NEW GUINEA AND AUSTRALIAN COLEOPTERA.

Notes and New Species. No. 2.

By H. J. Carter, B.A., F.E.S.

(Two Text-figures.)

[Read 25th May, 1932.]

Family Georyssidae.

Georyssus occidentalis, n. sp.

Black, subnitid; head almost wholly withdrawn within prothorax, the visible part seen closely adpressed to prosternum. Prothorax sub-bilobate, anterior half narrower than posterior half and on a lower plane than it, widely rounded at apex and at base, widest near base, margins rather widely foliate on basal half, extreme edge crenulated by pustules; basal half of disc with two large pustules, forming with a wide longitudinal ridge a "fleur de lys" design, smaller pustules irregularly placed elsewhere on disc, this widely sulcate on anterior two-thirds. Elytra transversely convex, each with three distinct costae, the suture also costate, the former three entire, but surmounted by granules, the second more strongly granulose than the first, the third than second, intervals finely pustulose. Underside covered with round pustules, tibiae crenulated by granules on exterior edge, front tibiae widened and arched, front femora very wide, sulcate beneath, front coxae contiguous, mid and hind coxae wide apart. *Dimensions*: 1·5 mm. long.

Habitat.—Western Australia: Preston River near Bunbury (Mr. F. Lawson Whitlock).

Two examples sent by Mr. Whitlock, taken from submerged wood, form the third species recorded from Australia. It is difficult to see the head or antennae even from beneath, but the wide pear-shaped apex of the antennae can be made out. In form, size and general sculpture it is not unlike *G. australis* King and *G. kingi* Macl., with the types of which I have closely compared it under a Zeiss binocular. In *australis* the pustules on anterior area of thorax are much coarser, the posterior lobe is narrower, the three medial humps form a transverse ridge, with two smaller humps behind these, and a line of small pustules at base. The elytral costae—only two are visible—consist of lines of pustules on a ridge, the intervals are punctate-foveate. In *kingi*, the prothorax is also more coarsely pustulose, the three large postmedial knobs form a triangle; the elytral costae more strongly raised and less marked by granules than in *occidentalis*, the intervals have cancellate ridges, forming large rugose foveae. Thus *occidentalis* is distinguished chiefly by the finer sculpture of pronotum and elytra. Holotype and paratype in Coll. Carter.

Family Buprestidae.

Chrysobothris subsimilis Thoms. ♂ (= *C. arcana* Macl. ♀).—Following the suggestion of my friend, Mr. F. E. Wilson, I have examined a series of examples

taken by Mr. J. Armstrong on the Bogan River, N.S.W., and now consider that *C. subsimilis* is the male of *C. arcana* Macl. The structural difference of the apical segment of the abdomen is remarkable. In the ♂ this segment is concave without medial carina, the apex with wide triangular excision, of which the extreme angles are bifid ("Apex 4-spinose" in my Table, see These Proceedings, 1925, p. 229). In the ♀ this segment has a well raised carina extending throughout its length and slightly produced behind, giving the "3-spinose apex" of my Table. The triangular apical excision is narrower than in the ♂. Mr. Armstrong has given me eleven examples (3 ♂, 8 ♀), all taken on the River Wilga (*Acacia stenophylla*). I can discover no character in colour, size or form of the upper surface to distinguish the sexes. I have other examples from N.W. Australia and from Bowen and Camooweal, Queensland.

Melobasis myallae, n. sp.

Elongate-navicular; head and pronotum steel-blue bronze, elytra violaceous bronze, basal area and shoulders coppery, apex blue; underside cyaneous with coppery gleams; antennae and tarsi blue, the former with basal segments coppery. Head densely, finely punctate, rather densely clad with golden hair. Prothorax: Apex and base bisinuate, sides obliquely narrowed from base to apex; covered with a dense system of punctures larger than on head, with a general transverse tendency; without defined foveae or medial line. Scutellum small, round, with a single central puncture. Elytra slightly wider than prothorax at base; subparallel to half-way, thence obliquely narrowed to apex, apices separately rounded, margins strongly serrated on apical half. Disc with light subsutural depression on basal half, and some ill-defined striae, the whole rather densely punctate. Prosternum finely and closely punctate, abdomen very finely strigose-punctate and moderately pilose; apical segment arcuately excised between triangular spines. *Dimensions*: 12 × 3·5 mm.

Habitat.—New South Wales: Bogan River (Mr. J. Armstrong).

Two examples, both I think ♀, have been sent by this keen young entomologist as taken on the Myall bushes (*Acacia pendula*). The species is quite distinct, with a nearly straight-sided prothorax as in *costata* Macl., or *picticollis* Cart. (as in fig. 14, Pl. ii, *Trans. Ent. Soc. Lond.*, 1923), with nearly flat elytra like that of *apicalis* Macl., which it most nearly resembles. Holotype and paratype in Coll. Carter.

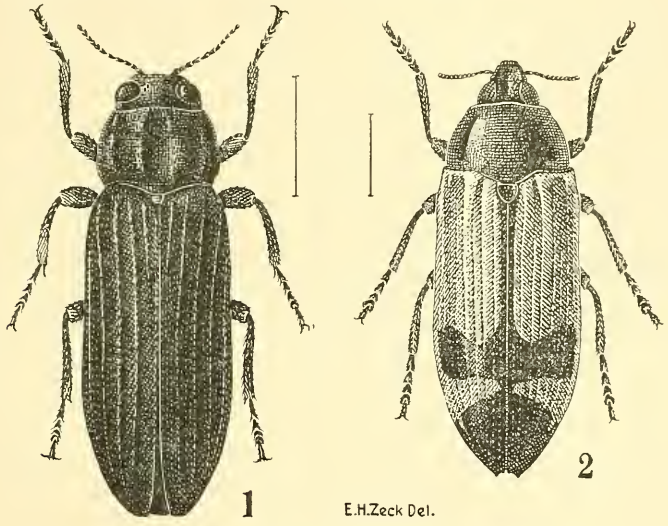
Neobuprestis trisulcata, n. sp. Text-fig. 1.

