteriorly and fine and scattered near front margin, shining; grooves on the vertex scarcely evident; temples well developed, half as long as the longitudinal diameter of the very finely faceted eyes, shortly rounded posteriorly; antennae moderately short, fairly equally broad from the fifth joint, the penultimate joints about half as broad again as long, the terminal joint a little longer than the two preceding ones together. Thorax a little narrower than the elytra, about a third broader than long, broadest in first third, distinctly somewhat roundly narrowed posteriorly, shallowly depressed near the lateral margin, with a fairly fine central groove in the middle, with only a very feeble indication of lateral grooves, strongly and densely, fairly uniformly punctured, shining. Elytra a little longer than the thorax, with dense and longitudinally rugulose puncturation. Abdomen with exceptionally fine and sparse puncturation and dully shagreened. Length 3.5 mm.

Belgian Congo: 18 miles S.W. of Elizabethville (1928) (H. E. Evans).

Oxytelus (Tanycraerus) rufulus n. sp.

Very closely related to O. planus Fauv., from which it is separated by the slightly broader and shorter head, larger eyes, shorter temples, but especially by the much stronger and denser puncturation on the thorax and by the colour.

Uniformly rusty-red, with paler antennae, palps, and legs. Head almost as broad as thorax in 3, narrower than the thorax in 9, almost unpunctured, with fairly large eyes; temples only about half as long as the longitudinal diameter of the eyes; antennae only moderately thickened towards the apex, the penultimate joints only about half as broad again as long. Thorax strongly convex, approximately about one-third broader than long, fairly strongly, distinctly a little roundly, narrowed posteriorly, with bluntly rounded posterior angles, moderately fine and fairly densely punctured, almost without indica-

tions of grooves or impressions, shining. Elytra scarcely as long as the thorax, very finely and sparsely punctured, shining, with a very feeble indication of a longitudinal depression. Abdomen with only a few punctures, shining smooth. Length 2.5 mm.

Mashonaland: Salisbury (1910) (G. A. K. Marshall).

Oxytelus (Anotylus) mortuorum n. sp.

Belongs to the *inustus* Grav. group, but easily separated by the deep black colour and the very dense longitudinally rugose sculpture on the thorax.

Deep black, fairly shining; the mouth and the femora pitchy; the tibiae and tarsi bright reddish-yellow. Body moderately broader and more compact. Head almost as broad as the thorax in 3, considerably narrower than the thorax in \(\varphi\), with dense longitudinally rugose puncturation, smooth and shining anteriorly; eyes not very prominent, finely faceted; temples well developed, a little shorter in 3, much shorter in 2, than longitudinal diameter of eyes; antennae short, gradually thickened towards the apex, the penultimate joints slightly more than half as broad again as long, the terminal joint as long as the two preceding ones together. Thorax a little narrower than the elytra, about half as broad again as long, the sides feebly and fairly uniformly rounded, without an impression near the sides, discally with a distinct central groove but scarcely indicated lateral grooves, with very dense costate-rugae all over, a little shining. Elytra as long as the thorax, together strongly transverse, longitudinally rugose like the thorax, the rugae, however, finer and denser. Abdomen exceptionally finely shagreened, scarcely visibly punctured. Length 2.5 mm.

Belgian Congo: 18 miles S.W. of Elizabethville (1928) (H.S. Evans).

Oxytelus (Anotylus) mashonensis n. sp.

A small, rather insignificant species of the *inustus* group, distinguished by the sparse puncturation on the front part of the body, especially the almost unpunctured head.

Black, shining; the elytra, the bases of the antennae, and the legs pale reddish-yellow; the mouth rusty-red. Head narrower than the thorax, depressed in the middle, with two fine frontal grooves and a small depression on the vertex, shining, scarcely punctured; eyes not very prominent, their longitudinal diameter, seen from above, much longer than the short temples; antennae of the normal shape,

the penultimate joints almost twice as broad as long. Thorax almost half as broad again as long, a little narrower than the elytra, the sides slightly rounded, with bluntly rounded posterior angles, with a broad, deep depression near the sides, centrally with a deep longitudinal groove, slightly interrupted before the middle, with a less strong and shortened lateral groove on each side, the puncturation fine and sparse, more strongly and densely on the inside of lateral depressions. Elytra a little longer than the thorax, with a longitudinal depression, with the puncturation fine and scattered, scarcely longitudinally rugose. Abdomen indistinctly punctured, shining. Length 2.5 mm.

Mashonaland: Salisbury (1910) (G. A. K. Marshall).

Oxytelus (Anotylus) quadricarinatus n. sp.

Belonging to the tetracarinatus group and easily distinguished from the rest of the African species by the faintly greasy-shining head, and especially by the four fine, shining carinae on the thorax.

Deep black, dull, the elytra slightly paler; the tibiae and tarsi yellowish. Head scarcely narrower than the thorax in \$\delta\$, in \$\gamma\$ considerably narrower, transversely quadrate, exceptionally finely shagreened; antennal tubercles shining; the vertex with faint, greasy lustre; antennae fairly thickened towards apex, the penultimate joints a little less than twice as broad as long. Thorax about a third broader than long, the sides feebly rounded, dully shagreened, with four fine, not abbreviated, shining carinae, of which the two inner ones are very near together and enclose the central groove, and the lateral ones are further removed, with a broader and stronger depression on each side between the lateral carinae and the side. Elytra much longer than the thorax, exceptionally finely striato-shagreened, dull, with small, sparsely scattered punctures. Anterior tibiae not crenate along the outer margin. In the \$\delta\$ the sixth sternite is inconspicuously emarginate. Length 1.5 mm.

Belgian Congo: 18 miles S.W. of Elizabethville (1928) (H. S. Evans).

Platysthetus natalensis n. sp.

Resembling P. armatus Sachs. deceptively in shape, size, and colour, and separated only by the less dense puncturation on the head, and especially on the elytra; possibly only a race of armatus.

The elytra are mostly very sparsely punctured, whereas they are comparatively densely punctured in armatus. The puncturation of

the head and thorax also is considerably more scattered. Apart from these, I can find no further essential differences. Length 2.8-3.5 mm.

Natal: Drakensberg; Van Reenen, 5500-6500 feet altitude (October 1926) (R. E. Turner).

Bledius (s. str.) lamelliceps n. sp.

