# SOME NEW TENEBRIONIDAE IN THE SOUTH AUSTRALIAN MUSEUM; TOGETHER WITH NOTES AND DESCRIPTIONS OF OTHER AUSTRALIAN COLEOPTERA.

### By H. J. CARTER, B.A., F.E.S.

# [Read May 13, 1937.]

### PLATES V, VI, and VII.

This paper originated through the energy of Mr. Womersley, Entomologist of the South Australian Museum, in transmitting some 2,170 unnamed specimens, the accumulation of some years and including many from the Lea Collection. Sixteen new species are herein described; others—probably new to our records are, for the present, withheld from description, either through being in unsuitable condition, or through doubt as to their local origin. A few have been sent to the British Museum for special information.

Besides the species new to science, some extremely rare Tenebrionidae were found here, the determination of which enhances the value of the famous collection of insects in this Museum.

The new Buprestidae described are chiefly the result of the field work of two enthusiasts, Mr. A. Goerling, of Marloo Station, and Mr. II. W. Brown (most famous of our collectors).

To the two artists, Miss N. B. Adams, of the Australian Museum, Sydney, and Miss J. Cameron, of the South Australian Museum, Adelaide, I desire to express my sincere thanks for their excellent figures.

### BUPRESTIDAE.

# Neospades gibbera, n. sp.

Elongate, narrow, attenuate at both ends; dark blue above and below save for ventral and elytral white pubescence; the former with a white spot at sides of metasternum and of each ventral segment; the latter consisting of an undulate preapical fascia, interrupted at suture, and four spots, two premedial near suture, and two, medial, near sides, besides some less defined pubescence at base and elsewhere.

*Head* subconvex.

*Prothorax*, apex and base bisinuate, widest in front of middle, margins on apical half much deflexed, the anterior angles unseen from above, lateral carinae gradually diverging from basal point to apex; hind angles subrectangular; disk transversely striolate.

*Elytra* lightly compressed behind shoulders, latero-apical margins finely, closely, spinulose; general surface finely scalose. Longitudinally strongly arched with a small hump near base. Underside finely punctate.

Dimensions $-5 \ge 2$  mm.

Habitat—New South Wales; Mullaly (the author), Gosford and Cessnock (W. Duboulay), on Acacia leaves.

Three examples examined. The public nurkings and preapical fascia, its blue pronotum and longitudinally gibbous form, abundantly distinguish it from N. simplex Blkb. The typical forked tarsal claws, narrow form, etc., distinguish it from Cisseis cupricollis<sup>(1)</sup> Hope. Holotype in Coll. Carter.

<sup>&</sup>lt;sup>(1)</sup> Cisseis cupricollis Hope = C. acneicollis Hope = C. morosa Kerr = C. vicina Kerr. The last has been so far unrecorded, but is clear from an exhibit labelled "type" by the author. (In the Kerreman's Collection in the British Museum, in many cases a long series of a species were thus labelled.)

#### Neocuris duboulayi, n. sp.

Narrowly ovate,  $\delta$  with head, prothorax, underside and legs green,  $\varphi$  with head green, with coppery gleams, prothorax dark blueish-green, margins widely —also underside—fiery coppery; elytra ( $\delta$ ,  $\varphi$ ) testaceous with suture and margins narrowly dark blue; legs blue.

*Head* with shallow excavation, minutely and closely punetate.

*Prothorax* more convex than usual, apex and base bisinuate, anterior angles reflexed and acute, posterior acute: widest at base, thence narrowed lightly to apex; disk very finely punctate at middle, more strongly on sides; without medial line. Underside glabrous.

*Elytra* as wide as prothorax at base, sides lightly incurved at middle, separately and rather widely rounded at apex, subapieal margins denticulate; base with wide margins of dark green, an obscure, subfasciate, dark colouration near base in some examples; whole surface dotted with minute black punctures.

Dimensions—  $\delta$ , 5 x 2 mm.;  $\varphi$ ,  $5\frac{1}{2}$  x  $2\frac{1}{4}$  mm.

Habitat—Western Australia: Three Springs (W. Duboulay), Wurarga (A. Goerling). Two examples, the sexes, given me by Mr. Duboulay, 10 from Mr. Goerling, are elearly distinct from its allies, *browni* Cart. and *doddi* Cart., by smaller size, the yellow elytra narrowly margined with darker eolour, and the marked sexual colouration. Holo- and Allotype in Coll. Carter.

#### Neocuris ignicollis, n. sp.

Narrowly oval, head and prothorax a fiery copper, elytra dark blue, underside chiefly violaceous and coppery; appendages blue or violet; glabrous above and below.

Head flat, eyes widely separated; closely punctate, without suleus.

*Prothorax* transversely convex, apex a little produced in middle, anterior angles deflexed and obtuse, base moderately bisinuate, hind angles acute; widest at base, sides very feebly narrowed to apex; disk uniformly and closely covered with round, rather deep, punetures; without medial line.

Elytra as wide as prothorax at base, slightly widened at shoulders and compressed behind them, otherwise sub-parallel; separately rounded at apex; the margins here very minutely denticulate (this more evident in the  $\varphi$  example); whole surface uniformly, closely umbilicate-punctate (each larger puncture having two minute deeper punctures within it). Prosternum with sparse, large, punctures, metasternum smaller, close punctures, abdomen with faint, scaley impressions, apieal segment more strongly punctate.

Dimensions- 3, 3.5 mm. long; 9, 5 mm. long.

Habitat-Wurarga, Western Australia (Mr. A. Goerling).

Three examples (2 \$ \$ , 1 \$ ), sent by their discovercr. This species is a brilliant addition to the genus. In colour it is very similar to *Melobasis cyaneipennis* Boh., the elytra a shade darker blue. Holo- and Allotype in Coll. Carter.

#### Bubastes subflavipennis, n. sp.

Pl. v, fig. 1.

*c*. Elongate, subeylindric, subopaque; head and pronotum dark blue, the sides of the latter brighter green or blue, antennae and tarsi, sometimes part of head, bronzy, elytra a dingy flavous, with suture and sides narrowly blueish; undersides and legs peacock green.

**Q**. Sides of pronotum, underside and legs a dingy coppery bronze with gleams of blue-green; head and pronotum with a tendency to bronze.

*Head*, densely punctate, sparsely pubescent, feebly concave on front, sometimes a short medial channel indicated at base, lateral margins between eyes narrowed posteriorly; space between eyes wider in  $\mathcal{D}$  than in  $\mathcal{E}$ ; eyes moderately large and rather prominent.

*Prothorax* convex, apex subtruncate (feebly produced in middle), base lightly bisinuate; widest at base, sides feebly sinuate here, thence very lightly, arcuately, narrowed to apex; anterior angles unseen from above, the posterior produced backward and strongly acute; disk densely punctate, the punctures smaller near middle and apex, becoming coarser and alvcolate towards sides; basal foveac at middle and sides shallow; no sign of medial line. *Scutellum* small and round.

*Elytra* lightly enlarged at shoulders, thence, at first gradually, then more sharply attenuate to apex; subapical margins serrulate, apices very acute, a little separated, with an oblique lunation, the exterior angle of this forming a short triangular tooth. *Prosternum* closely rugose-punctate, rest of underside and legs densely punctate; whole underside with longish, pale, recumbent pile.

Dimensions- &, 11-14 x 3.5-4 mm.; 9, 15 x 4.2 mm.

Habitat-Western Australia: Wurarga (Mr. A. Goerling).

Again I am indebted to this squatter-naturalist for an interesting novelty. Eight examples (7 & &, 1 &) show a slender species that differs markedly from any described member of the genus in colour. The sexual colouration is well defined. The peacock blue-green of the underside of &—as in other instances of this unstable hue—varies between the extremes of each tint. Holo- and Allotype in Coll. Carter.

### Melobasis aurocyanea, n. sp.

Oblong-oval; moderately convex, nitid and glabrous; head, pronotum and greater part of elytra rich, dark blue, the two former here and there with coppery gleams, elytra with base, narrowly, and sublateral vitta, extending from shoulder to apical declivity, golden; this vitta nowhere extending to lateral border, widened and a little diffused near middle. *Scutellum* golden. *Underside* coppery purple; legs blue, antennae green.

*Head* glabrous, finely and densely punctate, eyes little prominent.

*Prothorax*, apex and base feebly bisinuate—especially the former—widest near middle, sides moderately rounded, subparallel on basal half; anterior angles deflected and obtuse, posterior subrectangular; disk closely, finely and subuniformly punctate, without medial sulcus, fovcae or transverse rugulae. *Scutellum* small and round.

*Elytra* feebly compressed premedially, lightly widened postmedially; posterior margins serrulate, apices separately rounded; very finely striate-punctate, with five fine striae perceptible near middle region, basal and lateral areas irregularly punctate, the latter with fine transverse rugae; intervals quite flat, without subsutural depression. *Underside* glabrous, prosternum with close, round punctures; metasternum with laevigate central area; abdomen finely punctate, in the 3 apical segment rather squarely excised between two minute spines; in the 9 truncate between two larger spines.

Dimensions—9 x  $3\frac{1}{2}$  mm.

Habitat-Western Australia: Tammin (H. W. Brown).

