

ON AUSTRALIAN STAPHYLINIDAE (COLEOPTERA).
PART II.⁽¹⁾

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(Contribution from the South Australian Museum.)

[Read September 10, 1925.]

Part II. deals with the subfamily Staphylinides, the subfamily which contains the largest species of the family, many genera, and even species of world-wide distribution; already many species described as Australian have proved to be synonymous with well-known European and Asiatic ones, and it is probable that more of them will be so regarded. Remarkable combs are present on the males of many species of *Quedius*, and other genera, although, being placed amongst dense clothing on the legs, some manipulation is usually necessary before they can be clearly seen.

METOPONCUS, Kraatz, Cat., p. 290.

ATRICEPS, Macl. Q.

var. *piceus*, Macl.

CRIBRATUS, Fvl. (*Xantholinus*), Cat.,

p. 301. V., Tas., S.A.

enervus, Oll.

CYANEIPENNIS, Macl. (*Leptacinus*).

Q., N.S.W., Lord Howe Island.

var. *cairnsensis*, Blackb.

nigricollis, Bernh., Arkiv för

Zool., Band 13, No. 8, p. 15.

FUGITIVUS, Oll. Lord Howe Island.

LURIDIPENNIS, Macl. (*Leptacinus*).

Q., N.S.W., V., S.A., W.A.

novaehollandiae, Fvl. (*Leptacinus*).

METOPONCUS CRIBRATUS, Fvl.

M. energus, Oll.

On Tasmanian specimens of this species the whole of the upper surface is usually black or blackish, except that the tip of the abdomen is sometimes obscurely diluted with red; but on mainland ones the prothorax is sometimes paler (although not conspicuously reddish), sometimes both prothorax and elytra are paler. A specimen from South Australia was taken by Mr. R. F. Kemp from a nest of the green-head ant, *Ectatomma metallicum*.

The type of *M. energus* is in the South Australian Museum, and structurally agrees perfectly with specimens that agree with the description of *M. cribratus*.

METOPONCUS CYANEIPENNIS, Macl.

M. cairnsensis, Blackb., var.

M. nigricollis, Bernh.

This beautiful and widely distributed species has several conspicuously coloured varieties, one of which was named as a distinct species, *cairnsensis*, by Blackburn, and the same form as a variety, *nigricollis*, by Bernhauer. A specimen of the typical form was taken from a nest of ants, *Euponera lutea*, at Dorrigo.

(1) Part I. was published in these Transactions for 1923.

var. *howensis*, n. var.

Two specimens from Lord Howe Island, taken in company with typical ones under bark of banyan figs, have the black prothorax of the variety *cairnsensis*, but have only the second and third segments of abdomen black, the first is of a paler flavous than the four apical ones.

var. *basiflavus*, n. var.

A specimen from Kuranda (in the British Museum) probably represents another variety. It is smaller, 6.5 mm., than any other specimen before me; its prothorax is black, and abdomen black, except that the basal segment only is pale flavous.

METOPONCUS RUFULUS, Broun, var. *norfolcensis*, n. var.

Four specimens from Norfolk Island appear to represent a variety of *M. rufulus*.⁽²⁾ They are all smaller (6-9 mm.) than New Zealand ones (10-11 mm.). Structurally they are fairly close to *M. cyaneipennis*, but the head is shorter, with different impressions, and the colours are very different, the elytra being reddish at the basal third and blackish posteriorly. The abdomen of the type was described as having two segments partly dark, on two New Zealand specimens in the Museum three are partly dark; on the Norfolk Island variety all have five segments partly dark, and less of the elytra pale.

There are three combs in a notch on the front tibiae of the males of both the typical form and variety; the combs are composed of numerous teeth somewhat as on the species of *Domene*, but their positions are not quite the same, and I have not been able to count their teeth owing to the density of the adjacent clothing. Combs are present on the males of *M. cyaneipennis*, *M. cribratus*, and probably of many other species of the genus.

Metoponcus brevipes, n. sp.

♂. Black; prothorax, antennae, palpi, and legs red; tips of three apical segments of abdomen obscurely reddish. Elytra and abdomen with sparse and rather short pubescence; the sides with a few bristles.

Head longer than wide, sides feebly dilated to near base, with two short deep sulci in front, and a shallow notch near each eye; with dense and sharply defined punctures of moderate size, but absent from a narrow median line. Antennae short, fourth to tenth joints strongly transverse. Prothorax slightly longer than head, widest near apex, where the width is slightly more than that of head; with punctures as on head, but somewhat sparser, and with the impunctate median line slightly wider. Elytra slightly longer than prothorax, and slightly wider than its widest part; with crowded punctures, slightly smaller than on head. Abdomen parallel-sided to near apex; with crowded punctures, much smaller than on elytra. Legs short; front tibiae stout, notched, and with three combs at and near apex. Length, 7.5 mm.

Hab.—Victoria: Melbourne (E. Fischer, No. 1409). Type (unique), l. 12886.

The prothorax is bright red as in *M. cyaneipennis*, but the punctures are very different (on the head they are much as in *M. cribratus*), abdomen with no segment entirely pale, etc. The punctures on the pronotum are fairly dense up to the median line, so that the seriate arrangement of those adjoining it is not very evident. There are three combs on each front tibia, but one was not detached for examination under the microscope.

(2) Broun, *Man. of the N.Z. Col.*, 1880, p. 106.

Metoponcus planatus, n. sp.

♂. Head blackish, the muzzle paler, prothorax blackish-brown, diluted with red in front, and almost flavous at base, elytra and abdomen flavo-testaceous, four of the median segments of the latter partly blackish; antennae, palpi, and legs more or less reddish.

Head, excluding muzzle, slightly longer than wide, parallel-sided behind the eyes, with four impressions in front, the median ones shorter and less close together than usual, the others oblique and each terminating in a small fovea; with a few large punctures towards sides, and numerous small ones scattered about. Antennae short, fourth to tenth joints transverse. Prothorax slightly shorter and narrower than head, widest near apex, base truncated; with two punctures on each side of middle, and a few marginal and submarginal ones; a feeble medio-basal impression. Elytra slightly longer and very little wider than prothorax; with sparse, small, and somewhat rugose punctures. Abdomen almost impunctate. Tibiae stout, the front ones notched near apex and with three combs. Length, 5-6 mm.

Hab.—Queensland: Cairns (A. M. Lea). Type, I. 12701.

A thin, highly-polished species, much flatter than any other *Metoponcus* known to me. On each side of the under surface of the head there is a narrow groove, with seriate punctures, bounded externally by a fine carina. The sides are sparsely setose, but no part is truly pubescent. On the larger of two specimens the head is almost black, on the smaller it is scarcely darker than the front part of the prothorax.

LEPTACINUS, Er., Cat., p. 292.

BATYCHRUS, Gyll.⁽³⁾ V., Tas., S.A.
Introduced.

var. *linearis*, Grav.

FILUM, Blackb., n. pr. N.S.W., V.,
S.A., W.A.

MINIMUS, Bernh., Arkiv för Zool.,
Band 13, No. 8, p. 15. Q.

PARUMPUNCTATUS, Gyll.⁽⁴⁾ V., S.A.
Introduced.

SOCIUS, Fvl. (*Xantholinus*). N.S.W.,
V., Tas., S.A., W.A.

anthracinus, Broun.

picticornis, Blackb.

LEPTACINUS SOCIUS, Fvl.

In the Catalogue (p. 294) *L. picticornis*, Blackb., was noted as a good species, but Blackburn himself called attention⁽⁵⁾ to the fact that the name was a synonym of *socius*.

Mr. J. Clark took three specimens of the species, from nests of *Iridomyrmex conifer*, at the Swan River, and two from another species of *Iridomyrmex* at Encounter Bay.

Leptacinus blackburni, new name.

L. filum, Blackb. (1886), n. pr.

In the Catalogue (p. 294) *L. filum*, Blackb., was placed as a synonym of *L. socius*, Fvl., in error. *L. filum*, Blackb., differs from *socius*, in being much smaller and thinner, with very different punctures on all parts of the upper surface, and the sutural region different. As, however, the name *filum*⁽⁶⁾ was previously used in the genus, I propose the above substitute. Mr. A. H. Elston took two specimens of the species, from moss, at Myponga.

(3) Eighteen synonyms and varieties are noted in the catalogue.

(4) Ten synonyms and one variety are noted in the catalogue.

(5) Trans. Roy. Soc. S. Austr., 1887, p. 190.

(6) *L. filum*, Kraatz, 1859, from Ceylon.

LEPTACINUS PARUMPUNCTATUS, Gyll.

A specimen from St. Kilda (Victoria) in Mr. Oke's collection is probably an immature specimen of this species; it has the elytra bright flavous, except for an infuscated triangle extending from the entire base to the apex of the suture.

Leptacinus quadrisulciceps, n. sp.

Black, shining; antennae, palpi, and legs of a more or less dingy brown. Elytra and abdomen with sparse ashen pubescence; the sides (including those of head and prothorax) with a few bristles.

Head slightly longer than wide, slightly wider near base than elsewhere, with four deep impressions in front, the lateral ones oblique and touching the eyes; with large irregularly distributed punctures but numerous on sides. Antennae short, fourth to tenth joints decidedly transverse. Prothorax distinctly longer than wide, widest near apex, thence gently decreasing in width to base, which is evenly rounded; with a few well-defined marginal and submarginal punctures, and a conspicuous row on each side of middle. Elytra slightly longer than prothorax, feebly dilated to apex, a narrow elevation on each side of and close to suture; with fairly numerous punctures, smaller than on prothorax, and in places subseriate in arrangement. Abdomen with irregularly distributed punctures, distinct towards base of each segment. Length, 3.5-4.5 mm.

Hab.—Tasmania: Launceston (Aug. Simson), Hobart (A. M. Lea). Type, I. 12696.

A thin, dark species, about the size and much the colour of *L. blackburni*, but with much sparser punctures on head and pronotum, and the latter with impunctate spaces between and at the sides of the seriate rows; it is close to *L. batychnus*, but the elytra are uniformly coloured, and with somewhat different punctures; its sutural region is somewhat as in *L. socius*, but it is a much smaller species, and the oblique impressions on the head are well defined instead of being represented by subconjoined punctures. Owing to the depth of the frontal impressions the head appears to be tricarinate in front. On one specimen the elytra are as black as the prothorax, on two others they are obscurely paler, and on one of the latter the sutural region is not much darker than the legs.

Leptacinus bisulciceps, n. sp.

Blackish-brown; prothorax, mouth parts, antennae, and legs more or less reddish. Elytra and abdomen with sparse ashen pubescence, the sides with a few setae.

Head longer than wide, almost parallel-sided behind the eyes, with two short deep impressions in front; with numerous well-defined punctures, somewhat sparser in middle than elsewhere. Antennae short. Prothorax distinctly longer than wide, distinctly narrowed from apex to base, which is gently rounded; with fairly numerous punctures in front angles, a distinct row on each side of middle, and sparse elsewhere. Elytra almost parallel-sided, slightly longer than prothorax and very little wider than its apex, sutural region narrowly depressed but not carinated; punctures fairly numerous, but smaller than on pronotum. Abdomen long, thin, and parallel-sided to near apex; punctures fairly distinct about base of each segment. Length, 4.4-5 mm.

Hab.—Western Australia: Bridgetown, Pinjarrah (A. M. Lea).

A very thin species, which differs from *P. blackburni* in its paler prothorax, with very different punctures, and by the sutural region; the polished space there is much less pronounced than on *P. socius*. The apices of the abdominal segments are usually paler than the other parts; on one specimen the elytra

are not much darker than the prothorax. The sublateral impressions of the head are practically absent, being represented by a feeble notch on each side, immediately behind the clypeus. From some directions some of the elytral punctures appear to be feebly seriate in arrangement.

Leptacinus suturalis, n. sp.

Reddish; most of head, apical two-thirds of elytra, metasternum, and parts of abdomen darker, antennae and legs paler. Elytra and abdomen sparsely pubescent.

Head rather long, almost parallel-sided behind eyes; with two narrow deep impressions in front; with numerous well-defined but not very large punctures, sparser in middle than elsewhere. Antennae short. Prothorax slightly shorter and narrower than head, sides feebly diminishing in width to base; punctures fairly numerous and well defined, but absent along middle. Elytra parallel-sided, slightly longer than prothorax, and very little wider than its apex, suture narrowly and suddenly depressed; punctures numerous and rather well defined. Abdomen with fairly distinct punctures about the base of each segment. Length, 3.25 mm.

Hab.—New South Wales: Galston (A. M. Lea).

A thin, minute species, readily distinguished from all previously described from Australia (except *L. minimus*) by its small size and pale base of elytra; *minimus* is an even smaller species, and apparently has different prothoracic punctures. From some directions there appears to be a narrow carina on each side of the suture, but this is really due to the sudden way the suture is depressed below the adjacent parts.

Leptacinus megacephalus, n. sp.

♂. Bright reddish-castaneous, most of head and usually apical half, or more, of elytra darker. Elytra and abdomen with sparse pubescence.

Head unusually large and flat, with two narrow deep impressions in front, and remnants of two others; with dense and sharply defined punctures, except along a narrow median line. Antennae short. Prothorax much narrower than head, obliquely narrowed to neck, sides diminishing in width to base; with an impunctate median line, elsewhere with dense punctures somewhat smaller than on head. Elytra slightly longer than prothorax and wider than its widest part, parallel-sided, suture slightly carinated; punctures about as large but slightly denser than on prothorax. Abdomen somewhat dilated in middle, with numerous small punctures. Length, 2.5-3.5 mm.

♀. Differs in having the head smaller, and no wider than elytra, abdomen almost parallel-sided to near apex and legs shorter and thinner.

Hab.—Lord Howe Island (A. M. Lea). Type, I. 12707.

A small species, flatter than usual, and with an unusually large head. The elytra vary in colour, on some specimens being entirely pale, on others infuscated posteriorly somewhat as on the preceding species, from which it differs in its much larger head (even on the female) with very different punctures, etc. The legs are usually almost flavous. In some respects it appears to approach the description of *L. minimus*, from Queensland, but the smallest specimen is somewhat larger than the size noted for that species. On many specimens, when viewed from behind, the pronotum appears to have a feeble basal tubercle, but this is due to the shining median space being even to the apex, whilst the adjoining surface is punctate and slightly depressed. Twenty specimens were obtained on *Kentia* palms.

Leptacinus opacipennis, n. sp.

Flavo-castaneous, most of head and of abdomen darker, antennae and legs paler. Elytra, for the genus, rather densely clothed with short, ashen pubescence, becoming sparser on abdomen.

Head moderately large, sides feebly dilated to near base, with two narrow deep impressions in front and remnants of two others; with fairly dense, sharply defined punctures, except on a narrow median line. Antennae rather short. Prothorax distinctly longer than wide, sides narrowed from near apex to base; with rather dense punctures, except on a narrow median line. Elytra parallel-sided, no wider than head, opaque; with crowded and small punctures; suture very narrowly elevated. Abdomen with crowded punctures, fairly well defined except about the tips of the segments. Length, 3.3-3.5 mm.

Hab.—Norfolk Island (A. M. Lea). Type, I. 12706.

A rather flat species, approaching the preceding one, but with smaller head and opaque elytra. On each of the two specimens before me there is a minute black spot on each side of the prothorax, near the apex, but it could be easily overlooked.

Leptacinus sexsulciceps, n. sp.

Of a dingy reddish-castaneous, most of abdomen darker, palpi and legs paler. Elytra and abdomen very sparsely pubescent, sides with a few setae.

Head rather large and flat, with six frontal sulci, the two median ones short and closed, the intermediate ones longer and oblique, their tips almost directly behind the tips of the median ones, the side ones passing the eyes for a short distance, and joined to the intermediate ones in front, with sparse punctures. Antennae short. Prothorax almost twice as long as the basal width, widest near apex, with sparse and small punctures. Elytra almost parallel-sided, slightly longer than prothorax, and slightly wider than its widest part; suture depressed at base, but not posteriorly; with rather sparse and small punctures. Length, 4.5-4.75 mm.