♀. Elongate-ovate; head and pronotum black, subnitid, elytra and underside black with purplish lustre, legs dark blue, general surface glabrous. Head: Labrum short, lightly depressed on vertex, a smooth wide and short carina between eyes, surface rugose-punctate, antennae short, apical five segments serrate, 2, 3, 4 subequal; eyes separated by a space of the transverse diameter of one eye and converging behind. Prothorax (3·6 × 4·8 mm.) subdepressed, apex very lightly, base rather strongly bisinuate, widest behind middle, thence arcuately converging to the depressed, acute, anterior angles; disc very uneven, with three wide sulci, the medial oval with a suggestion of a smooth carina along its centre, the others at the middle of each lobe respectively, obliquely extending from base to near front angles, the raised areas on each side of sulci coarsely reticulate-punctate, the depressed areas more finely and densely punctate. Scutellum very small, almost hidden below surface of elytra. Elytra three and one-third times as

long as, and wider than prothorax, rather flat, widest behind middle, sides entire, conjointly rounded at apex, each with five lightly-raised costae—including the sutural—besides a short, scutellary costa, the costae here and there irregular through the presence of vaguely defined impressions; intervals otherwise reticulate-rugose. Prosternum lightly depressed in middle, mesosternum divided, metasternum sulcate, whole region closely reticulate-punctate; abdomen and legs also strongly punctate and glabrous, the basal segment widely sulcate. Tarsi short. *Dimensions*: 18 × 6 mm.

Habitat.—New South Wales: Bogan River (Mr. J. Armstrong).

I am indebted to this keen young naturalist for the opportunity to describe this interesting species. Though differing from its congeners in the remarkable sculpture of its pronotum it is, I think, an ally of *N. albosparsa* mihi. The single specimen available is female. Holotype in Coll. Carter.



Text-figs. 1-2.
1.—*Neobuprestis trisulcata*, n. sp. 2.—*Stigmodera* (*Castiarina*) *suttoni*, n. sp.

Curis atrocyanea, n. sp.

Oblong, nitid blue-black above, pronotum—especially at sides—more evidently blue than elsewhere; beneath similarly coloured, but with patches of white flocculence at sides of prosternum, behind all coxae, and of sides of each abdominal segment, appendages blue-black. Head with wide, deep excavation; finely rugose-punctate. Prothorax: Apex and base bisinuate, the latter more strongly so; widest at middle, sides well rounded, subsinuate in front and behind, all angles a little acute; disc with an oval, shallow depression extending over basal half at middle, a fine medial sulcus just traceable on front half; surface covered with fine punctures, increasing in size and density laterally. Scutellum very small and round, punctate. Elytra slightly wider than prothorax at base, feebly compressed behind shoulders, not completely covering apex of abdomen, apices separately rounded, their margins strongly serrulate to apical third, with short scutellary and four other costae, these rather wide and moderately raised, the costae

bounded by irregular series of punctures (more regular on basal half); intervals irregularly punctate near the middle, the lateral intervals—external to the second costa on each side—rather vaguely reticulate-rugose. Prosternum finely punctate, the rest of underside striolate only; apical segment excised between two spines. In ♂ the eighth ventral sternite clearly forcipulate. *Dimensions*: ♂, 12 × 4 mm.; ♀, 14 × 4·5 mm.

Habitat.—New South Wales: Bogan River (Mr. J. Armstrong).

A pair of this distinct species has been received from its captor. In form it is intermediate between *splendens* Macl., and *caloptera* Boisd. The elytral costae are well marked, but the interstitial punctures are less well defined than in either of these species. The flowery flocculence of the underside is readily removed with a pin, and may be variably present in older examples. Holotype ♂ in Coll. Carter. Allotype ♀ returned to Mr. Armstrong.

Anilara olivia Cart.—I have already shown (*Entomolog. Blatt.*, 1929, p. 184) the clear distinction of this species from *A. viridula* Kerr., but apparently my note was not in time to prevent a repetition of this mistaken synonymy in the Junk Catalogue edited by Dr. Obenberger.

Diceropygus macleayi Kerr. = *Melobasis suturalis* Macl. (1886).—When writing the Revision of this group I was unaware of Kerreman's "Catalogue synonymique" in which this new name was supplied for that preoccupied by *M. suturalis* Thoms. (1879)—a synonym of *M. apicalis* Macl. One of the references given by Obenberger in the Junk Catalogue (Buprestidae, p. 437) under this name, however, applies to *Hypocisseis suturalis* Saund. (Cisseis)—a widely different species.

Stigmodera (*Themognatha*) *yarrelli* L. & G.—I have received from Mr. H. W. Brown two beautiful blue varieties of this species—mentioned also in my Revision of 1916 (*Trans. Roy. Soc. S. Aust.*, 1916, p. 81)—that is found specially in the Moore River district. I suggest the name *coerulescens* for this very distinct variety.

STIGMODERA (CASTIARINA) SUTTONI, n. sp. Text-fig. 2.

Oblong; head and pronotum golden (sometimes greenish at sides), underside, legs and appendages dark-green; elytra yellow with base (narrowly), suture, post medial fascia (in 4 out of 5 examples not extending to sides) and wide apical mark, dark-green. Head finely, closely punctate, frontal sulcus wide and deep. Prothorax moderately convex, widest at base, sides lightly and arcuately narrowed to apex, this lightly and acutely produced, base moderately bisinuate, its angles subrectangular, disc finely punctate, more closely so towards apex, sparsely at base; deep mediobasal fovea placed in larger longitudinal depression, smooth medial line faintly indicated on basal half, a large rounded lateral fovea near each hind angle. Elytra, sides nearly straight, lightly compressed in front of, and lightly enlarged behind, middle; apices finely bispinose, with small semicircular lunation, sutural spine minute. Striate-punctate, all intervals convex on apical half, third and fifth also on basal half; seriate punctures distinct, intervals impunctate; underside very finely pubescent and punctate. *Dimensions*: 11–13 × 4–4·1 mm.