A small, beautiful species which must be included amongst the striatepunctate species of my Group II, Section C, near *lauta* Macl. and *iridicolor* Cart. but differentiated by colour from both. Four examples examined of which two have been returned to Mr. Brown. Holotype in Coll. Carter.

Var.—Four other examples, sent by Mr. Brown from Tammin, are identical with the above in size, structure and sculpture, but differ in colour as follows:— Head, prothorax and underside bright metallic green; elytra with medial area steel-blue or greenish, sides golden-coppery.

#### Melobasis browni, n. sp.

Elongate, navicular; bronze nitid. *Head* pubescent with short, shallow sulcus at base, eyes rather prominent; head here as wide as apex of prothorax.

*Prothorax*, lightly bisinuate at apex and base, the former produced forward at the angles, these acute; sides near middle very lightly rounded, posterior angles rectangular; medial channel clearly cut near base, elsewhere lightly impressed; disk finely, closely punctate. *Scutellum* small, round and smooth.

*Elytra* of same width as prothorax at base, widest near middle, thence rather strongly attenuate behind, apices bluntly, scparately rounded, posterior margins serulate; each with a carinate and lightly flexuous costa, extending from near base to apex, the suture also carinate for the greater part; a short convex impression inside the costae not extending beyond middle and a short sub-scutellary convexity forming an elongate triangle at base; area exterior to costae closely and delicately punctate, and contrasted with medial area by lighter bronze and silky surface; the sutural region of darker shade with fine, distant punctures, besides the smooth, wide, less-raised middle half of the costae. *Underside* glabrous; prosternum more densely punctate than rest of underside; pro- and mid-tibiae bowed; apical ventral segment widely, triangularly excised and bidentate.

Dimensions—9-10 x 3-4 mm.

Habitat-Western Australia, Burracopp (H. W. Brown). On Acacia.

Two examples, both  $\delta$ , sent by Mr. Brown, of which he has generously given me one, show a very distinctly sculptured species of my Group I, Section A, somewhat allied to *M. vertebralis* Cart. in form, the darker shade of bronze taking the place of the blue on the elytra. Holotype in Coll. Cart.

### Melobasis marlooensis, n. sp.

Bronze, elongate-ovate, moderately convex.

*Head* finely, closely punctate, a well impressed sulcus at base, clothed with short, pale pubescence; eyes not prominent.

*Prothorax* wider than head at base, widest at middle, apex bisinuate, base subtruncate, sides evenly and lightly rounded; disk very finely and evenly punctate over the greater part, punctures larger (but not at all coarse or rugose) near sides; medial line indicated by narrow, smooth line—in some cases feebly carinate—a small basal fovea near scutellum. *Scutellum* small.

Elytra of same width as prothorax at base, lightly narrowing to apex, apices separately rounded, subapical margins strongly serulate; surface with three or four lightly raised lines, of which that limiting the subsutural area (this scarcely depressed) rather more prominent than the others; intervals with fine punctures and transverse rugulae, without a sign of seriation. Underside finely punctate, pubescent only towards sides; apical segment of  $\delta$  with semi-circular excision, of  $\varphi$  subtruncate.

Dimensions-13-15 x 5 mm.

Habitat-Western Australia, Marloo Station, Wurarga (Mr. A. Gocrling).

Another of Mr. Goerling's discoveries. Seven examples examined show a species than can only be confused with M. igniceps Saund. and M. uniformis Cart. From both it is separated by its much finer sculpture. The apex is less sharply narrowed than in igniceps. In only one example is the apex slightly coppery (usual in igniceps), while uniformis is without any indication of raised lines on the elytra. Holotype and Allotype in Coll. Carter.

### MELOBASIS ABNORMIS Cart.

= M. impressa Cart.

The first example sent was so different from my example of *abnormis* that I was deceived into describing it as new. Mr. Goerling has recently sent me three examples which convince me of this synonymy.

# Stigmodera (Castiarina) goerlingi, n. sp.

Pl. v, fig. 2.

Oblong-ovate, convex; head, medial area of pronotum and elytral markings obscure blue, scutellum, metasternum and appendages bright blue, prothorax and elytra chiefly pale yellow, the former with an oblong discal area blue-black, the latter with two narrow fasciae and the apex (narrowly) blue-black, the premedial arched from the shoulders backward, widened at the suture, not extending to sides, the postmedian straight, widened at suture and meeting sides. *Underside* yellow (except metasternum).

Head widely and dceply excavate, finely punctate.

Prothorax rather strongly convex, widest behind middle, apex feebly arcuate, anterior angles subacute, sides well rounded, scarcely sinuate behind, base bisinuate, posterior angles acute.

*Elytra* slightly wider than prothorax at base, sides nearly straight, widely rounded behind, apices bispinose, the external spine longer than the sutural, subapical margins finely serrate; striate-punctate, seriate indistinct, intervals nearly flat, save at apex, and almost impunctate. *Metasternum* pubescent, abdomen glabrous.

*Dimensions*—16-19 x 7-7.5 mm.

Habitat-Western Australia, Marloo Station, Wurarga (Mr. A. Goerling).

A very distinct species, having a thorax suggestive of S. gibbicollis Saund., the yellow margins occupying two-thirds of its width, besides the prosternum; the elytral markings are somewhat as in S. fulviventris Macl. In one example of three sent, the premedial fascia is broken up into three spots. There is also some variation in the width of the fasciae. Holotype in Coll. Carter. Dedicated to its captor, an enthusiastic collector in a little explored district.

# Stigmodera (Castiarina) palagera, n. sp.

(Pala, a spade; gero, I bear. Lat.)

Pl. v, fig. 3.

Narrowly oblong; hcad, pronotum and scutellum brassy, underside golden green, appendages green, elytra testaceous with a narrow sutural mark bright green and a spade-shaped subapical mark, produced and widened at apex, blue-black.

*Head* decply channelled and excavate, labrum green.

*Prothorax* lightly convex, widest at base, sides thence arcuately narrowed to apex, this lightly arcuate, base lightly bisinuate; anterior angles deflexed and wide, posterior subrectangular; disk finely subuniformly punctate, punctures at sides larger and closer; a shallow discontinuous medial sulcus indicated.

*Elytra* of same width as prothorax at base, lightly widened at shoulders and behind middle, apices finely bispinose; striate-punctate, seriate punctures round and distinct, alternate intervals rather markedly raised near base, less so near apex; intervals flat on medial area, lightly convex at sides.

Prosternum strongly punctate in middle, metasternum laevigate in middle, rest of underside very finely punctate and glabrous. Prosternal process is peculiar

in having its carinate margin abruptly narrowed at apex with a lateral branch delimiting this narrow part.<sup>(2)</sup> Abdomen very feebly pubescent.

Dimensions— $10 \ge 4$  mm.

Habitat-New South Wales, Cessnock (W. Duboulay).

Mr. Duboulay took some six examples in November, 1936, and generously gave me a pair, both  $\delta$ . The  $\varphi$  is slightly larger, without colour distinction. It is very close in pattern to *S. fossoria* Cart., with the following distinctions. Prothorax much less convex, sides less widely rounded, base less bisinuate; elytral apical margins entire. The dark-green parts of *fossoria* are replaced by metallic brassy. On the elytra the subapical spade is produced to apex and the sutural mark is narrower and continuous throughout; there is no sign of red near apical margins. Holotype,  $\delta$ , in Coll. Carter.

### Stigmodera (Castiarina) verna, n. sp...

Pl. v, fig. 4.

Oblong, moderately convex; head, pronotum, scutellum, underside and appendages dark metallic green. Elytra peacock blue-green, with the following markings yellow; two large, oval, at base, generally (in six out of seven examples) connected with humero-lateral mark, narrow medial and preapical fasciae, both rather widely interrupted at suture, the former with anterior margin, the latter with posterior margin concave.

*Head* channelled and widely excavate.

*Prothorax* rather strongly convex, apex truncate, base strongly bisinuate, sides lightly rounded, widest at middle; densely and finely punctate—slightly more coarsely at sides—a fine medial sulcus throughout in  $\vartheta$ , less evident in  $\varphi$ .

*Elytra* rather flat, lightly compressed near middle, feebly widened behind this, latero-apical margins entire; apices bispinose with oblique lunation; striate-punctate, intervals convex near sides and apex, third and fifth at base only, in general flat, impunctate, with marked transverse wrinkles. Prosternal episterna and intercoxal process sharply punctate, rest of underside very minutely so and glabrous. Prosternal intercoxal process widely oblong and truncate at apex.

Dimensions—  $\delta$ , 10 x 3 mm.;  $\varphi$ , 12 x  $3\frac{1}{2}$  mm.

Habitat-Western Australia, Wembley Park (E. Duboulay).

The species is very like the eastern S. dimidiata Cart. but has both structural and colour differences as follows:—The prothorax more convex and bisinuate at base. In dimidiata the elytra are strongly punctate. The oval basal yellow mark on the elytra of verna is absent in dimidiata, while in the latter the apical fascia is continued along margins towards apex. The underside of verna is dark green, of dimidiata golden-green or coppery. The name is suggested by its prevalent green colour as well as by its carly spring appearance (vide W. Duboulay, who has kindly given me a pair). Holotype and Allotype in Coll. Carter.

