

FURTHER NOTES ON AUSTRALIAN COLEOPTERA,  
WITH DESCRIPTIONS OF NEW GENERA AND  
SPECIES.

By the Rev. T. BLACKBURN, B.A.

XXVII.

[Read October 2, 1900.]

LAMELLICORNES.

HETERONYX.

*H. grandis*, sp. nov. Robustus, elongato-ovatus; postice manifeste dilatatus; minus nitidus; piceo-ferrugineus, antennis pedibusque paullo dilutioribus; pilis cinereis subtilibus sat elongatis sat crebre vestitus; capite (clypeo incluso) sat grosse ruguloso; prothorace aspere subtiliter confertim, elytris sat crebre minus subtiliter, pygidio fere ut elytra sed magis leviter, punctulatis; clypeo antice late leviter rotundato, sutura clypeali bene determinata, angulata; pronoto quam longiori ut 5 ad 3 latiori, lateribus leviter arcuatis, basi modice bisinuata, angulis anticis acutis sat productis posticis obtusis; elytris obsoletissime interrupte substriatis; tibiis anticis extus obtuse tridentatis; labro longe sub clypeum sito; antennis 9-articulatis; coxis posticis ad latera quam metasternum parum brevioribus, quam segmentum ventrale 2<sup>um</sup> multo longioribus; tarsis posticis minus elongatis, articulo 2° quam 1<sup>us</sup> manifeste longiori; unguiculis appendiculatis, parte apicali quam basalis parum breviori. Long., 8 l.; lat., 4 l.

This remarkably fine *Heteronyx* is near *piceus*, Blanch. In my tabulation of the species of that group (P.L.S., N.S.W., 1892, pp. 488-9) it must be placed next after *alpicola*, Blackb., as follows:—

HHHH. Sculpture of pronotum very much finer and  
closer than of head and elytra ... .. *grandis*, Blackb.

The elytra of this species are not truly striate, but their surface is slightly (scarcely visibly) uneven owing to the presence of faint longitudinal wide elevations, the margins of which, from a certain point of view, give the elytra a scarcely noticeable quasi-striate appearance.

Victoria; Dividing Range (unique in my collection).



## ELATERIDÆ.

## CHROSIS.

*C. angusticollis*, sp. nov. (Mas). Angusta; valde elongata; ferruginea, prothorace coccineo (in medio nigricanti), capite antennisque nigris, pedibus piceis; capite sparsim fortiter punctulato, pilis albidis sat elongatis sparsim vestito; prothorace quam ad basin latiori vix (quam ad medium latiori ut 10 ad 7) longiori, supra longitudinaliter profunde trisulcato, ut caput pubescenti, sparsim subtiliter (ad latera magis crebre magis grosse) punctulato, antice fere truncato, lateribus sat parallelis, angulis posticis fortiter divaricatis; elytris breviter (apicem versus magis longe) pubescentibus, ad apicem oblique subtruncatis, sat fortiter striatis, interstitiis leviter convexis punctulatis. Long., 8 l.; lat., 2 l. (vix).

Allied to *C. trisulcatus*, Er., but extremely distinct by, *inter alia multa*, the very much sparser puncturation of its head and prothorax and the narrower and more parallel form, and the more abruptly divaricate hind angles of the latter. The antennæ considerably passing the base of the prothorax indicate the specimen before me to be a male.

Victoria (Dividing Range).

## PARASAPHES.

*P. quinquesulcatus*, sp. nov. Angustus; valde elongatus; ferrugineus, capite antennis et prothoracis vittis 2 nigricantibus, femoribus infuscatis; capite crebre subfortiter punctulato, pilis albidis sat elongatis vestito; prothorace quam ad basin latiori ut 10 ad 8 (quam ad medium latiori ut 10 ad 7) longiori, supra longitudinaliter sat profunde 5-sulcato, in partibus medianis elevatis glabro sparsim subfortiter punctulato, alibi ut caput pubescenti confertim subtiliter (latera versus magis grosse) punctulato, antice subtruncato, lateribus fere rectis, angulis posticis haud divaricatis; elytris breviter pubescentibus, ad apicem valde acuminatis, sat fortiter striatis, interstitiis leviter convexis punctulatis. Long., 7 l.; lat.,  $1\frac{1}{2}$  l.

There seems to be no doubt that this species and the following should be associated generically with that for which Dr. Candèze proposed the name *Parasaphes*. They bear a remarkable general resemblance to *Chrosis*, but differ from it in respect of important structural characters,—notably their very much shorter head and the widely different form of their mesosternum and tarsi. The former is (not horizontal but) strongly declivous; and the latter have their basal joint very elongate, the 2nd scarcely half as long as the basal one and slightly dilated; the 3rd still shorter,



more strongly dilated and sublamellate; the 4th extremely small (little more than a nodule); the 5th about the same length as the preceding 3 together. I have before me specimens of an insect that seems certainly to be Candèze's typical species of the genus (*P. elegans*), but it is from Tasmania (my own capture) not Queensland (Candèze's locality.) There are thus known to me three species of the genus, *P. elegans* being distinguishable from the other two by, *inter alia*, the much less acuminate apices of its elytra, and *P. quinquesulcatus* from the other two by, *inter alia*, the non-divaricate hind angles of its prothorax. In all three the carina within the hind angle of the pronotum is very strongly defined and continued more or less distinctly to, or even beyond, the middle of the pronotum. My specimen of *P. quinquesulcatus* is probably a female, as the antennæ scarcely pass the base of the prothorax.

Victoria (Dividing Range).

*P. bicolor*, sp. nov. Angustus; valde elongatus; niger, pronoti sulco mediano lateribusque et prosterni lateribus rufis; capite crebre subfortiter punctulato, pilis albidis sat elongatis vestito; prothorace quam ad basin latiori ut 7 ad 6 (quam ad medium latiori ut 7 ad 5) longiori, supra longitudinaliter sat profunde 5-sulcato, in partibus medianis elevatis glabro sparsim subfortiter punctulato, alibi ut caput pubescenti, confertim subtiliter (latera versus magis grosse) punctulato, antice subtruncato, lateribus leviter arcuatis, angulis posticis divaricatis; elytris breviter pubescentibus, ad apicem valde acuminatis, sat fortiter striatis, interstitiis punctulatis leviter convexis.

Maris antennis prothoracis basin longe, feminae parum, superantibus. Long.,  $5\frac{3}{4}$ — $6\frac{1}{2}$  l.; lat.,  $1\frac{1}{5}$ — $1\frac{1}{2}$  l.

Victoria (Dividing Range).

#### MALACODERMIDÆ.

##### SELENURUS.

*S. fernshawensis*, sp. nov. Elongatus; capite nigro, antice flavo-notato, mandibulis plus minusve luteis, antennis palisque nigro-piceis; prothorace luteo, macula magna discoidali nigra ornato, hac antice margines laterales attingenti, postice bifida; elytris viridibus ante apicem macula suturali flava ornatis; corpore subtus nigro, flavo-maculato; pedibus piceis; capite prothorace lævibus; hoc subquadrato postice paullo angustato, margine antico late rotundato, angulis subrotundatis; elytris crebre rugulose punctulatis, quam abdomen multo brevioribus, ad apicem dehiscentibus. Long., 4—5 l.; lat.,  $\frac{4}{5}$ —1 l.



Congeneric with a species I described in Tr.R.S., S.A., 1892, pp. 220-221, but referred to *Selenurus* subject to the doubt I have already expressed (*loc. cit.*).

Victoria (Fernshaw).

#### TELEPHORUS.

*T. pulchellus*, Macl. var. (?) *notophilus*. I have before me two specimens belonging to the S.A. Museum, which appear to be a remarkable variety of *T. pulchellus*. They differ from the type in having a wide very conspicuous and sharply limited yellow fascia on the elytra a little behind the middle. I can, however, find no other difference. I have seen hundreds of specimens of *T. pulchellus*, but never one (except these) in which the elytra were not unicolorous. The specimens before me are from Carrieton (South Australia) and are male and female.

#### CLERIDÆ.

The Australian *Cleridæ* are much in need of revision, such descriptions as have been published being scattered through a great variety of (chiefly non-Australian) works, and many of them still standing as referred to genera with which they have nothing to do. The following notes are a contribution to the task of reducing them to order.

I am not aware of the existence of any memoir showing the relation to each other of the various genera among which the Australian *Cleridæ* are distributed, except Lacordaire's "Genera des Coléoptères," where such of the Australian genera as were known forty-three years ago find a place among the *Clerid* genera of the world, and some memoirs by the Rev. H. S. Gorham dealing with such as were known of them in certain groups of the *Cleridæ* twenty-four years ago, where again they are placed among the *Cleridæ* of the world belonging to those groups. I have, therefore, considered it desirable to provide a tabulated statement of the characters distinguishing the genera to which the known Australian *Cleridæ* can be referred for the use of students in Australia.

Herr Lohde has recently published a catalogue of the *Cleridæ* of the world, which is of the highest possible value, and includes nearly all the corrections that have been made in the generic position of the Australian species, but as a large part of the erroneous generic determinations of the earlier describers have never been corrected in any published treatise those determinations are still, of course, uncorrected in this recent catalogue. As far as possible I have corrected these in the following pages.