Habitat.—South Queensland: Fletcher (Mr. E. Sutton).

Five examples sent by this keen-eyed collector, to whom it is dedicated, show a species of the *andersoni* group nearest to *campestris* Blkb., and *skusei* Blkb., but distinct from both by the golden prothorax. In *S. campestris* the apices are widely bidentate, and the general shape different. In *S. skusei* the dark colour

on suture is never continued beyond the fascia, the underside is blue amongst other differences. Holotype and allotype in Coll. Carter. Three paratypes returned to Mr. Sutton.

Family TENEBRIONIDAE.

Gonocephalum arenarium F.—Mr. G. F. Blair has identified examples from Albany, Western Australia, taken by Mr. H. Giles, as this species. Its wide distribution is shown by its locality—Bengal and the Moluccas (Junk Catalogue) and Cape of Good Hope (ex. sent me by Mr. Blair). Mr. F. L. Whitlock has lately sent it from Bunbury, W.A.

Saragus.—I am indebted to Mr. K. G. Blair for sending me accurate information on types examined by him. The following corrections should therefore be made in my Check List:

S. australis Boisd. = *tarsalis* Hope (*S. asperipes* Pasc., is not a synonym of *tarsalis* Hope as in my List).

S. inaequalis Blkb. = *lindi* Blkb.

S. levicostatus Macl. = *mediocris* Blkb. (? also = *interruptus* Boisd.).

S. confirmatus Pasc. = *opacipennis* Macl.

MYCHESTES PAPUANUS, n. sp.

Widely oval, brown. Head roughly shagreened, antennal ridge strongly raised (ear-like), antennae comparatively long and slender, third segment longer and more slender than first, 4–8 oblong, each lightly enlarged in front, 10–11 oval, forming a moderately wide club, 11 longer than 10. Prothorax widely oval and transverse, apex emarginate, front angles acute and prominent, sides well rounded, widest rather behind middle, margins roughly crenulate, posterior angle rounded off, base bisinuate, with a produced medial lobe, disc with six prominent protuberances, two conical, rather close together, just behind apex very prominent and sloping forward, two subspherical at basal third, themselves bearing small nitid tubercles, and a transverse one, less prominent than the preceding, near middle of and within each lateral margin, a longitudinal row of about five small double tubercles equally placed between the medial area and the concave margins, other small tubercles scattered along base or irregularly elsewhere on disc. Scutellum small, oval. Elytra widely oval and convex, at widest as wide as prothorax, posterior declivity very steep, subvertical; two prominent, costate lines of tubercles from base to hind declivity, a prominent rounded tubercle near middle exterior to costae on each side and a second similar to this, near declivity, and exterior to it, intervals bearing small nitid tubercles. Legs with short bristly hair, tibiae with small tubercles on exterior margins, not enlarged, at apex. *Dimensions*: 9 × 5·2 mm.

Habitat.—N.W. Papua: Mt. Lamington, 1300–1500 ft. alt. (C. T. McNamara).

A single example, forwarded by the late Mr. Lea, is gummed on a card. While generally similar to, it is strongly differentiated from, its Australian congeners, though nearest to *M. pascoei* Macl., in proportions, but wider and more convex than it. Holotype in South Australian Museum.

MARTIANUS AUSTRALIS, n. sp.

Elongate-ovate, subdepressed, subnitid; head, prothorax and underside reddish, elytra piceous-black with shoulder mark and apical margins red; antennae, palpi and legs red. Head unarmed, epistoma straight in front, rounded at sides, palpi

narrowly semi-elliptic, strongly and closely punctate; antennae extending well beyond half the length of prothorax; segments beyond the fifth transverse and successively wider to apex; apical segment subcircular. Prothorax: Apex nearly straight (feebly advanced at angles and middle), base bisinuate, sides evenly rounded, all angles obtuse, the anterior slightly rounded off; surface strongly and closely, not confluently, punctate, the usual basal foveae marked by large shallow depressions. Scutellum transversely oval, punctured like pronotum. Elytra slightly wider than, and more than three times as long as, prothorax, lightly ovate; striate-punctate, the strial and interstitial punctures close and confused; intervals moderately convex, in places transversely wrinkled. Prosternum lightly pustulose, rest of underside and femora strongly punctate, metasternum the most sparsely so. *Dimensions*: 4·5–5 × 2 (+) mm.

Habitat.—N. Queensland: Cooktown. In palm tree (Mr. L. Wassell).

Four examples, kindly sent by their captor recently, are quite distinct from the Fiji species, *M. dermestoides* Chev. The sculpture gives it a subopaque appearance. An example sent to Mr. Blair for determination was returned as *Martianus* sp.—a genus not so far recorded from Australia, and distinguished from *Platydema* by (1) upper lip not connected by membranous hinge with epistoma, (2) body long, parallel, and (3) apical segment of maxillary palpi cylindric (Gebien, *Philippine Journ. Sci.*, 1925). In the above, (1) can only be certified by dissection, (2) is not the case, (3) the palpi are certainly much narrower than in *Platydema*, but are not cylindric, the external margin being slightly arcuate, widest in middle. Holotype in Coll. Carter. A paratype sent to British Museum.

Saragus barretti, n. sp.