# Curis venusta, n. sp.

Pl, vii.\*

 $\delta$ . Head and scutellum golden-green, prothorax more golden than green, suffused with purple reflections on disk. Elytra purplish-blue, the base, suture and sides irregularly fiery coppery (these colours not clearly delimited), legs and underside green, sides of abdominal segments with white tomentum; antennae golden.

9. Head, prothorax, underside and legs a rich blue, elytra blue with base, suture and sides irregularly fiery coppery; sides of abdominal segments with large white plagae, antennae golden.

<sup>(2)</sup> This structure will be found to be of service in differentiating species.

<sup>\*</sup> As a mark of appreciation of Mr. H. J. Carter's contributions to Australian Entomology, the Council have adopted the unusual course of publishing this plate in colour.—Editor.

*Head* widely excavated, densely punctulate; eyes proportionately larger, also closer in the  $\delta$  than in  $\Im$  (the head clearly wider than apex of prothorax in the  $\delta$ , eyes not prominent, head not wider than apex of prothorax in  $\Im$ ).

Prothorax widest near base, apex feebly, base strongly bisinuate, sides lightly rounded in  $\delta$ , strongly so in  $\mathfrak{P}$  and here much narrowed to apex; medial sulcus throughout, more clearly defined on apical third and terminated in a strong fovea at base.

Elytra shorter than body, wider than prothorax at shoulders, lightly converging to apex in  $\mathfrak{d}$ , a little widened behind middle in  $\mathfrak{Q}$ , apices separately rounded, subapical margins denticulate. Each with three lightly raised costae besides a fourth scutellary costa; intervals more or less seriate punctate, three rows between each pair of costae on hinder half, the rows increasing and more irregular on basal half; the punctures large and round. Apices of abdomen bispinose.

Dimensions—  $\delta$ , 9 x 3.5 mm.;  $\varphi$ , 13 x 4.5 mm.

Habitat-Western Australia, Wurarga (Mr. A. Goerling).

A pair of this beautiful species has been generously sent me by this keen observer. It is abundantly distinct from recorded species; the only other one having abbreviated elytra in both sexes is C. splendens<sup>(3)</sup> Macl., which has entire margins. Holo- and Allotype in Coll. Carter.

#### TENEBRIONIDAE.

### LATOMETUS Er.

= Elascus Pasc.

### LATOMETUS PUBESCENS Er.

= Elascus crassicornis Pase. = E. major Cart.

While examining Colydiidae I was struck by the extraordinary likeness of Orthocerus (Sarrotrium) australis Blkb. to Elascus crassicornis Pasc.<sup>(4)</sup>—as noted by Blackburn. This led to my own misdetermination of Pascoe's species and the consequent synonymy of my E. major. (Erichson described his Latometus first as a Colydiidid.) I have, therefore, gone carefully through all available material from various collections, and find that my mistake has occurred elsewhere. A further comparison of the figure and description of Latometus pubescens Er. with those of Pascoe has convinced me of the above synonymy. The following species is undescribed.

### Latometus differens, n. sp.

Elongate-oblong. Opaque brown, clad with decumbent silvery hair, elytra with three lunate fasciae, the hindmost with concavity towards apex.

*Head* strongly raised laterally, sides produced downwards and outwards beneath eye, eyes prominent and subconic; a group of tubercles near base; antennae wide and ciliate, first segment stout, second small, 3-9 subequally wide, third twice as long as 4, 10-11 much wider than preceding, 11 rounded, larger than 10.

*Prothorax*, apex and base produced in middle, the former bilobed, anterior angle dentate and directed outward; sides lightly sinuate, widest near base, foliate margins coarsely fringed; disk strongly raised, depressed in middle, the raised parts more or less quadri-tuberculate.

<sup>&</sup>lt;sup>(a)</sup> In C. splendens Macl. the sexes are similarly very unequal in size. Thus a pair in my collection:— $\beta$ , 10 x 3.5 mm;  $\varphi$ , 18 x 5 mm.

<sup>(\*)</sup> Through the courtesy of Mr. Clark I have been permitted to examine the types of Elascus crassicornis Pase. and E. lunatus Pase. in the Howitt Collection of the National Museum.

Elytra wider than prothorax, each with three flexuous costae, coarsely seriate punctate, with three fasciae and the suture (widely) marked by pale pubescence; the two anterior as in L. (Elascus) lunatus Pase.; the hind fascia in reversed position. Beneath with scaly derm.

Dimensions-5 mm. long.

Habitat-Tasmania (A. Simson and A. M. Lea).

Four examples examined, National Museum. Coll. Carter. Two in Lea Coll., S.A. Museum, show a close relation to L. lunatus Pase. The following comparison will clearly separate them.

lunatus Pase.	differens, n. sp.
Eyes-Round	Subconic. Two apiçal segments wider than preceding. Anterior angles directed outward.
ward <sup>(5)</sup> <i>Elytra</i> —lnner costae interrupted Apices jointly rounded Post. fascia straight, suture dark	Inner costae continuous. Apices triangulately separated. Post. fascia bent, suture pale.

Holotype in the National Museum.

BYRSAX EGENUS Pasc. 9.

= B. coxi Cart. 3.

With a long series of examples-with a wide distribution in Queensland and New South Wales-I cannot distinguish the female examples. Pascoe's type was a female. In the case of species of which the male is horned it is a mistake to describe a single female example.

# CESTRINUS ASPERSUS Blackb.

is, I consider distinct from C. brevis Champ. by its lighter colour, with its admixture of pale hairs, and its sub-contiguous seriate punctures. A long series from Mount Lofty, South Australia, shows, at least, a well-marked variety of C. brevis.

# Mychestes ordinatus, n. sp.

Oval, convex, opaque brown. Head shagreened, eyes prominent, antennae first segment long and stout, second short and round, third elongate, 4-7 subequal, 8-10 successively widened, 10 largest, 8 intermediate in size between 7 and 9, the two apical clavate.

Prothorax widest near apex, medial lobe projecting over head, concealing it from above, this lobe channelled in middle, its highest point forming two rounded humps; the disk depressed in middle, the raised area around depression formed by connected tubercles converging behind; a more or less foliate margin, with irregular, crenulate border, at base forming wide posterior angles; between the foliation and ridged medial region irregular tubercles scen.

Elytra very convex, narrower than prothorax at base and about one and a half times longer than it, with tubercles somewhat arranged in two irregular rows; two larger compound tubercles at base (these may be double or triple or otherwise, no two examples being quite alike), a single row, more regularly disposed than the rest on each side, smaller tubercles elsewhere, becoming obsolete on apical declivity, without evident punctures. Underside uneven, thickly clothed with velvety derm; prosternum rugose-pustulose, its process produced and pointed.

Dimensions-9-10 x 4.5-5 mm.

<sup>(5)</sup> This character is somewhat exaggerated in Pascoc's figure (Jour. Ent., 1860, pl. vii, fig. 8).

Habitat—North Queensland, Millaa-Millaa (F. H. Taylor), Cooktown (Dodd), Little Mulgrave River (Hacker), Cairns (Lea collection).

Twelve examples are under examination. The only other *Mychestes* that shows this subseriate arrangement of the tubercles is *M. papuanus* Cart. from New Guinea, a rather wider species with the tubercles sub-costate and the larger tubercles exterior to the costac. The subjoined tabulation will indicate its relation to others. Holotype in Coll. Carter.

#### MYCHESTES.

1.	Apex of prothorax forming a spherical lobe.	mastersi	Macl.
	Apex of prothorax not so.		2
2.	Elytral pustules more or less in longitudinal rows.		3
	Elytral pustules not so.		4
3.	Elytral pustules subcostate, a large tubercle near middle exterior to costae.	papuanus	Cart.
	Elytral pustules subseriate, larger pustules at base.	ordinatus,	n. sp.
4.	Elytral pustules closely crowded,	congestus	Pasc.
	Elytral pustules fewer and sparse.		5
5.	Elytra impunctate, larger tubercles two at base, two on apical declivity.	pascoei	Macl.
	Elytra punctate, larger tubercles two at base, four on transverse line on o	leclivity.	
		lignarius,	Pasc.

### Sobas minor, n. sp.

Convcx, ovate, reddish-brown, opaque, setose.

*Head* and pronotum clothed with squamose derm, with minute, sparse pustules perceptible; epistoma bilobed, subtruncate in front, border sharply raised throughout, divided medially by wide cuspidate excision; eyes small and round; antennae short, stout, the segments closely applied, lightly enlarged towards apex.

Prothorax twice as wide as long, basc much wider than apex; apex arcuate, base feebly bisinuate, sides arcuately narrowed on apical half, subparallel on basal, anterior angles widely rounded, posterior obtuse, lateral margins explanate, extreme border finely serrulate and setose. Scutellum absent.

*Elytra* widely ovate and convex, clearly narrower than prothorax at base, extreme border scarcely seen from above; striate-punctate, the medial striae (at least) in fresh examples with subfoveate punctures, these less defined towards sides, intervals strongly convex, formed by subcontiguous, rounded tubercles; under a strong lens a ground system of minute tubercles perceptible, the whole somewhat obscured by derm and setae, the latter forming a lateral fringe. Apical segment of palpi oval. *Prosternum* finely punctate, rest of underside with large, round punctures; prosternal process, front femora and tibiae very wide, the last flattened, with large rounded process at middle of exterior cdge and smaller teeth between this and base, its apex also strongly widened and truncate; mid- and post-tibiae spinose exteriorly and little widened; tarsi short.