Hab.—Victoria: Melbourne (E. Fischer), Belgrave, in April, C. Oke. Tasmania: Launceston (British Museum). Type, I. 15888.

The size and outlines are somewhat as on *L. batychrus*, but otherwise the two species are very different. The punctures are sparser and smaller than on any other species of the genus before me; even the seriate ones on the pronotum are rather inconspicuous, on the type there are five on one side and nine on the other, on the Launceston and Belgrave specimens they are five and four in number (but reversely placed); the elytral punctures from directly above appear to be fairly sharp, although small, from oblique directions they are less defined, but appear somewhat larger and rugose, the abdominal punctures are scarcely visible. The Victorian specimens appear to be males, the Launceston one is probably a female, as its head is smaller, it differs also in having the colour somewhat brighter, except that the elytra are almost as dark as the abdomen.

XANTHOLINUS, Serv., Cat., p. 299.

Many Australian species at various times have been referred to this genus, but the smaller ones have mostly been removed to *Leptacinus* and *Metoponcus*, and the larger ones to *Thyrecephalus* and *Eulissus*. It is probable that no typical species of the genus really occurs in Australia.

ALBERTISI, Fvl. Q., New Guinea, etc. SIDERALIS, Fvl. W.A.
DUBIUS, Macl. (Gen. dub.). Q.

XANTHOLINUS ALBERTISI, Fvl.

This beautiful and variable species is fairly common in the Cairns district.

EULISSUS, Mannerh., Cat., p. 310.

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| CHALCOPTERUS, Er. (<i>Xantholinus</i>).
Q., N.S.W., V., Tas., S.A., W.A. | HUMMLERI, Bernh. Q., N.T. |
| <i>cyaneipennis</i> , Macl. (<i>Xantholinus</i>). | OLLIFFI, Lea (<i>Xantholinus</i>). N.S.W.,
V., Tas. |
| CHLOROPTERUS, Er. (<i>Xantholinus</i>).
Q., N.S.W., V., Tas., S.A. | ORTHODOXUS, Oll. (<i>Xantholinus</i>),
Cat., p. 306. N.S.W. |
| CYANOPTERUS, Er. (<i>Xantholinus</i>).
V., Tas., S.A. | PHOENICOPTERUS, Er. (<i>Xantholinus</i>).
Q., N.S.W., V., Tas., S.A.,
W.A., N.W.A., N.T. |
| ERYTHROPTERUS, Er. (<i>Xantholinus</i>),
Cat. p. 302. Q., N.S.W., V.,
S.A. | TAITIENSIS, Bohem. (<i>Xantholinus</i>).
Q., N.S.W., S.A., W.A. Intro-
duced. |
| <i>cervinipennis</i> , Macl. (<i>Xantholinus</i>). | <i>holomelas</i> , Perr. (<i>Xantholinus</i>). |
| HAEMORRHOUS, Fvl. (<i>Xantholinus</i>).
Q. | |

EULISSUS HAEMORRHOUS, Fvl.

A specimen identified by Dr. Bernhauer, and sent by Dr. Sjostedt, as *E. haemorrhous* certainly belongs to *E. erythropterus*; in the description of *E. haemorrhous*, however, the head is noted as having "*sulco subtilissimo a basi ultra medium longitudinaliter impresso*"; a character I have not seen on any one of numerous specimens of *erythropterus*.

EULISSUS HUMMLERI, Bernh.

Six specimens from the Mary River and Darwin (Northern Territory), and the Coen River (Queensland) appear to belong to this species; but on only one of them could the elytra be fairly called reddish-brown, on all the others they are blackish at the base, becoming obscurely paler posteriorly, but all have a distinct metallic gloss, which becomes more pronounced on the abdomen. The head of the male is much larger than that of the female, even larger than on the male of *Thyrecephalus lorquini*.

THYREOCEPHALUS, Guer., Cat., p. 313.

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| COELESTIS, Fvl. (<i>Xantholinus</i>).
N.S.W., V., Tas. S.A. | LORQUINI, Fvl. (<i>Xantholinus</i>).
Q., N.S.W., V.
<i>rufitarsis</i> , Fvl. (<i>Xantholinus</i>). |
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THYREOCEPHALUS COELESTIS, Fvl.

A specimen from Noble Park (Victoria) in Mr. Oke's collection has elytra of a brighter blue (the beautiful blue of *Belonuchus dohrni*) than ordinary, they are also somewhat flatter, and with their punctures more sharply defined.

THYREOCEPHALUS LORQUINI, Fvl.

Xantholinus rufitarsis, Fvl.

Two specimens, from the British Museum, labelled as having been named *X. rufitarsis* by Fauvel (they are from Rockhampton, a locality not mentioned in the original description), appear to me to be quite ordinary specimens of *T. lorquini*. Three specimens, sent by Dr. Sjostedt as *T. rufitarsis*, and so recorded by Dr. Bernhauer, also belong to the species. In *lorquini* the male has a much wider head than the female, the prothorax is wider at apex, and the antennae are slightly longer; the legs, independently of sex, vary slightly in colour; the elytra, on fresh specimens, have a beautiful violet gloss, that is usually lost with age.

DIOCHUS, Er., Cat., p. 319.

DIVISUS, Fvl. N.S.W.

OCTAVII, Fvl. Q., N.S.W., V.

DIOCHUS DIVISUS, Fvl.

Specimens of this species have been taken in abundance during floods on the Peel and Hawkesbury Rivers. The prothorax varies from a dingy red (usually with the sides obscurely darker) to black, and the clytra from about one-fourth to three-fourths pale; the extent of the pale portion of the abdomen also varies; on one unusually pale specimen only about one-fifth of the base of the elytra is slightly infuscated.

DIOCHUS OCTAVII, Fvl.

Specimens of this species before me vary from 4 mm. in length with the abdomen contracted, to 6 mm. with it fully extended; they are from New South Wales (Sydney, Tamworth, and Clarence River) and Queensland (Cooktown and Mulgrave River).

NEOBISNIUS, Ganglb., Cat., p. 322.

PROCERULUS, Grav. N.S.W., S.A., C.A. Introduced.

semipunctatus, Fairm. (*Actobius*).

PHILONTHUS, Curtis, Cat., p. 326.

AFRICANUS, Fvl. (? Recorded in error, Cat., p. 327, as Australian).

ANTIPODUM, Fvl. N.S.W., S.A., W.A., Lord Howe Island.

DISCOIDEUS, Grav. Q., N.S.W., V., Tas., S.A., W.A., N.W.A. Introduced.

GLENELGI, Blackb. V., S.A. (Omitted from Catalogue.)

HEPATICUS, Er. S.A. Introduced.

LONGICORNIS, Steph. Q., N.S.W., V., Tas., S.A., W.A., Norfolk Island. Introduced.

laetabilis, Oll. (*Cafius*).

MACELLUS, Fvl. Q., N.S.W., V., S.A., N.W.A., C.A.

MINUTUS, Bohem. Q., N.S.W. Introduced.

NIGRITULUS, Grav. N.S.W., V., Tas., S.A., W.A. Introduced.

OREOPHILUS, Fvl. Q.

ORNATUS, Blackb. Q., N.S.W., V., S.A., C.A.

PERTHENUS, Bernh., Arkiv för Zool., Band 10, No. 5, p. 5. W.A.

PILIPENNIS, Macl. Q.

POLITUS, Linne. N.S.W., V., Tas., S.A. Introduced.

aeneus, Rossi.*amblyterus*, Oll. (*Cafius*).*laeus*, Oll. (*Cafius*).

QUISQUILIARIUS, Gyll. N.T. Introduced.

SORDIDUS, Grav. N.S.W., V., Tas., S.A., W.A. Introduced.

SUBCINGULATUS, Macl. Q., N.S.W., V., S.A., W.A., N.W.A., C.A. Omitted from Catalogue.

sanguinicollis, Fvl.

VENTRALIS, Grav. Q., N.S.W., V., Tas., S.A., N.W.A., N.T. Introduced.

PHILONTHUS GLENELGI, Blackb.

A specimen of this species, from Lucindale, differs from the type in being slightly smaller (5.25 mm.); of the series of punctures on its pronotum the one on the left consists of four, but on the right of five.

PHILONTHUS ORNATUS, Blackb.

The elytra of this species vary from a bright red, except for a very faint infuscation at the base and in the external apical angles, to almost entirely dark, except that the suture is obscurely reddish.

PHILONTHUS SUBCINGULATUS, Macl.

A specimen of this species was taken at Gawler from the nest of a species of *Pheidole*.

PHILONTHUS MINUTUS, Boh.

An introduced species, in appearance rather close to *P. discoideus*, but tips of elytra more narrowly pale, the suture also more narrowly pale (if not entirely dark); the front angles of the prothorax are also more rounded off. The punctures in the rows on the prothorax are usually five in number, but are sometimes four on one side and five on the other. Four synonyms are noted in the Catalogue.

PHILONTHUS QUISQUILIARIUS, Gyll.

In the Catalogue (p. 352) this species is noted as cosmopolitan and eleven synonyms and varieties are recorded. The only Australian specimen before me, that agrees with European ones so named, is in the National Museum from Oenpelli (Northern Territory).

PHILONTHUS THERMARUM, Aube.

Fauvel recorded this species from New Guinea, and in the Catalogue it is noted as cosmopolitan. I have not seen any Australian specimens, however, that agree with two Indian ones received from Dr. Cameron, and know of no actual Australian record.

Philonthus dolichoderes, n. sp.

♂. Black, shining, with a faint bronzy gloss, abdomen with bluish iridescence; antennae, mouth parts, and legs of a more or less dark brown. Elytra with rather sparse, depressed, blackish setae, becoming longer on abdomen; sides and legs with blackish bristles.

Head rather large, slightly transverse (excluding neck), angles rounded off; with a few large punctures, and numerous minute ones. Eyes slightly longer than third joint of antennae, and almost twice as long as wide. Antennae rather long, first joint almost as long as second and third combined, third longer than second, the others gradually decreasing in length to tenth, which is distinctly shorter than eleventh. Prothorax with front margin almost straight and much wider than base, which is gently rounded, sides finely margined; all margins with some large punctures, a few others scattered about, each discal row composed of three or four punctures irregularly spaced, minute ones scattered about. Elytra slightly wider than prothorax, sides gently rounded; with fairly dense and rather large punctures. Abdomen with punctures somewhat sparser but more sharply defined on upper than on lower surface; anal styles rather long. Legs moderately long and stout, front tarsi dilated. Length, 11-17 mm.

♀. Differs in having the head somewhat smaller, antennae shorter and front tarsi thinner, with sparser clothing.

Hab.—Lord Howe Island (Australian Museum and A. M. Lea). Type, I. 12685, in South Australian Museum.

A large species, with the general appearance of *P. politus*, but the prothorax is much longer (suggestive of that of *Xantholinus*), head and antennae longer, and punctures different. Some specimens have the prothorax and elytra obscurely diluted with brown. From some directions the abdomen appears to be black, but the iridescence is conspicuous in most lights. The elytral punctures are frequently confluent, but viewed directly from above it each one usually appears to be sharply defined and isolated. In certain lights the pronotum appears to be faintly shagreened. The three basal joints of the antennae are shining, the first appears to be always partly black, the second and third are sometimes deeply

infuscated. Thirteen specimens were obtained, including one from the summit of Mount Gower.

Philonthus cupreotinctus, n. sp.

♂. Deep black and shining, with a faint coppery gloss; antennae (except the three shining basal joints), palpi, tarsi, and tips of lower surface of abdominal segments obscurely brownish. Elytra, abdomen, and under surface with rather sparse, short, blackish pubescence; a few bristles scattered about.

Head (excluding neck) slightly wider than long, hind angles gently rounded; with large punctures about base, margining eyes and fairly dense in hind angles, four isolated ones on disc; minute punctures scattered about. Antennae rather thin, but not very long, first joint almost as long as second and third combined, third distinctly longer than second. Prothorax slightly longer than apex, which is almost truncated, base rather strongly rounded and narrower than apex, sides very finely margined; with minute scattered punctures, some rather large marginal ones, and two irregular median rows. Elytra subquadrate, slightly wider than widest part of prothorax; with dense and comparatively coarse, sharply defined punctures. Abdomen with a well-defined narrow impression, on the upper surface, across most of the segments, but curving around the spiracle on each side, five of them with two discal impressions; punctures well defined but much smaller than on elytra, anal styles obtuse but fairly long. Legs rather thin but not very long; front tarsi dilated. Length, 12 mm.

Hab.—Queensland: Cairns (E. Allen), unique.

A glossy-black species, without abdominal iridescence, about the size of *P. politus*, but narrower, prothorax decidedly longer, head flatter with larger and more numerous punctures, and elytra with coarser punctures and shorter and sparser pubescence. The seriate punctures on the pronotum are irregularly spaced, four on the left of the middle, and five on the right.

Philonthus oviceps, n. sp.

Black, shining; elytra not quite black and less shining, palpi and legs of a dingy brown, antennae darker, except the two apical joints. Elytra and abdomen with dense, depressed, dark pubescence; with a few bristles, mostly marginal.

Head comparatively small and oval, distinctly longer than wide; with rather large, irregularly distributed punctures, and very minute ones. Antennae rather long and thin, first joint distinctly shorter than second and third combined, about the length of eleventh, and slightly shorter than eyes. Prothorax rather thin, slightly longer than wide, apex (which is truncated) scarcely wider than base (which is evenly rounded); with some large marginal and submarginal punctures, and a row on each side of middle. Elytra slightly longer than wide, conspicuously wider than prothorax, suture evenly raised, punctures dense, small, and partly concealed. Abdomen long and parallel-sided to near apex; punctures more irregular than on elytra, but in parts concealed; anal styles long and acute. Legs rather thin. Length, 7 mm.

Hab.—Queensland: Townsville (E. Fischer). Type (unique), I. 15886.

In general appearance rather close to *P. quisquiliarius*, but hind angles of head completely rounded off and elytral punctures finer. In some lights the pronotum has an opalescent gloss; it has five seriate punctures on the right of the middle and six on the left. As the tip of the lower surface of the abdomen is slightly notched the type would appear to be a male, although its front tarsi are rather thin.

Philonthus anthracinus, n. sp.

♀. Deep black and shining; head, pronotum, and elytra with a faint bronzy gloss, tips of mandibles, palpi, and tarsi dark brown. Elytra and abdomen with rather sparse, short, dark, depressed pubescence; bristles sparse and marginal.

Head, between labrum and neck, distinctly transverse, hind angles gently rounded; with large punctures about eyes and base, and two isolated ones between eyes. Antennae moderately long, first joint almost as long as second and third combined, distinctly longer than eleventh, and slightly longer than eyes, three sub-apical ones slightly transverse. Prothorax about as long as wide, apex truncated, base evenly rounded; with a few large marginal and submarginal punctures, and three evenly spaced ones on each side of middle. Elytra scarcely longer than their greatest width, distinctly wider than prothorax, suture elevated throughout; punctures dense and sharply defined, but not very large. Abdomen with punctures of varying size, but mostly smaller than on elytra. Length, 7 mm.

Hab.—Western Australia: Albany. Type (unique), in British Museum.

The size and outlines are somewhat as on *P. discoideus* and *P. macellus*, but the colour and punctures are different. At first glance the type appears to be entirely black; in some lights the head and pronotum appear to be very faintly shagreened, and parts of the abdomen to be faintly opalescent. Only the bristles of the anal styles are visible.

Philonthus apicipunctus, n. sp.

Black and very shining, legs of a rather pale brown, the femora almost flavous, basal and apical joints of antennae paler than the others, which are more or less deeply infuscated. Elytra and abdomen with moderately long, sparse, depressed pubescence; with a few marginal bristles.

Head, between labrum and neck, slightly transverse, hind angles rounded off; with a few distinct marginal punctures. Antennae rather short, first joint almost as long as second and third combined, and very little longer than eyes, second slightly longer than third, fourth to tenth transverse. Prothorax slightly longer than wide, apex truncated, base evenly rounded, sides almost parallel; with a few fairly large marginal and submarginal punctures, and three evenly spaced ones on each side of middle. Elytra not much wider than prothorax and slightly transverse; with sparse and small punctures. Abdomen impunctate, except at tips of segments. Length, 5 mm.