I begin with a tabulation of the characters of the *Clerid* genera known to occur in Australia, and then furnish more particular notes concerning some of those genera, together with the diag-



nosis of two new genera, descriptions of some new species, and a revision of one genus (*Aulicus*).!

Tabulation of Australian *Clerid* genera :—

- A. Eyes more or less emarginate.
- B. All the tarsi (viewed from above) distinctly 5-jointed.
  - C. Head elongate, parallel ... .. *Cylidrus*.
  - CC. Head oval ... .. *Tillus*.
- BB. Genera not having all the tarsi (viewed from above) distinctly 5-jointed.
- C. The front tarsi (viewed from above) distinctly 5-jointed.
- D. Eyes strongly emarginate.
- E. Space between the eyes considerably wider than diameter of part of eye visible from in front.
  - F. Club of antennæ lax and long ... *Clerus*.
  - FF. Club of antennæ abrupt and comparatively short ... .. *Eleale*.
  - EE. Space between eyes equal to diameter of part of eye visible from in front ... *Stigmatium*.
  - EEE. Space between eyes much narrower than diameter of part of eye visible from in front ... .. *Omadius*.
- DD. Eyes scarcely emarginate ... .. *Orthrius*
- CC. The front tarsi viewed from above appear to have only 4 joints.
- D. The appearance (from above) of the tarsi having only 4 joints arises from the basal joint being concealed under the second.
- E. The eyes very coarsely granulate.
- F. The apical joint of the maxillary palpi securiform ... .. *Opilo*.
- FF. The apical joint of the maxillary palpi elongate subtriangular.
  - G. Body winged ... .. *Natalis*.
  - GG. Body apterous ... .. *Cormodes*.
- EE. The eyes much more finely granulate.
- F. The apical joint of the maxillary palpi not securiform.
  - G. Club of antennæ gradual and very feeble ... .. *Metabasis*.
  - GG. Club of antennæ abrupt and strong ... *Cleromorpha*.
  - FF. The apical joint of the maxillary palpi more or less strongly securiform.
    - G. Mesosternum vertical in front ... *Zenithicola*.
    - GG. Mesosternum not vertical in front.
    - H. Elytra with conspicuous basal fascicles ... .. *Trogodendron*.
    - HH. Elytra with large basal tubercles ... *Olesterus*.
    - HHH. Elytra at base even (or nearly so).
    - I. Pronotum with a conspicuous ante median transverse sulcus.
    - J. Elytra not more than twice as long as (at their base) wide ... *Aulicus*.
    - JJ. Elytra much more than twice as long as (at their base) wide.



- K. The whole surface of the elytra coarsely rugulose; head elongate ... Scrobiger.
- KK. Apical one-third or more of elytra smooth; head short ... Neoscrobiger.
- II. Pronotum not having an antemedian sulcus.
- J. Hind tarsi much longer and narrower than front tarsi ... Tarsostenus.
- JJ. All the tarsi very similar *inter se* ... Tarsostenodes.
- DD. The appearance (from above) of the tarsi having only 4 joints arises from the 4th joint being a mere nodule.
- E. Antennal club composed of 8 serrate joints ... Tenerus.
- EE. Antennal club composed of not more than 4 joints.
- F. Apical joint of maxillary palpi strongly securiform ... Thanasimomorpha.
- FF. Apical joint of maxillary palpi not (or scarcely) securiform.
- G. Eyes very strongly granulate ... Pylus.
- GG. Eyes much less strongly granulate.
- H. Antennal club abrupt and strong.
- I. Pronotum much expanded laterally but scarcely margined ... Parapylus.
- II. Pronotum conspicuously margined laterally.
- J. Apical joint of maxillary palpi elongate-triangular ... Corynetes.
- JJ. Apical joint of maxillary palpi oval ... Necrobia.
- HH. Antennal club elongate narrow and feebly defined .. Crobenia.
- CCC. The front tarsi (viewed from above) appear to have only 3 joints ... Paratillus.
- AA. Eyes entire.
- B. Elytra wider at their base than the base of the prothorax ... Lemidia.
- BB. Elytra not wider at their base than the base of the prothorax ... Allelidia.

## TILLUS.

The only Australian species that stand in this genus in Catalogues (Lohde's included) are *hilaris*, Westw., and *dux*, Westw. The former of these is stated by Gorham (Cist. Ent., II., p. 62) to be congeneric with *Tillus bipartitus*, Blanch., and greatly to resemble it, but not to be a *Tillus*. *T. bipartitus* is the type of my genus *Thanasimomorpha* (my identification of *T. bipartitus* was confirmed by Dr. Sharp). I have before me a small *Clerid* from Victoria which agrees well with Westwood's description of *T. hilaris* (a Tasmanian species) in every respect except in being a trifle small and having its tibiae and tarsi infusate. It differs



from *T. bipartitus* considerably in the sculpture of its pronotum but otherwise its structural characters seem identical,—granulation and shape of eyes, length and structure of antennæ, structure of palpi, &c. Like *T. bipartitus* it seems to have only four tarsal joints even under a strong power, and it is not easy to feel quite certain which is the missing fifth joint, but I am fairly confident that it is the penultimate which is abnormal, and exists only as a minute nodule at the base of the apical joint. I have no doubt that the specimen before me either is *T. hilaris* or is excessively close to it, and that *T. hilaris* is a *Thanasimomorpha*, but whatever it is, it is not a *Tillus*.

*T. dux*, Westw., is a complete enigma. I incline to the opinion that its author was mistaken in calling its claws appendiculate, in which case it might well be a large *Natalis*, but if he was not mistaken I can make no suggestion about it except in saying that the description, and especially the size, do not suggest a true *Tillus*. I am therefore of opinion that there is no true *Tillus* known in Australia. It certainly seems unlikely that among all the Australian *Cleridæ* before Mr. Westwood there was not a *Natalis* but that there was a specimen, of the remarkably large size of a *Natalis*, subsequently (so far as I can discover) not mentioned by any author, and appertaining to a different genus.

#### OPILO.

To this genus nine Australian species are attributed in Masters' Catalogue; in Lohde's Cat. they stand at the same number but are not the same insects, *O. (Notoxus) ephippium*, Boisd., and *mærens*, Westw., having been removed, the former (vide Tr. Roy. Soc., 1891, p. 303) having been shown to be a *Trogodendron* and the latter having been referred (I think wrongly,—vide infra) by Chevrolat to *Scrobiger*. Their places are filled by *O. variipes*, Chevr. (apparently omitted accidentally by Masters) and *O. floecosus*, Schenk., on which a note will be found below. A change of name also occurs, *Whitei*, Gorh., being substituted for *apicalis*, White (nom. præocc.), a synonym that appears to have escaped Mr. Masters' notice.

Concerning the species referred to *Opilo* in Lohde's Catalogue I offer the following notes:—

*O. congruus*, Newm. A true *Opilo*; very variable and common all over Australia.

*O. eburneocinctus*, Gorh. Not known to me. Probably a true *Opilo*.

*O. ephippiger*, White. Identical with *Trogodendron (Notoxus) ephippium*, Boisd., as pointed out by me (Tr. Roy. Soc., S.A., 1891, p. 303). Herr Lohde does not appear to have observed my note.



*O. floccosus*, Schenkl. I have in my collection a *Olerid* which agrees with Herr Schenkling's description of this species in every respect except that it has the palpi of a *Natalis* and should be referred to that genus. As Schenkling states that *floccosus* has the palpi of an *Opilo* I am compelled to suppose that the insect before me is not his species in spite of its agreement in other respects with his excellent description. I shall not however venture on describing it on the ground that he may possibly have incorrectly observed the palpi he described. It bears some resemblance to but is quite distinct from *Natalis*, *Leai*, Blackb.

*O. incertus*, Macl. Not known to me. Probably a true *Opilo*.

*O. Pascoei*, Gorch. A true *Opilo*. I have it from Victoria.

*O. sexnotatus*, Westw. Not a true *Opilo* as it has finely granulated eyes. I give it a new generic name (*vide infra*).

*O. variipes*, Chevr. A true *Opilo*, apparently very close to *O. congruus*, Newm.

*O. Whitei*, Gorch. (*apicalis*, White). Unknown to me. I doubt its being a true *Opilo*.

Thus it appears that there are five known Australian species confidently referable to *Opilo* and two doubtfully attributable to it.

#### NATALIS.

*N. debilis*, sp. nov. Mas.? Elongata; angusta; sat parallela; subtus sat sparsim pubescens; supra pilis erectis elongatis sparsis vestita; nigra, pedibus antennis et corpore subtus picescentibus; antennis sat elongatis sat gracilibus; oculis minus prominulis; capite confertim subtilius subaspere punctulato, puncturis paullo majoribus sparsim intermixtis; prothorace quam latiori ut 7 ad  $5\frac{1}{3}$  longiori, ut caput punctulato et ad latera nonnihil (fere ut *N. porcata*, Fab.) ruguloso, sulco longitudinali mediano lineari sat elongato impresso, pone medium utrinque fortiter dilatato-rotundato; scutello confertim subtiliter punctulato; elytris ad apicem inermibus, seriatim punctulatis, puncturis quadratis (antice profundis sat magnis, postice gradatim minoribus minus profunde impressis); interstitiis alternis leviter costiformibus; tibiis anterioribus 4 arcuatis; abdomine sparsim subtiliter punctulato, segmentis postice late membranaceo-marginatis; pedibus sat gracilibus, femoribus posticis perlongis; tarsis sat elongatis sat gracilibus. Long.,  $6\frac{1}{2}$  l.; lat.,  $1\frac{3}{5}$  l. (vix).