Dimensions-3.7 x 2 mm.

Habitat-Western Australia, Geraldton (the late A. M. Lea).

Five example in the Lea collection (South Australian Museum) are readily separated from S. australis Hope,<sup>(6)</sup> by (a) smaller size, (b) reddish colour, (c) more convex elytral intervals, (d) more coarsely sculptured under-surface, inter alia. Type series in South Australian Museum.

#### Phaennis caelata, n. sp.

Oblong-ovate, lightly convex; testaceous; antennae and tarsi red. *Head* narrowing from base to apcx, epistoma raised and concave within, its

<sup>(\*)</sup> S. australis Hope measures from  $4 \cdot 5 \cdot 5 \times 3$  mm., is of a dingy brown colour; elytra obscurely striate, intervals scarcely perceptibly raised. See also my note (Proc. Linn. Soc. N.S.W., 1921, p. 307).

sides raised, forming a triangular horn in front of antennal insertion, labrum prominent; antennae long, segments 1 and 2 globose, first larger than second, 3-8 subovate, 3 elongate, 4-8 successively shorter, 9-11 much wider than preceding, 9-10 triangular, 11 ovoid.

*Prothorax* subcordate, rather convex, apex slightly rounded and advanced in middle, anterior angles advanced and acutely dentate, sides moderately rounded, sinuate behind, margins without foliation, closely serrulate; posterior angle forming a short rectangular tooth; base bisinuate, medial part widely rounded and produced; disk a little uneven, the shallow punctures obscured by clothing of white, adpressed hairs; medial sulcus well marked near front. *Scutellum* transversely oval.

Elylra wider than prothorax at base, sides subparallel for the greater part, each with ten rows of large, round, deep punctures, more or less connected by shallow striae; within each puncture a minute dark pustule; intervals—especially near base and from the fifth outwards—clothed with adpressed pile. On apical third, and more vaguely elsewhere, the surface embossed by pale, lightly raised humps of irregular form and size—these slightly obscuring the seriate punctures. Prosternum flat and almost impunctate; metasternum and abdomen with large shallow punctures and sparsely pilose. Front femora tumid. Post. tarsi with basal segment shorter than two succeeding.

Dimensions— $5 \ge 2$  mm.

Habitat-New South Wales, Forest Reefs (A. M. Lea).

A single  $\diamond$  example in the Lea Collection differs in the structure of the head from *Ph. fasciculata* Champ. (vide my note these Proc., 1920, p. 224), but has the lateral triangular horns of that species. Holotype in the South Australian Museum.

#### Platydema lilliputanum, n. sp.

Ovate, convex, rufo-flavous, clytra with suture, fascia and apex dark castaneous, all appendages testaceous.

*Head* densely, minutely punctate, dividing suture truncate in middle, oblique at sides, eyes large and transverse, antennae extending slightly beyond base of prothorax; moniliform, 4-10 nearly round.

*Prothorax*, apex sub-truncate, base bisinuate, sides well rounded, front angles rounded, posterior obtuse; widest near middle, whole surface minutely and closely punctulate, a small fovea on each side near base. *Scutellum* triangular.

*Elytra* ovate, moderately convex, base vaguely clouded, the suture, wide medial fascia and apex widely more or less castaneous, the rest of the elytra testaceous (in some examples the dark apex with yellow markings); striate-punctate, the two interior striae rather more strongly impressed than the others; seriate punctures rather large and close; intervals nearly flat, themselves minutely punctulate.

Dimensions—3 mm. long.

Habitat--South Australia, Karoonda to Peebinga (G. E. H. Wright); also Berri (or Perri), South Australia.

Seven examples taken by Mr. Wright, and two others, indistinctly labelled, are quite distinct from other recorded Australian species. This species is nearest in general facies to *macleayi* Cart. which is, however, differently marked. In pattern it is nearer *bicinctum* Champ., but is more oval and convex than that species. The darker markings vary in distinctness, becoming nebulous and ill-defined in one or two examples, the pronotum also sometimes clouded. Holotype in South Australian Museum.

### Alphitobius hilli, n. sp.

Rather widely ovate, dark brown, subnitid; antennae and legs red.

*Head*; epistoma evenly rounded to the eyes, a separating depression from the forehead; finely and densely punctate, antennae not extending to base of prothorax, four apical segments successively enlarged.

*Prothorax* strongly transverse, widest near middle, apical half arcuately narrowed to front, basal half subparallel; apex nearly straight (widely and lightly advanced in middle), anterior angles widely rounded off and depressed, base bisinuate, posterior angles subrectangular, a narrow horizontal margin, visible from above only on basal two-thirds; disk without medial sulcus, basal foveae represented only by shallow depressions, surface evenly and finely punctate. *Scutellum* triangular.

*Elytra* ovate, of same width as prothorax at base, bluntly rounded at apex; striate-punctate, the striae rather wide, containing large, close punctures, somewhat transversely oval; intervals convex. *Underside* coarsely punctate, femora stout.

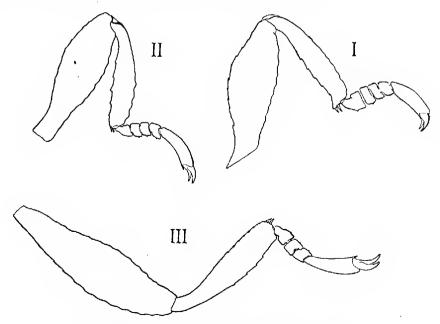
Dimensions-3-3.2 x 2 (-) mm.

Habitat-Northern Territory, Darwin (G. F. Hill).

Two examples in the Lea Collection (South Australian Museum) differ markedly from *A. blairei* Cart. (also taken by Mr. Hill in this district) in colour and much wider form. Holotype in the South Australian Museum.

### Eulea, n. gen. (Ulominae).

Elongate, narrow, head without distinct neck, without apparent eyes, apical segments of palpi cultriform; surface above and below granulose; elytra costate; fore coxae subapproximate, mid and hind coxae moderately widely separate. Antennae 11 segmented, with perfoliate, triclavate apex.



Eulea caeca, n. g. et sp. Legs I, II and III.

#### Eulea caeca, n. sp.

Elongate, narrowly oblong-ovate and subdepressed; red.

*Head* subquadrate, labrum prominent, clypeus truncate, lateral margin continuous to near base, surface granulose, antennal sockets widely arched, but little raised; antennae rather long, segments 1 and 2 oblong, wide, 3 as long as but narrower than 2, 4-8 moniliform, not closely set, 9-11 forming a loose club, 9-10 cup-shaped, 11 oval.

*Prothorax* longer than wide, apex feebly arcuate, anterior angles subrectangular, not prominent, sides lightly, obliquely, narrowed from apex to base, base convexly arcuate, hind angles widely obtuse; whole surface granulose, without a differentiated margin, a fine crenulation at lateral border. *Scutellum* triangular.

*Élytra* elongate-ovate, about as wide as prothorax and twice as long, shoulders advanced and acute, apices conjointly and rather narrowly rounded; each with three straight costae, the margins of suture also subcostate, both costae and intervals granulose without evident punctures. *Underside* everywhere granulose.

Dimensions— $4 \ge 1$  (vix) mm.

Habilat—Swan River (A. M. Lea).

A card of two examples from the collection of the late A. M. Lea bears a locality label and a note, "Colydien voisin du genre *Rhogodera*, gen. nov.," so that it had apparently been submitted to a specialist. Its tarsi are, however, heteromerous. It is remarkable that with Mr. Lea's great interest in blind Coleoptera, he did not describe it, or give more detail as to its habitat. I name the genus in his honour. Holotype and paratype in the South Australian Museum.

### Helaeus subpustulosus, n. sp.

Obovate, dull reddish-brown above, rcd beneath.

*Head* minutely granulose, sparsely pubescent.

*Prothorax* lightly convex on disk, margins wide, without raised border, the apical processes wide, subfalcate, the left overlapping the right, bluntly rounded at extremity, disk finely and sparsely granulose—a little rugose on the processes; posterior angles acutely falcate, slightly overlapping elytra, lateral margins—scen sideways—narrow, except near base; base strongly bisinuate; disk unevenly carinate in middle, the carina not extending to apex or base and somewhat depressed in middle.

*Elytra* slightly wider than prothorax at base, widest behind middle; foliate margins widest in front, not much narrowed behind, its surface finely granulose, extreme border well raised, seen sideways, as wide as that of prothorax at base. Each with five rows of small, rounded pustules, irregular in number, rows 1-4 more or less equally spaced, the fifth, near junction with foliate margin; the second of these contains the larger pustules—about eight in number—in the first row five are discernible on the right, three on the left elytron, in the third row three, in the fourth and fifth four apparent in each, intervening space rather closely punctate, each puncture with a short, upright bristle. Each sutural margin also with a line of small tubercles, more closely placed than in other rows; these continuous with two well raised, subcrenulate costae enclosing scutellum and the triangular depression. *Underside* impunctate and glabrous.