Easily distinguished from B. pilicollis Bernh. (with which, among the African species, it shares a similar sexual distinction in the 3) by the absence of the characteristic hair on the thorax, much shorter elytra, and the entirely different colour. From our endemic (European) species of the tricornis group, which it closely resembles in colour, it is distinguished by the shorter elytra, very scattered puncturation on the thorax, and other sexual distinctions in the 3.

Deep black; the elytra dull blood-red; the legs pitchy; the hairs, excepting the few lateral bristles, sparse and short. Head exceptionally densely and strongly granularly shagreened, entirely non-shining, with a very large, broad, dorsally truncated and anteriorly strongly produced raised lobe on each side above the eyes in the 3. Thorax broader than long, parallel-sided, with bluntly rounded posterior angles, distinctly and moderately densely granularly shagreened, moderately shining, with a stronger central groove medially, with moderately strong and scattered puncturation, with unpunctured areas behind the middle and laterally, medially produced anteriorly in the 3 into a fairly short, triangular, apically much attenuated, spine-like, densely haired process. Elytra only a little longer than the thorax, with fine and scattered puncturation on an exceptionally finely, scarcely visibly, striated background, moderately shining. Abdomen dull, granularly shagreened, moderately finely and sparsely punctured. Length 5.5 mm.

Cape Town: Milnerton (February 1926) (R. E. Turner).

Bledius (Blediodes) semiopacus n. sp.

This species is very near $B.\ glasunovi$ Luze, and differs from it only in the following points:—

The head and thorax are less dull, the latter more distinctly and densely punctured; antennae paler, reddish-yellow to near apex, whereas they are brownish in glasunovi. The most important difference is, however, found in the puncturation of the elytra, which are at least twice as strongly and half as densely punctured and

thus more shining. I can find no other essential differences. The two species may be confused even by their similarity in colour and shape.

From atricapillus Germ. the new species differs essentially by the duller, finer, and more scattered puncturation on the front part of the body, and by the stronger and more scattered puncturation on the elytra. Length 3.2 mm.

Natal: Frere; Estcourt (1910) (G. A. K. Marshall).

Bledius (Hesperophilus) lateripennis n. sp.

A species easily distinguished by the colour.

Black, fairly shining; a very large spot on the elytra, extending almost along the entire sides to about the first fifth and inwards to over the middle, the bases of the antennae, the legs, and the extreme apex of abdomen from the ninth tergite onwards yellowish-white; the mouth rusty-red. The head exceptionally finely and dull shagreened, entirely non-shining; antennae a little thickened towards apices, the penultimate joints fairly transverse. Thorax broader than long, parallel-sided, with rounded posterior angles, with a fine central groove, finely and moderately densely punctured, fairly shining. Elytra much longer than the thorax and much longer than the breadth of both combined, considerably more strongly and densely punctured than the thorax, fairly shining. Abdomen shining, fairly strongly and sparsely punctured. Length 2·5–3 mm.

Pondoland: Port St. Johns (October 1923) (R. E. Turner).

Bledius (Hesperophilus) pruinosulus n. sp.

Very close to *B. michaelseni* Bernh. from South West Africa; very closely resembling it and scarcely distinguishable in sculpture, but apart from the uniform black or pitch-black colour, also distinguished by the following additional characters:—

The thorax is broader and much shorter, almost one-third broader than long, with a very narrow but distinct, smooth, shining line along the middle, with the sides straighter, the posterior angles less arcuately rounded. The elytra are much longer, almost half as long again as the thorax, without a reddish-yellow spot at the posterior angles, unicolorous, blackish, dirty brown in immature specimens, about one-fourth longer than their combined breadth. The mouth and legs pale yellow; the antennae a little darker. Length a little over 2 mm. (with the abdomen drawn in).

Mashonaland (December) (G. A. K. Marshall).

Bledius (subgen. n. Pareiobledius) alutellus n. sp.

The new subgenus differs from *Hesperophilus* (with which it agrees in the very long mandibles which are not crossed in repose), as well as from the remaining subgenera, by the finely faceted eyes and a build reminiscent of *Trogophloeus*, and may possibly prove to be an independent genus.

To this subgenus belongs Bledius pruinosus Bernh. (Fauv., i, 1), which was misleadingly described by me as a Trogophloeus from a determination label of Fauvel. From this species the new species differs in being considerably larger, and in having strongly developed, swollen and prominent temples, broader head, longer antennae, and much shorter elytra.

Pitch-black; the front part of the body more pitch-brown; the entire antennae and legs rusty-yellow; dull, not shining, densely haired. Head a little narrower than the thorax, dull shagreened and with fine and moderately dense, anteriorly more scattered, puncturation, with elevated, fairly large, shining, antennal tubercles, with two feeble impressions between these; the eyes are comparatively small, slightly prominent, finely faceted; the temples behind them strongly developed, strongly broadened posteriorly, about as long as the longitudinal diameter of the eyes seen from above; the antennae are elongated towards the apices, only very slightly thickened, the first joint scapiform, the second elongated, the third much shorter, the others scarcely broader than long, the penultimate one moderately broader than long. Thorax a little narrower than the elytra, longer than broad, broadest in front, linearly and strongly narrowed posteriorly, with bluntly rounded posterior angles, exceptionally densely dull shagreened, not punctured along the middle zone, otherwise fairly coarsely and densely punctured, the margins at the sides very indistinct, the epipleurae very broad. Elytra scarcely longer than the thorax, longer than their combined breadth, dull shagreened and finely and densely punctured. Abdomen dull shagreened without any shine, very densely covered with grey hairs, with tufts of yellow hair laterally and across the hind margins of the tergites. Anterior and middle tibiae strongly spined. Length 4.5 mm.

Cape Province: Cape Town, Table Mt. (1906) (W. Bevins); Cape Town, Milnerton (February 1926) (R. E. Turner); Mossel Bay (October 1921) (R. E. Turner).

Thinobius (Thinophilus) iridiventris n. sp.

Related to heterogaster Fauv. in having the abdomen feebly iridescent and extraordinarily thickly punctate, but with somewhat similar habitus (build) to petzi Bernh.; from the former easily distinguished by the very long elytra.