Oval, very convex; nitid black, foliate margins of prothorax, legs and underside reddish-brown, oral organs, antennae and tarsi red. Head coarsely punctate and slightly rugose, epistoma widely arcuate, its edges reflexed; antennae slender, 2–6 lineate, 7–8 subconic, 9–10 round, 11 oval. Prothorax strongly transverse, disc convex, finely but distinctly punctate, foliate margins wide behind, narrowing and concave towards front, all angles rounded off. Elytra convex, with steep apical declivity, apex rather acute, with fine, rather indistinct striae, containing rows of very small punctures; the flat intervals bearing a few, just perceptible, punctures; lateral margins very narrow, except near base, but continuous to apex. Prosternum finely punctate; abdomen glabrous, impunctate. *Dimensions*: 12·5 × 9 mm.

Habitat.—Western Australia: Nullarbor Plains (C. Barrett, Esq.).

A unique specimen was sent to Mr. F. E. Wilson amongst examples of *S. pascoei* Macl., by the well-known naturalist to whom I dedicate it. The following comparison will distinguish it from this its nearest ally:

S. pascoei.	*S. barretti.*
Head very finely punctate	more coarsely so
Antennae stouter, 3rd = 2 × 4th	more slender, 3rd less than 2 × 4th
Prothorax impunctate, margins black	clearly punctate, margins red
Elytra: seriate punctures, larger and irregular, margins much wider.	seriate punctures very fine, narrow
Form widely ovate, apices bluntly rounded, widest behind shoulders	tapering to a rather sharp apex, widest at base of prothorax
Hind tibiae flat between carinate edges	rounded, without carinae
Dimensions 16-19 × 12·5-15 mm. (from examples before me)	12·5 × 9 mm.

Holotype in Coll. Wilson.

Lepispilus Westw.—In conversation with me in 1922 Mr. K. G. Blair suggested the synonymy of the genus *Tyndarisus* Pasc., with *Lepispilus*, the former being the male form of the latter. I had long noted the similarity of structure, clothing and sculpture in these genera, and included *T. longitarsis* under *Lepispilus* in my Check List as a separate species. Field notes failed to provide indisputable evidence of sexual relation, i.e., no mated pair was taken of these comparatively common insects. Of late years I have carefully collected material and now entirely endorse Mr. Blair's opinion, as expressed by letter of 17/3/31: "Many thanks for the nice box of *Lepispilus* which I think clears matters up nicely—To me the identity is so obvious that you cannot escape it—You have four species, of three of which I return you a pair each." The males in each case differ from the females in their more slender form, longer legs, especially tarsi; so that Pascoe placed *Tyndarisus* in the Subfamily Strongyliinae. The more lightly built males are often taken on the wing, but I have never thus taken the heavier females. This, together with the erroneous determination by the late Mr. Masters of *T. longitarsis* for the common Blue Mountain species (*L. rotundicollis* Blkb. ♂) made me hesitate in accepting Mr. Blair's suggestion until recently.

T. longitarsis Pasc. (♂) = *L. stygianus* Pasc. (♀), the latter having page priority, the former name must therefore be sunk.

I have examined 213 examples from the chief Australian collections, and note the following distribution:

sulcicollis Boisd. 103 examples. New South Wales, Victoria and Tasmania.

rotundicollis Blkb. 60 examples. New South Wales, Victoria and South Australia (mostly from highlands, Blue Mountains, etc.).

stygianus Pasc. 35 examples. Alpine New South Wales and Victoria (Kosciusko–Mt. Buffalo, etc.).

ocularis, n. sp. 15 examples. New South Wales: Dorrigo and Williams River. Queensland: National Park and Tambourine Mountain.

The sexual distinctions are strongly marked by (*a*) form, as stated above, (*b*) (except in *sulcicollis*), eyes larger and closer in ♂, (*c*) sex organs. As regards (*c*), the ♂ organ has a longitudinal groove, but is undivided, with an acute apex; the ♀ often displays a prominent ovipositor which is more or less longitudinally divided, bifid at apex with two linear transverse appendages. These sex organs, if not obvious, can readily be dissected or squeezed out after soaking in warm water. The four species may be tabulated as follows.

1. ♂ with eyes closer, also form more elongate than ♀ 2
   Eyes similar in both sexes, sexual form less marked ..... *sulcicollis* Boisd.
2. Sides of prothorax variously sinuate, never angulate, size larger 3
   Sides of prothorax subangulate, size smaller ..... *ocularis*, n. sp.
3. Upper surface black (sometimes reddish) without pubescent patches except on scutellum ..... *stygianus* Pasc.
   Upper surface uneven, elytra with large pale, pubescent patches, with raised subreticulate intervals ..... *rotundicollis* Blkb.

N.B.—As in many other genera of the Tenebrionidae the females of the different species are sometimes difficult to separate.

Lepispilus ocularis, n. sp.

♂. Narrowly elongate and parallel; bronzy brown, clothed with more or less pale pubescence, this chiefly on depressed areas, e.g. lateral groove of pronotum,

irregular patches of elytra. Head: Eyes large and close, their interspace less than the transverse diameter of one eye (less than 1 mm.); antennae slightly longer (especially apical segment) than in *sulcicollis*. Prothorax: Apex arcuate-emarginate, base lightly bisinuate, sides with outline of anterior half convex, posterior half concave, subangulate at middle, anterior angles subrectangular (wider than in *sulcicollis*), posterior acute, with narrow raised border, widely grooved within this; disc rather sparsely and finely punctate, with wide medial sulcus enlarged at base, and a basal depression on each side. Scutellum triangular, pubescent. Elytra wider than prothorax at base, parallel for the greater part, sides feebly constricted at middle, with roundish pubescent areas arranged chiefly in longitudinal series, the intervals raised and reticulate; two larger series of pubescence, the first originating at the constriction of sides and interruptedly continued half-way to suture, the second forming a vague fascia on apical third; underside pubescent, especially epipleurae. Hind tarsi with segments 1 and 4 longer than in *sulcicollis*. *Dimensions*: ♂, 15 × 6 mm.; ♀, 15–17 × 7–9 mm.