Dimensions-11 x 8 mm.

Habitat-? South Australia, Naracoorte (F. R. Zietz).

A single example in the Muscum of South Australia is quite distinct from recorded species, though perhaps nearest H. granulatus Lea from Western Australia but without the elytral costae, and wider than Lea's species. Holotype in the Museum of South Australia.

#### Pterohelaeus commixtus, n. sp.

Oblong-ovate, brownish-black, subnitid.

Head finely punctate, antennae with third as long as 4-5 combined, last three rounded and wider than preceding.

Prothorax widest at base, thence arcuately narrowed to front, anterior angles rounded at tips, enclosing head beyond eyes; foliate margins widely horizontal, posterior angles acute and subfalcate. Disk finely, not closely punctate; mcdial sulcus fine, but in general distinct throughout; two large depressions at base extending half-way to apex.

Elytra of same width as prothorax at base, sides parallel for the greater part, or slightly widened behind middle; horizontal margins about half as wide as those of prothorax, much narrowed at apex; each with six carinate costac, besides the raised suture, the third and fifth more sharply raised than the others; between each pair, double rows of large round punctures, tending to form slight crenulations on the costae. Prosternum subcarinate in middle, abdomen fincly strigose.

Dimensions-19 x 9 mm.

Habitat-Queensland, Roma and Watten (F. H. Taylor), Winton (A. M. Lea). Holotype in Coll. Carter.

A species long regarded by me as Eight examples are before me. P. alternatus Pasc. until my visit to the British Museum in 1922, when I compared it with the type. Among the Tenebrionidae from the South Australian Museum were a number of the true alternatus from the interior of South Australia (Miller's Creek, Leigh's Creek, Prof. Wood-Jones). The following comparison may serve to prevent confusion by others.

alternatus Pasc.	commi
Colour-Nitid coal black	Dull brownish
Prothorax with small round basal foveac,	With two lar
widest in front of base	sions, wid
<i>Elytra</i> —Third, fifth, seventh costae only	All costae sh
well marked, seriate punctures small,	more than
without crenulations	turcs large

ixtus, n. sp.

1-black.

- rge, elongate depreslest at base.
- harp, third and fifth n others, seriate punce and deep with some crenulation.

Holotype in Coll. Carter.

Pascoe gave eight lines as the length of his type. The examples of P. alternatus before me vary from 16 to 19 mm. long.

### Pterohelaeus ellipsoides, n. sp.

Convex and widely oval, nitid black above, brownish beneath, antennae and tarsi red.

Head rather flat, antennal orbits little raised, epistoma regularly arcuate, a few small punctures between eyes, larger and closer punctures at sides; anterior area impunctate; antennae sublineate, third not as long as 4-5 combined, apical segments little widened.

Prothorax widest at base, thence sharply narrowed to apex, base thrice as wide as apex, foliatc margins wide behind, narrowing to front; lightly concave; disk and margins laevigate, medial line feebly indicated on basal half; antcrior angles rounded, posterior narrowly acutc; base bisinuate, subtruncate in front of scutellum.

Elytra wider than prothorax at base and about four times at long; foliate margins moderately wide in front, suddenly narrowed behind middle and subobsolete at apex; apical declivity steep; striate-punctate, the striae indistinct near middle, this region irregularly punctate, the punctures small but distinct; intervals flat, the sutural and about three others laevigate, the other with irregular punctures of the same size as in the series; a line of rather large punctures at discal margins. *Prosternum* flat, not raised between coxac, mid-intercoxal process widely, post. process narrowly triangular; underside very minutely punctate; apex of tibiae and tarsi strongly pubescent.

Dimensions-12 x 8 mm.

Habitat—Western Australia, Cue (H. W. Brown), Boulter (A. Bethune). One of a small Saragus-like group near, but larger than *P. thymacloides* Macl. Two examples examined. Holotype in South Australian Museum.

# Pterohelaeus orbicularis, n. sp.

Convex and widely oval, very nitid black, underside and legs dark castaneous, antennae and tarsi red.

*Head* rather small and flat; eyes closer than in *ellipsoides*, the margins more raised, the surface more clearly punctate; antennae sublineate, the four apical segments enlarged, 9-10 round, 11 oval.

*Prothorax* very similar to that of *ellipsoides*, disk rather less convex and merging more gradually into the foliate margins; almost laevigate, a medial line feebly indicated.

*Elytra* wider than prothorax at base and nearly thrice as long; foliate margins wide, narrowed to about half in apical region; striate-punctate, the striae distinct, the seriate punctures small in the sutural rows, larger towards sides, the mediobasal regions without the irregular punctures of *ellipsoides*; intervals nearly flat, each with about four laevigate intervals very slightly raised. *Prosternum* flat, lightly granulosc; metasternum and first abdominal segment strongly punctate, second and third strongly strigose, apical segment coarsely punctate.

Dimensions—9-10 x 7 mm.

Habitat—South Australia, Murat Bay.

Two examples in the S.A. Museum are intermediate in size between ellipsoides and thymaloides Macl., while similar in their widely ovate form; this being the widest of the three. Though Saragus-like in form, both this and ellipsoides are definitely winged. Holotype in the South Australian Museum.

### Pterohelaeus planior, n. sp.

Oblong, depressed, opaque brownish-black above, nitid reddish-brown beneath, antennae reddish.

*Head* very flat, epistoma widely rounded, antennal orbits scarcely raised; front finely punctate, antennae rather slender and lineate, third = 4-5 combined, 8-10 transverse, 11 oval.

*Prothorax* flat, foliate margins wide and sub-horizontal, apcx arcuateemarginate, anterior angles advanced, blunted at tips, base bisinuate, hind angles acute and falcate; widest behind middle, sides rather widely rounded, extreme border wafer-like scarcely raised, except near angles; disk minutely and closely punctate, a smooth medial line, lightly sulcate on basal half. *Scutellum* transversely triangular.

*Elytra* of same width as prothorax at base and nearly five times as long; sides sub-parallel, horizontal margins rather wide; striate-punctate the striac lightly impressed, the seriate punctures rather small, intervals very lightly, the fourth, eighth and twelfth more strongly convex. *Prosternum* lightly carinate, glabrous and impunctate.

Dimensions-18-21 x 10.5-12 mm.

Habitat-North-West Australia, Fortescue River, Hammersley Range (W. D. Dodd).

Two examples show a distinct species belonging to Macleay's Section 11, Subsection 1. It is nearest to *planus* Bless and *oblongus* Cart. but is flatter and relatively wider than either, with a more opaque surface. Indeed, it is the flattest of all the larger species. Holotype in the South Australian Museum.

#### Pterohelaeus subsericeus, n. sp.

Shortly oblong-ovate, black, glabrous and subopaque, antennae and tarsi red, underside and legs nitid black.

*Head* and *pronotum* densely and finely punctate, epistoma truncate, front lightly impressed between the eyes; antennae 1-2 globose, 3 as long as 4-5 together, 4-6 short, oval, 7-11 transverse, 8-10 wider than 7.

*Prothorax*, apex arcuate emarginate, anterior angles widely rounded off, lateral margins moderately wide, subhorizontal, without defined border; widest at basc, thence arcuately narrowed to apex; base strongly bisinuate, nearly twicc as broad as apex; disk and margins uniformly and densely punctate, without medial line or basal foveae. *Scutellum* large, triangular.

*Elytra* as wide as prothorax at basc, slightly wider at shoulders, thence subparallel (feebly widened behind middle) and bluntly rounded at apex. Surface without any defined system of striae or seriate punctures; the whole with a silky roughness, with about three lightly raised and rather wide, subundulate, longitudinal impressions on each elytron, at equal intervals. *Prosternum* finely granulose, subcarinate between the coxae; all tibiae denticulate on outside, fringed with hair on inside.

Dimensions— $12 \ge 6.5$  mm.

Habitat-North-West Australia, Fortescue River, Hammersley Range (W. D. Dodd).

A unique example is allied only to P. sericeus Cart.<sup>(7)</sup> from Queensland. These two stand in a group apart, by their absence of the usual striation and the peculiar silky integument of the elytra and the denticulate tibiae; but *subsericeus* is more elongate, the raised lines less clearly zig-zag. Holotype in the South Australian Museum.

#### Pterohelaeus teres, n. sp.

Oblong-ovate, convex, subnitid black above, nitid black beneath, antennae and tarsi piceous.

*Head* subtriangular, sides narrowed to apex, antennal ridge little raised, surface rugose-punctate, antennae rather slender, 3 not as long as 4-5 combined, last four segments transverse, eleventh oval.

*Prothorax* widest a little in front of base, anterior angles rounded, posterior slightly falcate, sides arcuately narrowed to apex, foliate margins wide and concave, border recurved; disk minutely, not very closely, punctate, without sign of medial line, a small transverse depression on each side at base.

*Elytra* slightly wider than prothorax at base, sides sub-parallel for the greater part; very finely striate-punctate, the punctures small and regular, the intervals flat, with punctures of equal size with the striae; a wide laevigate space at suture, and less marked, impunctate intervals between every fourth series, clsewhere irregular punctures tending to obscure the striae. *Prosternum* carinate, underside almost impunctate, tibiae glabrous.

Dimensions-14-15 x 7.5-8 mm.