At once distinguishable from all the previously described *Natales* except *porcata*, Fab., by the close even puncturation of the entire disc of its pronotum and the feebleness of the lateral rugulosity of that segment. From *porcata* it differs *inter alia* by its black colour, by its distinctly less convex eyes, by its very much more elongate prothorax, by the very evidently closer and



finer puncturation of its pronotum, and by the very wide membranous hindmargin of each ventral segment,—which is certainly not due to the abdomen of the specimen before me being distorted or unduly dilated. I have little doubt of the specimen described being a male, in which case the species is distinguished from many of its congeners (but not from *porcata*, Fab.) by the absence of patches of close sexual puncturation on the ventral segments. In my tabulation of *Natalis* (Tr. R.S., S.A., 1899, pp. 29-30) the inclusion of this species would cause the substitution for the last line of the following:—

AA. Disc of prothorax closely and evenly punctulate.

B. Prothorax much longer than wide ... .. *debilis*, Blackb.

BB. Prothorax very little longer than wide .. ... *porcata*, Fab.

S.A. (basin of Lake Eyre); taken by Herr Koch near Farina.

#### THANASIMUS.

There seems to be reason for regarding all the Australian insects that have been referred to this genus as incorrectly placed there. *T. accinctus*, Newm., has already been made the typical species of a new genus (*Metabasis*, Gorh.), and Mr. Gorham has already referred (correctly, I have no doubt) *T. sculptus*, Macl., and his own *T. rufimanus* to the genus *Aulicus*. *Necrobia eximia*, White (which has been attributed to *Thanasimus* by some authors,—e.g., Gorham) is certainly not a *Thanasimus* in my opinion,—but here I am writing from memory (having examined a specimen not at this moment available) and so will not at present discuss its position more particularly. I know of only three other Australian species that have been placed in *Thanasimus* (viz., *acerbus*, Newm., *confusus*, Newm., and *cursorius*, Westw.), and they undoubtedly belong to the genus *Stigmatium*. They are all described insufficiently for confident identification among congeners so numerous and superficially so closely resembling each other as are the species of *Stigmatium*, but it seems to me probable that *acerbus* and *cursorius* are founded on the same insect and that it is also the same which M. Kuwert has since described as *S. dispar*. I think I know *S. confusus*, Newm., as a species that I have met with in Victoria (Newman's locality) not rarely, and it is probably identical with one or more of the species that have since been described as *Stigmatia* by other authors, but without examination of types it is difficult to arrive at a confident opinion.

#### CLERUS.

I regard it as extremely doubtful whether any true *Clerus* occurs in Australia. Eight Australian species are ascribed to the genus in Masters' Catalogue, one of which (*crassus*, Newm.) disappears in Lohde's Cat., having been reported (Tr. R. Soc., S.A.,



1891, p. 303) as a *Zenithicola*. Of the remainder *C. apicalis*, Macl., *Mastersi*, Macl., and *delicatulus*, Bohem., are *Aulici* (as noted below); *C. cruciatus*, Macl., is probably a *Lemidia*,—certainly not a *Clerus*; *ventralis*, Westw., is evidently an *Olesterus*; *C. guttulus*, White, has been stated by Gorham to be congeneric with *Tillus bipartitus* and therefore mentioned by me (*loc. cit.*, p. 304) as probably a *Thanasimomorpha* (but I have since identified it, and now place it,—as noted below,—in my new genus *Tarsostenodes*). *C. sepulcralis*, Westw., remains; I have not to my knowledge seen it, nor do I find anything in its description on which I can form a decided opinion as to its generic position. I note however that in a recent memoir Herr Schenkling mentions it as "*Clerus*" *sepulcralis* from which it seems probable that it is at any rate near *Clerus*. Perhaps it is an *Orthrius* (an Australian ally of *Clerus* named by Mr. Gorham and distinguished *inter alia* by its scarcely emarginate eyes).

#### CLEROMORPHA.

In his diagnosis of this genus (*Cist. Ent.*, II., p. 83) Mr. Gorham indicates the number of tarsal joints visible on their upper surface as doubtful,—owing I presume to the type having lost its tarsi. His conjecture that the number is four is correct.

#### AULICUS.

Under this name Spinola (its author) included species from America and Australia. Later, Gorham expressed the opinion that the species of the two continents ought to be separated, but says that not having examined any of the American species he "has not ventured on the alteration," and at the same time proposes the name *Phlogistus* for the Australian species, though admitting it doubtful whether Spinola did not consider an Australian species the typical one. This is decidedly puzzling, and does not seem to me to furnish sufficient reason for rejecting Spinola's name in respect of the Australian species, although I observe that in his recent "*Cleridarum Catalogus*," Herr Lohde has done so but (as was of course to be expected in a mere Catalogue) without assigning a reason. It is quite possible that the need of the change of name may eventually be demonstrated, but in the absence of a diagnosis of *Phlogistus*,—which has not been provided by any author,—I retain the name *Aulicus* for the present.

The Australian species of this genus are in great confusion, not a few of them having been attributed by their authors to the old genera *Thanasimus* and *Clerus* and still standing there even in Herr Lohde's recent Catalogue. Having recently had occasion to examine a considerable number of specimens of *Aulicus* I have



taken the opportunity to study the widely scattered literature of the subject and offer the following notes as an attempt at a systematic treatment of the Australian species. Under the generic name *Aulicus* 21 specific names have been proposed for them, and two species described as *Thanasimi* and one described as *Clerus* have been shown to be in reality *Aulici*,—viz., *T. rufimanus*, Gohr., and *sculptus*, Macl., and *C. instabilis*, Newm. I now draw attention to the fact that the following also appear to be decidedly members of the same genus,—viz., *Clerus Mastersi*, Macl., *apicalis*, Macl., and *delicatulus*, Bohem. Beside the above *Xylotretus scrobilata*, Spin., is stated by Gorham to be “probably an *Aulicus*,”—a reference that is followed (but with a ?) by Herr Lohde. In this I cannot concur. Spinola describes the insect as having “5 or 6” rows of large deep foveæ on the elytra. But in all the large number of *Aulici* I have examined I have never seen one in which there is any doubt at all about the number of rows on each elytron being *ten*,—so emphatically is this the case that I am quite satisfied of the presence of that number of rows of quadrate foveolæ being a reliable generic character (as far as Australian species are concerned). Moreover Spinola describes *X. scrobilatus* as having a “transverse fold” on the non-foveolate apical portion of the elytra,—a character to which there is no approximation whatever in any *Aulicus* (or indeed in any Australian *Clerid*) known to me. I incline to the opinion that *X. scrobilatus* is erroneously attributed to Australia. If not, it probably represents a genus as yet uncharacterised. But if the “transverse fold” can be disregarded as (say) a deformity of the individual specimen, it is possible that the insect in question is a *Zenithicola*, as in species of that genus (e.g., *australis*, Boisd.) the foveolæ of the lateral are so much smaller than those of the discal series that it would be correct to say there are “about 5 or 6 rows of *large deep* foveæ,” though even in that case one would wonder that the describer had not added that there are also other rows of much smaller foveæ. The generic identification of *X. scrobilatus* is impossible without an inspection of the type, but whatever it may be it is not an *Aulicus* unless the description is outrageously incorrect. Unfortunately Spinola gives a wrong reference to his figure, which imparts a further difficulty into the matter (as Gorham points out, Cist. Ent., II., 88), but the figure that is probably intended for *X. scrobilatus* looks as if it might represent a *Zenithicola*.

Altogether, then, there are 27 names that must be regarded as having been given to Australian species of *Aulicus*, but a considerable number of these are synonyms, some of which have already been shown to be so. It will be convenient, however, to recapitulate them all now. The following, however, I believe to be founded on error, or mere conjecture:—



*A. episcopalis*, Spin., wrongly regarded by Spinola as a synonym of *instabilis*, Newm. (discussed below).

*A. corallipes*, Chevr., quoted by Herr Lohde as a synonym of *foveicollis*, Macl. This seems to me highly improbable. No reason is given for the reference. *A. foveicollis* is practically undescribed. It is a Queensland species, and the type is at Sydney.

*A. corallipes* is a familiar Tasmanian species.

*A. castanipes*, Westw., and *A. tibialis*, Westw. (described by White, *Clerid*, IV. 60) placed in all catalogues known to me as synonyms of *A. instabilis*, Newm. I consider this almost certainly wrong. It is possible the names were given to varieties of *A. episcopalis*, Spin., but the matter could not be cleared up without examination of the types (which are no doubt in the Br. Museum).

The following synonymy seems to be correct :—

*A. affinis*, Gorh.=*A. samaragdinus*, Gorh. Its author says of *affinis* "possibly only a var."

*A. varicolor*, Chevr.=*A. multicolor*, Chevr. Its author says of *varicolor* "probably only a var."

*A. albofasciatus*, Gorh.=*A. ochrurus*, Chevr. Mr. Gorham has already noted this synonymy. Both descriptions were published in 1876, and it seems doubtful which has the priority.