Black, dull; elytra brown; the bases of the brownish antennae, the palps, and legs dirty yellow. Head considerably narrower than thorax, almost as long as broad, parallel-sided; vertex transversely impressed, very finely and very thickly punctate; antennae fairly long, fifth joint scarcely broader than sixth, the penultimate one as long as or somewhat broader than long, the sides gently and nearly evenly rounded, very finely and very thickly punctate, dull. Elytra nearly twice as long as thorax, much longer than their united width, extremely finely and densely shagreened punctate, matt. Abdomen extraordinarily finely punctate, the puncturation scarcely visible even with the strongest lens, but with distinct though feebly iridescent silky sheen. Length 1.2 mm.

S.W. Africa: Okahandja (2nd-18th March 1928) (R. E. Turner).

Gigarthrus harrismithi n. sp.

Related to G. continentalis Bernh., to which it is very similar in size, build, and coloration; but easily distinguished by its longer thorax, distinctly shagreened middle zone, and much longer, more strongly and thickly punctate elytra.

Deep black; the antennae, palps, and legs pitch-black, with sparse grey pubescence; abdomen with thick golden-yellow pubescence. Head little narrower than thorax, strongly shagreened, with strong and fairly close puncturation, feebly shiny; antennae scarcely different. Thorax almost as broad as elytra, about as broad as long, nearly parallel-sided, strongly emarginate near base, with very broad striate-shagreened middle zone, on either side with an obliquely longitudinal, non-punctate, but distinctly shagreened, broad ridge, otherwise strongly and fairly closely punctate on a distinctly shagreened ground. Elytra nearly one-third longer than thorax, slightly longer than their united width, strongly and closely punctate, but less so near the suture, and extremely finely shagreened. Abdomen somewhat widened behind, less strongly but more closely punctate than fore part of body, extremely finely shagreened, less shiny than the elytra. Length 4.5 mm.

Orange Free State: Harrismith (February 1927) (R. E. Turner).

Holotrochus opacus n. sp.

Very remarkable for its sculpture.

Black, feebly shiny, with thick grey-yellow pubescence; the antennae, palps, and legs rusty-red. Head much narrower than thorax, moderately finely and closely punctate on a finely shagreened ground; antennae moderately thickened towards apex, penultimate joints distinctly transverse. Thorax as broad as elytra, little broader than long, sides gently rounded, feebly narrowed posteriorly, with rectangular posterior angles, with a median narrow, raised, shiny line, laterally behind the middle with an obliquely longitudinal shiny ridge, otherwise strongly and thickly punctate and strongly shagreened, feebly shiny. Elytra half as long again as thorax, equally wide, much longer than their united width, shagreened but matt, finely and sparsely punctate, the shagreen almost granulate. Abdomen finely and moderately sparsely punctate, finely shagreened, rather more shiny than fore part of body. Length 3.5–4 mm.

Mashonaland: Salisbury (1910) (G. A. K. Marshall) (under bark of trees).

Stenus (Nestus) conicus n. sp.

Very similar to S. erythraeanus Bernh. in the coloration, especially of the abdomen, but somewhat smaller and distinguished by the following additional features:—

Head rather narrower, narrower than the elytra, transverse diameter of eye greater than half the interocular width; antennae considerably shorter and thicker, the individual joints shorter, the penultimate ones distinctly transverse in their broadest aspect. Thorax shorter, only very little longer than broad, the sides a little rounded. Elytra narrower and also shorter, more thickly rugulose-punctate. Abdomen conically pointed, base of first tergite medianly keeled, the puncturation more scattered. Upper surface less densely punctate. It may be that when more material is examined this species will prove to be a race of erythraeanus. Length 2.3 mm.

Mashonaland: Salisbury (1910) (G. A. K. Marshall).

Stenus (Hypostenus) silvaticus n. sp.

Deceptively like S. alutiventris Bernh. in build, colour, and size, but easily distinguished by the coarser and sparser puncturation on head, thorax, and elytra, and distinguished also by the distinct shagreen of the latter; distinguished also from alutaceipennis Bernh.

VOL. XXX, PART 4.

by the much coarser and much sparser puncturation of the fore part of body, much feebler shagreen on elytra and the extremely fine and sparse puncturation of the abdomen.

Head somewhat narrower than elytra, transversely circular, with two broad, shallow frontal impressions, moderately finely and moderately thickly punctate, with narrow, smooth median line; temples short but well indicated; antennae very similar to those of the above species, equally elongate, joints of the club at least twice as long as broad. Thorax much narrower than elytra, half as long again as broad, elongate, the sides gently rounded, strongly and not too closely punctate on an extremely fine and scarcely visible shagreened ground, feebly shiny. Elytra as long as thorax, shoulders strongly angularly prominent, the puncturation somewhat less strongly and distinctly more scattered on a distinctly shagreened ground, feebly shiny. Abdomen extremely finely and very sparsely punctate, less matt than fore part of body. Length 5.5 mm. (abdomen somewhat retracted).

Mashonaland: Chirinda Forest (October 1905) (G. A. K. Marshall).

Stenus (Hypostenus) parcipennis n. sp.

Belonging to the same group as the preceding species, but distinguished from it and other related species by the short, strongly and sparsely punctate, shining elytra.

Black, with very feeble bluish sheen; antennae, palps, and legs whitish-yellow. Head very large, with the strongly protuberant eyes almost broader than the thorax, with a median shallow, sparsely punctate depression, the rest strongly, laterally fairly thickly, punctate. Thorax much narrower than the elytra, not quite half as long again as broad, the sides behind the middle obtusely broadened, strongly and thickly punctate, shiny like the head. Elytra considerably shorter at the suture than the thorax, more strongly but rather sparsely punctate, very shiny. Abdomen with extremely fine, scarcely visible, and very sparse puncturation, moderately shiny. Length 5.2 mm. The 3 has the sixth sternite gently emarginate, the fifth and fourth somewhat emarginate in the middle of hind margin, and along the median line very finely and closely punctate and pubescent.

Pondoland: Port St. Johns (10th-31st July 1923) (R. E. Turner).

Stenus (Hypostenus) tristiculus n. sp.

This species is extraordinarily close to S. cruralis Bernh. in general build and in sculpture and coloration, but can be easily distinguished by the pale antennal joint, the dark bases of the tibiae, much smaller head, and broader and longer elytra.