Hab.—Queensland: Cairns (F. P. Dodd). Type (unique), I. 12682.

The size and colours are much as in *P. ventralis* and *P. oreophilus*, but the punctures are much sparser, and the seriate ones on each side of the pronotum are but three in number. The tip of the under surface of the abdomen is slightly notched, so the type is probably a male, although its front tarsi are rather thin. It was trapped by a sticky seed of *Pisonia brunoniana*.

Philonthus incisiventris, n. sp.

♂. Black, elytra bright castaneous; antennae, mouth parts, and legs somewhat paler, tips of abdominal segments obscurely pale. Elytra and abdomen with not very dense, depressed pubescence; sides with rather numerous bristles, becoming dense on tip of abdomen.

Head rather large, slightly transverse between labrum and neck; with large marginal and submarginal punctures, two isolated ones between eyes, a shallow depression in middle just behind clypeus; minute punctures scattered about. Antennae rather short, first joint as long as second and third combined, and scarcely longer than eyes, second slightly shorter than third, fourth and fifth slightly transverse, sixth to tenth strongly so. Prothorax almost as long as wide, front truncate and slightly wider than base, which is evenly rounded; with a few distinct marginal and submarginal punctures, and four evenly spaced ones on each side of the middle. Elytra slightly transverse, sides gently dilated to near apex, suture slightly elevated; punctures sharply defined but not very large or dense. Abdomen with denser and smaller punctures than on elytra, tip of under

surface deeply notched; anal styles moderately long. Legs not very long, femora stouter than usual, front tarsi dilated. Length, 5-5½ mm.

Hab.—Queensland: Cairns (E. Allen), Mulgrave River (H. Hacker, No. 70).

The colours are much as in the European *P. fulvipes*, but otherwise the two species differ considerably. From some directions the prothorax appears to have a faint satiny lustre; the abdomen is somewhat opalescent. On one specimen the wings are exposed and brilliantly coloured.

***Philonthus victoriensis*, n. sp.**

♂. Black, shining; elytra castaneous, parts of mouth and of legs obscurely brown. Elytra and abdomen with moderately dense, depressed, blackish pubescence; sides with sparse bristles, but becoming dense on apex of abdomen.

Head subovate, slightly longer than wide, hind angles rounded off; with rather large marginal and submarginal punctures, and two isolated ones between eyes. Antennae not very long, first joint almost as long as second and third combined (these subequal) and slightly longer than eyes, fourth to tenth more or less transverse. Prothorax slightly narrower than median length, apex truncated, base evenly rounded, sides almost parallel; with fairly large marginal punctures, and a row on each side of middle (four on the right and five on the left). Elytra slightly dilated to apex, where the width is about one-fourth more than that of prothorax, suture narrowly elevated; punctures small and not very dense, but sharply defined. Abdomen with unevenly distributed punctures of different sizes, mostly smaller than on elytra; tip of under surface with a rather wide triangular notch. Front tarsi dilated. Length, 5 mm.

Hab.—Victoria: Melbourne (E. Fischer). Type (unique), I. 15887.

The colours are somewhat as in the European *P. salinus* and *P. fulvipes*, except that the antennae and legs are darker; the punctures, however, are very different. From the preceding species it differs in being narrower, with darker antennae and legs and much less sharply defined punctures. The antennae at first glance appear to be entirely black, but parts of the second and third joints are obscurely red. The anal styles are concealed on the type.

***Philonthus multicolor*, n. sp.**

♂. Black; prothorax, elytra (except about base), and front and middle coxae bright red, femora flavous, rest of legs infuscated, antennae infuscated, four apical joints almost white. Elytra sparsely clothed with dark pubescence, becoming slightly denser and longer on abdomen; sides with a few bristles.

Head rather small, excluding neck about as long as wide, hind angles rounded off; with fairly large marginal and submarginal punctures, and two isolated ones between eyes. Antennae not very long, first joint as long as second and third combined, and about the length of eyes, fourth to tenth more or less transverse, the eleventh conspicuously produced on one side of apex. Prothorax (along middle) slightly longer than wide, apex truncated, base evenly rounded, sides feebly narrowed to apex; with rather large marginal and submarginal punctures, and a row of four on each side of middle. Elytra scarcely longer than prothorax, but distinctly wider; with few and small punctures. Abdomen long, parallel-sided to near apex; with sharply defined punctures near base of each segment, the tips also with distinct ones, tip of under surface obtusely notched; anal styles long and thin. Legs not very long, front tarsi dilated. Length, 6 mm.

Hab.—North-western Australia: Behn River (R. Helms). Queensland: Coen River (H. Hacker).

The colours, except of the antennae, are much as in the European *P. tenuis*, but the sculpture is very different. All the discal punctures of the elytra are

inconspicuous; on one specimen the left seriate row on the pronotum consists of five punctures.

Philonthus cruenticollis, n. sp.

♀. Head black; prothorax and front coxae bright red, elytra deep blue, abdomen of a dull red, each segment obscure at base, the subapical one (except at base) and apical one bluish-black, all segments more or less brightly iridescent, legs and palpi brownish, the antennae darker except the base of the first and second joints. Elytra and abdomen with fairly dense blackish pubescence, the sides with rather numerous bristles.

Head slightly longer than wide, hind angles rounded off; with large punctures about base and margining eyes, and two isolated ones nearer eyes than usual. Antennae moderately long, first joint slightly shorter than eyes, and than second and third combined, these subequal, some of the subapical ones transverse. Prothorax slightly longer than wide, apex truncated, base evenly rounded, sides almost parallel; with rather large marginal and submarginal punctures, and a distinct row (six on the left and five on the right) on each side of middle. Elytra distinctly wider than prothorax, and almost twice the width of head, suture faintly elevated; punctures dense and rather small but sharply defined. Abdomen with punctures about base of each segment, much as on elytra, but becoming smaller to the tips, where they almost vanish; anal styles long and thin. Legs rather long. Length, 9 mm.

Hab.—Queensland: Townsville (R. E. Turner). Type (unique) in National Museum from C. French's collection.

A beautiful species, the only *Philonthus* known from Australia with blue elytra; the colours are much as in some varieties of *Paederus cruenticollis*. The front tarsi of the type are wider and more densely clothed than is usual in females, but the tip of the abdomen is not at all notched.

CAFIUS, Steph., Cat., p. 361.

AUSTRALIS, Redt. (<i>Ocybus</i>). N.S.W., V., Tas.	PACIFICUS, Er. (<i>Philonthus</i>). Q., N.S.W., V., Tas., S.A., W.A., King, Rottnest, Pelsart, and Carnac Islands.
<i>areolatus</i> , Fvl.	<i>littoralis</i> , Fvl.
CATENATUS, Fvl. N.S.W.	SABULOSUS, Fvl. Q., N.S.W., V., Tas., S.A., Lord Howe Island.
CORALLICOLA, Fairm. W.A. Intro- duced.	SERIATUS, Fvl. V., Tas., S.A., W.A.
<i>occidentalis</i> , Blackb.	SERICIUS, Holme (<i>Philonthus</i> and <i>Remus</i>). V., Tas., S.A., W.A. Introduced.
NASUTUS, Fvl. (Needs confirmation as Australian.)	VELUTINUS, Fvl. N.S.W., V., Tas., S.A., W.A.
NAUTICUS, Fvl.	
<i>densiventris</i> , Fvl. Q., N.W.A., Baudin, Condillac, Low Rocks, Adele, and Lord Howe Islands. Introduced.	

CAFIUS AUSTRALIS, Redt.

C. areolatus, Fvl.

This species varies considerably in size (11-18 mm.) and colour, but may be distinguished from all other Australian ones, except *C. sabulosus*, by the absence of punctures from the prothorax, except at the angles; from *sabulosus* itself it is distinguished by the larger size and much larger and sparser punctures on the elytra. One female before me has the prothorax reddish, except for a large discal infuscation, the three basal joints of its antennae are reddish, the others black; the punctures on its elytra are all sharply defined, with the adjoining surface not at all wrinkled. On males the prothorax is usually deep black; with the

elytra densely and finely wrinkled between the punctures, the antennae are sometimes entirely dark, on several specimens parts of the three basal joints are black, the others obscurely reddish. The elytra vary (apart from sex) from castaneous-brown to black, with the inflexed sides paler and the tips narrowly pale; on one male the prothorax (except for a slight infuscation), elytra, and abdomen (except for an infuscated spot on each segment) are entirely castaneous-brown. On the males there are sometimes two or three sharply defined punctures between the eyes, but these are usually absent or faintly indicated. On the females the elytra are seldom conspicuously wrinkled between the punctures, and on some males the wrinkles are very feeble, although usually distinct. On some males the head is not much larger than on females, but on others it is twice the size. The type of *C. australis* was an unusually small and brightly coloured male, that of *C. areolatus* a male of medium size; the synonymy is now first recorded.

CAFIUS PACIFICUS, Er.

C. littoralis, Fvl.

I have seen but one specimen that agrees perfectly with the description of *C. pacificus*, and that was from King Island, where it was taken in company with typical specimens of *C. littoralis*, which has now to be recorded as a synonym of the species. It varies considerably in size (8-12 mm.) and is widely distributed. The common form is black, with the inflexed sides of the elytra and parts of the abdomen obscurely reddish; on a few specimens the anterior angles and sides of the prothorax are very obscurely diluted with red.

CAFIUS NAUTICUS, Fvl.

Readily distinguished from all other species occurring in Australia by the highly polished median line of prothorax bounded by dense punctures, and continued on to the head. On some specimens the suture is narrowly reddish throughout, on others at the tip only, on several not at all; the head of the male is considerably larger than that of the female; the size ranges 7-9 mm.

CAFIUS VELUTINUS, Fvl.

The species identified as *C. velutinus* by Blackburn, Olliff, and myself is a widely distributed one, ranging 6-8.5 mm. in length, with two rows of punctures on the prothorax, the head opaque but with a shining lanceolate median space; on all specimens of it the inflexed sides of the elytra are flavous or almost so.

A specimen of the species, in the British Museum from the Sharp Collection, was labelled as *C. catenatus*, Fvl., but probably incorrectly so.

CAFIUS CORALLICOLA, Fairm.

C. occidentalis, Blackb.

A cotype of *C. occidentalis*, and a specimen from the Swan River, agree well with Fauvel's description of *C. corallicola*, and also with a specimen from Seychelles sent under the latter name by Dr. Bernhauer.

Six specimens, from Adele and Baudin Islands, in the British Museum, appear to represent a variety; they have the prothorax reddish and somewhat paler than the parts behind it; the antennae of three of them have the second and third joints distinctly infuscated, on another they are faintly infuscated, on the others no darker than the adjacent joints; the long median line, more conspicuous from some directions than from others, and coarse punctures on the shining head are exactly as on typical specimens.

HESPERUS, Fvl., Cat., p. 363.

AUSTRALIS, Macl. (<i>Philonthus</i>). Q., N.S.W., V.	PACIFICUS, Oll. Lord Howe Island.
HAEMORRHOIDALIS, Macl. (<i>Philon-</i> <i>thus</i>). Q., N.S.W.	PULLEINEI, Blackb. S.A.
<i>mirabilis</i> , Fvl.	SEMIREFUS, Fvl. Q., N.T.

HESPERUS HAEMORRHOIDALIS, Macl.

On an occasional specimen only two of the apical joints of the antennae are pale, instead of three or four.

Hesperus gloriosus, n. sp.

Pale castaneous, elytra metallic-blue or purple, the suture black, metasternum and abdomen black, three basal joints of antennae pale castaneous, the five next black or deeply infuscated, the apical three almost white. Elytra and abdomen with rather sparse, dark pubescence; with long dark bristles, dense on the abdomen, numerous on the elytra, but almost confined to the sides on the head and prothorax.

Head distinctly transverse between clypeus and neck; with a few large, irregularly distributed punctures. Antennae rather short, first joint slightly longer than second and third combined, and longer than eyes, seventh to tenth rather strongly transverse. Prothorax about as long as wide, slightly narrower than head across eyes, base rounded, front angles gently rounded; a few large punctures scattered about, and an irregular row on each side of middle. Elytra subquadrate, distinctly wider than head, suture slightly raised; punctures fairly dense and small but sharply defined, a few large ones scattered about. Abdomen evenly decreasing in width posteriorly; with rather crowded and elongated punctures across the base of five segments, and at the tips of four. Length, 8-9 mm.

Hab.—Queensland: Coen River (H. Hacker), Cairns district (A. M. Lea). Type, I. 12661.

A very beautiful species, structurally fairly close to *H. semirufus*. In certain lights the blue or purple of the elytra changes to green, especially posteriorly; the abdomen is shining but not iridescent. On one specimen four of the basal joints of antennae are pale and only two of the apical. There are four punctures in line between the eyes, and between the median two, a short remnant of a median line; on two specimens there are three punctures in each of the seriate rows on the pronotum, on a third there are four on the left and three on the right.

Hesperus picticornis, n. sp.

♂. Black; basal half of elytra (except suture), mouth parts, and legs reddish; three basal joints of antennae, except tips of second and third, reddish, fourth to eighth black or infuscated, the apical three almost white. Elytra sparsely pubescent and with numerous bristles, becoming more numerous on abdomen, the sides elsewhere with a few bristles.

Head strongly transverse between clypeus and neck, with a few large punctures, of which six form an irregular row between the eyes. Antennae moderately long, seventh to tenth joints somewhat transverse. Prothorax slightly narrower than the median length, base evenly rounded, sides almost parallel; with a few large punctures scattered about, and three forming a row on each side of middle. Elytra slightly longer and wider than prothorax; with numerous (but not crowded) and rather small sharply defined punctures. Abdomen evenly diminishing in width posteriorly, each of the four basal segments with a row of punctures near base and another at apex, punctures irregular on the following

segments; anal styles long and thin; tip of under surface triangularly notched. Front tarsi dilated and padded. Length, 10 mm.

Hab.—New South Wales: Tweed River, in October (H. J. Carter). Type, I. 12660.

Not very close to any other species before me. The black part of the elytra has a slight coppery gloss; the abdomen is brilliantly iridescent, its four basal segments are narrowly tipped with red, the subapical one has about one-fourth pale, the following one is pale, except for a transverse median infuscation.

BELONUCHUS, Nordm., Cat., p. 369.

BREVICOLLIS, Fvl. Q.

DOHRNI, Fvl. Q., N.S.W., N.T.

BELONUCHUS BREVICOLLIS, Fvl.

The prothorax of this species at first glance appears to be deep black, but from some directions a slight silken iridescence becomes visible. The type was from Wide Bay, two specimens before me are from the Cairns district.

BELONUCHUS DOHRNI, Fvl.

This beautiful species is fairly common in the Cairns district on *Pandanus*, and there is a specimen in the National Museum, labelled as from New South Wales.

MYSOLIUS, Fvl., Cat., p. 373.

CHALCOPTERUS, Oll. Q.

ACTINUS, Fvl., Cat., p. 373.

IMPERIALIS, Fvl. Q. (also New Guinea).

MACLEAYI, Oll. Q.

ACTINUS IMPERIALIS, Fvl.

In the description of this species the elytra (except at the sides and apex) were noted as green, and were so figured; but on numerous specimens before me from New Guinea the elytra (except at the sides and apex) are purplish, in parts, however, with a greenish gloss from certain directions; more than half of the sixth abdominal segment is flavous. Two specimens from the Coen River (Queensland) agree perfectly with them, except that a smaller portion of the sixth abdominal segment is pale.

ACTINUS MACLEAYI, Oll.

It is doubtful if *A. macleayi* is more than a variety of the preceding species. Specimens of *A. imperialis* differ considerably in the punctures of the head and prothorax, in the same way as those of *A. macleayi* from Cairns, so that the only apparently constant distinction is *imperialis* having one apical joint of antennae white, and *macleayi* two. The species is an extremely active one, and the most beautiful member of the family that I have seen from any part of the world.