*A. (Thanasmus) rufimanus*, Gorh.=*A. chrysurus*, Chevr. Already noted by Mr. Gorham.

*A. splendidus*, Chevr.=*A. sculptus*, Macl. Already noted by Mr. Gorham.

The following synonymy has not been noted previously :—

*A. ochrurus*, Chevr. (= *albofasciatus*, Gorh.) = *A. (Clerus) apicalis*, Macl. (Macleay's name has priority).

*A. viridissimus*, Pasc. is (as more fully indicated below) probably a synonym for *A. (Clerus) delicatulus*, Bohem.

It should be added that in Herr Lohde's Catalogue the name "auratus, Gory., i.l." occurs as a synonym of *A. instabilis*, Newm. I do not know this insect, and have not seen the description of it, so can express no opinion about it.

Assuming the correctness of the above synonymic notes, 9 of the 27 names referred to above must be regarded as mere synonyms.

Of the 18 names remaining I have been able to identify 14 with insects on which they appear to have been founded. The four that I have not been able to identify are :—

*A. foveicollis*, Macl. Practically undescribed.

*A. imperialis*, Gorh. Seems to be differently colored from any *Aulicus* known to me. The structural characters mentioned would fit many *Aulici*.



*A. lemoides*, Pasc. I have not seen any *Aulicus* that will fit the description. The few structural characters mentioned are founded on a comparison with "*A. instabilis*, Newm.," but it is impossible to ascertain (without reference to his collection) to what *Aulicus* Pasc. attributed that name. I should conjecture *A. lemoides* to be possibly a var. of *A. rufipes*, Macl.

*A. mellinipes*, Chevr. I am convinced that I have not seen this species. If the statement that its prothorax is longer than wide is strictly accurate (by measurement) I am doubly sure that I have not seen it.

In the following pages I describe nine new species of *Aulicus* and furnish notes on several of the previously described species. I also furnish a tabulation of all the species except the four remarked on above. In this tabulation I have found it necessary in several instances to rely upon colour distinctions, because in the case of species that I have identified only by means of the descriptions it might be misleading to characterise them by characters not actually mentioned in the descriptions, as there is of course a possibility of some of the identifications being wrong,—but, as it is, the tabulation is right according to the authors' descriptions even if my identifications are wrong,—except in the case of *instabilis*, Newm., *episcopalis*, Spin., *delicatulus*, Bohem, and *corallipes*, Chevr., of which I have not seen authentic specimens, but have assumed the correctness of my identification. I may say, however, that I have not the slightest doubt about all the species included in the tabulation being perfectly valid ones. The genus has been in so complete a state of confusion that it seems worth while to treat it as a whole (which has not been done before) in respect of its Australian members, even if my treatment of it should prove eventually to require a few corrections.

Tabulation of species of the genus *Aulicus*.—

- |      |   |                            |
|------|---|----------------------------|
| A.   | Elytra variegated with different colouring or pubescence in transverse zones.     |                            |
| B.   | At least one of the zones testaceous.   |                            |
| C.   | The apex and a median (or submedian) zone testaceous                              | <i>apicalis</i> , Macl.    |
| CC.  | Elytra having only a median testaceous zone                                       | <i>cræsus</i> , Blackb.    |
| CCC. | Elytra having the base and a median zone testaceous.                              |                            |
| D.   | Prevailing colour of elytra bronzy-red,—no black                                  | <i>Mastersi</i> , Macl.    |
| DD.  | Prevailing colour of elytra black   | <i>dives</i> , Blackb.     |
| BB.  | No testaceous colouring on the elytra.  |                            |
| C.   | Apical part of elytra not aureo-villose.  |                            |
| D.   | Club of antennæ black   | <i>multicolor</i> , Chevr. |
| DD.  | Club of antennæ testaceous  | <i>sculptus</i> , Macl.    |
| CC.  | Apical part of elytra aureo-villose   | <i>chrysurus</i> , Chevr.  |
| AA.  | Elytra not variegated with different colouring or pubescence in transverse zones. |                            |
| B.   | Antennæ black   | <i>lætus</i> , Chevr.      |



BB. Antennæ not black.

C. Antennæ reaching back to the base of the prothorax ... .. *instabilis*, Newm.

CC. Antennæ shorter.

D. Ninth and tenth elytral series quite distinct from each other and separated by a well-defined interstice to beyond middle of elytra ... .. *episcopalis*, Spin.

DD. Ninth and tenth elytral series not as in *A. episcopalis*.

E. External face of tibiæ traversed by a well-defined entire longitudinal carina.

F. Under surface of head and prothorax of dark colour.

G. Seriate sculpture of elytra continuing (gradually enfeebled) to apex *nigrohirtus*, Blackb.

GG. Seriate sculpture of elytra ceases suddenly considerably before apex.

H. No longitudinal sulcus on pronotum behind the front transverse sulcus ... .. *smaragdinus*, Gorh.

HH. A well-defined longitudinal sulcus on pronotum behind the front transverse sulcus... *robustus*, Blackb.

FF. Under surface of head and prothorax pale yellow ... .. *rufipes*, MacL.

EE. External face of tibiæ not having a continuous longitudinal carina.

F. The transverse sulci of the pronotum connected by a strong longitudinal sulcus.

G. Transverse interstices of elytral foveolæ strongly cariniform and crossing several series ... .. *Plutus*, Chevr.

GG. Transverse interstices of elytral foveolæ fine, scarcely raised, and short ... .. *delicatulus*, Bohem.

FF. Transverse sulci of pronotum not connected by a strong longitudinal sulcus.

G. Front of clypeus not both notably narrower than interval between eyes and also much emarginate.

H. Sculpture of elytra quasi-uniform from base to apex, only becoming gradually finer and closer (but not less rugulose) in approaching the apex ... .. *eremita*, Blackb.

HH. Sculpture of elytra much enfeebled at base, gradually becoming towards apex more or less finer, but still continuing rugulose.

I. Prothorax notably wider across apex than across base. (Legs entirely dark) ... .. *amabilis*, Blackb.

II. Prothorax scarcely wider across apex than across base.



- J. Pronotum closely evenly and somewhat strongly punctured. (Femora red) ... *cribratus*, Blackb.
- JJ. Pronotum about middle of basal part very finely and very sparsely punctured. (Femora dark) ... *modestus*, Blackb.
- HHH. Sculpture of elytra much enfeebled at base, and behind suddenly changing to fine non-rugulose (or scarcely rugulose) puncturation considerably before the apex.
- I. Femora entirely dark... *mundus*, Blackb.
- II. Femora testaceous or red ... *corallipes*, Chevr.
- GG. Front of clypeus considerably narrower than interval between eyes and also much emarginate *parvulus*, Blackb.

*A. Cræsus*, sp. nov. Supra cupeo-purpureus, elytris mox ante medium fascia testacea (hac nec suturam nec marginem lateralem plane attingenti) ornatis, corpore subtus cœruleo, labro palpis antennisque testaceis, pedibus obscuris (tibiis anticis subtus et tarsis anticis dilutis; pilis albidis elongatis sat sparsim vestitus; capite crebre fortiter subrugulose punctulato; antennis prothoracem medium vix attingentibus, articulo ultimo ad apicem emarginato; prothorace manifeste transverso, fere ut caput (sed antice minus crebre) punctulato, antice tubulato, ad partis tubulatæ basin transversim fortiter arcuatim sulcato, pone sulcum late concavo, in partis concavæ fundo longitudinaliter sulcato, mox ante basin transversim sulcato, lateribus inter sulcos transversos fortiter rotundatis; elytris 10-seriatim grosse foveolatis, seriebus basin versus vix minus distinctis vix elytrorum partem apicalem tertiam attingentibus, hac puncturis sat grossis confuse minus crebre impressa, seriebus 9<sup>a</sup> 10<sup>a</sup> que carina distincta ad elytrorum partem apicalem tertiam divisio. Long.,  $3\frac{3}{5}$  l.; lat.,  $1\frac{3}{10}$  l. (vix).

This species is readily distinguishable from all previously described Australian *Aulici* by its colour and marking. It will be convenient to compare it and others of its congeners with *A. chrysurus*, Chevr. (*Thanasimus rufimanus*, Gorh.), that being a previously described species which there can be no difficulty in identifying with certainty. Compared with it the present species *inter alia* differs as follows:—Antennæ much shorter (joints 9 and 10 much more transverse, joint 11 much more emarginate at apex), prothorax more transverse with much more strongly rounded sides, foveæ of the elytral series much larger (reaching the base and extending much further towards the apex). Its nearest ally is the species that I regard as *A. episcopalis*, Spin. (= *instabilis*,



Spin. var.) from which it differs (apart from colour and markings) chiefly by its shorter and more convex form, the larger and less crowded foveæ of its elytral series, the less abrupt cessation posteriorly of the same foveæ, and their continuity to the actual base of the elytra. The antennæ of these two species are extremely similar, also the conspicuousness of the ninth and tenth series of foveæ and their interstice to the commencement of the smooth apical part of the elytra.