Habitat.—New South Wales: Dorrigo (W. Heron) and Williams River (A. Lea and F. E. Wilson); Queensland: National Park and Tambourine Mountain (H. Hacker).

♀. Differs in having the eyes more widely separated (1½ mm. apart), the prothorax relatively wider, elytra more or less obovate, tarsi stouter, front tarsi shorter.

Fifteen examples examined, 6 ♂, 9 ♀. The species is nearest *sulcicollis*, but clearly separated by the characters stated in the tabulation. Holotype ♂ in South Australian Museum, allotype ♀ in Coll. Carter.

N.B.—The pubescence is easily abraded, so that four of the ♂ examples only show clearly the lateral pubescence of prothorax and elytra. In such cases it can be readily distinguished from *stygianus* by the smaller size, coarser sculpture, besides the angulate pronotum; though the ♂ of *stygianus* has very similarly placed eyes.

L. rotundicollis Blkb. var.—Several examples from the Queensland National Park and Dorrigo, New South Wales, differ from typical examples in the larger size of yellow pubescent areas, making this the predominant colour. The male examples appear less elongate than the corresponding males of *rotundicollis* from the Blue Mountains. The type, said to be from Central Australia, has been lent me for examination. It appears to be a small ♀.

Zophophilus.—My friend Herr Gebien writes that the following synonymy should be recorded:

(*a*) *Zophophilus* Fairm. = *Sphenothorax* Geb. = *Teremenes* Cart.

(*b*) *Z. curticornis* Fairm. = *Meneristes dentipes* Cart. = *Z. raptor* Geb.

Titaena wilsoni, n. sp.

Elongate, cylindric, sparsely pilose. Head and pronotum nitid, dark-green (almost black), elytra purple, underside black with purplish gleams, legs piceous, antennae and tarsi reddish. Head and pronotum sparsely punctate (compared with *columbina* Er.), the latter widest at apex, gibbous anteriorly, with large, shallow, laterobasal impressions. Elytra somewhat irregularly punctate, with a suggestion of linear arrangement; the punctures nowhere contiguous, more distant and with less tendency to rugulose intervals than in *columbina*. *Dimensions*: 12–13 × 3 mm.

Habitat.—Victoria: Bogong High Plains. 5,000–6,000 ft. alt. (F. E. Wilson).

Two examples taken are clearly separable from *T. columbina* Er., by the bicolorous and feebly pilose upper surface, the nitid and less densely punctate pronotum, and the elytral punctures also clearly more distant. No structural distinctions can be seen. Holotype in Coll. Wilson.

Strongylium wagneri Cart. (These PROCEEDINGS, 1930, p. 546).—Herr Gebien has courteously written to me that this name is preoccupied by *S. wagneri* Pic. (1918) for an Argentine species. I, therefore, propose the name LEAI as a substitute for the New Guinea species.

Corrigendum.—In the same paper (p. 547) the author of *Amarygmus mutabilis* was printed Geb. instead of Guér.

Obriomaia ruficornis Champ. (*Menephilus*).—Herr Gebien writes that this species, having no margin to the anal segment, cannot be referred to *Menephilus*, but is a member of the Cnodaloninae—genus *Obriomaia* Geb. He considers that *O. azuripennis* Cart., which I recorded as a variety of Champion's species, is a good species—an opinion with which I concur after a re-examination. Besides colour distinction, the sculpture of the pronotum is finer, and the sides of prothorax are almost straight, not sinuate behind as in *O. ruficornis*.

It is extremely probable that *O. aeneus* Cart. (*Menephilus*) is another species, distinguished by the fifth elytral interval carinate, besides colour distinction.

ANDROSUS WASSELLI, n. sp.

Oblong; head and prothorax subnitid black, elytra metallic dark-green, underside nitid black, above and below glabrous; antennae and tarsi castaneous, legs piceous above, red beneath. Head densely and strongly punctate, epistoma subcircular, its margin slightly reflexed, antennal segments successively wider and transverse from fifth outwards, eleventh subspherical. Prothorax: Apex somewhat squarely emarginate, anterior angles acute, and produced in front of eyes, base bisinuate, posterior angles subrectangular, sides straight on posterior half, thence arcuately converging to the front; lateral margins slightly foliate, extreme border raised, base without border; disc strongly punctate, less closely than on head, the punctures larger and more distant near base and sides. Elytra of same width as prothorax at base and about two and two-thirds as long; slightly enlarging at shoulder, thence parallel to near the bluntly rounded apex; striate-punctate, the striae well impressed, the strial punctures small near suture, increasing in size and distance apart in external striae; intervals flat, scarcely visibly punctate. Prosternum declivous, its process bisulcate, pointed at apex; prosternal episterna roughly punctate, abdomen very finely so. *Dimensions*: 4–5·5 × 2–2·2 mm.

Habitat.—Queensland: Clayfield, a suburb of Brisbane (Mr. L. Wassell).

Twenty-two examples of this little species were lately sent by my friend to whom it is dedicated. It is curious that so apparently common a species should have escaped notice. Holotype in Coll. Carter.

Note.—*Androsus* Geb., is separated from *Chariotheca* by rather slight characters, of which the bisulcate prosternal process seems the most definite; but it forms at least a convenient group division of a genus that has become inconveniently numerous in the Austro-Papuan fauna. Herr Gebien rightly diagnoses my *C. brevis* as an *Androsus*; *C. varipennis* Cart., is another member of this genus.

CARDIOTHORAX MONARENSIS, n. sp.