OCYPUS, Steph., Cat., p. 383.

ATER, Grav. (*Tasgius*). V. Introduced.

OCYPUS ATER, Grav.

A specimen of this species, now first recorded as occurring in Australia, was taken by Mr. F. E. Wilson at Kooyong, in May, 1919; it agrees perfectly with English specimens identified as such by the late Dr. D. Sharp and the late Rev. T. Blackburn; the species has also been taken in Victoria by Mr. Ejnar Fischer. In the Catalogue fourteen synonyms and varieties of the species are noted.

COLONIA, Oll., Cat., p. 397.

REGALIS, Oll. Q., N.S.W.

CREOPHILUS, Mannerh., Cat., p. 397.

ERYTHROCEPHALUS, Fabr. (*Emus*). Q., N.S.W., V., Tas., S.A.

W.A., N.W.A., N.T., C.A., King and Lord Howe Islands.

unipunctatus, Hope (*Staphylinus*).⁽⁷⁾

lanio, Er.

var. *oculatus*, Fabr.⁽⁸⁾

ANTIMERUS, Fvl., Cat., p. 410.

PUNCTIPENNIS, Lea. Q., N.S.W.

SMARAGDINUS, Fvl. V.

Antimerus posttibialis, n. sp.

♂. Black; head and prothorax with a bronzy gloss, the elytra with a greenish one, five basal joints of antennae (the others missing), palpi, and tarsi more or less reddish. With dense, whitish pubescence, sparser on middle of head and prothorax, and on upper surface of basal segments of abdomen; than elsewhere, third, fourth, and fifth segments with denser clothing than elsewhere, and somewhat curved; sides with fairly numerous bristles.

Head large and flat; transverse between lip and neck; with crowded and sharply defined punctures of moderate size. Eyes large, oblong-elliptic, distinctly longer than basal joint of antennae. Mandibles rather thin, with an obtuse projection at base, the left one with a small tooth nearer the base than apex, the right one not interrupted there. Prothorax about as wide as head and slightly longer, median length equal to greatest width (across apex), base evenly rounded and finely margined, the sides also finely margined; punctures much smaller than on head but quite sharply defined; a narrow, impunctate median line. Elytra slightly longer and wider than prothorax, sides gently rounded, apices strongly so; with more crowded punctures than on head, but scarcely larger. Abdomen with dense punctures, except on the second and third segments, on which they are distinct only across the base; tip of under surface gently incurved to middle. Tibiae densely clothed, the tips spinose, hind pair suddenly incurved at apex; front tarsi strongly, the middle ones moderately, dilated. Length, 16 mm.

Hab.—Queensland: Kuranda (F. P. Dodd). Type (unique), I. 12698.

Only five joints of one antenna are left (less of the other), of these the two basal ones are pale castaneous and shining, the others are paler; all are longer than wide.

This and the following species are referred with doubt to *Antimerus*; they have the general outlines of the two previously named species of that genus; the head, including the mouth parts, the prothorax, and the greatly dilated front and middle tarsi are also in agreement; but the clothing and the finer details of sculpture differ greatly from those species.

Antimerus auricomus, n. sp.

♂. Black; head and prothorax shagreened and dark metallic-green, elytra, antennae, palpi, and legs reddish; tip of abdomen obscurely reddish. With

(7) Mr. Arrow informs me that the type of *Staphylinus unipunctatus* (Hope, in Gray's Zoological Miscellany, 1831, p. 32) from Nepal is in the British Museum, and that the name is a synonym of *C. erythrocephalus*.

(8) Fauvel, Ann. Mus. Civ. Gen., 1877, p. 250, records this well-known New Zealand form as occurring in Australia, but its presence requires confirmation.

fairly long and variegated pubescence; and sparse bristles becoming numerous posteriorly.

Head large and flat; transverse between lip and neck; with dense and rather small punctures. Eyes large, oblong-elliptic. Basal joint of antennae shorter than eyes, and shorter than the following joints combined, of these the second is slightly shorter than third (the others are missing). Prothorax slightly wider (near apex) than long, base gently rounded and, with the sides, very finely margined; punctures much as on head. Elytra slightly wider than prothorax and distinctly longer, sides slightly, the apices strongly rounded; with crowded and rather small punctures, in places coarser and confluent. Abdomen with dense more or less concealed punctures; under surface feebly incurved at apex; anal styles rather long. Tibiae with strong spines at apex, and with some thinner ones amongst the clothing elsewhere; front tarsi strongly, the middle ones moderately dilated. Length, 15 mm.

Hab.—New South Wales: Dorrigo (unique).

A beautifully coloured and clothed species. The clothing and the shagreened surface are very different from those of the preceding species, and the hind tibiae are not incurved at apex. On the head and pronotum the pubescence is mostly dark and inconspicuous, but in parts is golden and distinct, on the scutellum it is almost white, on the elytra it is golden except for a black patch about the middle, but it becomes white on the sides; on the three apical segments of the abdomen it is dense golden and waved, on the other segments it is mostly pale on the sides and black elsewhere (in some lights the black pubescence has a fiery-red gloss); on the under surface and legs it is entirely pale.

HETEROTHOPS, Steph., Cat., p. 411.

BIMACULATA, Fvl. N.S.W.	SEMICUPREA, Fvl. Q.
LATICEPS, Fvl. Q., N.S.W., V., Tas.	TIBIALIS, Fvl. N.S.W., V., Tas., S.A.
LUCTUOSA, Fvl. S.A.	XANTHOLINOIDES, Macl. (<i>Philonthus</i> and <i>Quedius</i>). Q., N.S.W., V.
MAGNICEPS, Bernh., Arkiv för Zool., Band 13, No. 8, p. 17. Q.	<i>flavicollis</i> , Fvl.
PICIPENNIS, Fvl. ⁽⁹⁾ N.S.W., V., Tas., S.A.	<i>fauveli</i> , Bernh. and Schub.

HETEROTHOPS LATICEPS, Fvl.

A widely distributed species, stated by Bernhauer⁽¹⁰⁾ to be synonymous with *H. xantholinoides*, but in this he was mistaken; *H. laticeps* is a larger, wider, and dingier species, with head much wider and differently impressed, and of which I have seen numerous specimens, including a cotype from the British Museum. The two species were, in part, described by Fauvel as follows:—

laticeps. "fronte inter antennis leviter bimpressa."

flavicollis. "fronte inter antennis antice sat profunde impressa, post impressionem punctis 2 approximatis notata."

HETEROTHOPS XANTHOLINOIDES, Macl.

H. flavicollis, Fvl.

H. fauveli, Bernh. and Schub.

Two specimens from Gayndah, probably cotypes, of *H. xantholinoides* have the base, suture, and apex paler than the rest of the elytra (although the elytra were simply described as "of a darker hue than the thorax"); they have a

⁽⁹⁾ In error recorded by Bernhauer as *picipes*.

⁽¹⁰⁾ Bernhauer, Arkiv för Zoologi, Band 13, No. 8, 1920, p. 17.

depression on the front part of the head, and close behind it two punctures close together. The species was described as a *Philonthus*, in the Catalogue it is placed as a *Quedius*, but it is a *Heterothops*, and the same species was named *H. flavicollis* by Fauvel, a name changed by Bernhauer and Schubert to *H. fauveli*, as being already in use in the genus, but their name is not now required. Three specimens from Tasmania appear to represent a variety of the species, they differ from typical specimens in having the head scarcely darker than the prothorax, and on one of them the suture is quite as dark as the adjacent parts of the elytra.

HETEROTHOPS TIBIALIS, Fvl.

On some specimens of this species the median joints of the antennae are but slightly infuscated; on the female the front tibiae are much thinner than in the male, and not notched.

HETEROTHOPS PICIPENNIS, Fvl.

Mr. F. E. Wilson took a specimen of this species from a nest of a jumper ant (*Myrmecia* sp.), at Belgrave (Victoria), in September.

HETEROTHOPS MAGNICEPS, Bernh.

A curious almost parallel-sided species, of which I took one specimen at Cairns; and another (apparently a cotype) was received from Dr. Sjöstedt.

Heterothops dolichocephalus, n. sp.

♂. Dark castaneous; antennae, palpi, and legs paler; a few dark hairs scattered about, and more numerous on abdomen than elsewhere; elytra, abdomen, and under surface with rather sparse, pale pubescence.

Head long and thin; with a few distinct punctures near eyes and before neck. Eyes rather small, with coarse facets, not extending half-way to neck and shorter than the inter-antennary space. Antennae with first joint almost as long as second and third combined, these subequal, none of the others transverse, eleventh about once and one-half the length of tenth. Apical joint of palpi very thin, about two-thirds the length of subapical one. Prothorax more than twice the width of head, sides rather strongly narrowed to apex; with two distinct submedian punctures in the usual positions and a few near all the margins. Elytra much shorter than prothorax and scarcely wider, apex conjointly arcuate; with fairly dense, sharply defined punctures of moderate size. Abdomen more than half the total length; with sparse punctures mostly in zones, tip of under surface bilobed. Front tibiae dilated to near apex, front tarsi moderately dilated. Length, 5.5 mm.

♀. Differs in having abdomen not notched at apex, and the front tibiae and tarsi thinner.

Hab.—Tasmania (Aug. Simson's No. 3696), Waratah, in moss (A. M. Lea). Type, I. 12502.

An apterous, long-headed species, with the general outlines of *Quedius baldiensis*, but with the palpi of *Heterothops*, and decidedly shorter elytra. On several specimens the prothorax and abdomen (except that most of the segments of the latter are paler at the tips) are darker than the other parts; the abdomen (both surfaces) is slightly iridescent; one male is shining black, except that the legs, antennae, palpi, and tips of some of the abdominal segments are obscurely reddish, its abdomen is very feebly iridescent, and most of the punctures on its upper surface are confined to the base and apex of each segment. Another male, except for its eyes and clothing is entirely pale flavous, but seems to be immature. The front tibiae of the male are dilated about the apical third, and then narrowed to apex, with on one side of the narrowed part a long comb of reddish bristles or

teeth, but the comb is so placed that some manipulation is needed to see it under a compound power; the middle tarsi of the male have more numerous bristles than on the female, but they do not form a comb. As on many species of *Quedius* the tip of most of the abdominal segments on the upper surface appears finely serrated, owing to a setiferous row of punctures; the setae are very distinct from the sides.

Very close in general appearance to *Quedius longiceps*, Broun (from New Zealand, and which appears to be a *Heterothops*), but distinguished by the abdominal punctures; on *longiceps* they are more densely crowded at the base of the segments, and are fairly numerous elsewhere; on that species also some of the antennal joints are transverse; the two are certainly very closely allied, and possibly the Tasmanian form should be regarded as varietal.

***Heterothops apterus*, n. sp.**

Deep black and highly polished; antennae, some of the mouth parts, legs, and most of under surface of a more or less dingy red. Sides with a few dark hairs, becoming rather numerous on abdomen; elytra, abdomen, and under surface with sparse dark pubescence.

Head rounded, between front of eyes and neck slightly transverse; a few distinct punctures near eyes and just before neck. Eyes very large, extending almost to neck, almost twice as long as the inter-antennary space. Antennae with first joint almost as long as second and third combined, these subequal, the others gradually decreasing in length, but none transverse, eleventh almost twice the length of tenth. Apical joint of palpi very thin, slightly shorter than the subapical one. Prothorax slightly wider than the median length, strongly narrowed to apex; with some distinct punctures slight distances from the margins, and two submedian ones in the usual positions. Elytra much shorter than prothorax, sides slightly dilated posteriorly; with rather dense and not very large but sharply defined punctures. Abdomen more than half the total length; with numerous punctures; four segments very finely serrated at tips. Length, 4.25 mm.

Hab.—Tasmania: Cradle Mountain (A. M. Lea). Type (unique), I. 12485.

A deep black, apterous species; the type at first glance is like a black specimen of the preceding species, but the eyes are unusually large and of different shape, and the head is considerably wider. The two basal joints of antennae are paler than the others, which are rather deeply infuscated; under a magnifying glass several of their joints appear to be slightly transverse, but under a compound power even the tenth is seen to be slightly longer than wide. The type is probably a female, but its sex is doubtful, as the apical segment of the abdomen is withdrawn so that its tip cannot be examined, the front tibiae are moderately dilated to near the apex, with a rather dense fringe there, and the front tarsi are hardly dilated. It is rather close to *Quedius megophthalmus*, Broun (from New Zealand, and which is probably a *Heterothops*), but its head is narrower so that the eyes occupy a larger proportion of the head, although their size is the same, but their inner sides are nowhere straight, as they partly are on that species.

***Heterothops picticollis*, n. sp.**

♂. Of a rather dingy castaneous-brown but shining, sides of prothorax, basal joints of antennae, palpi, and most of under surface and of legs paler. Upper surface with rather sparse long hairs; elytra, abdomen, and under surface with pale and not very dense pubescence.

Head rather long, parallel-sided from eyes to near neck; with a few large punctures near the eyes and before the neck. Eyes small, distinctly shorter than the inter-antennary space. Antennae with first joint slightly shorter than second

and third combined, second slightly longer than third, the others to tenth feebly decreasing in length, but none transverse, eleventh about once and one-half the length of tenth. Apical joint of palpi very thin, slightly longer than the sub-apical one. Prothorax scarcely wider than the median length, strongly narrowed to apex; with a few large irregularly distributed punctures, but with two submedian ones in the usual position. Elytra about once and one-fourth the length of prothorax, base as wide as its widest part, somewhat dilated posteriorly, a distinct depression on each side of suture; with dense and rather small punctures. Abdomen with rather inconspicuous punctures, the tips of four segments very minutely serrated; tip of under surface bilobed. Front tibiae dilated to near apex, front tarsi moderately inflated. Length, 4.5-5 mm.

♀. Differs in having the tip of the abdomen not notched and the front tibiae and tarsi thinner.

Hab.—Victoria: Dividing Range (Blackburn's Collection), Ferntree Gully in July (F. E. Wilson), Killara in August (C. Oke). Type, I. 12689.

The general outlines are much as in *H. dolichocephalus*, but the head is not quite as narrow, and the elytra are distinctly longer and probably cover wings. On some specimens the prothorax is more infuscated than on others, but its sides, on the five specimens before me, are always conspicuously paler than elsewhere, the basal sides of the head are also paler than the rest of the upper surface, on several of them the tips of the elytra are obscurely infuscated. The abdomen is rather feebly iridescent, and on the male the pubescence towards each side at the base of some of the segments has a golden appearance. On each elytron at about the basal third, near the subsutural depression, there appears from some directions a feeble elevation, but it is not a true tubercle, but rather an interruption of a feebly elevated line. The front tibiae of the male have a comb or fringe of reddish bristles much as on *dolichocephalus*, and the basal joint of the middle tarsi has more numerous bristles than the female.

Heterothops mediofuscus, n. sp.

♂. Pale castaneo-flavous; part of head (the rest deeply infuscated), sides of prothorax (the middle deeply infuscated), and parts of legs paler.

Head rather long, sides gently rounded; with a few large punctures near eyes and before neck. Eyes very small, scarcely extending one-third of the way to neck, and much shorter than the inter-antennary space. Antennae with first joint about as long as second and third combined, third slightly longer than second, the others gradually decreasing in length, tenth feebly transverse and somewhat shorter than eleventh. Apical joint of palpi very thin, slightly shorter than sub-apical one. Prothorax scarcely, if at all, wider than the median length, sides strongly narrowed to apex; with a few subapical, subbasal, and lateral punctures, two submedian ones rather closer together than usual, and two towards apex rather more distant. Elytra along middle distinctly shorter than prothorax; with rather dense and small, subsperate punctures. Abdomen more than half the total length; punctures not very sharply defined, tips of four segments minutely serrated; tip of under surface bilobed. Front tibiae moderately dilated to apex, and with an apical fringe of reddish bristles; front tarsi slightly dilated. Length, 4.5 mm.