Black, matt; antennae except the pale basal joint, the apices of the reddish-yellow palps, and the legs pitch-black, basal joint of antennae not black as in *cruralis*, bases of tibiae not paler. Head but little broader than thorax, much narrower than elytra, almost smooth, with very indistinct frontal grooves, fairly strongly and extremely finely rugulose-punctate; antennae short, third joint much narrower than and nearly double as long as second, the penultimate ones somewhat broader than long. Thorax much narrower than elytra, only a little longer than broad, the sides strongly rounded and with two fine spiniform denticles, more strongly and deeply rugulose-punctate than the head. Elytra strongly developed, with strongly prominent, rectangular shoulders, coarsely and closely punctate, somewhat shiny, like the rest of the body with extremely short, silvery-white, sparse pubescence. Abdomen moderately coarsely and closely punctate, somewhat shiny. Length 3.5 mm.

In having lateral (thoracic) denticles, and in general also in coloration, build, and sculpture, this species agrees so closely with S. quadrispinus Bernh. that the two species might easily be confused; the new species, however, is distinguished by the distinctly stronger and less close puncturation of the whole body, but especially of the elytra and abdomen.

N.W. Rhodesia: Namwala (3rd April 1913) (H. C. Dollman).

Stenus (Hypostenus) turneri n. sp.

Very closely allied to S. gerardi Bernh., but distinguished by the following features:—

Head larger and considerably broader, very feebly impressed between the eyes, with very weak frontal grooves, and without any non-punctate keel between them, the puncturation closer, width between the strongly swollen eyes much narrower, much less than twice as broad as transverse diameter of eyes (in dorsal view), whereas in gerardi it is at least twice as broad. Thorax somewhat shorter, scarcely longer than broad, sides more rounded, without a median shiny spot, with somewhat coarse and more scattered puncturation. Elytra shorter, only very little longer than thorax, scarcely longer

than their united width, the puncturation considerably stronger and more scattered. Abdomen similarly punctate, but without the long pubescence of *gerardi*. Length 3-3·2 mm.

In the 3 the sixth sternite is rather deeply arcuately emarginate in the middle of the hind margin, the fifth is gently emarginate, finely and closely punctate in front of the emargination, and clothed with thick, fluffy, whitish pubescence.

Zululand: Eshowe (June 1926) (R. E. Turner). Natal: Kloof (August 1926) (R. E. Turner).

Stenus (Hypostenus) natalensis n. sp.

This species is even nearer to S. gerardi Bernh., and in general is only distinguished by the different sculpture of the abdomen and the absence of the long pubescence. In colour the two species are scarcely different. The head is not broader than the elytra, somewhat more finely but not more closely punctate, with a similar shining median keel and with more distinct narrow shining spots above the bases of the antennae, and with a minute shiny dot on the inner margin of each eye; antennae scarcely different. Thorax but little shorter, somewhat more strongly and less closely punctate. Elytra somewhat longer, scarcely more strongly and somewhat less closely punctate. Abdomen finely and sparsely punctured, excepting the strongly punctate transverse tergal grooves. Pubescence of the body is only short and sparse. Length 4-4·2 mm. (with extended abdomen).

In 3 the sixth joint has a shallow, triangular emargination on hind margin, the fifth scarcely emarginate, both sternites with somewhat thicker and longer pubescence along middle line than at the sides; the metasternum is impressed, strongly and moderately closely punctate, with whitish pubescence.

Natal: Frere (1910) (G. A. K. Marshall); mouth of Umkomaas River (G. A. K. Marshall); Van Reenen (January 1927) (R. E. Turner).

Stenus (Hypostenus) oligocephalus n. sp.

From the preceding species, to which it is closely related, at once distinguished by the narrow head.

Black, without distinct metallic sheen, feebly shiny; the bases of the antennae, which are brownish distally, the palps as far as the dark apices, and the basal halves of the femora reddish-yellow; the apices of the femora and the tibiae fuscous; tarsi dirty yellow. Head

slightly broader than thorax, much narrower than the elytra, moderately strongly and closely punctate, with five shiny spots, with a long raised median keel, a small keel above base of each antennae, and a minute shiny spot at the second third of inner margin of eye; antennae short, the penultimate joints almost broader than long. Thorax half as broad as the elytra, considerably longer than broad, behind the middle bluntly widened, covered all over with very close and coarse rugulose puncturation. Elytra considerably longer than thorax, with rectangular protuberant shoulders, more coarsely and somewhat less closely punctate. Abdomen posteriorly strongly and conically narrowed, everywhere closely and strongly punctate, somewhat more finely punctate posteriorly. Length 4 mm.

From the same localities.

Stenus (Hypostenus) zuluanus n. sp.

Build broader and stouter than in the preceding species, less closely and, especially on the elytra, less rugulosely punctate, more shiny.

Black; bases of antennae, entire palps, and legs bright reddish-yellow; knees broadly infuscate, very thinly pubescent. Head almost as broad as elytra, moderately closely punctate, with similarly arranged but larger shiny spots as in the preceding species. Thorax much narrower than elytra, little longer than broad, behind the middle obtusely widened, strongly and not too closely evenly punctate. Elytra considerably longer than thorax, with rectangular shoulders, longer than their united width, more coarsely and sparsely, but scarcely rugulose, punctate than thorax, with strongly shiny intervals. Abdomen fairly fusiform, coarsely and moderately closely, posteriorly more finely and sparsely, punctate, strongly shiny. Length 3.5 mm.

In 3 sixth sternite moderately deeply, arcuately emarginate, fifth gently emarginate on hind margin, finely and densely punctate along median line, with long whitish pubescence.

Zululand: Eshowe (June 1926) (R. E. Turner).

Edaphus marshalli n. sp.

This, the first *Edaphus* species to be described from South Africa, agrees very closely with the description of *africanus* Epp. from the Gold Coast. In particular the sculpture of the head, the shape of the thorax and elytra, which are strongly developed and more than twice as long as thorax, agree completely with the new species. The

structure of the antennae and the presence of only four pits on the thorax, however, negatives the specific identity of the two forms.

The new species has six deep and sharply defined pits at base of thorax. The club of the antennae is only 2-jointed, the ninth joint only a little broader than the eighth, knob-shaped, little broader than long, and only about one-third as broad as the tenth, whereas in africanus it is twice as broad as long, and thrice as broad as the eighth, and only half as broad as the tenth. These two characters are so important in Edaphus that I maintain the two species as distinct. The coloration is uniform reddish-yellow as in africanus. Length 1.2 mm.