S. Australia (Yorke Peninsula).

*A. dives*, sp. nov. Cyaneus, elytrorum parte dimidia basali testacea utrinque macula magna atro-cyanea humerali ornata (parte dimidia apicali atro-cyanea utrinque macula magna sanguinea ante-apicali notata), antennis palpis tibiis anticis tiliarum intermediarum apice et tarsis anticis intermediisque testaceis; pilis albidis elongatis sparsim vestitus; capite fortiter minus crebre punctulato; antennis prothoracem medium haud attingentibus, articulis 9°—11° transversis, 11° ad apicem leviter emarginato; prothorace sat fortiter transverso, fere ut caput (sed nonnihil magis grosse) punctulato, antice breviter tubulato, ad partis tubulatæ basin transversim fortiter arcuatim sulcato, pone sulcum late concavo, in partis concavæ fundo longitudinaliter sulcato, mox ante basin transversim sulcato, lateribus inter sulcos transversos sat fortiter rotundatis; elytris 10-seriatim grosse foveolatis interstitiis minus angustis, seriebus basin versus obsoletis nec elytrorum partem apicalem tertiam attingentibus, hac sparsim sat subtiliter punctulata, seriebus 9<sup>a</sup> 10<sup>a</sup> que vix ultra elytra media attingentibus. Long., 3 l.; lat., 1 $\frac{1}{5}$  l. (vix).

In this species the apical joint of the maxillary palpi is more strongly securiform than in most of its congeners. Lacordaire tabulates *Aulicus* as having that joint securiform, but in diagnosing the genus says that it is of the form of an elongate triangle, which is quite correct as regards most of the species,—but in this one the triangle is scarcely elongate. It may be noted, too, that Lacordaire calls the claws of *Aulicus* "simple," but I find them to have a very small and feeble sub-basal tooth which in the present species is scarcely traceable. This species is remarkable for its short antennæ, having their apical joint distinctly transverse. The seriate punctures of the elytra are scarcely smaller than in *A. cræsus* but they are less sharply defined, their interstices being less narrow and carina-like than in most *Aulici*. Apart from coloring and pattern the present species differs from *A. chrysurus*, *inter alia* by the very much coarser seriate punctures of its elytra, from *A. cræsus* by the seriate punctures of the elytra not nearly reaching the base, from *A. episcopalis* by the



9th and 10th series scarcely passing the middle of the length of the elytra, and from *A. apicalis*, Macl., by the apical part of its elytra nearly black. It is perhaps nearest to *A. (Clerus) Mastersi*, Macl. The characters attributed to that species (apart from those relating to colour) are valueless for identification, being common to almost all *Aulici*. The pattern of *A. Mastersi* seems to bear a general resemblance to that of the present insect, but the general colour of the elytra is said to be "bronzy red" which is certainly not the general colour in *A. dives*, and the very great distance apart of the localities in which the two insects were taken renders it unlikely that they are varieties of one species.

S. Australia (Mt. Lofty Range).

*A. nigro-hirtus*, sp. nov. Supra cœruleus purpureo-micans, subtus cyaneus, antennis (clava nonnihil infuscata excepta) palpis et tarsis anticis testaceis, tibiis anticis subtus ferrugineis, pedibus alibi purpureis; pilis sat elongatis (his in corpore supra obscuris, subtus albidis) vestitus; capite crebre fortius nec rugulose punctulato; antennis prothoracem medium vix superantibus, articulo ultimo fere ut generis *Eleale* appendiculato; prothorace vix transverso, fere ut caput punctulato sed puncturis rugis transversis intermixtis, postice breviter (sed antice nullo modo) tubulato, antice transversim arcuatim (postice recte) sulcato, inter sulcos æqualiter convexo, lateribus ab angulis anticis fere ad basin æqualiter arcuatis; elytris 10-seriatim foveolatis, seriebus 9<sup>a</sup> 10<sup>a</sup> que ultra medium vix distinctis ceteris in elytrorum partem quartam apicalem continuis, foveolis quam *A. chrysuri*, Chevr., parum magis grossis, parte apicali confuse nec crebre punctulata; tibiis extus carinatis. Long., 4 l. (vix); lat.,  $1\frac{2}{5}$  l.

The notable characters of this species are the strongly appendiculate apical joint of its antennæ which is scooped out on its wide compressed face in such fashion as to make it from a certain point of view look like two joints, the pronotum without concavity or longitudinal sulcus behind the anterior transverse sulcus, and the tibiæ with a conspicuous longitudinal carina on their external face. The foveæ of the elytral series are notably less coarse and more closely placed than in the species I call *episcopalis*, Spinola; the series (as such) are exceptionally conspicuous owing to the longitudinal interstices being distinctly more elevated than the interstices separating fovea from fovea in the series. Perhaps nearest to *A. imperialis*, Gorh., but evidently very distinct from it as that species is described as having its pronotum abruptly narrowed in front and much depressed dorsally.

N. Queensland.

*A. instabilis*, Newm. There seems to be much confusion about



this species. It is quite clear to me that Spinola did not identify it correctly, and I should say that in all probability Newman himself mixed two species under the name. Newman's very brief description mentions only one character that is of real value in determining what insect he had before him, viz., "protibiæ subtus testaceæ." Trivial as this character might seem I have examined sufficiently long series of several *Aulici* to enable me to say that it is of great value. To this clue may be added another in the fact that almost all the *Cleridæ* described by Newman are Victorian species, and still another in the size (long.,  $\frac{4}{10}$  of an inch) being stated. Now I have taken somewhat plentifully in Victoria two species of *Aulicus* whose front tibiæ are invariably black (or dark piceous) on their upper surface and testaceous beneath, the two colours being in quite abrupt and conspicuous contrast. My opinion is that Newman had both these insects before him and did not observe their specific difference. One of them is about of the size Newman quotes, and of deep violet blue colour with elongate antennæ,—the other is decidedly smaller and of a bright green colour with shorter antennæ. Newman says "Colore instabilis, nunc viridis, nunc violaceus" and mentions no other character that is not generic except the peculiar colouring of the front legs. As the size given is that of the larger insect just referred to I feel little doubt of its having been that on which the species *instabilis* was founded and conjecture that either Newman had before him also a green variety (unknown to me) of it, or that he had before him the smaller species referred to above and overlooked its specific difference from the specimen on which he founded his description (or at all events his measurement).

I feel very little doubt that *A. instabilis*, Spinola, is a species that occurs in many parts of S. Australia and even extends into the S.-Eastern part of Western Australia, and is much more variable in colouring than I have found the species to be which I regard as *instabilis*, Newm. Its front tibia are not of two colours divided longitudinally, but are (as Spinola describes them) wholly dark except near the apex where they have a tendency to become testaceous. The species differs from that mentioned above as *instabilis*, Newm., *inter alia* by its shorter antennæ, and the considerably larger seriate punctures of its elytra which moreover are well defined on a larger area of the elytra (becoming obsolete only close to the base and in the apical one-fourth), the ninth and tenth rows being separated by a continuous distinct carina quite into the apical one-fourth of the elytra. As Spinola described a colour-var. of this insect under the name *episcopalis*, this latter may now stand as the name of the species.



*A. robustus*, sp. nov. Sat elongatus, sat convexus; supra igneus cupreus, capite pronotoque paullo obscurioribus, antennis palpisque testaceis (illarum clava et palporum labialium articulo apicali obscuris); subtus obscurus vel atro-cyaneus, pedibus læte cyaneis, tarsis anticis ferrugineis ceteris picescentibus; pilis pallidis elongatis vestitus; capite fortius sat crebre punctulato, inter oculos late leviter impresso; antennis prothoracem medium paullo superantibus, articulis  $9^{\circ} 10^{\circ}$  que sat transversis  $11^{\circ}$  obovato ad apicem acuto extus leviter excavato; prothorace vix transverso, supra sparsim fortius inæqualiter nec rugulose punctulato, sat longe pone apicem arcuatim (et mox ante basin recte) sulcato, pone sulcum anticum longitudinaliter profunde breviter canaliculato, lateribus ante sulcum anticum et inter sulcos separatim rotundatis; elytris 10-seriatim foveolatis (seriebus  $9^a$  et  $10^a$  haud carina acuta divisis), foveolis fere a basi ad partem posticam tertiam continuis (hic subito desinentibus), parte apicali subtiliter vix seriatim punctulata, serierum interstitiis a foveolarum interstitiis transversis tubatis; tibiis extus longitudinaliter carinatis. Long.,  $4-4\frac{1}{2}$  l.; lat.,  $1\frac{1}{5}-1\frac{3}{5}$  l.

This species bears much general resemblance to that which I take to be *A. Plutus*, Chevr., but differs from it *inter alia* by the much shorter longitudinal channel of its pronotum, by the much less coarse sculpture of its elytra, and by the well-marked longitudinal carina that traverses the whole length of the external face of its tibiæ.

N.S. Wales (Inverell; given to me by the late Mr. Olliff).