Hab.—Tasmania: Waratah, in moss (A. M. Lea). Type (unique), I. 12688.

At first glance the type seems like a narrow pale variety of the preceding species, and its clothing is very similar, but the elytra at their longest, on the sides, are scarcely the length of the middle of the prothorax, whereas on that species they are decidedly longer, the suture and its vicinity are also on an almost even plane, instead of the suture distinctly elevated above subsutural depressions,

the eyes are smaller, and the antennae are shorter; it also appears to be apterous, and the preceding one is probably winged. The dark part of the prothorax occupies about the median third from base to apex, on the abdomen (both surfaces) there is a feebly infuscated median line from the base to beyond the middle, the antennae are feebly infuscated in the middle; although highly polished the iridescence is very slight. The apical joint of the palpi is almost like a seta.

Heterothops rufosuturalis, n. sp.

♂. Blackish, prothorax obscurely paler, suture and extreme tips of elytra, tips of abdominal segments, legs, and some of the mouth parts more or less reddish. A few dark hairs scattered about, but becoming numerous on abdomen, especially on the anal styles; elytra, abdomen, and under surface with moderately dense, ashen pubescence.

Head rather long and thin, with a few distinct punctures touching eyes and before neck. Eyes small, not extending half-way to neck, distinctly shorter than the inter-antennary space. Antennae rather longer than usual, first joint as long as second and third combined, these subequal, the others to tenth gradually decreasing in length but all distinctly longer than wide, eleventh about once and one-half the length of tenth. Apical joint of palpi very thin, about half the length of the subapical one. Prothorax rather large, sides strongly narrowed to apex, with a few small punctures near apex and base, and two rather small submedian ones in the usual positions. Elytra distinctly longer than prothorax, slightly narrowed posteriorly; with dense and small, subasperate punctures. Abdomen with dense punctures, tips of four segments very finely serrated; tip of under surface feebly bilobed. Front tibiae dilated to near apex, and then with a large notch fringed with reddish setae; front tarsi moderately dilated. Length, 3.5-4.25 mm.

♀. Differs in having slightly shorter antennae, abdomen not notched at apex, front tibiae less dilated, with a smaller notch, and front tarsi very little wider than the middle ones.

Hab.—Queensland: Goodna in October (F. E. Wilson), Brisbane (A. J. Coates). New South Wales: Tweed River (A. M. Lea). Type, I. 12693.

In structure fairly close to a species identified by Blackburn as *H. luctuosa* (and which appears to be *analis*, Macl., referred by Macleay to *Staphylinus* and supposed by Fauvel to be a *Quedius*), but head thinner, with much smaller eyes, prothorax not black and suture red. The head is about the shape of that of *H. dolichocephalus*, but the elytra are much longer, and wings are exposed on several specimens. On two specimens the prothorax is obscurely reddish-brown, but on the others, although not black, it appears almost so at the first glance; the antennae are rather deeply infuscated in the middle, but become paler towards base and apex; on some specimens almost the whole of the under surface is obscurely reddish. Both surfaces are distinctly although not very brilliantly iridescent; the sides of the prothorax in some lights have a greenish, satiny lustre.

Two specimens, sexes, from South Australia (Myponga, A. H. Elston, and Lucindale, B. A. Feuerherdt) probably belong to this species, but under a compound power the front tibiae are seen to have a much denser fringe of bristles, these, on both specimens, being so close together that they touch throughout their length; the suture and tips are no darker than the rest of the elytra. A female, from Tasmania. (Launceston, Lea), resembles the South Australian female, but has the prothorax as black as the head, and the antennae dark throughout.

Heterothops mirus, n. sp.

♂. Piceous-brown; head almost black, elytra, apical segment of abdomen, most of subapical segment and tips of the others, antennae, palpi, parts of the mouth, and legs more or less flavous. With a few dark hairs at sides, becoming

numerous on anal styles, elytra, abdomen, and under surface with short, pale pubescence.

Head subquadrate, with a few distinct punctures close to eyes and before neck (the neck unusually wide). Eyes small, not extending half-way to neck, distinctly shorter than the inter-antennary space. Antennae with first joint about as long as second and third combined, these subequal, sixth to tenth transverse. Apical joint of palpi very thin, much shorter than the subapical one. Prothorax slightly transverse, sides gently rounded, apex as wide as base; with two distinct submedian punctures in the usual positions and a few near the margins. Elytra not much wider than prothorax and distinctly longer, almost parallel-sided; with rather dense and small punctures. Abdomen with punctures about as large as on elytra but sparser, tip of under surface bilobed. Front tibiae moderately dilated to near apex, front tarsi slightly dilated, middle tarsi with a distinct dark comb on the basal joint. Length, 2.25-2.5 mm.

♀. Differs in having the head slightly smaller, abdomen not notched at apex, and middle tarsi combless.

Hab.—Lord Howe Island, on *Kentia* palms (A. M. Lea). Type, I. 12703.

A curious flat, subparallel-sided species, allied to *H. magniceps*, but smaller and narrower, prothorax paler and less iridescent. On some specimens the prothorax is almost as dark as the base of the abdomen, on some it is of a dull red, and it appears to be always darker than the elytra and paler than the head. The mandibles are asymmetrical, the right one about the middle has a small acute projection that fits into a notch on the left one; this appears to be a common feature in the genus, but it is usually difficult to force the jaws of these small insects apart without damaging the head. On the front femur of the male, but visible only under a high power, there is on its under surface, from about the middle to the apex, a closely placed series of short setae, they are exactly the same colour as the surrounding parts, and are perhaps used for stridulation; the front tibiae are moderately dilated to apex, with an apical fringe of reddish bristles; the front tarsi are only slightly dilated at the base; the middle coxae and femora are much thicker than the front ones; the middle tarsi have the basal joint large, with a conspicuous comb of long teeth, nine in number, certainly not bristles, accidentally appearing regular, but a distinct comb as on many species of *Quedius*, although with less numerous and longer teeth than on species of that genus. A female from Queensland (Mount Tambourine, Lea) possibly belongs to this species, but has the antennae shorter and darker, elytra darker, and less of the abdomen pale.

On this species the curious minute, dense, wavy lines that cover almost the entire body of many Staphylinidae of the present subfamily, and are invisible except under a high power, are unusually conspicuous, and visible under a considerably lower power than is usually the case. On specimens mounted in Canada balsam, or on greasy ones, I have been unable to see them at all, on most species they appear to be interrupted by the punctures, but on the species of *Actinus*, on which they are particularly beautiful, they traverse the sides and bottom of the punctures without apparent interruption.

***Heterothops tantillus*, n. sp. or var.**

♂. Flavous, head and tips of elytra slightly darker than the adjacent parts. Length, 2 mm.

Hab.—Queensland: Cairns district (A. M. Lea). Type (unique), I. 12702.

The type is the smallest specimen I have seen of the subfamily, it is allied to *H. magniceps*, and it is structurally extremely close to the preceding species, although decidedly smaller and paler. A front and a middle leg have been mounted in Canada balsam, and under the microscope the latter is seen to be larger

than the former, although not to such a disproportionate extent as on the preceding species; on the front femur I was unable to see the row of setae clearly, but it appears to be indicated; the front tarsi are more dilated than on that species, and the dark comb on the middle tarsi is slightly shorter but quite as distinct.

Heterothops ubiquitousus, n. sp.

Black; elytra piceous, prothorax dull red, tips of abdominal segments, legs, parts of the mouth and two or three basal joints of antennae, of a more or less dingy flavous. With a few dark hairs at sides but becoming numerous on tip of abdomen; elytra, abdomen, and under surface with ashen pubescence.

Head (excluding neck) about as long as wide; with a few distinct punctures close to the eyes, and before neck. Eyes small, not extending half-way to neck, and shorter than the inter-antennary space. Antennae with first joint as long as second and third combined, these subequal, sixth to tenth transverse. Palpi with apical joint very thin, about as long as the subapical one. Prothorax slightly longer than wide; with two distinct submedian punctures in the usual positions, and a few submarginal ones. Elytra at base slightly wider than prothorax, along middle slightly longer, and distinctly longer at sides; with not very crowded and small, but sharply defined punctures. Length, 2.75-3.5 mm.

Hab.—Tasmania: Mount Wellington (H. H. D. Griffith and A. M. Lea), Hobart, Huon River, Latrobe, Stanley, Ulverstone, Launceston, Frankford, Burnie (Lea). Victoria: Melbourne (E. Fischer, No. 4010), Beaconsfield, Emerald (E. Jarvis), Belgrave (F. E. Wilson and C. Oke), Ferntree Gully (Wilson). South Australia: Myponga (A. H. Elston), Lucindale (Lea). Type, I. 15254.

A narrow fusiform species, allied to *H. picipennis*, but consistently smaller and narrower, and prothorax and legs paler. The tibiae are usually darker than the rest of the legs; the prothorax is rarely of a bright red, and on such specimens the elytra are usually castaneous-brown, but sometimes scarcely darker; occasionally the elytra are almost as dark as the abdomen. On one specimen the shoulders are paler than the adjacent parts, and it has three punctures triangularly placed half-way between the eyes. The male is narrower than the female and has the tip of the abdomen notched, but the front and middle legs do not appear to vary sexually. The majority of the specimens were taken from moss or tussocks, one from a tree fern and others from flood *débris*.

Heterothops nigrofrater, n. sp.

Black; tip of abdomen, tips of most of the segments on the under surface, some of the mouth parts, basal joint of antennae and legs flavous. A few dark hairs scattered about, but becoming numerous on apex of abdomen; elytra, abdomen, and under surface with rather sparse dark pubescence.

Head longer than wide, sides very feebly rounded between eyes and neck; a few distinct punctures close to eyes and before neck. Eyes small, not extending half-way to neck, slightly shorter than the inter-antennary space. Antennae with first joint almost as long as second and third combined, these subequal, fifth to tenth transverse. Apical joint of palpi very thin, about as long as the subapical one. Prothorax slightly longer than wide, distinctly narrowed to apex; with two distinct submedian punctures in the usual positions, and a few submarginal ones. Elytra distinctly longer than prothorax, especially on the sides, sides slightly dilated posteriorly, suture feebly elevated; with fairly numerous, small but rather sharply defined punctures. Abdomen with punctures much as on elytra. Length, 3-3.25 mm.

Hab.—Victoria: Warburton, in tussocks, in March, and Belgrave in March (F. E. Wilson), Killara in August from a nest of ants, *Iridomyrmex* sp. (C. Oke);

Melbourne (Ejnar Fischer). Tasmania: Mount Wellington (H. H. D. Griffith and A. M. Lea). Type, I. 15255.

A highly polished black species, in general like *Diochus octavii* on a greatly reduced scale, but elytral punctures quite distinct and with palpi of *Heterothops*; it is like a rather narrow form of the preceding species, and similarly the sexes can scarcely be distinguished except by the tip of the abdomen, but the prothorax and elytra are quite as black as the head. The tibiae are somewhat infuscated. On some specimens the tips of the abdominal segments on both surfaces are pale, but on most of them only distinctly so on the under surface.

***Heterothops clarki*, n. sp.**

♀. Black; elytra almost black, tips of abdominal segments, some of the mouth parts, basal joints of antennae and legs of a rather dingy brown. With a few dark hairs scattered about and becoming numerous on anal styles; elytra, abdomen, and under surface with ashen pubescence.

Head subquadrate between antennae and neck; with three large punctures touching each eye, and a few before neck. Eyes small, not extending half-way to neck, about the length of the inter-antennary space. Antennae with first joint about as long as second and third combined, second longer than third, fifth to tenth distinctly transverse. Apical joint of palpi very thin, about the length of the subapical one. Prothorax slightly longer than wide, sides slightly narrower at apex than at base; with two distinct submedian punctures in the usual positions, and a few about all the margins. Elytra almost parallel-sided; with rather dense and small punctures. Abdomen with somewhat similar punctures to those on elytra. Length, 2.75-3.25 mm.

Hab.—Western Australia: Swan River, five females from nests of *Iridomyrmex conifer* (J. Clark). Type, I. 12694.

An interesting species, with antennal joints so short as to be suggestive of many of the Aleocharides; the species forms another addition to the many inquiline taken by Mr. Clark from nests of the twig-mound ant. In general appearance it is close to the species identified by Blackburn as *H. picipennis*, but is consistently smaller, antennae shorter, with most of the joints transverse; from the preceding species it differs in its wider head, shorter antennae, and darker legs.

***Heterothops obscuripennis*, n. sp.**

Black; elytra and most of under surface of a dingy brown, legs, some of the mouth parts, and two basal joints of antennae paler. With scattered dark hairs, becoming numerous on anal styles; elytra, abdomen, and under surface with dark pubescence.

Head rounded, excluding the neck scarcely longer than wide; with a few distinct punctures near eyes and before neck. Eyes large, extending almost to neck, distinctly longer than the inter-antennary space. Antennae with first joint slightly longer than second and third combined, third slightly shorter than fourth and still shorter than second, the others gradually decreasing in length, till the ninth and tenth are slightly transverse, eleventh longer. Apical joint of palpi thin, about half the length of the subapical one. Prothorax moderately transverse, decidedly narrowed to apex; with two distinct submedian punctures in the usual positions, and some in the lateral and basal margins, and near apex. Elytra with dense and rather small, asperate punctures. Abdomen with smaller and sparser punctures than on elytra, tips of four segments very finely serrated. Length, 3.5 mm.

Hab.—South Australia: Kangaroo Island, in moss on ground (A. M. Lea). Type, I. 12695.

In general appearance somewhat like *H. laticeps*, but head smaller and eyes much larger; at first glance it appears to belong to *Quedius*, but the apical joint of the palpi is very small. The sexes appear to differ externally only in the tip of the abdomen, that of the male being notched; the male before me is probably immature, as it is considerably paler than the female; the abdomen of both sexes is moderately iridescent.

***Heterothops castaneus*, n. sp.**

Bright castaneous; part of abdomen and most of antennae more or less deeply infuscated. With a few rather short hairs, but becoming numerous on tips of anal styles; elytra, abdomen, and under surface with not very dense ashen pubescence.

Head subquadrate between front of eyes and neck; with two distinct punctures close to eyes, and a few before neck. Eyes small, not extending one-third of the way to neck, and much shorter than the inter-antennary space. Antennae with first joint about as long as second and third combined, these subequal, seventh to tenth transverse. Apical joint of palpi very thin, somewhat shorter than the subapical one. Prothorax along middle scarcely longer than the greatest width, moderately narrowed to apex; with two submedian punctures in the usual positions, and a few near or on all the margins. Elytra along middle not much longer than prothorax, but longer on sides; with fairly dense and rather small but sharply defined punctures. Abdomen with somewhat sparser punctures than on elytra. Length, 3.5-4.5 mm.

Hab.—Lord Howe Island, six specimens from fallen leaves (A. M. Lea). Type, I. 12691.

A narrow, pale species, with unusually small eyes; at first glance it resembles some of the narrower species of *Calodera*; it is fairly close to *H. xantholinoides*, but is narrower, with smaller eyes, elytra entirely pale, etc. The two apical segments of abdomen are usually entirely pale, the others each have more or less of the base infuscated, although on the under surface the infuscation is sometimes but slight; the scutellum on one specimen is infuscated. On the male the front tibiae are slightly more dilated to the apex than on the female, and the tip of its abdomen is notched.

***Heterothops kentiae*, n. sp.**

♂. Black; elytra dull red, a large blackish spot on each; apical segment of abdomen and tips of the others, mouth parts, palpi, two or three basal joints of antennae and the legs more or less reddish. With scattered dark hairs, becoming dense on anal styles; elytra, abdomen, and under surface with ashen pubescence.

Head rather large, with a few large punctures near eyes and before neck. Eyes small, scarcely extending one-third of the distance to neck, and shorter than the inter-antennary space. Antennae with first joint not quite as long as second and third combined, these subequal, seventh to tenth transverse. Apical joint of palpi very thin, slightly dilated at base, almost as long as the subapical one. Prothorax slightly transverse near apex, scarcely narrower than near base; with two distinct submedian punctures, and a few in basal and lateral margins and near apex. Elytra with suture slightly but distinctly elevated; with fairly dense and small, sharply defined punctures. Abdomen with somewhat sparser punctures than on elytra, tip of under surface deeply notched. Length, 4.5-5 mm.