Habitat-Western Australia, Mullewa (Miss F. May).

<sup>(7)</sup> The words "wavy costae" in the description of *sericeus* scarcely describe the widely raised impressions that take the place of costae.

Five examples from the Lea Collection belong to this undescribed species. In form like *P. kollari* Br. and *cereus* Macl., though less nitid and more convex than the latter. It is distinguished by its flat elytral intervals and fine, somewhat irregularly punctate, surface. The seriate punctures of *P. kollari* Cart. (? Breme) are considerably larger, the prothorax wider, less narrowed in front. Holotype in the South Australian Museum.

### Saragella, n. gen. (Nyctozoilinae).

Body wingless. Head widc, antennae short, maxillary palpi with apical segment cultriform and abnormally large, labial short with apical segment small oval and ciliate; mentum very large, flat and subangulate at sides, its surface closely pitted with round punctures. Eyes undivided, rounded and depressed, little seen from beneath. Prosternum declivous, its process deflexed, received into a shallow triangular receptacle of the mesosternum; mesosternum short. Tibiae each with two apical spines, one long, the other short; without lateral spur. Tarsi clothed beneath with stout bristly cilia, the fore and post. tarsi with basal segment long; the former thin (with tibial receptable), the latter as long as the rest combined.

A species at first suggestive of *Adelodemus* of the *Opatrinae*, but the large, lozenge-shaped mentum, with its strong, horizontal teeth of the submentum, the large palpi, the notched mesosternum, and the elongate tarsi point to its association with *Dysarchus*, though without the spurred anterior tibiae of that genus.

### Saragella palpalis, n. sp.

Pl. vi, fig. 1.

Ovate, opaque brown, almost glabrous, antennae and tarsi red.

*Head* epistoma arcuate and ciliate, its reflexed border extending in an unbroken line to the raised antennal orbit, this extending laterally beyond eyes; two converging ridges extending from in front of eyes to meet at base. Surface finely shagrcened. Antennae not reaching to half of prothoracic length, third not as long as 4-5 together, 4-7 subconic, 8-10 a little transverse, 11 smaller than 10.

Prothorax depressed and widely sub-hexagonal (2.5, 4.5 mm), apex (discal part) and base truncate, the former with prominent, subacute (apices blunted) angles, posterior angles well defined but widely obtuse; a narrow horizontal, foliate margin—slightly widened at front angles, extreme border sub-crenulate, not raised; widest at middle, here subangulately widened; whole surface shallowly alveolate-punctate, the lateral areas finely pustulose. Scutellum small, transverse.

*Elytra* rather widely ovate; a narrow horizontal border seen from above and ciliate; each with four, nitid, well-raised, sub-crenulate costae, intervals shagreened and finely pustulose; suture also with geminate costae less raised than the others. *Underside* coarsely punctate, *prosternum* a little rugose.

Dimensions-9 x 5 mm.

Habital-Western Australia, Mullewa (Miss F. May).

A unique example in the Lea Collection has been difficult to classify as unlike anything known to me in the Tenebrionidae. With the general aspect of a *Saragus*, its unusual mentum, palpi, antennae and tarsi at once separate it from the *Helaeinae*. The absence of a pro-tibial spur denies its inclusion under *Dysarchus*, with which it seems to be most nearly allied. Holotype in the Museum of South Australia.

### ADELODEMUS (APOSTETHUS) TERRENUS Pasc.

There is an example of this in the Simson collection of the South Australian Museum from the type locality, Bowen, Queensland. The elytral intervals of this are manifestly pustulose-setose, the pustules fine and sparse, though rather numerous towards apex—each being a fine seta. These were possibly obscured by the "earthy squamulose crust" of his description, since he makes no mention of them. This is the first example recorded in Australian collections.

### Onosterrhus pustulatus, n. sp.

Ovate, convex, subnitid black above, more nitid beneath, antennac and tarsi piccous.

*Head* not perceptibly punctate, labrum prominent, epistoma truncate with rounded angles, the sides meeting the lightly raised antennal ridge at a wide angle, antennae slender, 3 as long as 4-5 combined, 4-7 lineate-triangular, successively shorter and wider, 8-11 narrower and slightly longer than 10.

**Prothorax** (4 x 7 mm.), very convex, apex arcuate-cmarginate, angles acute, base lightly bisinuate; widest at base, sides arcuately narrowed to apex, a little sinuate at the acute, posterior angles, these pointing diagonally outwards, extremc border narrowly raised, margins concave within this; disk not perceptibly punctate. Scutellum widely transversely triangular.

Elytra (12 x 10 mm.) convex and widely ovate, greatest height behind middle, widest at middle, margins unseen from above, whole surface irregularly rugosepustulose, the pustules sharper and more numerous towards sides and apex, modified and sub-obsolete towards base. Tooth of *submentum* acute, not much raised and pointing forward. *Prosternum* transversely rugose, all coxae glabrous, abdomen sparsely strigose, fore tibiae very sparsely pubescent, hind tarsi furrowed beneath.

Dimensions-18 x 10 mm.

Habitat—Australia (Blackburn Collection).

A single example, labelled as above, deserves a name for its unique sculpture. While in some details approaching to the description of *O. veternosa* Blackb. the sculpture is at variance with the laconic "leviter reticulatum strigosa." Presumably this species came under his eye. Holotype in the South Australian Museum.

### Agasthenes tepperi, n. sp.

Elongate ovate, convex, dull black above, nitid black beneath, antennae and tarsi piceous.

*Head* very minutely punctate, labrum very prominent, epistoma truncate, its front corners obtuse, its sides obliquely widened to meet the ear-like antennal orbits at a wide angle; antennae long, nearly extending to the base of the prothorax, third as long at 4-5 combined, 4-8 piriform and successively widened. 9-10 round, not wider than 8, 11 oval narrower than 10.

**Prothorax** (5 x 9 mm) vcry wide, apex strongly emarginate, the discal part subtruncate, the angles acutely pointing forward, beyond the eye; base bisinuate, hind angles acute, produced and closely adapted to the rounded shoulder of elytra; widest at middle, sides widely sinuate behind, arcuately converging in front; foliate margins rather wide and concave, extreme border strongly thickened and rounded; disk impunctate, without medial line or foveae. Scutellum strongly transverse.

*Elytra* wider than prothorax at base, elongate ovate, and narrow horizontal border, visible from above, surface glabrous and impunctate. *Submentum* punctate, with a strong conical, horizontal tooth; *prosternum* rugose, arched in middle, its process received into a wide triangular receptacle of the mesosternum; inside margins of tibiae fringed with tomentum, hind tarsi short.

Dimensions-21 x 10.5 mm.

Habitat-North-West Australia (E. Tepper).

Labelled in the handwriting of the late Entomologist of the South Australian Muscum, the species is quite distinct from *A. Championi* Cart. by the differently shaped head and thorax, the former having the outline of the antennal orbit widened towards the front from the cyes, and sinuately continuous with the epistoma; its prothorax is widest behind middle, its front angles pointing obliquely outward, *inter alia*. Holotype in South Australian Museum.

# Onoglypta rugosa, n. sp.

Oblong-ovate, convex; subnitid castaneous, glabrous; antennae and tarsi pale red.

*Head*, epistoma arcuate, on a lower plane than the front, its outline not continuous with that of the widely rounded and raised antennal orbit; eyes widely separate, front glabrous, epistoma lightly punctate; antennae not reaching base of prothorax, third segment one-and-a-half times as long as 4, 8-10 transverse, 11 oval, nearly twice as long as 10.

*Prothorax* widest behind middle, apex arcuate emarginate, base bisinuate, sides moderately rounded, all angles acute, the anterior a little blunted at tip, the posterior about 80°, foliate margins rather narrow, concave within, border thickened and raised; disk very minutely and sparsely punctate, without sign of medial line. *Scutellum* very transverse.

*Elytra* slightly wider than prothorax at base, just perceptibly widened behind middle; widely rounded behind; apical declivity very steep, border unseen from above; whole surface confusedly covered with wide vermiculate rugae, having large punctures at the depressions. Three longitudinal lines on each form illdefined costae, these more distinct on apical half (consisting of closely placed humps), the punctures form a series near suture and partly so along the costae; also a marginal row, obscured in places. *Underside* finely and sparsely punctate, the apical ventral segment more strongly so; *submentum* with a vertical, subconical tooth on each side, prosternum declivous, its process produced and rounded at apex.

# Dimensions—8 x 4.5 mm.

Habitat-Western Australia, Mullewa (Miss F. May).

Two examples from the Lea Collection form an interesting addition to the western fauna. It is possible that the pale colour denotes immaturity. The sculpture unique in the group, though clearly allied, I think, to O. octocostata Geb. Holotype in the South Australian Museum.

### Platyphanes subseriatus, n. sp.

Oblong, subnitid above, nitid beneath, head, prothorax and underside black, elytra obscurely varicolorous, purple, green and blue, the last in humeral region, the two first indeterminately confused.

*Head*, epistoma truncate with widely rounded angles, eyes large, separated by the width of a transverse diameter of an eye. Surface finely and closely punctate; antennae short and slender, third not longer than fourth, apical segments lightly incrassate.