Oblong-ovate; moderately nitid black, antennae and tarsi brown. Head: Epistoma rather sharply rounded in front, the stirrup-shaped frontal impression bearing a few punctures, antennae stout. Prothorax: Apex arcuate-emarginate, base nearly straight; anterior angles rounded, sides widest near middle, sinuate near the obtuse, but fairly prominent hind angles (more prominent in ♀ than in ♂), sides well rounded, raised border moderately thick, foliate margins wide, separated from disc by shallow sulcus; without evident setae; disc with medial sulcus throughout, in general with transverse depression on each side within basal border. Elytra sulcate, with six wide and deep sulci on disc, three narrower sulci at sides, intervals convex and subequal, underside impunctate; posterior tibiae of ♂ widened and concave on the inside, with short hairy clothing. *Dimensions*: 17–18 × 6–6·5 mm.

Habitat.—New South Wales: Monaro District, Jindabyne, Thredbo River (the author), Cooma (T. G. Sloane), Yaouk (F. H. Taylor).

Ten specimens under examination belong to the *walckenaeri* Hope–*laticollis* Cart. Section, having sexually widened hind tibiae. This is the species wrongly determined by me hitherto as *brevicollis* Redt. There is an example of *brevicollis* in the British Museum, which Mr. Blair has compared with the actual type, sent from Vienna for that purpose. It has not yet been determined in Australian collections, nor is its habitat known, since both examples examined by Mr. Blair have only "Australia" on label. Yet the Gemminger and Harold Catalogue gives "Sidney" and Masters' Catalogue "New South Wales" as its habitat—the latter, I think, founded on a misdetermination of specimens in the Macleay Museum. Mr. Blair has courteously sent me the following comparison:

brevicollis Redt. ♀.	*monarensis*, n. sp.
Colour black (faint bronzy reflection)	black
Anterior angles of thorax sub-obtuse	fully rounded
Posterior angles obtuse; sides scarcely sinuate before them	prominent
Base of thorax angularly emarginate	nearly straight
Elytra more elongate	more ovate
Striae paired; 3rd, 5th, 7th intervals wider, especially towards apex, and flat	not paired, deeper and more sulciform, all intervals on declivity equal and convex.

Holotype in Coll. Carter.

ADELIUM PULCHELLUM, n. sp.

Oval, convex; brilliant golden-bronze above and below, antennae and tarsi opaque red. Head coarsely punctate, antennae rather short, submoniliform, third segment shorter than 4–5 combined, apical segment pyriform. Prothorax transverse, apex arcuate-emarginate, front angles widely rounded, base nearly straight, hind angles obsolete, sides subsemicircular; disc punctate—not at all rugose—the punctures sparse and fine near middle, larger and a little closer near sides and base, without distinct foliation, some laevigate areas here and there; extreme border finely raised. Scutellum triangular. Elytra ovate, slightly wider than prothorax, and about twice as long; widely rounded at shoulder, striate-punctate, with regular rows of very small punctures placed in fine, shallow striae; intervals flat and almost impunctate. Underside very nitid and impunctate save for a few small punctures on the epipleurae. Tarsi very short. *Dimensions*: 7–8 × 3–3·5 mm.

Habitat.—New South Wales: Dorrigo (Mr. Alfred Stephen and the author).

Two examples before me are amongst the smallest in the genus, distinguished by the brilliantly metallic gloss of its whole surface, the widely and evenly rounded sides of prothorax and the very fine sculpture of the elytral series. But for the transverse eyes it is not unlike certain Brycopiae. I took one example in July, 1910, the second was found by Mr. Stephen in December, 1920. Holotype in Coll. Carter.

AMARYGMUS AMPLIPES, n. sp.

Elongate-ovate; head, pronotum, underside and antennae black, legs dark, tarsi reddish, rufo-pilose. Elytra dark purple, blue-green at base, sides and apex—the colours merging and varying with aspect. Head: Eyes widely separated, interspace about length of third antennal segment, antennae with basal segments slender, successively thickened from the fourth onwards. Prothorax: Apex subtruncate, base lightly sinuate, widest at base, thence slightly and almost straightly, converging in front till near apex; here more strongly narrowed, all angles obtuse; disc evenly, densely punctate. Elytra slightly wider than prothorax at base, subcylindric in form, striate-punctate, the striae more clearly marked towards sides and apex, the strial punctures small, uniform in size and distance; intervals quite flat, except at sides, thickly covered with punctures much smaller than the seriate. Underside finely strigose, front tibiae lightly bent in middle vertically, then arcuate, and enlarged to apex; hind tarsi with basal segment longer than the rest combined. *Dimensions*: 9–10 mm. long.

Habitat.—Queensland (in Hamburg Museum).

Four examples sent by my friend Herr Gebien as "*suavis* Blkb. or sp. nov." are clearly separated from the Sydney species *suavis* by larger size, more sombre colour and uniform seriate punctures of the elytra, and especially the protibial characters. It is perhaps nearer *cupido* Pasc., which is a smaller, more oval species of a brighter colour. Holotype in Hamburg Museum. Paratypes in Coll. Carter.

Family CISTELIDAE.

CHROMOMOEA NIVALIS, n. sp.

Narrowly ovate; upper surface densely clad with recumbent, snowy pubescence, underside less densely but similarly clad. Legs red, knees, tarsi and antennae black. Head and prothorax blackish, where visible through the clothing, oral organs reddish; eyes moderately prominent; antennae not extending far beyond base of prothorax; segment 3 linear, longer than 4; 4–7 successively shorter and widened at apex, 8–10 subtriangular, 11 elongate-ovate. Prothorax subquadrate (slightly longer than wide), sides rounded in front, truncate behind, medial line shown at base. Elytra considerably wider than prothorax at base, shoulders rounded, sides tapering to a fine, common apex; finely striate-punctate, the seriate punctures clearly visible, striae well marked. *Dimensions*: 10–11·5 × 4 mm.