♀. Differs in having the head smaller, prothorax less transverse, abdomen wider and not notched at apex.

Hab.—Lord Howe Island, summit of Mount Gower, on *Kentia canterburyana* (A. M. Lea). Type, I. 12690.

Structurally rather close to *H. laticeps*, but very differently coloured, eyes smaller and abdomen less parallel-sided. On most specimens the extreme apex

and base of the prothorax are paler than the rest of its surface, occasionally the whole prothorax is of an obscure reddish-brown, but the head, except for parts of the mouth, appears to be always deep shining black. The blackish spot on each elytron occupies more than half its surface, and usually touches the side, but not the base, apex, or suture; the femora are paler (sometimes almost flavous) than the rest of the legs. The head varies in size and, except for the neck, is usually transversely quadrate and wider than the prothorax in the male; quadrate and slightly narrower than that segment in the female, but sometimes it is of its exact width. There is a shallow inter-antennary depression with a shallow puncture on each side, but from some directions only the two punctures are visible. The jaws are usually clenched, but when they have been forced apart there may be seen two triangular teeth, a small notch and a wider one on the right side, and two wider teeth and one wider notch on the left side. The real tip of the abdomen of the male is deeply notched, but the segment with the notch is sometimes withdrawn so that the tip appears rounded, even when an oedeagus is protruding. My wife and I obtained numerous specimens, including many larvae, from fallen fronds and on wet parts of the palm trees; there is also a specimen in the Australian Museum from the same mountain.

Heterothops pictus, n. sp.

♂. Black; elytra (except for some dark spots), tips of abdominal segments, some of the mouth parts, two or three basal joints of antennae and the legs more or less reddish. With sparse dark hairs, but becoming dense on apex of abdomen; pubescence of elytra and abdomen variegated.

Head rounded and moderately transverse; with three or four punctures touching each eye, and a few before neck. Eyes very large, almost extending to neck, considerably longer than the inter-ocular space. Antennae with first joint as long as second and third combined, these subequal, the others to tenth gradually decreasing in length. Apical joint of palpi very thin, slightly shorter than the subapical one. Prothorax moderately transverse, distinctly narrowed to apex; with two conspicuous submedian punctures, closer together than is usual, and with a few on the lateral and basal margins and near apex. Elytra not much longer than prothorax, suture distinctly elevated, a shallow depression on each side of it; with rather dense, subasperate punctures. Abdomen with sparser and more irregularly distributed punctures than elytra; tip of under surface bilobed. Front tibiae moderately dilated to apex, and about apex with a fringe of reddish bristles; basal joints of front tarsi moderately dilated. Length, 4-6 mm.

♀. Differs in having the abdomen not notched at the tip, and front tibiae and front tarsi thinner.

Hab.—Victoria: Victorian Alps (E. Fischer, No. 1028), Dividing Range (Blackburn's Collection), Belgrave in March (F. E. Wilson), in September, and Ferntree Gully in June (C. Oke), Warburton in April (Wilson), Bright (H. W. Davey, No. 848), Wandin in August (National Museum), Emerald (E. Jarvis and A. M. Lea). Tasmania (Aug. Simson, No. 3133, in British Museum), Zeehan. Western Australia: Donnybrook (Lea). Type, I. 12673.

A beautiful species not very close to any other before me. The elytra have a curious mottled appearance, partly owing to the black or infuscated spots, of which there are usually three on each elytron (one medio-apical, one medio-lateral, and one medio-sutural), and partly to patches of somewhat golden pubescence, more numerous than the spots; but on an occasional specimen the infuscations almost disappear. On the abdomen, especially on the upper surface of the male, the pubescence is of a beautiful golden colour, and irregularly placed, somewhat as noted for that of *Quedius inaequalipennis*; its iridescence, although

not very pronounced, combined with the golden clothing on the black and red surface, causes the abdomen to appear more beautiful than usual. On most specimens the head and prothorax have a slight coppery gloss; the prothorax is occasionally obscurely reddish; on some specimens the legs are mostly deeply infuscated, but on many of them the femora (the front ones to a greater extent than the others) are partly or entirely flavous. There are usually a few inconspicuous punctures, about six, on the front of the interocular space; the right mandible has a triangular tooth, which fits into a notch on the left one; probably no joint of the antennae is really transverse, but under a magnifying glass the tenth, especially when gummy, appears distinctly transverse; under a microscope, however, even the tenth is seen to be at least as long as wide.

QUEDIUS, Steph., Cat., p. 417.

On the males of many species of this genus the basal joint of the middle tarsi is elongated, and on one side, placed obliquely, it has a comb with teeth varying in numbers from sixteen to forty; the teeth are closely set and are longer in the middle than on the ends, but the variation in length is quite even. The comb, although of comparatively large size, is inconspicuous or concealed from certain directions, and to see it clearly it is often necessary to detach a leg and mount it for examination under the microscope; even then, unless mounted the right way up, the comb on several species could easily be overlooked, as the tips of the teeth only would show, and these could easily be missed amongst the bristles, but when properly mounted and in a good light the combs are abundantly distinct. In the literature to which I have access I cannot find that they have been previously commented upon, except in the description of *Q. pectinatus*, but they are present on many Australian species, and of those already named some comments, further on, will be found on those of *Q. diemensis*, *Q. hybridus*, and *Q. tepperi*. Some species instead of having a comb have rather dense setae or bristles, and others have such soft and dense hair there as to be almost furry. Under a magnifying glass the species having bristles on the basal joint sometimes appear combed, but in the really combed species the joint appears to have a distinct black or blackish rim (as on the front tarsi of species of *Carphurus*, *Helcogaster*, and other Malachiides); on the bristly species there is no blackish rim, the colour being as in the adjacent parts. On the females of some species whose males have combs, the joint is rather long, and some bristles cause a deceptive resemblance to a comb, but under a microscope the difference is at once apparent.

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| AENEUS, Fvl. V. | IRIDIVENTRIS, Fvl. Q., N.S.W., V., S.A., W.A. |
| ANALIS, Macl. (<i>Staphylinus</i>). Q., N.S.W., S.A. | KOEBELEI, Blackb. Q. |
| ANDERSONI, Blackb. S.A., W.A. | LURIDIPENNIS, Macl. (<i>Staphylinus</i>). Q., N.S.W., V., S.A., W.A. |
| BALDIENSIS, Blackb. V. | <i>semiviolaceus</i> , Fvl. |
| CUPRINUS, Fvl. N.S.W., V., Tas. | LURIDUS, Fvl. W.A. |
| DICHROUS, Fvl. V. | MEDIOFUSCUS, Lea, Proc. Roy. Soc. Vict., 1909, p. 121. Tas. |
| DIEMENSIS, Blackb. V., Tas. | MESOMELINUS, Marsh. V. Introduced. |
| DIVERSIPENNIS, Fvl. W.A. | METALLICUS, Fvl. Q. |
| FULGIDUS, Fabr. V., Tas., S.A. | NELSONENSIS, Blackb. V., Tas., King Island. |
| HOLLANDICUS, Bernh. Australia. | NIGRICOLLIS, Fvl. Q., N.S.W., V. |
| HYBRIDUS, Er. (<i>Philonthus</i>). Q., N.S.W., V., Tas., S.A., W.A. | PECTINATUS, Lea, Proc. Roy. Soc. Vict., 1907, p. 151. King Island. |
| <i>taurus</i> , Blackb. (<i>Heterothops</i>), Cat., p. 414. | |
| INCONSPICUUS, Blackb. Tas., S.A. | |

- PICEOLUS, Fvl. N.S.W., V.
 PICTIPENNIS, Blackb. V.
 POLITULUS, Macl. (*Philonthus*). Q.
 RUBRICOLLIS, Fvl. N.S.W., V.
 RUFICOLLIS, Grav. (*Philonthus*).
 Q., N.S.W., V., Tas., S.A.
chalybeipennis, Macl. (*Philonthus*).
 SIDNEENSIS, Fvl. Q., N.S.W., V.,
 Tas.
 SULCICOLLIS, Fvl. N.S.W., V., Tas.,
 S.A., W.A.
- TEPPERI, Blackb. N.S.W., V., Tas.,
 S.A.
ferox, Blackb.
blackburni, Bernh. and Schub.
 THORACICUS, Fvl. Q., N.S.W., V.,
 S.A., W.A.
 VERSICOLOR, Fvl. Q.
 VIRIDESCENS, Fvl. Q., W.A.
 XYLOPHILUS, Lea, Proc. Roy. Soc.
 Vict., 1907, p. 152. Tas., King
 Island.

QUEDIUS TEPPERI, Blackb.

Q. ferox, Blackb.

Q. blackburni, Bernh. and Schub.

The type of *Q. tepperi* is in the South Australian Museum, and its prothorax and elytra are now (probably due to exposure) dark castaneous-brown; the species was originally described as "niger" and "with the . . . thorax deep black." Shortly afterwards *Q. ferox* was described from "a single specimen taken near Adelaide." The type of *ferox* is in the British Museum, but there are other specimens labelled by Blackburn as belonging to the species in the South Australian Museum, agreeing with the description, and also agreeing perfectly in sculpture with the type of *tepperi*. It is one of the dark species of the genus, but is distinct by its wide and rather flat head and prothorax, on fresh specimens these being slightly opalescent; the inter-antennary depression is faint and alike on the type of *tepperi* and on specimens labelled *ferox*. The species occurs also in New South Wales, Victoria, and Tasmania; island specimens are usually darker than mainland ones, on many of the latter the terminal joints of the antennae are pale. The species has a tarsal comb, but it is obscured by numerous long bristles, its teeth are also paler than usual (on most species having them they are blackish, or at least dark brown, on this one they are hardly darker than the bristles), are less than twenty in number, and are so placed that some manipulation is necessary to see them plainly. As the name *ferox* was already⁽¹¹⁾ in use in the genus Bernhauer and Schubert altered the name of the Australian species to *blackburni*, but their name is not now required.

QUEDIUS RUFICOLLIS, Grav.

Mr. Goudie took a specimen of this species, at Sea Lake, from the nest of a black species of *Camponotus*.

QUEDIUS LURIDIPENNIS, Macl.

Some Tasmanian examples of this species (taken in moss) have the elytra less conspicuously reddish than on mainland ones, and the abdomen is less brilliantly iridescent. Six (from Western Australia) have even darker elytra (although still obscurely reddish), and on two of them the abdomen is non-iridescent. Under the microscope the basal joint of the middle tarsi of the male is seen to be without a comb, but to have a short kind of fur amongst the bristles.

QUEDIUS IRIDIVENTRIS, Fvl.

The description of this species is but little more than a comparison with the European *Q. paradisiannus*. Some specimens identified by Blackburn as belonging to it differ from the description in having the fourth joint of antennae

(11) Leconte, 1878.

shorter than the third, not, as in the description, "2-4 aequalibus," the eyes are large, in the description they are, compared with *paradisianus*, "multo minoribus." On the specimens before me the basal joints of the antennae are paler than the others, but these vary from moderately to deeply infuscated, apparently they are never quite black; they range in length 5.5-9.5 mm.

QUEDIUS SIDNEENSIS, Fvl.

A specimen of this species, from near Sydney, in Mr. Carter's collection, has the elytra, tips of abdomen, and tibiae darker than usual.

QUEDIUS BALDIENSIS, Blackb.

The type of this species is in the British Museum. Blackburn at first considered it was possibly an alpine form of *Q. cuprinus*, but afterwards considered it distinct; if a specimen from his collection, labelled by him as *baldiensis*, is correctly named the two species are certainly distinct; this specimen, however, does not agree with the description, as its elytra and most of the abdomen are pale, and it is also evidently apterous. Three specimens recently taken from tussocks by Mr. F. E. Wilson on Mount Donna Buang (Victoria) agree with the description except that at least five of the antennal joints (6th-10th) are transverse, whereas Blackburn described the antennae as having "articulis nullis transversis." In structure they agree perfectly with the specimen from the Blackburn Collection, differing only in the much darker elytra and abdomen.

QUEDIUS NELSONENSIS, Blackb.

Numerous specimens from Victoria, Tasmania, and King Island appear to belong to this species, which may be readily distinguished by its apterous body, narrow head, and bicoloured elytra. The main colour of the type was noted as "piceus," but most of the specimens before me are deep black, with the abdomen often brilliantly iridescent and with some of its segments tipped with red; the two apical joints of the antennae are usually, but not always, conspicuously paler than the preceding ones. The Tasmanian specimens were taken from moss, tussocks, and sods of grass.

QUEDIUS DIEMENENSIS, Blackb.

Two specimens from Brisbane, in the Queensland Museum, probably belong to this species, but differ from typical ones in being smaller, prothorax and elytra slightly more convex, and abdomen entirely dark; one specimen has the legs and antennae entirely pale, the other has (of the legs) only the tarsi and knees pale. On many Tasmanian specimens the prothorax is deep black, and three basal joints of antennae no darker than the following ones. Structurally the species is very close to *Q. ruficollis*. Its male has a tarsal comb much as on *Q. hybridus*, but the species being of larger size the teeth are more easily seen under a magnifying glass; on the reverse side of the joint the bristles are so dense that the comb is greatly obscured.

QUEDIUS INCONSPICUUS, Blackb.

The prothorax of this species was described as "rufo-piceo," and antennae as "piceis apicem versus ferrugineis"; possibly the type (now in the British Museum) was immature, as a specimen bearing Blackburn's name-label "*inconspicuus*, Blackb.," has the prothorax deep black, with a faint coppery tinge, its antennae are also black, except that the basal portion of several joints is reddish. The type was from Wallaroo, in South Australia, the specimen commented upon, and others before me, are from Tasmania.

QUEDIUS KOEBELEI, Blackb.

Two specimens, taken on seeds of *Pisonia brunoniana* in the Cairns district, probably belong to this species; they differ, however, from the description in having the sides and tips of the abdominal segments obscurely paler, the elytra were described as "obscure ferrugineis apicem versus infuscatis"; on these specimens the dark parts of the elytra are the outer apical angles (the dark parts scarcely extend to the suture) and the inverted sides.

QUEDIUS PICTIPENNIS, Blackb.

On the clytra, of this beautiful species, the black markings vary somewhat in size, but they usually leave a conspicuous red V. Specimens under examination are all from Victoria (Belgrave in February and August, Ferntree Gully in July, and Emerald in March); two of them were taken from moss.

QUEDIUS HYBRIDUS, Er.

The middle tarsi of the male, as seen from one side, has a very conspicuous comb of nearly thirty rather long, blackish teeth; under a magnifying glass the comb appears as a well-defined and not very narrow black edging, but from one side the teeth are less distinct. All that Erichson said of the middle tarsi was "articulo primo incrassato."

Quedius bellus, n. sp.

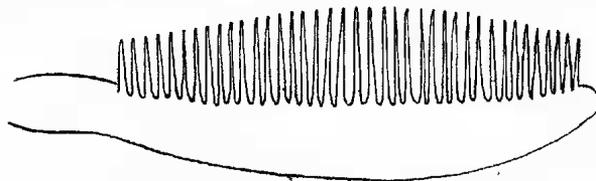
♂. Coppery-bronze; head and prothorax finely shagreened and of a different shade from elytra, muzzle, some mouth parts, basal joint of antennae and base of one or two others, and most of legs flavous, tarsi, knees, and hind coxae infuscated, antennae still darker; abdomen blackish and slightly iridescent, tips and sides of most of the segments, and most of the under surface obscurely reddish. Head, and sides of prothorax and of elytra, with a few blackish hairs, becoming numerous on sides of abdomen and dense on its tips; elytra, abdomen (both surfaces), and metasternum with rather dense, shining pubescence.