*Prothorax* dcprcssed, widest behind middle, apex arcuate-emarginate, anterior angles advanced and obtusely blunted, base strongly bisinuate, hind angles widely obtuse, but well defined; sides moderately rounded, reflexed border moderately wide, surface uniformly, finely punctate, without definite foliation, narrowly sulcate within border; without any sign of medial line or fovae. *Elytra* wider than prothorax at base, sides sub-parallel for the greater part; a narrow horizontal border visible from above; feebly seriate-punctate, without evident striae, the seriate punctures small, round, uniform in size and distance, intervals flat, themselves sparsely and finely punctulate. Prosternum coarsely, rest of underside minutely punctate. Legs long, with a metallic gloss.

Dimensions-18 x 9 mm.

Habitat-Western Australia, Mullewa (Miss F. May).

A single example in the Lea Collection is the only member of the genus without defined striae, but allied to *planatus* Cart., *chalcopteroides* Cart. in general structure. Holotype in the South Australian Museum.

#### Titaena minima, n. sp.

Elongate, cylindric, dark bronze, mouth and appendages red, two basal segments of antennae testaceous.

*Head* moderately, not closely, punctate, antennal segments cupuliform, 4-10 successively widening, 11th ovate.

*Prothorax* very convex, anterior angles unscen from above, widest near apex, thence slightly narrowing to base; hind angles obtuse, margins scarcely obvious from above, disk uniformly, closely and coarsely punctate, medial sulcus distinct, but continuous neither to apex nor base.

*Elytra* wider than prothorax; strongly and irregularly seriatc-punctate; the punctures becoming confused and irregular at base, the two series nearest suture placed in shallow striae, intervals between series containing a single row of smaller punctures. Underside concolorous with upper; prosternum closely punctate, metasternum with larger punctures near sides only.

Dimensions-4 mm. long.

Habitat—Victoria, Melton (F. E. Wilson).

Two examples, bred from stems of *Acacia decurrens* have been sent for description. The species is easily distinguished from *T. minor* Cart. by its minute size and concolorous bronze colour. Holotype in Coll. Wilson.

#### Adelium davisi, n. sp.

Elongate-ovate, nitid greenish-black above, nitid black below; palpi, antennae and tarsi reddish, apcx of the second paler, underside of tarsi clothed with ycllow tomentum.

*Head*, epistoma arcuatc, strongly punctate, frontal area more sparsely, less strongly so; clypeal suture arcuate and deeply impressed, antennae long, extending beyond base of prothorax; third not as long as 4-5 together, apical segments little enlarged, 11 elongatc.

*Prothorax*, lightly convex, apex arcuate-emarginate, anterior angles blunted, base subtruncate, widest behind middle, sides widely rounded, lightly sinuate behind, posterior angles widely obtuse but defined; without distinct foliation; extreme border narrow; whole surface uniformly punctate, not at all rugose, a round fovea on each side, an irregular depression near hind angle, and a few larger punctures here and there.

*Elytra* wider than prothorax at base; rather strongly convex laterally, margins unseen from above; ovate; scutellary and sutural regions depressed, weak striae discernible near suture. otherwise irregularly scriate-punctate, the scriate punctures in general small and distant, a few larger and clongate, especially on exterior half; intervals flat and sub-levigate. Underside glabrous and almost impunctate. *Prosternum* constricted and convex between coxae; post inter-coxal plate squarely truncate, intermediate triangular.

Dimensions—14 x 5 mm.

Habitat-Western Tasmania, Pieman Creek (G. and C. Davis).

A single example was amongst the Coleoptera collected by Mr. and Mrs. Consett Davis in January, 1937. In form and colour somewhat like *arboricola* Cart. and *flavicorne* Cart. Its distinct features are its lightly and regularly punctate pronotum, its nitid green-black surface and scarcely striate elytra with its small clear punctures. Holotype in Coll. Carter.

#### Adelium sinuaticolle, n. sp.

Ovate, subnitid, dark bronze; underside bronze-black, antennae fuscous towards apex.

*Head* coarsely punctate, rugose on front; epistomal ridge wide, truncate, separated from front by curved line; antennae rather short, thick, gradually stouter towards apex, third not as long as 4-5 together, 11 longer than 10, elongate ovate.

Prothorax depressed, transverse  $(4 \ge 6 \text{ mm.})$ , wider at base than at apcx, widest at middle, thence arcuate both ways, anterior angles obtuse, sides strongly sinuate before the prominent and acute posterior angles, these slightly deflected and pointing outwards; extreme border reflexed, thickened and crenulated, the crenulation strongest near hind angles. Disk rugosely punctate, levigate towards margins, but without distinct separation of margins from disk; medial line wide and shallow but evident throughout.

*Elytra* widely ovate, moderately convex, much wider than thorax at base, shoulders widely rounded, greatest width about half way; seriate-punctate, with ten rows of large elongate punctures on each (two of these on side), intervals finely punctate, four alternate intervals raised, forming costae on apical half, the third of these with sharpest outline and continuous to apex; epipleurae with large, sparse punctures near base, becoming a single line of punctures towards apex. Intercoxal process truncate with rounded angles, femora strongly punctate, tarsi with fulvous tomentum.

Dimensions-16 x 7 mm.

Habitat—North Qucensland, Mulgrave River (H. Hacker).

A single example in the South Australian Museum. It is distinguished from others of Group I of my revision by the crenulate border, and subdentate hind angles of the prothorax. In the latter respect it is near A. hackeri Cart., from which it is separated by the absence of the pilosity that characterises that species. The elytral sculpture is nearest that of A. plicigerum Pase. but the punctures are longer and narrower, especially on sides. The unnotched margin of the intercoxal process marks it as aberrant in its group. Holotype in the South Australian Museum.

### Adelium subsulcatum, n. sp.

Ovate, dark bronze, moderately nitid, tarsi reddish.

*Head* rather strongly punctate, clypeal suture scmi-circular, with lateral branch deeply impressed. Antennae extending to base of prothorax, third segment as long as 4-5 together, 4-8 subequal, 9-11 gradually enlarged, eleventh largest and oval.

*Prothorax* widest behind middle, apcx arcuate emarginate, anterior angle advanced and acute, base truncate, sides widely rounded, feebly sinuate in front, strongly so behind, towards the widely dentate, subrectangular, hind angles. Margins with wide foliation limited by a convex discal ridge, extreme border narrowly raised. Disk irregularly punctate, with a few ill-defined rugae; a short lateral fovca on each side within the above-mentioned ridge. *Scutellum* triangular; sutural region hollowed behind. *Elytra* broadly ovate-acuminate, considerably wider than prothorax at base; shoulders rounded, sides arcuately narrowed to a rather sharp apex; striate-punctate, the striae dcep, the seriate punctures large, increasing in size as striae approach sides; intervals convex, finely but clearly punctate, the fifth and seventh more strongly raised on apical declivity. *Underside* without defined punctures; post intercoxal process margined and rounded at apex.

Dimensions-13 x 6 mm.

Habitat—New South Wales, Mount Tomah, Blue Mountains. (The author.) I took a single & example in November, 1934, which has been in my cabinet awaiting further material. Its clear distinction makes a name desirable. In size, colour and form of prothorax it is like *A. geminatum* Pasc. and *A. reticulatum* Cart. The clytral sculpture is near that of *A. violaceum*<sup>(8)</sup> Cart., and it is one of

the few species having the elytra subsulcate, with definitely ridged intervals. It belongs to Section ii A of my Revision (Proc. Linn. Soc. N.S.W., 1908). Holo-type in Coll. Carter.

A. reticulatum Cart. is very like A. geminatum Pasc. (a species unknown to me when describing reticulatum). Two characters, however, clearly separate them: (1) Elytral foveae narrower and more elongate; (2) Elytral intervals clearly punctate—in geminatum sublacvigate. A. reticulatum appears to be limited in range to the Kurrajong and Mount Irvine district, whereas geminatum is widely distributed over northern New South Wales and southern Queensland.

### Brycopia alpicola, n. sp.

Oval, bronze, appendages red, legs darker than antennae; surface, especially at sides and apex of elytra, with long upright, silvery hair.

*Head* coarsely punctate, epistoma evenly rounded, eyes prominent; antennae stout, third segment much longer than fourth, 4-10 successively more widened at apex, 8-10 subtriangular, eleventh larger than 10, ovoid.

*Prothorax* apex and base truncate, widest about middle; anterior angles widely rounded off, posterior sharply subrectangular; sides feebly rounded on anterior two-thirds, then abruptly, angulately narrowed and widely sinuate on posterior third; extreme border lightly crcnulated.

*Elytra* obovate, considerably wider than prothorax at base; coarsely striatepunctate, the striae irregular, but generally wide and deep; seriate punctures very large, crenulating sides of intervals; these convex, with a single line of large setose punctures. Underside coarsely punctate.

Dimensions— $6 \ge 3$  mm.

Habitat-New South Wales, Mount Kosciusko. (The author.)

I took a single example in January of the present year, 1937. It is twice the size of *B. minuta* Lea, which it somewhat rescmbles in the form of the prothorax, but it differs widely from this species in the much coarser sculpture, denser and more evident pilosity, stouter antennae and the following structural distinction. In *minuta* the lateral sinuation of the prothorax commences half way; in *alpicola* at the posterior third. My tabulation of the genus will show its distinction from other species. (Proc. Linn. Soc. N.S.W., 1920, p. 246.) Holotype in Coll. Carter.