Mashonaland: Salisbury (April 1908) (G. A. K. Marshall).

Pinophilus tristicollis n. sp.

Extraordinarily like *P. siculus* Kr., deceptively alike in the sculpture and distinguished only by smaller size, narrower build, considerably longer and narrower thorax, much shorter antennae, and the differently shaped eighth tergite.

Antennae fairly short, third joint shorter (in siculus a little longer) than second, penultimate joint in broadest aspect not oblong, as in siculus, but at most as broad as long. Head very similarly sculptured, moderately strongly and sparsely, irregularly punctate, and a very finely and fairly closely punctate ground. Thorax much narrower, considerably longer than broad, scarcely distinct in sculpture. Elytra also narrower, about one-third longer than their united width, not markedly different in sculpture. Abdomen somewhat more finely and sparsely punctate, more shiny, with distinct though feeble iridescence. The hind margin of seventh tergite somewhat paler, eighth tergite black, whereas in siculus the abdomen from the hind margin of seventh tergite to the apex is bright red-yellow. Length 10 mm. (with extended abdomen).

Mashonaland: Salisbury (1910) (G. A. K. Marshall).

Pinophilus capensis var. rhodesianus n.

Differing from the typical form by the short elytra, which do not equal the thorax in length, and the somewhat longer thorax. The build is also somewhat narrower. Nevertheless I consider the form as only a race of the somewhat variable *capensis*. Length 15 mm. (with extended abdomen).

N.W. Rhodesia: Namwala (28th August 1914) (H. C. Dollman).

Pinophilus semiopacinus n. sp.

This species appears to be very close to *P. congoënsis* Grid., which I do not know, but can with certainty be distinguished by the coloration and by the whole frontal region of the head being smooth and shiny.

Black; elytra blood-red; apex of the seventh and base and apex of eighth tergite yellow-red; antennae and palps reddish-yellow; legs whitish-yellow, with infuscated fore tibiae. Head almost as broad as thorax, with a transverse patch of coarse, but very shallow and superficial, punctures in front of hind margin, and near the eyes, matt, with the entire remaining surface, which medianly extends to the third quarter of the length, shiny, with a zone above the antennal tubercles and on front margin strongly, unequally, and fairly sparsely punctate, on an extremely finely and sparsely puncticulate ground; eyes strongly convex; temples behind them well developed, about onethird as long as longitudinal diameter of eyes viewed dorsally; antennae elongate, third joint much longer than second, penultimate twice as long as broad, apically clavate. Thorax as broad as elytra, somewhat longer than broad, slightly narrowed posteriorly, quite matt shagreened, and very densely covered with large, very shallow, eye-like punctures, with a shortened non-punctate median keel behind the middle. Elytra considerably longer than thorax, longer than their united width, strongly and very closely rugulose-punctate, with yellow-grey pubescence like rest of body. Abdomen strongly and moderately closely punctate, more finely so posteriorly, shining, with feeble metallic sheen. Length 12.5 mm.

N.W. Rhodesia: Kashita, N. of Broken Hill (March 1915) (H. C. Dollman).

Pinophilus (Metapinophilus) subplanus n. sp.

Just like reticulatus Epp. in build, but larger, broader, and distinguished by the darker coloration, finer and sparser punctures on thorax, shorter and somewhat more sparsely punctate elytra, and denser reticulate-punctate sculpture of abdomen.

Pitch-black; head and thorax somewhat lighter; antennae, palps, and legs bright reddish-yellow. Head punctate as in reticulatus, but the punctures are very slightly more numerous; antennae scarcely different. Thorax as in reticulatus, somewhat broader than long, distinctly finer and more sparsely punctate. Elytra only very little longer than thorax, scarcely more strongly but distinctly more

sparsely punctate, more shiny, shorter than their united width. Abdomen as in *reticulatus*, punctures in oblique cross-rows, but somewhat closer together. Length 8 mm.

The sexual character of the 3 is rather different, the sixth sternite being shallowly impressed and feebly shagreened in the middle, and having the hind margin very broadly and somewhat deeply arcuately emarginate, with the margin grooved, the fifth sternite only very indistinctly emarginate, impressed medially and densely punctate, the anterior sternites without any distinctive features.

N. Rhodesia: Namwala (20th March 1913) (H. C. Dollman).

This new species is distinguished from *P. patrizii* Grid. by the larger and more robust build, the broader and shorter thorax, with its sparser puncturation, the greater shininess of thorax and elytra, and the more densely punctate abdomen.

Pinophilus deplanatus n. sp.

Most closely related to *P. infans* Epp., but distinguished at first glance by the much longer elytra and the following additional characters:—

The body is somewhat larger, darker in colour, pitch-brown; head and thorax more pitch-red; abdomen darker with redder apex; antennae whitish-yellow; palps and legs reddish-yellow. In the shape of head and its puncturation there is no essential difference. The antennae also are alike. The thorax is more finely and sparsely punctate, and more shiny. Elytra much longer, almost one-third longer than thorax, somewhat more finely and sparsely punctate. Abdomen also more finely and sparsely punctate. Length 5 mm. (with extended abdomen).

N. Rhodesia: Namwala (31st March 1913) (H. C. Dollman).

Pinophilus arrowi n. sp.

Belongs to the brevicollis Er. group. Distinguished from this species by the much coarser and sparser puncturation, and from the related bolamensis Grid., which it deceptively resembles in colour, shape, size, and sculpture, by the considerably longer elytra as well as the shorter antennae and sparser puncturation on the head. The apex of the abdomen also is not pale but black. The puncturation on the head is less extensive than in bolamensis, the smooth shiny interval on the front is much more extensive, its hind end reaching to level of middle of eyes, whereas in bolamensis this smooth patch

reaches only to the level of front margin of eyes; the punctures above the antennal bases considerably sparser; antennae distinctly shorter and less elongate, the individual joints shorter, the penultimate ones almost broader than long. Thorax somewhat shorter, about one-quarter broader than long, scarcely differing in puncturation. Elytra considerably longer, almost one-third longer than thorax and much longer than their united width. Length 8 mm.