Habitat.—New South Wales: Mullaley (the author). On *Leptospermum* flowers in November.

Three examples taken—others eluded me by very active flight—show a species structurally near *C. fusca* Cart., and *ochracea* Cart., with equally dense clothing; but the size is larger, the prothorax more narrowly elongate, and the elytra relatively wider than in either of these. The striae give a somewhat striped appearance to the elytra. The largest of the three examples is clearly ♂. (Both *fusca* and *ochracea* were taken at the same place.) Holotype in Coll. Carter.

Note.—*Dimorphochilus* (*Allecula*) *gouldi* Hope = *D. diversicollis* Borch.—Examples of this common Western Australian species were compared with Hope's type in 1922. Immature examples are often red or brown.

HYBRENIA ARMIPES, n. sp.

Ovate; nitid bronzy-black, with close, fine, whitish pubescence, basal segments of antennae, tarsi, base of femora and tibiae reddish. Head finely and closely punctate, eyes rather close, interval about the length of 2nd antennal segment, antennae slenderly lineate, 3rd and 4th segments equal, 5–11 shorter than 4, subequal, 11 lanceolate. Prothorax: Apex slightly advanced in middle, base nearly straight, sides subparallel on hind half, rounded towards front, hind angles subrectangular; surface with fine dense punctures, slightly larger near base and sides; subobsolete medial impression indicated near base, two indistinct basal foveae. Scutellum triangular, finely punctate. Elytra wider than prothorax at base, sides scarcely widening behind middle; striate-punctate—the strial punctures scarcely distinct from the interstitial and generally hidden in rather deep striae; intervals convex, strongly, not coarsely, punctate, the short pubescence strongly shown at sides and apex; the forcipital anal appendage sharply incurved (hooked); fore tibiae with wide triangular enlargement at middle on inside; mid tibiae with an internal tooth near apex; hind tarsi with basal segment longer than rest combined. *Dimensions*: 14 × 5 mm.

Habitat.—Cape York: C. Weymouth District (Mr. Leathom Wassell).

A single ♂ example sent by Mr. Wassell is quite distinct in the genus by the combination of bronzy colour, pubescent surface, fine pronotal sculpture and convex elytral intervals. In my Table (These PROCEEDINGS, 1929, p. 77) it is nearest *pilosa* and *torrida*, but is separated by the longer clothing and coarser pronotal sculpture of the former and by the very different elytral sculpture of the latter. From both it is distinguished by its tibial armature. Holotype in Coll. Carter.

HYBRENIA CAUDATA, n. sp.

Oblong; glabrous, prothorax opaque, elytra nitid black, legs dark, labrum, tarsi and apical segments of antennae reddish. Head finely, not closely punctate, eyes separated by a space equal to half the transverse diameter of an eye; antennae slender, 3rd one and a half times longer than 4th, 4–11 very slightly successively shorter, but not wider than preceding. Prothorax: Apex feebly sinuate, base truncate, nearly as long as wide, parallel on basal half, sides converging and rounded in front, hind angles sharply rectangular; clearly but narrowly margined throughout; disc very finely punctate, the punctures crowded in middle area, sparse at sides and base; four large foveate depressions; two larger and deeper at base near hind angles, two, shallower, near centre; medial line scarcely indicated. Scutellum transverse and punctate. Elytra much wider than prothorax at base and three times as long, slightly widest behind middle, apices a little divergent at suture, each with a blunt tooth, emphasized by small external sinuation, the suture itself widened and bent outwards and again incurved near apex. Striate-punctate, the seriate punctures rather large and elongate, the sutural row following a depression from just behind scutellum to apex; intervals otherwise quite flat, each with a single row of irregular, small but defined, punctures. Sternal region finely and sparsely punctate, abdomen striate with a few lateral punctures. *Dimensions*: 20 × 7 mm.

Habitat.—S. Queensland: Milmerran (Mr. J. Macqueen).

A fine species, distinct by its sculpture from its allies. In my tabulation (These Proceedings, 1929, p. 77) it would follow *sublaevis* Macl. (a smaller species with approximate eyes). It is nearer *H. clermontia* mihi (These Proceedings, 1930, p. 188), but the pronotum is much more finely punctate, and the elytra more nitid—without pustules. The curiously formed apex may prove to be an individual aberration. Type in Coll. Carter.

Hybrenia concolor Cart.—In my Revision of the Australian Cistelidae (*Proc. Roy. Soc. Vict.*, 1915, p. 87) I recorded this name for an all-black variety of *H. vittata* Pasc. I now see that it is a distinct species strikingly similar in sculpture, but separated by its different antennae in which the segments are longer and more slenderly lineate than in *vittata*.

Family Cerambycidae.

Athemistus aberrans, n. sp.

Reddish-brown; pubescent, elytra with an oblique fascia of pale pubescence on apical third, extending backwards towards suture, but not reaching suture nor sides; apical region similarly but sparsely pubescent; tibiae with two rings of pale pubescence. Head with sparse, round punctures, antennae widely set, as long as body, third segment more than twice as long as fourth, 5–11 shorter than 4, subequal. Prothorax rather shortly and widely oval, without constriction, a small lateral spine near middle, surface coarsely and rather closely punctate, basal area obscured by pale pubescence, without defined discal tubercles. Scutellum very small. Elytra of same width as prothorax at base, ovate, apices separately rounded, each elytron with three distinct subparallel rows of elongate, black tubercles, extending from base to apical declivity; also some traces of a fourth row exterior to the former; intervals between rows coarsely punctate and pubescent, the interval between first row and suture forming a series of large punctures. *Dimensions*: 5 × 2 mm.

Habitat.—North Queensland: Cairns (the late Dr. E. W. Ferguson).