### Dystalica multilineata, n. sp.

Pl. vi, fig. 2.

Elongate, black, subnitid above, nitid beneath, antennae and tarsi reddish. *Head* and *pronotum* densely crowded with longitudinal rugae, these fine on head and foliate margins of prothorax, coarse on disk; antennal ridges sub-

<sup>(\*)</sup> I recently took a pair of A. violaceum at Eungai, near Kempsey.

depressed, elypeal suture deeply impressed; antennae stout, nearly extending to base of prothorax, third not as long as 4-5 together, 8-11 widened and equal.

*Prothorax* sub-depressed, apex arcuate-cmarginate, front angles rather widely acute, base truncate, widest behind middle, sides well rounded, strongly, abruptly sinuate near posterior angles, these forming a small acute tooth pointing outwards; an ill-defined horizontal foliation, extreme border narrow; disk with medial line, somewhat obscured by rugae, but evident on basal half. *Scutellum* depressed, triangular.

Elytra considerably wider than prothorax at base, and about two and twothird times longer; lightly obovate; lateral margins unseen from above, each with nine sharply raised costae; between each pair of costae two undulate more finely raised lines—in general the exterior of these nearly straight, the interior less raised and more wavy, the undulations leaving elongate, oval depressions; the only definite punctures on sutural costae and post-seutellary region. Underside, submentum dentate (pointing forward), with double rows of punctures along its margin; prosternum with a double row of punctures along its front margin, and a row on each side of its intercoxal process; otherwise impunctate, meso- and metasternum strongly punctate, apical ventral segment closely so; post intercoxal process truncate with rounded sides, intermediate semihexagonal.

Dimensions— $12 \ge 5$  mm.

Habitat-Northern Territory, Port Darwin (G. F. Hill).

#### Campolene nitidior, n. sp.

Oblong-ovate, very nitid black, antennae and legs red.

*Head*, epistoma semi-circular, surface closely punctate, coarsely near base, finely on epistoma; antennae stout, strongly enlarged from the fifth outwards.

*Prothorax* very transverse, widest at middle, apex advanced medially, anterior angles widely rounded off and depressed, base lightly bisinuate, sides lightly rounded, a little sinuate near hind angles, these non-dentate and depressed, about 80°, extreme border raised, especially near base and narrowly sulcate within; disk uniformly and finely punctate, two transverse depressions near base.

Elytra slightly wider than prothorax at base and about two and two-third times longer, rather strongly convex, margins unseen from above, finely striatepunctate, the striae faint, the punctures much smaller than in *C. nitida* Pasc., the wide intervals flat and impunctate. *Prosternum* with deep transverse ridges, its flanks with a few large punctures, *mesosternum* depressed, finely carinate in middle, separated from cpisterna by ridge; *metasternum* and *abdomen* nitid and impunctate; legs stout, pro and mid tibiae slightly bowed.

Dimensions— $12 \ge 4$  mm.

Habitat -New South Wales, Dorrigo (W. Heron).

A unique in the South Australian Museum; adds another notable "find" of the Dorrigo naturalist, Mr. Heron. Its larger size, especially more elongate and navicular form, with markedly finer sculpture of the upper surface, easily distinguishes this species from the well-known *C. nitida* Pasc. Holotype in the South Australian Museum.

#### DASCILLIDAE.

# Elodes limbatus, n. sp.

Ovate, nitid black, subglabrous, margins of prothorax and of elytra (including epipleurae) testaceous; apex of prothorax and base of elytra also tinged with yellow. Underside opaque brown, tibiac and tarsi red.

Head closely punetate, almost devoid of hair, eyes large, round and prominent, antennae, first segment large, ovoid, 2 and 3 small, 4-11 linear, rather stout. *Prothorax*, short and wide, apex bisinuate, medial lobe widely produced over head, anterior angles rounded, little advanced; base arcuate, scarcely sinuate, hind angles widely rounded off, sides arcuately narrowed from base to apex, with wafer-like border, the concave margins yellow, the disk uniformly punctate, wth round, shallow punctures. *Scutellum* large, triangular (sides rounded).

*Elytra* lightly obovate, wider than prothorax at base, widest behind middle, the yellow margins subvertical near base, subhorizontal near apex; surface glabrous and punctate, the punctures rather large, shallow, not very close, an oblique, subobsolete costa traccable from shoulder, and a light depression near and parallel to suture. *Underside* impunctate, with short recumbent hair.

Dimensions— $5.5 \ge 3$  mm.

Habitat-Tasmania, West Coast (G. and C. Davis).

A single example is allied to E. cincta Blkb. but is smaller, and without the three distinct costae and pubescence of that species, besides colour differences. Holotype in Coll. Carter.

#### CURCULIONIDAE.

#### Talaurinus fergusoni, n. sp.

Oblong-ovatc. Black, tubercles nitid, depressed areas densely clothed with greyish scales, forming longitudinal vittae on prothorax and elytra; underside wholly black.

*& Head* lightly convex; rostrum excavate, external ridges wide, slightly divergent and a little produced over head; internal less raised than external and convergent; sulci rather wide, confluent across base; scrobes open behind.

*Prothorax* (6 x 6 mm.), sides well rounded, widest near middle, base feebly sinuate, with four compound rows of rounded tubercles—two, at sides, forming lateral crenulations—, intervening depressions forming pale vittae, a fourth vitta on episterna.

Elytra (15 x 9 mm.), sides lightly rounded, apex in general rounded—with a tendency to become mucronate in the \$—base arcuate, shoulders produced by two large tubercles; each elytron with four rows of large, single, rounded tubercles, the second of these subcontinuous with the internal rows of the prothorax, and containing from 8 to 13 tubercles; the geminate sutural rows with smaller and generally more elongate tubercles than those in other rows, and seldom extending on to the declivity, the second and third rows continuous to apex, near apex a short row of two to four small tubercles near margin, depressed intervals as on prothorax, without granulations; at extreme sides a row of large punctures. Underside flat, ventral (especially apical) segments depressed along middle, with fine, sparse, punctures, coxae more closely and coarsely punctate. Legs simple, femora rounded and undentate.

 $\varphi$  wider, ventral segments convex; apices of elytra sometimes mucronate. Dimensions—  $\delta$ , 22-23 mm. x 8-9 mm.;  $\varphi$ , 23-24 mm. x 9-9.5 mm.

Habitat—South Queensland, Stanthorpe (Von Wieldt), Fletcher and Wyberba (E. Sutton).

Seven examples are before me of this finc, distinct species of the *niveovittatus* Ferg. *carteri* Ferg.<sup>(\*)</sup> group. It is easily distinguished from these, as from others, by the regular rows of single, large, separate, rounded tubercles on the clytra. In only one example does the second elytral series show signs of duplication. The pale vittae tend to become obscure, only one example retaining

<sup>&</sup>lt;sup>(9)</sup> T. carteri Ferg., hitherto only represented by the unique type in the Ferguson Collection, from Howell, N.S.W., has also been found, not uncommon, in the Wyberba district, South Queensland. Like the above, it is subject to discolouration. Both species are exceptionally "hard-shelled" and very difficult to pin.

the almost white colour. It is fitting to name this in honour of the late Dr. E. W. Ferguson, whose work so much elucidated our knowledge of the Phalidurinae. Holo- and Allotype in Coll. Carter.

#### CERAMBYCIDAE.

# Athemistus orbicollis,<sup>(10)</sup> n. sp.

Dark brown, subopaque, almost glabrous, antennae red; apiccs of tibiac with tufts of pale hair.

*Head* very lightly pubescent, with sparse, deep punctures.

*Prothorax* subspherical, more convex than usual, sides widely rounded, the usual pustules obsolete (two feeble swellings discernible on disk, none at sdes); disk, like head, with sparse deep punctures; patches of very fine pubescence here and there at sides and apex.

*Elytra* ovate, apices separately rounded; seriate-pustulosc, the pustules rather elongate, smooth and subhorizontal, not crenulating the sides nor cristate at shoulders; almost devoid of hairy clothing, without distinct subapical pustules.

## Dimensions—13 x 4.5 mm.

Habitat-New South Wales, Mount Kosciusko. (The author.)

A single example was taken at Sawpit Creek (4,000 fect alt.) by myself in January, 1937. It is very distinct by its punctate, globose prothorax, almost devoid of tubercles and the very scanty clothing of its whole surface. On the apical declivity there are two feeble suggestions of tubercles, in that the fourth series from suture terminates in a slightly more tumid pustule than the rest; but these are indistinct, though just discernible in outline. Holotype in Coll. Carter.

#### DESCRIPTION OF PLATES V, VI. AND VII.

PLATE V—1, Bubastes subflavipennis, n. sp.; 2, Stigmodera (Castiarina) goerlingi, n. sp.; 3, Stigmodera (Castiarina) palagera, n.sp.; 4, Stigmodera (Castiarina) verna, n.sp.

PLATE VI-1, Saragella palpalis, n.g. et sp.; 2, Dystalica multilineata, in.sp.

PLATE VII-Curis venusta, n. sp.