N.W. Rhodesia: Namwala (10th September 1914); Mwengwa (27° 40′ E., 13° S.) (10th–16th July and 6th August 1914) (H. C. Dollman).

Pinophilus dubius n. sp.

Also closely related to bolamensis Grid., but distinguished by the head sculpture, which is similar to that of arrowi, the much shorter thorax with considerably finer and denser puncturation, scarcely longer but much more densely and less coarsely punctate elytra, and more finely and densely punctate abdomen.

In the dense puncturation of the thorax this species approximates to *brevicollis* Er., but from the latter is easily distinguished by the much less densely punctate head and distinctly more strongly punctate thorax and elytra.

Coloration the same as that of arrowi, the antennae as in bolamensis Grid.; the body less convex than in these two species; thorax more than one-quarter broader than long, with a well-developed short, broad, shiny keel in front of the scutellum. Length 7.5 mm.

N.W. Rhodesia: Mwengwa (27° 40′ E., 13° S.) (15th May 1914) (H. C. Dollman).

Pinophilus sanguinosus n. sp.

At once separated from the preceding species, with which this new species is very closely allied, by the longer thorax, much longer elytra, exceeding even those of arrowi, and coloration.

Black, shiny, convex, fairly narrow; elytra with the exception of the sides and broad base dull blood-red; hind margins of the abdominal segments narrowly, the apex more broadly, indistinctly reddish; antennae, palps, and legs bright reddish-yellow. Head similar to that of arrowi, but somewhat more densely punctate, the smooth spot smaller and more indefinite, with a few extremely fine punctures. Thorax almost as long as broad, somewhat more densely punctate, the smooth median keel on the posterior half broad and distinctly raised. Elytra a good third longer than the thorax, about one-

quarter longer than their united width, coarsely and densely rugulose-punctate. Abdomen scarcely differing. Length 8.5 mm.

Natal: Frere (1910) (G. A. K. Marshall).

Pseudoprocirrus n. g.

Distinguished at first glance from the most closely related genus *Procirrus* Lat. by the simple fourth joint of the tarsus and the broad thorax.

Build more compact, shorter, strongly convex. Head much narrower than thorax, posteriorly only moderately narrowed; neck nearly half as wide as head; eyes moderately large, rather coarsely faceted; temples as long as the longitudinal diameter of eyes, not margined below; antennae elongate, very thin, not thickened towards apex, third joint somewhat longer and much narrower than second, the following joints nearly alike, almost four times as long as broad, gradually thickened towards their apices, with the penultimate joint only twice as long as broad, clavately thickened apically, the terminal joint much shorter than the preceding; labrum truncate in front, transverse, scarcely emarginate; maxillary palps slender, second joint more than twice as long as broad, third clavately thickened towards apex, much shorter than second, terminal joint large, much longer than third, rather strongly clavate apically and obliquely truncate, so that in certain aspects it appears hatchet-shaped; the other mouth-parts not visible without dissection. Thorax strongly convex, ovate, strongly widened before the middle, lateral margins (Seitenrandlinie) strongly sinuate (gebuchtet); epipleurae particularly broad. Elytra posteriorly shallowly triangularly emarginate. Abdomen cylindrical, broad, not margined. Legs moderately slender, with the first three joints of anterior tarsi strongly broadened disklike, longer than broad, gradually decreasing in width, the fourth very small, not expanded, not broader than the apical joint; mid and hind tarsi slender, first joint elongate, longer than the three following together, the following joints decreasing in length, fourth lobately produced below the apical joint.

Nothing is yet known about the habits of this interesting insect. Genotype.—P. arrowi n. sp.

Pseudoprocirrus arrowi n. sp.

Rusty-red, moderately shiny, with thin golden-yellow pubescence, especially on abdomen; antennae, palps, and legs reddish-yellow.

Head transversely hexagonal, coarsely and densely punctate, with shiny intervals. Thorax much narrower than elytra, about one-quarter longer than broad, very strongly widened before the middle and strongly narrowed behind, punctate like the head, intervals shiny. Elytra slightly longer than thorax, parallel-sided, with strongly projecting rounded shoulders, convex, more coarsely and densely rugulose punctate than the thorax, slightly shiny. Abdomen strongly and densely, posteriorly more finely, punctate, with transverse grooves on the bases of the first four free tergites. Length 4.5 mm.

N. Rhodesia: Namwala (20th-21st March 1913) (H. C. Dollman).

Oedichirus latipennis n. sp.

In colour and shape of body very like O. oneili Per., but somewhat more robust, and easily distinguished by the narrow reddish-yellow hind margin of elytra, much broader blackening at the knees, and particularly by the densely punctate elytra. Head similar, punctures stronger and more numerous; antennae somewhat longer, penultimate joints almost twice as long as broad. Thorax somewhat longer, otherwise very similar, punctures in the dorsal rows and on the sides stronger and more numerous. Elytra not longer than thorax, the lateral margins rather strongly rounded with prominent shoulders, coarsely and densely and evenly punctate, smooth along hind margin and narrowly bordered with reddish-yellow. Punctures on the abdomen scarcely different. Length 7.5 mm.

N.W. Rhodesia: Mwengwa (27° 40′ E., 13° S.) (19th May 1914) (H. C. Dollman).

Oedichirus arrowi n. sp.

Very closely allied to the preceding species and distinguished by the coloration, longer head and thorax, and considerably longer elytra, which are of more even breadth and less densely punctate.

Black; thorax red-yellow; only the first three completely exposed segments of the abdomen and the pectus reddish-yellow; antennae and palps yellowish, the joints chequered with blackish; legs pale yellow, the knees narrowly blackened as in preceding species. Head moderately transverse, the punctures strong and scattered. Thorax nearly half as long as broad, much more coarsely punctate. Elytra longer than their united width, sides feebly rounded, fairly parallel-sided, similar to the preceding species but rather less densely and more strongly punctate, uniform deep black, without yellow hind

margin. Abdomen similarly sculptured. Length 7.5-10 mm. (according to degree of extension of abdomen).

N.W. Rhodesia: Mwengwa (27° 40' E., 13° S.) (17th July-6th August 1914) (H. C. Dollman).

Oedichirus rhodesianus n. sp.