*A. mundus*, sp. nov. Minus elongatus, minus convexus; læte cyaneus, antennis palpis et tibiis tarsisque anticis testaceis, tibiis tarsisque posterioribus 4 picescentibus; pilis sat elongatis fulvis vestitus; capite crebre ruguloso, inter oculos fovea profunda impresso, antennis prothoracem medium paullo superantibus, articulis  $9^{\circ} 10^{\circ}$  que sat fortiter transversis  $11^{\circ}$  obovato; prothorace vix transverso, supra crebre rugulose punctulato, pone apicem arcuatim (et ante basin recte) sulcato, pone sulcum anticum longitudinaliter brevissime canaliculato, lateribus ante sulcum anticum et inter sulcos separatim rotundatis; elytris 10-seriatim foveolatis (interstitio inter series  $9^{am}$  et  $10^{am}$  ultra elytra media haud cariniformi), foveolis in parte basali obsoletis et subito ad partem apicalem tertiam desinentibus, parte apicali subtiliter vix seriatim punctulata, serierum interstitiis a foveolarum interstitiis transversis turbatis. Long., 3 l.; lat., 1 l.

Very closely allied to *A. amabilis*, Blackb., but satisfactorily distinguishable by the absence of the subscutellar gibbosity on



the elytra and the *sudden* ending of the seriate foveolæ of the elytra at the beginning of the apical one-third part of the elytra. There is also a difference in the apical joint of the antennæ on which in *A. amabilis* there is a distinct external excavation (but not in the present species). The seriate foveolæ of the elytra are in both very similar to those of *A. chrysurus*, Chevr. Also (disregarding colour) near to *A. corallipes*, Chevr., but differing from it *inter alia* by the seriate sculpture extending scarcely into the apical one-third of the elytra, while in *corallipes* it reaches nearly into the apical one-fourth.

S. Australia (Mount Lofty Range).

*A. (Clerus) delicatulus*, Bohem. I have taken an *Aulicus* in the Sydney neighbourhood which I have no doubt is Bohemann's species. It does not seem to present very strong characters, its most striking feature being I think the comparatively feeble sculpture of its elytra, which consists of rows of transversely quadrate impressions separated by continuous longitudinal interstices which are (not, as they are in *A. chrysurus*, Chevr., thrown out of shape or zigzagged by still stronger transverse interstices running continuously across several of the rows but) straight. In respect of that sculpture it resembles *A. nigrohirtus*, but in that species the foveæ are considerably larger and deeper, and the interstices (both longitudinal and transverse) are considerably stronger and more cariniform; in *delicatulus* the longitudinal interstices are almost flat, and carry a straight row of fine and not very closely placed punctures. The sculpture of the median part of the elytra does not in *A. delicatulus* abruptly cease or change its character at a more or less considerable distance from the apex (as it does in many species of *Aulicus*) but merely becomes near the apex a little feebler and less seriate. The hind tibiæ and tarsi are unusually slender, which suggests the idea that *A. viridissimus*, Pasc. (also from Sydney) may be a later name for the same insect. Pascoe's statement that in *A. viridissimus* the elytra are "coarsely" punctured in rows seems perhaps inconsistent with such identity, but the expression is not altogether inapplicable to the elytra of the insect before me *absolutely*, although *comparatively* (i.e., compared with most other *Aulici*) the sculpture is not coarse. Some remarks seems to be called for on my having placed *delicatulus* in my tabulation (above) with *A. Plutus*, Chevr., as having the longitudinal channel of the pronotum exceptionally long, whereas Bohemann says of its pronotum "*breviter canaliculato*." Bohemann calls it by the name "*Clerus*," however, and it is in comparison with that of other *Aulici* that I call the longitudinal channel of its pronotum elongate. Absolutely, the channel may be called "short" as it does not reach the base, and does not nearly reach the front margin, of the pronotum.



*A. eremita*, sp. nov. Elongatus, sat angustus, sat convexus; colore instabilis; antennis palpisque testaceis, pedibus obscuris, tarsis anticis plus minusve ferrugineis; pilis elongatis vestitus (his in capite pronoto elytrisque fulvis, alibi dilutioribus); capite inæquali, inæqualiter punctulato, longitudinaliter sat manifeste rugato, clypeo antice subtruncato quam inter oculos caput haud angustiori; antennis prothoracem medium manifeste superantibus, articulis 9° 10° que transversis 11° ovato ad apicem acuto; prothorace quam longiori vix latiori, supra inæqualiter subtilius punctulato et transversim subtiliter rugato, sat longe pone apicem arcuatim (et mox ante basin recte) sulcato, pone sulcum anticum longitudinaliter breviter vix perspicue canaliculato, lateribus ante sulcum anticum et inter sulcos separatim rotundatis; elytris 10-seriatim foveolatis (seriebus 9<sup>a</sup> 10<sup>a</sup> que ultra medium vix distinctis), foveolis a basi fere ad apicem continuis sed in parte quarta postica gradatim minus seriatis minus quadratis, serierum interstitiis a foveolarum interstitiis transversis multo turbatis. Long.,  $2\frac{4}{5}$  l.; lat., 1 l. (vix).

I found a batch of specimens of this insect on flowers on the Dividing Range in Victoria, which vary extremely in coloring, containing green, blue, coppery, and golden individuals. The legs are usually of the general colour,—but always dark, except the front tarsi which are more or less red. The antennæ palpi and pilosity do not vary in colour. Usually the whole surface is unicolorous, but in some examples the pronotum differs in colour from the elytra and the under surface from the upper. Among the species not having a variegated pattern on the elytra, having dark legs and testaceous antennæ, the ninth and tenth rows of elytral foveolæ confused behind the middle, the elytral sculpture not abruptly ceasing (or nearly so) considerably before the apex, the antennæ not reaching back to the base of the prothorax, and having the symmetry of the longitudinal interstices of the elytra much disturbed by transverse interstices continuous across several of the longitudinal interstices, this insect is distinguished by its clypeus being in front as wide as the interval between the eyes and its elytral sculpture being continuous quite to the base of the elytra. It is also notable by the unevenness of the surface of its head, and by its elongate somewhat cylindric form.

Victoria (Dividing Range).

*A. amabilis*, sp. nov. Minus elongatus, minus convexus; læte viridis, antennis palpis, tibiis anticis subtus et tarsis anticis testaceis; supra pilis elongatis obscuris et brevibus testaceis (alibi pilis elongatis pallidis) vestitus; capite sat plano, inter oculos foveato, æqualiter crebre ruguloso, clypeo antice fere



truncato quam interoculos caput haud angustiori; antennis prothoracem medium paullo superantibus, articulis  $9^{\circ} 10^{\circ}$  que transversis  $11^{\circ}$  ovato ad apicem acuto extus leviter excavato; prothorace leviter transverso, sat æqualiter fere ut caput ruguloso, sat longe pone apicem arcuatim (et mox ante basin recte) sulcato, pone sulcum anticum late impresso (parte impressa in fundo longitudinaliter canaliculata), lateribus ante sulcum anticum et inter sulcos separatim fortiter rotundatis; elytris 10-seriatim foveolatis (interstitio inter series  $9^{\text{am}}$   $10^{\text{am}}$  que parum ultra medium distincto), prope scutellum utrinque et ad humeros manifeste tumidis, foveolis (serie subsuturali excepta) in parte basali obsoletis et in parte apicali tertia confusis et minus distinctis nec manifeste quadratis, serierum interstitiis a foveolarum interstitiis transversis multo turbatis. Long.,  $2\frac{3}{5}$  l.; lat., 1 l.

In this species the discal sculpture of the elytra becomes confused and feeble towards the apex more rapidly than in the other species of the aggregate which I have tabulated as having this sculpture only *gradually* enfeebled,—so that it is somewhat intermediate between that aggregate and the next. Its general characters associate it with *A. eremita* from which it differs in many points (cited in the description), the most definite being perhaps that mentioned in the tabulation,—the seriate foveæ of the elytra commencing considerably behind the base of the elytra. It is a shorter and more depressed species than *A. eremita* and does not seem to vary in colour (I have half a dozen specimens taken in company). The part of the prothorax in front of the anterior transverse sulcus is so strongly rounded separately at its sides that the lateral outline of the prothorax (viewed from above) seems to have a deep emargination a little behind its front extremity. *A. parvulus*, Blackb., is somewhat closely allied to this and the preceding species (*A. eremita*), but is easily distinguished from them by *inter alia* its clypeus considerably narrower in front and strongly emarginate, and by the transverse interstices of its elytral foveæ being so strong and continuous as almost to conceal the existence of the longitudinal interstices.

Victorian Alps.

*A. cribratus*, sp. nov. Modice elongatus, minus convexus; supra cyaneus, antennis palpis et (tibiis tarsisque posterioribus nigris exceptis) pedibus testaceis; subtus cyaneus vel viridescens; pilis elongatis (his in corpore supra obscuris, in corpore subtus albidis) vestitus; capite confertim æqualiter ruguloso, inter oculos fovea impresso; antennis prothoracem medium parum superantibus, articulis  $9^{\circ} 10^{\circ}$  que transversis  $11^{\circ}$  obovato ad apicem acuto; prothorace quam latiori sublongiori, ut caput punctulato, sat longe pone apicem



arcuatim (et mox ante basin recte) sulcato, pone sulcum anticum longitudinaliter brevissime canaliculato, lateribus ante sulcum anticum et inter sulcos separatim rotundatis; elytris 10-seriatim foveolatis (interstitio inter series 9<sup>am</sup> et 10<sup>am</sup> ultra elytra media haud cariniformi), foveolis per elytra tota fere continuis sed apicem versus haud quadratis minus crassis, serierum interstitiis a foveolarum interstitiis transversis turbatis. Long.,  $3\frac{1}{2}$  l., lat.,  $1\frac{1}{5}$  l.