Head of moderate size, with a few setiferous punctures at sides of eyes and just before neck. Eyes rather large, about as long as the inter-antennary space. Antennae with first joint longer than second and third combined, third slightly longer than second and conspicuously longer than fourth, the others to tenth feebly decreasing in length and very feebly increasing in width, the tenth just perceptibly transverse, eleventh distinctly longer than tenth, feebly incurved on one side of apex. Apical joint of palpi about twice the length of preceding one and at base not much thinner. Prothorax with two punctures in the usual positions, with one towards each side, two towards base, and a few small ones about the front angles. Elytra with rather dense and small but sharply defined punctures, and with about eight to ten large ones on each elytron. Abdomen with rather dense punctures, tip of under surface gently incurved to middle. Basal joints of front tarsi somewhat dilated, basal joint of middle tarsi large, and with a conspicuous black comb. Length, 6.65 mm.

Hab.—Victoria: Belgrave in July (F. E. Wilson), Ferntree Gully in July (C. Oke), Beaconsfield in May (H. H. D. Griffith from E. Jarvis). Type, I. 12667.

A beautiful species, with a conspicuous satiny gloss on the head and prothorax, and to a certain extent on abdomen. The head and prothorax are apparently coloured as in *Q. luridus*, but the elytra are also bronzy and legs pale, size smaller, etc. Structurally it is fairly close to *Q. pectinatus*, but more metallic, elytra with large scattered punctures and comb of middle tarsi even

larger. The comb is composed of nearly forty closely packed, blackish teeth, almost flat to the joint and slightly longer in the middle than on the sides, with its end projecting over the second joint; but there are numerous long bristles on the joint that somewhat obscure the comb under a weak power.



Tarsal comb of *Quedius bellus*, Lea.

***Quedius inaequalipennis*, n. sp.**

♂. Piceous-brown; most of legs and of abdomen and base of antennae paler, head black. Head and sides of prothorax and of elytra with a few blackish hairs, becoming numerous on sides of abdomen and dense on its tips. Elytra, abdomen, and metasternum with rather dense pubescence.

Head of moderate size; two punctures touching each eye, a few behind them and a few just before neck. Eys rather large, slightly longer than the inter-antennary space. Antennae with first joint as long as second and third combined, second the length of fourth and somewhat shorter than third, the others to tenth very feebly decreasing in length, but none transverse, eleventh longer than tenth, incurved on one side of apex. Apical joint of palpi considerably longer than subapical one, distinctly thinner at base, and acutely pointed. Elytra with suture distinctly elevated, a shallow depression on each side of it, and very feeble depressions elsewhere. Punctures fairly dense but small and shallow. Abdomen with irregularly distributed punctures, becoming dense in parts; tip of under surface slightly notched. Basal joints of front tarsi somewhat dilated, basal joint of middle tarsi large and with a distinct blackish comb. Length, 5.5-6.5 mm.

♀. Differs in having the head slightly smaller, antennae slightly shorter, with tenth joint just perceptibly transverse, abdomen wider, not notched at apex, front tarsi less dilated, and basal joints of middle tarsi shorter, thinner, and without a comb.

Hab.—Tasmania (Aug. Simson's No. 3613), Waratah in moss, Wilmot (H. J. Carter and A. M. Lea), Zeehan, Huon River (Lea). Victoria: Mount Donna Buang, near Warburton, in tussocks in March (F. E. Wilson). New South Wales: Blue Mountains (Dr. E. W. Ferguson). Type, I. 15250.

Allied to *Q. pectinatus*, but smaller, elytra more uneven, etc.; the inequalities of the elytra, other than the sutural elevation and subsutural depressions are fairly distinct on some specimens but very feeble on others. Of the thirteen specimens before me hardly any two are exactly alike in colour; on one of them the prothorax (except that the base and sides are narrowly and obscurely brownish) is quite as black as the head, on others although paler than the head, it is darker than the elytra; on one the elytra are of a rather dingy red; the abdomen on some specimens is almost entirely blackish, on others most of it is no darker than the elytra; on one the prothorax is distinctly reddish, although not of the bright red of *Q. ruficollis*. On the specimen (probably immature) from the Blue Mountains, the prothorax is paler than the elytra, and the abdomen is almost flavous, but becomes darker posteriorly. The head and prothorax are highly polished and the latter is usually feebly iridescent, the abdomen is slightly iridescent. The pubescence on the abdomen (both surfaces), especially of the male, is somewhat undulated, and has an appearance on each

side of most of the segments, as of radiating from a common base, with a slight golden gloss, faintly suggestive of Fauvel's figure of *Leucitus argyreus*,⁽¹²⁾ a somewhat similar appearance but less pronounced, may be noticed on other species of the genus. There are two submedian punctures on the prothorax, in the usual positions, and near each of them is usually a semicircular row of three others, but of these the posterior one is sometimes ill-defined or absent; there are also a few about the front angles. The comb, on the middle tarsi of the male, extends almost the entire length of its supporting joint, but the teeth are only about fifteen in number, although stouter than usual.

Quedius cordatus, n. sp.

♂. Black; scutellum, elytra (a large blackish heart-shaped or triangular patch behind scutellum), sides and tips of upper surface of most of the abdominal segments, and most of their under surface, sterna, legs, muzzle, and two basal joints of antennae, flavous or somewhat reddish. Elytra, abdomen, and under surface with fairly dense, ashen pubescence.

Head moderately large; two punctures almost touching each eye, and a larger one between it and neck. Eyes rather large, scarcely longer than the inter-antennary space. Antennae with first joint longer than second and third combined, these subequal, fifth to tenth more or less feebly transverse, eleventh almost twice the length of tenth, incurved on one side of apex. Prothorax less narrowed in front than usual; two submedian punctures inconspicuous. Elytra with comparatively sparse and small, but sharply defined punctures. Abdomen with fairly numerous punctures, under surface of apparent sixth segment produced at apex into four acutely triangular lobes, of which the lateral ones are much shorter than the others. Front tarsi rather strongly dilated, basal joint of middle tarsi long and with a conspicuous blackish comb. Length, 4.75-5 mm.

♀. Differs in having the abdomen wider, apical segment on under surface evenly rounded, front tarsi less strongly (although distinctly) dilated, and basal joint of middle tarsi smaller and combless.

Hab.—Queensland: National Park (H. Hacker). Type in Queensland Museum; cotype, I. 15231, in South Australian Museum.

Mr. Hacker obtained four specimens, all of which have a conspicuous heart-shaped or subtriangular black mark behind the scutellum; there are no long hairs on the upper surface of the head, prothorax, or elytra of any of them. The comb on the middle tarsi of the male appears to consist of about seventeen teeth, and its end projects well over the second joint, the end teeth are small, rather rapidly increase in length to the middle, and then decrease to its base, which is about one-third from the base of the joint itself. The apical joint of the maxillary palpi is scarcely as long as the preceding joint, from one direction its base appears not much thinner than that joint, but from another direction it appears line-like, and so possibly the species should be referred to *Heterothops*.

Quedius hackeri, n. sp.

♂. Black; femora, basal joint of antennae and some of the mouth parts flavous, rest of legs and of antennae more or less deeply infuscated, but not black. Head, sides of prothorax and of elytra with a few long hairs, becoming more numerous on sides of abdomen, and especially on anal styles; elytra, abdomen, and sterna with rather dense, sooty pubescence.

Head rather large, distinctly transverse and gently convex; a few distinct punctures near eyes, behind them, and just before neck. Eyes rather large, about as long as the inter-antennary space. Antennae with first joint slightly longer

(12) Fauvel, Ann. Mus. Civ. Gen., xii., 1878, pl. ii., fig. 28.

than second and third combined, second slightly shorter than third, and longer than fourth, the others to tenth more or less feebly transverse, eleventh longer, its apex incurved on one side. Apical joint of palpi slightly longer than the preceding joint, its base not much thinner. Prothorax less narrowed in front than usual; with two submedian punctures in the usual positions, and three marginal ones on each side. Elytra with fairly dense but rather small and shallow punctures. Abdomen with fairly dense punctures, tip of under surface slightly notched. Front tarsi somewhat dilated, basal joint of middle tarsi long and with a distinct blackish comb. Length, 5-6 mm.

♀. Differs in having the head smaller, antennae somewhat thinner, abdomen not notched at tip, front tarsi less dilated, and the middle ones combless.

Hab.—Queensland: National Park (H. Hacker). Type, in Queensland Museum; cotype, I. 15252, in South Australian Museum.

Structurally rather close to *Q. tepperi*, but head rather more convex, elytral punctures smaller and less sharply defined, and antennae and legs conspicuously paler. The elytra have a faint coppery gloss, and on two females the tip of the suture is reddish; the abdomen has a distinct, but not brilliant, bluish iridescence. The tarsal comb of the male consists of about thirty close-set teeth, extending practically the whole length of its supporting joint.

***Quedius nitidissimus*, n. sp.**

♂. Black and highly polished, femora flavous, tarsi, parts of mouth and of basal joints of antennae obscurely reddish, rest of antennae and tibiae darker but not black. Head and sides with a few blackish hairs, becoming numerous on tips of abdomen; elytra, abdomen, and sterna with sparse pubescence.

Head rather large, moderately transverse and rather convex; two punctures touching the side of each eye, a few behind them and just before neck. Eyes fairly large but scarcely as long as the inter-antennary space. Antennae with first joint slightly longer than second and third combined, these subequal, the others gradually decreasing in length till the ninth and tenth are moderately transverse, eleventh longer. Apical joint of palpi rather stout, slightly longer than the preceding one. Prothorax rather large, moderately narrowed in front; with two submedian punctures in the usual positions, and a few nearer the base, with a few marginal ones at apex and sides. Elytra with fairly numerous and moderately large, sharply defined punctures. Abdomen with sparse punctures, tip of under surface feebly incurved at middle. Front tarsi strongly dilated, basal joint of middle tarsi long and with a blackish comb. Length, 6 mm.

Hab.—Tasmania: Waratah (A. M. Lea). Type (unique), I. 12483.

At first glance close to the preceding species, but more highly polished, head considerably more convex, and elytral punctures much stronger, stronger than in *Q. tepperi*; from which it also differs in the convex head, and flavous femora. The upper surface is so highly polished that it has an oily appearance; the elytra have a faint coppery-green gloss. On the left side of the prothorax, at about one-fourth from the base, there are two conspicuous punctures, but on the right side there is but one. I have not mounted a middle leg to examine it more clearly under the microscope, and as the teeth of the comb are somewhat obscured by bristles, could not count them, but they are close-set, and extend almost the entire length of the supporting joint.

***Quedius lateroflavus*, n. sp.**

♂. Flavo-castaneous; most of the head (both surfaces), a large patch on prothorax (the rest flavous), two spots on each elytron, a wide median stripe on upper surface of abdomen, and sides of metasternum black or blackish; legs,

antennae, and palpi more or less flavous. Sides with some long dark hairs, becoming numerous on anal styles; elytra, abdomen, and under surface with pale pubescence.

Head large and moderately transverse; with a few large punctures near eyes and just before neck. Eyes very large, extending almost to neck, distinctly longer than the inter-antennary space. Antennae with first joint as long as second and third combined, the others gradually decreasing in length till the ninth and tenth are slightly transverse, eleventh longer, incurved on one side of apex. Apical joint of palpi rather thin, distinctly longer than the subapical one. Prothorax rather large; with two submedian punctures in the usual positions, and a few about apex and sides. Elytra rather wide, a feeble depression on each side of suture; punctures not very dense and rather small, but mostly sharply defined. Abdomen on upper surface with punctures near sides and sparse (or absent) elsewhere, the tips of most of the segments with numerous short, longitudinal impressions; under surface with more numerous punctures, the tips impressed as on upper surface, apical segment notched. Front tarsi with three basal joints moderately dilated; middle tarsi with first joint not very large and scarcely as long as second and third combined. Length, 4-6 mm.

♀. Differs in being somewhat wider, dark markings more extended, abdomen not notched and front tarsi less dilated.

Hab.—Queensland: Mount Tambourine (A. M. Lea). New South Wales: Blue Mountains (Dr. E. W. Ferguson), Sydney, Ourimbah (R. Helms). Type, I. 12687.

A beautifully marked and rather robust species. On the type the dark part of the prothorax occupies most of the apex, it is then slightly narrowed to near the middle, then suddenly dilated and then strongly narrowed to the base, where it occupies a space slightly less than the width of the scutellum; one spot on each elytron is rounded, apical, and slightly nearer the suture than side, the other is larger, less sharply defined, of irregular shape and medio-lateral; the abdominal stripe is almost one-third of the width of each of the segments to the subapical one, near the apex of which it terminates, the stripe is brightly iridescent. The female has the prothoracic mark somewhat larger, the medio-lateral spot on each elytron larger, and irregularly conjoined to a larger subscutellar blotch (the latter is scarcely indicated on the type), and the abdominal stripe is wider, with a blackish spot at the sides of each of four segments (faintly indicated on the type). Under the microscope the basal joint of the middle tarsi, of the male, appears bristly, but not combed.

Quedius erythroderes, n. sp.

Black; prothorax bright reddish, antennae, palpi and legs flavous, apical segment of abdomen, most of subapical one, and tips of the others, more or less reddish. With a few dark hairs on sides, and becoming numerous on anal styles. Elytra, abdomen, and under surface with dark pubescence.

Head rounded, distinctly transverse between antennae and neck; with a few punctures behind eyes and before neck. Eyes (for the genus) rather small, shorter than the inter-antennary space, and not extending half-way to neck. Antennae rather long, first joint as long as second and third combined, these subequal, the others gradually decreasing in length but none transverse, eleventh distinctly longer than tenth, one side of apex incurved. Apical joint of palpi rather stout at base, slightly longer than the subapical one. Prothorax moderately transverse, very little narrowed to apex; with two rather small submedian punctures in the usual positions, and a few on the apical and lateral margins. Elytra scarcely wider than prothorax, scarcely elevated at suture; punctures sharply defined and not very small or crowded. Abdomen with punctures quite

as large as on elytra, but becoming smaller posteriorly. Three basal joints of front tarsi inflated. Length, 5.5-5.5 mm.

Hab.—South Australia: Mount Lofty (A. H. Elston), Wallaroo (A. M. Lea). Victoria: Forrest (H. W. Davey). Type, I. 12683.

A rather thin, parallel-sided species, at first glance resembling *Philonthus subcingulatus*, but head more rounded, prothorax shorter and with very different punctures; *Heterothops tibialis* is also similarly coloured but differs in the head, front legs, etc.; *Q. ruficollis* and *Q. thoracicus* are much wider, with much larger eyes, and are otherwise very different. It is apparently close to *Q. rubricollis*, but differs from the description in having the elytra not at all bluish, and the prothorax transverse. The elytra of the type, although black, are not of the intense polished black of the head, and on two specimens are more piceous-brown than black. I cannot be sure as to the sex or sexes of the four specimens before me, two have the tip of the under-surface of the abdomen straight in the middle, and two have it faintly incurved there, but the difference is so slight that it may not be indicative of sex; all of them have the basal joint of the middle tarsi combless, but in most species of the genus it is combless in both sexes.

Quedius apiciflavus, n. sp.

♂. Black; scutellum, elytra, margins of most of the abdominal segments, legs and antennae red, apical segment of abdomen and part of the subapical one flavous. Sides with a few dark hairs, becoming numerous on abdomen and dense on anal styles, a few hairs on tips of most of the abdominal segments and a distinct fringe on apex of elytra; elytra, abdomen, and under surface with pale (in some lights golden) pubescence.

Head somewhat rounded; with two punctures touching inner side of each eye, and a few near neck. Eyes very large, extending almost to neck, distinctly longer than the inter-antennary space. Antennae with basal joint as long as second and third combined, these subequal, eighth to tenth moderately transverse, eleventh considerably longer than tenth, incurved on one side of apex. Apical joint of palpi much longer than subapical one, its base not much thinner. Prothorax rather strongly narrowed to apex; with two strong submedian punctures in the usual positions, a few in the lateral and basal gutters, and two near apex. Elytra with rather sharply defined but small punctures. Abdomen with somewhat similar punctures to elytra, tips of most of the segments very finely serrated, the apex slightly notched on under surface. Front tarsi rather strongly dilated, basal joint of middle tarsi bristly but not combed. Length, 5.25-5.5 mm.