This species is distinguished from both the preceding species by the extensive reddish-yellow coloration of the hinder part of the elytra; from arrowi also by the reddish-yellow colour of the sixth (fourth free) tergite and its sternite, shorter head, longer elytra, which are much more sparsely punctate especially on the yellow-red portions; from latipennis by longer thorax with coarser and more numerous punctures, and by much longer and more sparsely punctate elytra. The elytra with a large red-yellow spot, extending onethird of their length at the sides, rounded inwardly and reaching the apex of suture, strongly and sparsely punctate only in front and in the middle, the broad hind and lateral margins being quite smooth and shiny. Head moderately transverse, strongly, irregularly, and not densely punctate. Thorax half as long again as broad, with numerous very coarse and deep punctures, except on the raised smooth middle band and a longer and narrower spot outside the dorsal rows and the anterior angles. Knees fairly narrowly blackened. Length 7–8 mm.

N.W. Rhodesia: Mwengwa (27° 40′ E., 13° S.) (16th–18th July 1914) (H. C. Dollman).

Oedichirus dollmani n. sp.

Easily distinguished from among the red-yellow species by the longer, more parallel-sided elytra with their nearly rectangular, not bevelled off, shoulders.

Bright reddish-yellow; abdomen from seventh (fifth free) tergite deep black; antennae and palps partly blackened; legs pale yellow; knees without any infuscation. Head as broad as thorax, transverse, with a number of coarse and deep punctures, shiny, in front and behind; antennae slightly thickened apically, the penultimate joints about half as long as broad. Thorax much narrower than elytra, about one-third longer than broad, posteriorly strongly and straightly narrowed, each dorsal row with seven very coarse and pit-like punctures, and a number of similar punctures at the sides. Elytra only a little shorter than thorax, with prominent, apically rounded

shoulders, the sides distinctly rounded, widened before the apex, but nevertheless nearly parallel-sided, at the broadest part somewhat broader than length of suture, somewhat less coarsely and moderately densely, nearly evenly punctate. Abdomen with normal puncturation. Length 7.5 mm.

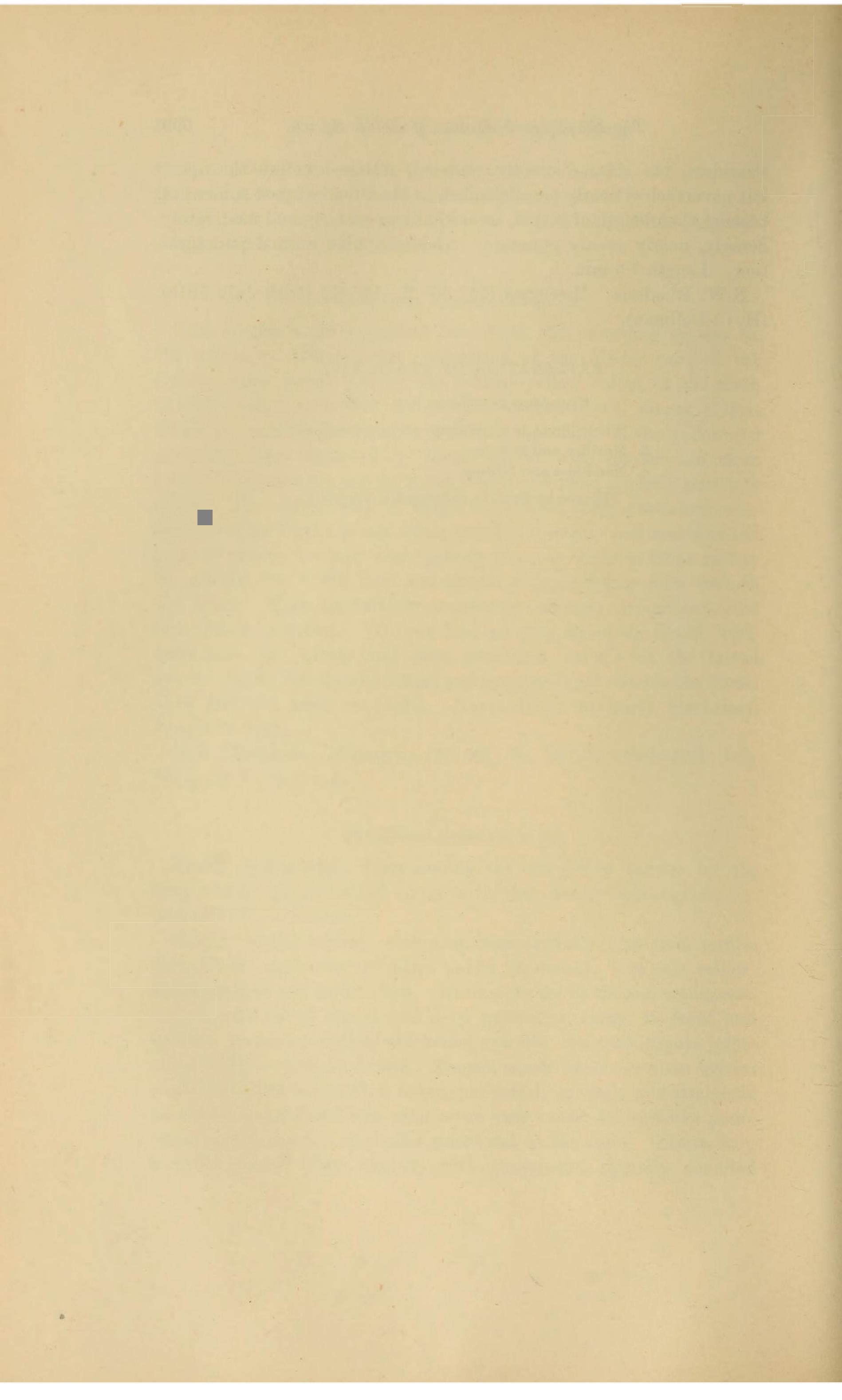
N.W. Rhodesia: Mwengwa (27° 40′ E., 13° S.) (10th July 1913) (H. C. Dollman).