This species is closely allied to *A. corallipes*, Chevr., but is certainly a distinct species. In a considerable number of specimens before me the hind tibiæ and tarsi are invariably black, the intermediate tarsi invariably black, and the intermediate tibiæ invariably more or less black. The few specimens I have seen of *corallipes* (from Tasmania) all have entirely red legs. There is also considerable and constant difference in the sculpture of the elytra which in *cribratus* begins close to the base and attains the apex, only becoming finer and less regular near the apex (so that this species has about the strongest apical puncturation of any in the genus); while in *corallipes* the sculpture begins considerably behind the base and changes suddenly at the commencement of the apical third of the elytra into a feeble non-rugulose puncturation.

S. Australia and N.S. Wales.

*A. modestus*, sp. nov. Angustus, elongatus, modice convexus; supra obscure æneus, antennis palpisque testaceis, subtus obscure cyaneus; pilis elongatis (his in corpore supra obscuris, in corpore subtus albidis) vestitus; capite antice crebre ruguloso, postice minus crebre punctulato, inter oculos fovea impresso; antennis prothoracem medium vix attingentibus, articulis 9° 10° que transversis 11° obovato ad apicem acuto; prothorace vix transverso, inæqualiter (in medio fortius sat crebre, apicem basinque versus subtilius sparsius) punctulato, in medio transversim rugato, sat longe pone apicem arcuatim (et mox ante basin recte) sulcato, pone sulcum anticum longitudinaliter minus breviter canaliculato, lateribus ante sulcum anticum et inter sulcos separatim rotundatis; elytris 10-seriatim foveolatis (interstitio inter series 9<sup>am</sup> 10<sup>am</sup> que haud cariniformi), foveolis basin versus obsoletis apicem versus gradatim minus quadratis minus seriatis magis confertis, serierum interstitiis a foveolarum interstitiis transversis turbatis. Long.,  $3\frac{1}{5}$  l.; lat., 1 l.

Var. (?immat.) pedibus sordide testaceis.

This species is closely allied to *A. eremita*, Blackb. It differs from that insect in colour which is (invariably in all the examples I have seen) dull bronzy above and blackish (tending to cyaneous) beneath, the antennæ and palpi testaceous, the front



tarsi somewhat ferruginous,—*eremita* being a brilliantly coloured and much more nitid insect. In *eremita* the seriate sculpture of the elytra reaches the actual base without any enfeeblement whatever so that there is no indication of the base of the elytra being more nitid than the rest of the surface, while in *modestus* on the basal portion of the elytra the seriate sculpture becomes very faint and sparse, so that that region is conspicuously more nitid than the general surface. In *eremita* the transverse carinae separating fovea from fovea in the series are stronger than in *modestus* and more elongate (a greater number of them being continuous across several series of foveolæ), causing the elytra to appear very manifestly more coarsely rugulose; and in *eremita* the whole surface of the head is vaguely uneven, while in *modestus* the surface of the head is flat with merely a single fovea-like impression between the eyes.

S. Australia and Victoria.

#### SCROBIGER.

Chevrolat (Rev. et Mag. de Zool., 1874, p. 34) refers *Opilo mærens*, Westw., to this genus. His statement does not appear to have been founded on an inspection of the type, and I believe it to be erroneous. According to the size given by its author it is a very much smaller insect than any known *Scrobiger*, and *inter alia* its pronotum is very differently sculptured from that of other species of that genus and its palpi are all subequal. I presume that Chevrolat's reason for regarding *mærens* as a *Scrobiger* is Westwood's calling its elytra in the front part "rude punctato-striata." This phrase, however, is used by Westwood for elytra (*e.g.*, those of *Cleromorpha*) which are infinitely less coarsely sculptured than those of *Scrobiger*. Westwood's locality for *mærens* is Adelaide, and I think I am fairly well acquainted with the *Cleridæ* of the Adelaide district. I have seen only one *Clerid* which agrees with Westwood's description, viz., the introduced *Tarsostenus univittatus*, Rossi, and that insect agrees with it very well and occurs near Adelaide. I have no doubt, therefore, that the name *Opilo mærens* must be regarded as a synonym of *T. univittatus*.

#### NEOSCROBIGER (gen. nov. *Cleridarum*).

Palporum articulus apicalis securiformis; caput breve; labrum transversum antice emarginatum; antennæ modicæ (prothoracis basin vix superantes), clava sat laxè 3-articulata; oculi modici, supra inter se distantes, subtiliter granulati, transversim subreniformes; prothorax sat elongatus, postice angustum tubuliformis, supra pone apicem transversim sulcatus; elytra sat elongata, quam trans basin lata plus quam duplo longiora, æqualia, in parte apicali fere dimidia



sublævia; pedes sat elongati, femoribus posticis elytrorum apicem plane vel fere attingentibus tarsis 5-articulatis, articulo basali (tarsorum omnium) superne haud manifesto, articulo ultimo robusto præcedenti parum exserto, unguiculis parvis simplicibus divaricatis; corpus modice elongatum, capillis erectis vestitum.

Type *Opilo patricius*, Klug (*sexnotatus*, Westw.).

*O. patricius*, Klug, cannot be rightly placed in any hitherto characterised genus. Its finely granulated eyes separate it strongly from *Opilo*; its tarsi (all apparently four-jointed,—owing to the basal joint being concealed,—when viewed from above), the securiform apical joint of its maxillary palpi, and its pronotum transversely sulcate near the front, in combination associate it with the *Scrobiger* group of genera. Among those genera its mesosternum not vertical in front, its elytra neither fasciculate nor tuberculate and having a large apical space nitid and almost unpunctured, and its form (the elytra considerably more than twice as long as at the base wide) are sufficient to distinguish it.

Characters such as these appear to me certainly entitled to be treated as generic in the *Cleridæ*, a family in which many structural characters seem to be of less value than they are in most families, *Metabasis* and *Thanasimomorpha*, e.g. (also *Tarsostenus* and *Paratillus*) being so much like each other respectively that it seems strange to separate them widely, and yet having a totally different tarsal structure one from another. No doubt structural differences must have their full weight, and it is out of the question to associate under one generic name species having such, but much study of the Australian *Cleridæ* satisfies me that it is also out of the question to associate under one generic name (at least as far as the Australian *Cleridæ* are concerned) species differing widely in facies and sculpture because one cannot find important differences in the structure of the eyes, palpi, tarsi, &c. *Aulicus*, *Trogodendron*, *Scrobiger*, and the present genus, undoubtedly resemble each other closely in structural characters, but each has so distinctive and constant a facies and type of sculpture that it seems unreasonable to merge any two of them under one generic name. Probably when their life histories and habits are fully known it will be found that each of these genera mimics the facies of the group of insects on which it is parasitic.

*N. rauciceps*, sp. nov. Sat elongatus, postice sat dilatatus; sat nitidus; æneo-niger, labro antennis palpis tibiis tarsisque rufis, elytris ante medium macula discoidali et ad medium fascia sat lata albidis ornatis (parte apicali rufescenti dense albido pubescenti); capite confertim subgrosse ruguloso,



palporum maxillarium articulo ultimo leviter securiformi, antennis prothoracis basin paullo superantibus; prothorace quam latiori vix longiori, supra antice ut caput (in disco retrorsum gradatim minus crebre) ruguloso, inæquali (antice angulatim mox ante basin recte transversim sulcato, pone sulcum anticum impresso, ante basin 3-tuberculato), lateribus mediis fortiter rotundato dilatatis; elytris a basi ultra medium seriatim sat grosse foveolatis, alibi lævibus. Long., 4 l.; lat.,  $1\frac{1}{10}$  l.

Much resembling *N. (Opilo) sexnotatus*, Westw., but with the apical joint of the maxillary palpi so feebly securiform as to suggest generic distinction. Compared with *sexnotatus* the markings on the elytra are whitish instead of yellow, the subapical spot wanting but the whole apex faintly reddish and densely clothed with whitish pubescence; the femora entirely dark; the head and pronotum much more strongly rugulose, the surface of the latter being considerably more uneven behind; the elytra narrower at the base and consequently more dilated near the apex. I do not find any structural difference between this species and *sexnotatus* except that in the maxillary palpi and a trifle less elongation of the hind femora.

Victoria (Dividing Range).

#### EBURIPHORA.

This generic name must be removed from the Australian Catalogue, as its presence there rests on the authority of Klug's *Opilus patricius* having been referred to *Eburiphora*. This Tasmanian insect is clearly identical with Westwood's *O. sexnotatus* (also from Tasmania,—a species discussed above) and is certainly not an *Eburiphora* (*inter alia* it has not appendiculate claws). As Klug's is the older name the species must be known as *patricia*, Klug.

#### TARSOSTENUS.

I do not believe that any member of this genus is native to Australia. I have myself taken and recorded the occurrence of *T. univittatus*, Rossi, near Adelaide, but it is no doubt introduced from some other country. The following notes relate to the three really Australian species that have been attributed to the genus.

*T. Mastersi*, MacI. The description does not read at all like that of an insect very closely resembling *Tarsostenus*; and if Macleay's statement "eyes coarsely granulate" be correct, the word "coarsely" being used in the sense Lacordaire uses it of *Clerid* genera, the species cannot be placed even near *Tarsostenus*.