A single example (? ♂) was given me some years ago by my old friend. The rather regular series of larger tubercles distinguish its sculpture from the other members of the genus, but its general facies is similar, and I am unwilling to establish a separate genus for its reception. Holotype in Coll. Carter.

Parmenomorpha wasselli, n. sp.

♂. Black; antennae, tibiae and tarsi reddish-brown, elytra with loose, post-medial fascia of silvery pubescence, this more or less continuous along sutural region to apex; a slight trace of the same on shoulders and sides of prothorax; antennae and tibiae with indistinct rings of similar pubescence—at the base of segments in the former, at apical third of the latter; a few sparse upright hairs on forehead and sides of elytra, otherwise glabrous. Head with coarse, close punctures, antennae stout, extending slightly beyond the body, third segment longer than fourth, the latter twice as long as any of the succeeding, 5–9 subequal, 10–11 wanting. Prothorax oval, sub-bulbous, constricted towards apex and base, a small lateral conical spine at middle; surface densely and strongly punctate (the punctures larger and closer than in *P. irregularis* Blkb.). Scutellum small, triangular, pubescent. Elytra ovate, of same width as prothorax at base, widest at middle, tapering and declivous to apex, extreme apices separately rather widely

rounded (subtruncate); basal half of elytra somewhat irregularly, not closely, punctate; punctures becoming obsolete on basal half. *Dimensions*: 8 × 3 mm.

Habitat.—Cape York: C. Weymouth District (Mr. Leathom Wassell).

A single example sent by its captor is an interesting addition to the Dorcadionini group of longicorns. Compared with *irregularis* Blkb., of which I have an example, besides the difference of colour, it is larger, more coarsely punctured and less pilose. Holotype in Coll. Carter.

MICROTRAGUS BROWNI, n. sp.

Black, antennae and legs ashen-grey, elytra clothed with pubescence, brown on disc, ashen at apex. Head velvety pubescent and sparsely pilose, with a few large punctures, front finely sulcate, antennae approximate, extending to the apical third of elytra. Prothorax rather closely covered with rounded tubercles, showing foveate intervals near apex, the tubercles smaller on apical half, larger and shining at sides, one large lateral triangular tubercle conspicuous near basal third. Elytra each with a compound humeral tubercle, formed by a larger tubercle surmounting three or more rounded tubercles; the whole surface, except a narrow sutural region, more or less bearing tubercles. Of these, two well defined series of large rounded and flattened tubercles with a coarsely crenulated outline (seen from sides) on each; between the suture and the first of these are smaller tubercles irregularly placed; between the exterior of these and the sides are larger, more conical tubercles; the whole sparsely clothed with upright hair, and irregularly pitted with foveate punctures. Beneath clad with velvety down. Mid tibiae with rounded enlargement externally near apex. *Dimensions*: 20 × 7 mm.

Habitat.—Lake Grace, 275 miles south-east of Perth, W. Aust.

Mr. H. W. Brown has kindly sent me a single example, which, having terminal segment of palpi widely oval, I take to be ♂ of this very distinct species. It is easily distinguished from *M. luctuosus* Shuck., by its denser pubescence and hair; besides its multituberculous surface. Holotype in Coll. Carter.

HESTHESIS RUFODORSALIS, n. sp.

♂. Head strongly albopilose; antennae wholly black, its segments—especially the third—longer and more slender than in *H. cingulata* Kirby. Dorsal surface of abdomen having the two penultimate segments red. Legs black. Otherwise similar to *H. cingulata*.

♀. Antennae as in *H. cingulata*.

Dimensions: ♂, 17–20 × 5 mm.; ♀, 27–28 × 7 mm.

Habitat.—New South Wales: Mullaley (on *Leptospermum* flowers—the author).

I took six examples (4 ♂, 2 ♀, one pair *in cop.*) in November, 1930, near Garrawilla Homestead. At first considered as a colour subspecies of *cingulata*, which it closely resembles, the distinct differences of the antennae in the ♂ point to specific divergence. The red dorsal surface of abdomen is its notable character. Holotype ♂ and allotype ♀ in Coll. Carter.

N.B.—In *cingulata* the red legs seem to be confined to the ♂.

H. moerens Pasc.—I am now of opinion that this is but a male form of *H. cingulata* Kirby: the elytral hind margins are here very much as in *rufodorsalis*, i.e., with a slight sexual divergence, less oblique in the ♂. I noted in

my Revision of this genus (These Proceedings, 1928, p. 546) the variability in the ventral bands in *H. cingulata*.

Ceresium australe, n. sp.

Head, prothorax, underside and appendages castaneous, elytra castaneous with testaceous markings as follows: a wide, oblique fascia extending from shoulders to near suture in front of middle, a smaller irregular macula (sometimes connected with former) behind middle and a preapical fascia not reaching suture, upper surface pubescent. Head subtriangular, sulcate between eyes, antennae extending to apical third of elytra in ♂, shorter in ♀, first segment extending beyond the head, third longer than fourth, 4–11 subequal. Prothorax narrower than head, elongate-ovate, longer than wide, widest near middle, constricted in front and behind, surface rather strongly punctate-setose. Scutellum subcircular, pilose. Elytra wider than prothorax at base, subcylindric, shoulders rather squarely rounded, apices separately rounded, surface rather closely punctate, punctures subobsolete towards apex. *Dimensions*: 9–11 × 2–2·2 mm.

Habitat.—New South Wales: Sydney, Mittagong. Queensland: Townsville. Victoria (in South Australian Museum).

Six examples are before me of this widely distributed species that I cannot find described. It is erroneously labelled *Acyrusa ciliata* in the Macleay Museum, but the antennae are not spinose in either sex. The elytral pattern varies much by the extension of the pale yellow markings. Holotype and allotype in Coll. Carter.