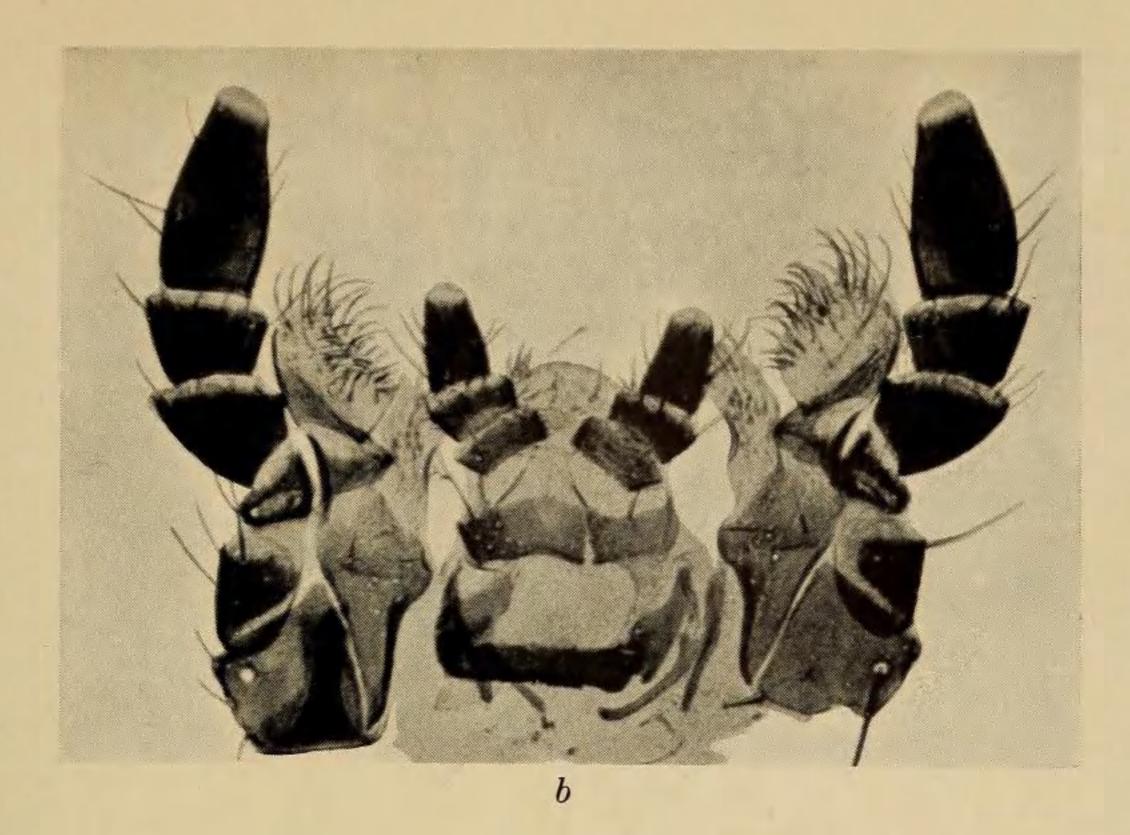
EXPLANATION OF PLATE XIV.

Eparchium paradoxum n. g., n. sp.

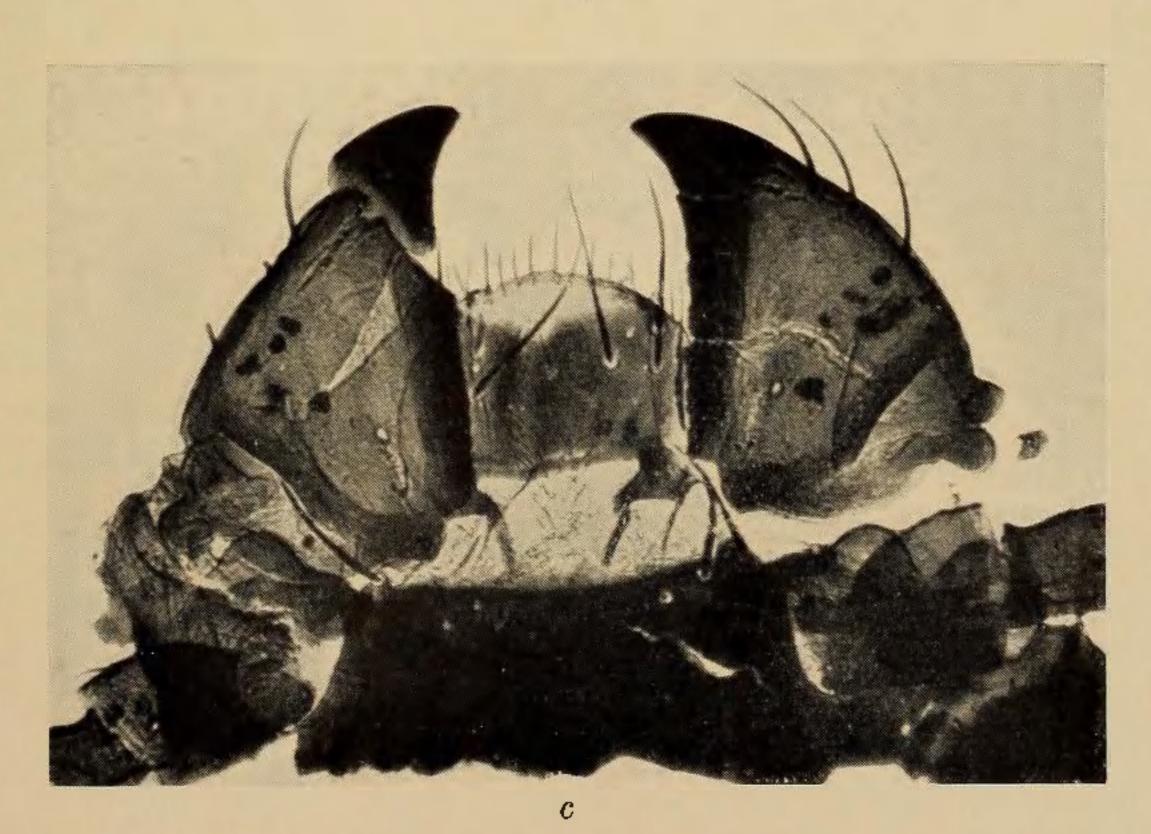
- a. Whole insect to show shape and unspined tibiae.
- b. Maxillae and labium.
- c. Mandibles and labrum.

(Photos by Prof. O. Scheerpeltz, Vienna.)









EPARCHIUM PARADOXUM, n. g., n. sp.

Dr. Max Bernhauer.

Neill & Co., Ltd.