Hab.—Queensland: Mount Tambourine, two specimens from rotting leaves (A. M. Lea). Type, I. 12670.

A rather robust species, structurally fairly close to *Q. lateroflavus* but very differently coloured. In appearance it is fairly close to *Q. luridipennis* and *Q. metallicus*, but shorter and more robust, and tip of abdomen flavous. *Q. sidneensis* and *Q. fulgidus* are much larger species. Most of the abdomen (both surfaces) is brilliantly iridescent, the rest of the upper surface is highly polished but feebly iridescent; the middle of the antennae is slightly darker than the base and apex, but is not distinctly infuscated; in some lights the extreme tips of the elytra appear paler than the adjacent parts, but in other lights they appear darker.

Quedius subopacus, n. sp.

♀. Black; elytra and tarsi red, trochanters, parts of front legs, parts of anal styles and of antennae obscurely reddish. Sides with a few long dark hairs, becoming numerous about tips of abdomen; elytra, abdomen, and under surface with rather short, pale pubescence.

Head rather elongate; with a few punctures near eyes and before neck. Eyes large, distinctly longer than the inter-antennary space. Antennae with first joint as long as second and third combined, third distinctly longer than second, slightly longer than fourth and the length of fifth, the others to tenth slightly decreasing in length, but all longer than wide, eleventh scarcely one-fourth longer than tenth. Apical joint of palpi much longer than subapical. Prothorax strongly narrowed to apex, greatest width slightly more than greatest length; with two submedian punctures in the usual positions, and a few on all the margins. Elytra with small and not very sharply defined punctures, many resembling transverse scratches. Abdomen with larger punctures than elytra, five segments each with a row of setiferous ones at the tip. Front tarsi rather strongly inflated, basal joint of each of the others slightly longer than three following joints combined. Length, 9 mm.

Hab.—Tasmania: Launceston, in tussocks (A. M. Lea), unique.

Structurally and in general appearance close to *Q. luridipennis* and *Q. metallicus*, but head and prothorax very finely shagreened and subopaque; the anal styles are also thinner; the abdomen is shining, with a bluish, but not very brilliant iridescence.

Quedius duplopunctatus, n. sp.

♂. Black; elytra, antennae, palpi, legs, and tips of most of the abdominal segments, of a more or less dingy red. A few long dark hairs on sides, becoming more numerous on abdomen, and especially on the anal styles; elytra, abdomen, and under surface with dark pubescence.

Head moderately large and rounded, with a few large punctures close to eyes and before neck, and with numerous small ones scattered about. Eyes very large, distinctly longer than the inter-antennary space. Antennae with first joint as long as second and third combined, these subequal, the others to tenth gradually decreasing in length but none transverse, eleventh distinctly longer than tenth. Apical joint of palpi moderately thin, almost twice the length of the subapical one. Prothorax moderately transverse, strongly narrowed to apex; with two strong submedian punctures in the usual positions, and a few on the margins, with numerous small ones as on head. Elytra rather small; with fairly dense and rather small punctures, many of which are transversely subconfluent. Abdomen with punctures somewhat similar to those of elytra, but a setiferous row at the tip of each of five segments; tip of under surface notched. Three basal joints of front tarsi rather strongly inflated, basal joint of middle tarsi bristly but not combed. Length, 7.5-8.5 mm.

♀. Differs in having the abdomen somewhat wider, its tip evenly rounded and the front and middle tarsi thinner.

Hab.—Tasmania: Frankford, two specimens from moss (A. M. Lea).

The elytra are not conspicuously reddish as in *Q. metallicus*, *Q. luridipennis*, *Q. sulcicollis*, and others, but the species may be at once distinguished from these, and from all other Australian ones before me, by the numerous small but rather sharply defined punctures on the head and prothorax. The red of the elytra is fairly bright at the base, but it soon becomes obscured, till at the apex it is of a rather dark piceous-brown, the three basal joints of the antennae are paler than the others, parts of the legs are infuscated. In some lights the head and prothorax have a faint coppery gloss, the abdomen has a slight bluish iridescence; to the naked eye both specimens appear entirely black. The anal styles are unusually long, but as they are often partly withdrawn in specimens of the subfamily no reliance should be placed upon them.

Quedius pignerator, n. sp.

Black; elytra and tip of abdomen dull red, legs, antennae, and palpi somewhat paler, abdomen brilliantly iridescent. Sides with a few long dark hairs, becoming numerous on anal styles; elytra, abdomen, and under surface with somewhat ashen pubescence.

Head rounded and transverse, with a few distinct punctures near eyes and neck; with three shallow depressions in front: two between bases of antennae and the other forming a triangle with them. Eyes very large, extending almost to neck, much longer than the inter-antennary space. Antennae with first joint as long as second and third combined, these subequal, the following ones gradually becoming shorter, and two or three of them very feebly transverse, eleventh distinctly longer than tenth. Apical joint of palpi rather thin, twice the length of the subapical one. Prothorax moderately transverse, sides strongly narrowed to apex; with two conspicuous submedian punctures in the usual positions, and a few on the margins. Elytra with fairly dense and small punctures; suture moderately elevated. Abdomen with sparser but more sharply defined punctures than on elytra, each of four segments very finely serrated at apex. Three basal joints of front tarsi rather strongly dilated, basal joint of middle pair bristly but not combed. Length, 6.6-5 mm.

Hab.—New South Wales: National Park, two specimens from rotting leaves (A. M. Lea).

The head is smaller than on *Q. apiciflavus*, eyes larger, apical joint of palpi longer and body thinner; it is somewhat like *Q. luridipennis*, but is smaller and thinner than any specimen of that widely distributed species before me, eyes distinctly larger, and punctures of elytra and abdomen rather sparser; the abdomen is quite as brilliantly iridescent as on that species, but the iridescence is more golden, and varies from every point of view, and from one direction even disappears, from some the colours appear to be in narrow zones. It is apparently fairly close to *Q. nigrovirens*, but the head and prothorax are without a green tinge, and the abdomen is not a clear brown (as noted in Fauvel's table). The smaller specimen has the abdomen even more brilliantly iridescent than the other, and the glitter extends even to the legs, which are entirely pale; on the larger specimen the legs are partly black, and on the upper surface of its abdomen there are long bristles at the tips of two of the segments, as well as on their margins; but as each has the under surface of the abdomen slightly notched at the tip they are presumably males. There is a rather shallow puncture half-way between each of the submedian punctures on the prothorax, and the position of the rounded off hind angle.

Quedius nothus, n. sp.

Black; parts of elytra, tips of some of the abdominal segments, legs, two basal joints of antennae, and parts of the mouth and of the palpi more or less reddish. Sides with a few dark hairs, becoming numerous on tip of abdomen; elytra, abdomen, and under surface with dark pubescence.

Head rather large, convex, and slightly longer than wide; with a few distinct punctures near eyes and just before neck. Eyes (for the genus) rather small, not extending half-way to neck, and shorter than the inter-antennary space. Antennae with first joint as long as second and third combined, third slightly longer than second, seventh to tenth slightly transverse, the eleventh distinctly longer. Apical joint of palpi slightly longer than the subapical one. Prothorax moderately transverse, somewhat narrowed to apex; with two distinct submedian punctures in the usual positions, a few smaller ones in lateral and basal margins and near apex. Elytra with fairly dense and rather small punctures; suture not elevated. Abdomen with sparser punctures than on prothorax, the tips of four

segments very finely serrated. Front and middle tarsi not at all dilated. Length, 4.5-5 mm.

Hab.—Queensland: National Park (H. Hacker), Brisbane (O. W. Tiegs). New South Wales: Illawarra (H. J. Carter). Type, I. 12671.

A rather dingy species, with a somewhat curious head and bicolorous elytra, the abdomen with a rather feeble bluish iridescence. The head is moderately narrow, but not as narrow as in *Q. nelsonensis*, *Q. baldiensis*, etc. The reddish parts of the elytra are not sharply limited, although quite distinct, they are the shoulders, about one-fifth of the tips (sometimes connected along the sides with the shoulders), and the suture (although this is sometimes very obscure, and on one specimen no darker than the adjacent parts). On the prothorax (which on some specimens is not as black as the head), immediately in line behind each of the strong submedian punctures, there are one or two more, but they are very small and invisible from most directions, although fairly distinct when viewed obliquely from behind; they are certainly far from being as distinct as the seriate punctures of *Philonthus*. The minute serrations at the tips of four of the abdominal segments of this, and of some other species, are due primarily to closely placed setiferous punctures. On some specimens the head is considerably larger and wider than on others, but I can find no distinctive male characters on the abdomen and legs of such specimens; the ones with smaller heads have also shorter antennae so they are probably females, the others probably being males; but the front tarsi on even the big-headed ones are thin, so they are possibly all females.

Quedius melas, n. sp.

♂. Deep polished black; tarsi, two or three basal joints of the antennae (the others infuscated but not black) and some of the mouth parts reddish. Sides with some dark hairs, becoming more numerous on abdomen and dense on its apex; elytra, abdomen, and under surface with black pubescence.

Head large, somewhat rounded and moderately convex; with two large punctures touching each eye, and a few near neck. Eyes large, extending more than half-way to neck, slightly longer than the inter-antennary space. Antennae with first joint scarcely as long as second and third combined, third distinctly longer than second and much longer than fourth, sixth to tenth somewhat transverse, eleventh distinctly longer than tenth, incurved on one side of apex. Apical joint of palpi somewhat thinner and slightly longer than the subapical one. Prothorax moderately transverse and narrowed to apex; with two conspicuous submedian punctures in the usual positions, and two slightly larger ones near the apex, with a few smaller ones in the basal and lateral margins. Elytra with fairly dense and not very large punctures, usually sharply defined, but many transversely confluent. Abdomen with sparser but larger punctures than on elytra, the tips of four segments (both surfaces) very finely serrated, apex of under surface slightly notched. Three basal joints of front tarsi dilated into a wide pad, basal joint of middle tarsi long and rather wide. Length, 7.8-8.5 mm.

♀. Differs in having the head slightly smaller, apex of abdomen not notched, front tarsi less strongly (although conspicuously) dilated, and basal joint of middle tarsi smaller.

Hab.—New South Wales: Blue Mountains (Dr. E. W. Ferguson). Victoria: Melbourne (Ejnar Fischer, No. 1634), Ringwood in July and Beaconsfield in December (F. E. Wilson). Type, I. 12871.

A deep black, shining species, in general appearance close to the one commented upon as possibly *Q. iridiventris*, but wider, antennae stouter, paler, at least five joints transverse, the third joint conspicuously longer than the second,

and this slightly longer than the fourth. The antennae are practically identical with those of *Q. mesomelinus*, but the elytra are uniformly dark and with much denser punctures. It is apparently allied to *Q. hollandicus*, but the antennae are not black and the eyes are large. In some light the prothorax has a faint bluish gloss; the abdomen has a bluish or purplish iridescence, but it is not very brilliant. The basal joint of the middle tarsi of the male is furry rather than bristly, with the fur projecting over the second joint. Structurally and in general appearance it is very close to *Q. latifrons*, from New Zealand, but the male has a smaller head, the abdominal punctures are much sparser and the elytra are entirely black.

***Quedius stenocephalus*, n. sp.**

Black; shoulders, antennae (some of the median joints infuscated), palpi, and legs more or less reddish. Sides with a few dark hairs becoming numerous on abdomen and dense on its tips; elytra, abdomen, and under surface with blackish pubescence.

Head rather long and thin, with a few distinct punctures near eyes and neck. Eyes rather small, scarcely as long as the inter-antennary space. Antennae with first joint about as long as second and third combined, third slightly longer than second, seventh to tenth transverse, eleventh moderately long. Apical joint of palpi rather thin, but slightly dilated near base, more than twice the length of the subapical joint. Prothorax not much wider than the greatest length, strongly narrowed to apex; with two distinct submedian punctures in the usual positions, and some smaller ones in the basal and lateral margins. Elytra not very small, suture slightly elevated throughout; with fairly dense and rather small, but sharply defined punctures. Abdomen with sparser but more distinct punctures than on prothorax, tips of four segments very finely serrated. Front and middle tarsi thin. Length, 4.75-5.25 mm.

Hab.—Queensland: Mount Tambourine, one specimen from rotting leaves in January (A. M. Lea). New South Wales: Kurrajong in July (H. J. Carter). Type, I. 12677.

The narrow head and general outlines are suggestive of some species of *Acylophorus*, but the basal joint of antennae is of normal length for *Quedius*, and the apical joint of the maxillary palpi is long and thin. The head is much as in *Q. nelsonensis*, but the elytra are larger and apparently cover wings, and less of their base is pale; the elytra are much larger than on the species commented upon as probably *Q. baldiensis*; the head is almost as small as in *Q. analis*, but the eyes are smaller, and the tips of the antennae are pale. The elytra at first appear to be entirely blackish, but on close examination are seen to be reddish about the shoulders; the palpi and front legs are almost flavous; the abdomen (both surfaces) is brilliantly iridescent, and the iridescence extends to some of the legs; in some lights the prothorax has a faint silken gloss. On both specimens the tip of the under surface of the abdomen is very feebly incurved, so, despite the thin front tarsi, they are probably males.

QUEDIOPSIS, Fvl., Cat., p. 437.

ABDOMINALIS, Fvl. V.

LUGUBRIS, Fvl. V.

ACYLOPHORUS, Nordm., Cat., p. 437.

ASPERATUS, Fvl. Q., V.

INDIGNUS, Blackb. S.A.

GLABERRIMUS, Herbst. N.S.W.

RUFICOLLIS, Mots. Q., N.S.W.,

Introduced.

N.T. Introduced.

ACYLOPHORUS GLABERRIMUS, Herbst.

A specimen from Ebor, in the Queensland Museum, appears to belong to this species, which has not previously been recorded as Australian; six synonyms are noted in the Catalogue.

ACYLOPHORUS RUFICOLLIS, Motsch.

I have not seen the original description of this species, but a specimen sent by Mr. G. J. Arrow (from Adelaide River) was stated by him to agree "quite well with Ceylon examples considered by Kraatz and Fauvel to be *A. ruficollis*. Dr. Sjöstedt also sent two Queensland specimens identified by Dr. Bernhauer as belonging to the species. Other specimens before me are from Endeavour River, Cairns, Townsville, Rockhampton, and Bribie Island (in Queensland); and from near Sydney (in New South Wales). The species is very distinct by its bright red prothorax, reddish subapical segment of abdomen, and small head with long basal joint of antennae.

ATANYGNATHUS, Jacobson, Cat., p. 439.

TERMINALIS, Er. (*Tanygnathus*).

var. *australasiae*, Fvl. (*Tanygnathus*). Q., N.S.W., V.

ATANYGNATHUS TERMINALIS, Er.

Two specimens from New South Wales (Nepean River and Sydney) appear to belong to the variety *australasiae*.

Two others, from Queensland, possibly represent another variety; their elytra are entirely black, three apical joints of antennae whitish-flavous, and abdomen more brilliantly opalescent than in the preceding specimens, but with the tips of the segments less conspicuously reddish.

CRYPTOMMATUS,⁽¹³⁾ Matth., Cat., p. 440.

JANSONI, Matth. (*Amblyopinus*). V., Tas.

CRYPTOMMATUS JANSONI, Matth.

The nine specimens of this species that I have seen were all taken clinging to the anal hairs of bush rats, in Tasmania, by Messrs. Aug. Simson and H. M. Nicholls, and in Victoria by Mr. E. Jarvis. The male only, on the basal joint of the middle tarsi, has a comb with a dense fringe of setae as on the males of many species of *Quedius*; in Matthews' figure of the middle leg⁽¹⁴⁾ only the teeth of the comb are shown.

(13) Matthews, Cist. Ent., iii., p. 87, considered that *Myotyphlus* was a catalogue name only, and unsuitable for the present genus.

(14) Matthews, L.c., ii., pl. 6, fig. 7.