*T. zonatus*, Blanch. This species is certainly identical with *Paratillus (Clerus) carus*, Newm. Newman's name has priority.

*T. pulcher*, MacI. The description of this insect does not



suggest the idea of a *Tarsostenus*; indeed Macleay himself says that the insect has the appearance of a *Tillus*. I suspect, however, that it is congeneric with the species described below as *Tarsostenodes simulator*.

TARSOSTENODES (gen. nov. *Cleridarum*).

Palporum articulus apicalis securiformis; labrum transversum antice emarginatum; antennæ modicæ (prothoracis basin vix superantes), clava 3-articulata distincta articulis præcedentibus 4 conjunctis longitudine sat æquali; oculi modici, supra inter se sat distantes, fortiter convexi, sat subtiliter granulati, subrotundati, antice emarginati; prothorax elongatus, antice elongato-globulosus postice sub-tubuliformis (*Homæmotæ* prothoracem simulans); elytra longissima angusta apicem versus sat abrupte (nonnihil globulose) dilatata, nec tuberculata nec fasciculata, notulis eburneis, ornata; pedes sat elongati, femoribus posticis elytrorum apicem haud attingentibus, tarsis 5-articulatis, articulo basali (tarsorum omnium) superne haud manifesto; unguiculis subappendiculatis; corpus angustissimum, capillis erectis vestitum.

The insect for which I propose this name mimics in a very remarkable manner Longicorn genera such as *Homæmotæ* or *Zoedia*, in company with which I found it on flowers. I think it should be placed near *Tarsostenus*, from which *inter alia* the raised ivory-like markings on its elytra readily distinguish it. *Clerus guttulus*, White, is a member of this genus.

*T. simulator*, sp. nov. Subopacus; læte viridis, labro palpis antennis pedibus scutello et pectore rufo-testaceis, elytris (basi apiceque late viridibus exceptis) rufo-cupreis, his lineis elevatis eburneis binis obliquis ornatis (sc. linea brevi antemediana a margine externo retrorsum, et linea longiori postmedianâ a margine externo antrorsum, directis); capite pronotoque confertim subtilius rugulosis; elytris a basi ultra medium æqualiter vix lineatim confertim sat grosse (alibi quam pronotum paullo magis subtiliter) rugulosis. Long., 4 l. (vix); lat., 1 l.

Very different from *T. (Clerus) guttulus*, White, in its colours and markings; also, *inter alia*, by the notably wider club of its antennæ.

Victoria (Dividing Range).

HYDNOCERA.

This generic name must drop out of the Australian Catalogue, *H. bella*, Westw., having been recently shown by Herr Schenckling (Deutsch. Ent. Zeit, 1898, p. 180) to be a *Lemidia*.



## PYLUS.

*P. anthicoides*, Newm., has been stated by Gorham (Tr. Ent. Soc., Lond., 1878, p. 154) to be an African species,—an assertion that is accepted by Lohde in his recent Catalogue. Newman certainly implies that it is Australian. Probably he was in error as to the place of capture,—or the specimen was an accidentally imported one. I have not seen any Australian *Clerid* agreeing with Newman's description.

## TENEBRIONIDÆ.

## HYPOCILIBE.

*H. veteriosa*, sp. nov. Late ovata; minus opaca; nigra, antennis apicem versus et tarsis subtus picescentibus; vix perspicue punctulato; clypeo utrinque vix perspicue impresso, antice late manifeste emarginato; prothorace quam longiori ut 16 ad 9 (postice quam antice, ut 8 ad 6) latiori, antice modice emarginato (margine antico in parte mediana late recto), fortiter (a latere viso) convexo, lateribus modice arcuatis postice sinuatis, angulis anticis minus (posticis fortiter) acutis; scutello perlato, utrinque postice late profunde impresso; elytris (a latere visis) valde convexis, leviter reticulatim strigosis, quam prothorax ut 12 ad  $8\frac{1}{2}$  latioribus, lateribus rotundatis anguste reflexis, postice alte declivibus; tibiis intus haud tomentosus; coxis anterioribus 4 pubescentibus. Long., 8 l.; lat.,  $4\frac{1}{2}$  l.

Differs from *H. Macleayi*, Bates, by the elytra without any trace of costæ (even at the suture) and from *H. impunctata*, H. Rutenb., by the very distinct (though faintly impressed) reticulation of the elytra which is due to the presence of numerous wrinkles irregularly traversing the surface. The strongly convex form of the pronotum causing its outline (viewed from the side) to appear very strongly declivous in its hinder one-fourth, the extremely convex elytra (with their greatest height—viewed from the side—considerably behind the middle), the clypeus distinctly emarginate in front, the scutellum deeply excavated on either side in the hinder part, and the densely pubescent anterior 4 coxæ, are characters that in combination distinguish this species from all its described congeners (excluding the two already mentioned,—of which I have not seen examples). It is nearest to *H. heroïna*, Blackb., which, however, is a much larger and more nitid insect, with the clypeus rounded in front, the surface of the scutellum even, the reflexed edging of the elytra notably wider, &c., &c.

S. Australia (Basin of Lake Eyre); taken by Herr Koch near Farina.



## CURCULIONIDÆ.

## ALCIDES.

*A. terræreginæ*, sp. nov. Sat parallelus; sat cylindricus; castaneus, prothorace antennis tarsis et corpore subtus obscurioribus; pronoto ad latera dense albo-squamoso; elytris maculis quinque albo-squamosis ornatis (sc. 1<sup>a</sup> basali lineari longitudinali in interstitio 3<sup>o</sup> sita, 2<sup>a</sup> parva in interstitio 7<sup>o</sup> hujus ad longitudinis medium sita, 3<sup>a</sup> post-mediana in interstitio 3<sup>o</sup> sita, 4<sup>a</sup> quam 3<sup>a</sup> vix posteriori in interstitio 7<sup>o</sup> sita, 5<sup>a</sup> subapicali in interstitio 4<sup>o</sup> sita), corpore subtus plus minusve dense albo-squamoso; rostro modice elongato leviter arcuato; prothorace quam in medio longiori paullo latiori, subquadrato, sat crebre ruguloso; scutello punctiformi; elytris striatis, striis grossissime nec crebre punctulatis, interstitiis sat angustis sat rugulose punctulatis; femoribus subtus dente magno serrato armatis; tibiis arcuatis; segmento ventrali 2<sup>o</sup> quam 3<sup>us</sup> paullo longiori. Long. (rostr. excl.)  $2\frac{4}{5}$  l.; lat., 1 l.

This little species is very distinct from all its congeners of which I have been able to see the descriptions; from all its described Australian congeners it differs widely, *inter alia*, by the markings of its elytra, which consist of 5 spots on each elytron, one of them being an elongate line on the basal portion of the 3rd interstice and there being no spots on the suture or lateral margins. In shape it closely resembles *A. brevicollis*, Pasc. (as figured in Ann. Mus. Gen., 1885, T.I., fig. 7), but with the prothorax very much less transverse. In one of the examples before me there are traces of a scaly spot near the middle of the base of the pronotum.

Queensland (near Charters Towers).

## ANTHRIBIDÆ.

This family is somewhat numerously represented in Australia, though but few of its genera seem to be plentiful in species and but few of its species plentiful in individuals. Its Australian genera (including the new ones I form in the following pages) having more than doubled in number since the issue of Masters' Catalogue in 1886, it seems desirable to furnish a table showing their relation *inter se*. In trying to meet this requirement I have in the main followed the lines of Lacordaire's classification, adopting his principal division based upon the position of the scrobes in which the antennæ are inserted, and also his principal division of the larger group (*Pleurocères*,—having the scrobes lateral) into two aggregates with the transverse carina of the pronotum (a) antebasal (b) basal. Lacordaire's principal character for dividing the second main group (*Anocères*) does not at present



concern us, since the second aggregate of that group has not been reported as Australian. Beyond this I have not strictly followed Lacordaire, as his principal (so far as concerns the Australian *Anthribidæ*) subdivisions of the two main aggregates of the *Pleurocères*,—based on the width of the rostrum at its base and the more or less cylindric form of the body,—seem to shade off into each other in a somewhat perplexing manner. [Lacordaire, *e.g.*, tabulates the true *Anthribides* as of oblong or oval,—contrasted with cylindric,—form, but in the detailed diagnoses of their genera calls some of them “almost cylindric,” “subcylindric,” and even unreservedly “cylindric.”] I have adopted in the place of those characters others which Lacordaire treats as subordinate to them, founded on (*a*) the relation between the upper and lower edge of the rostral scrobe, in the one case the lower edge protruding outwards further than the upper edge or the upper edge cutting into the lateral margin of the rostrum, so that the scrobe is visible from above; in the other case the upper edge not cutting into the lateral margin of the rostrum and the lower edge not protruding outwards beyond the upper, and the scrobe consequently being entirely invisible from above (*b*) the form of the eye.

Of the *Anthribid* genera known as Australian I have been able to include in the following tabulation all except *Telala*,—which is a genus characterised by Mr. Jordan (*Ent. Z. Stett*, 1895, p. 143). I do not think that it is represented among the *Anthribidæ* before me, and as its author does not say whether the rostral scrobes are visible from above I cannot place it in my tabulation without seeing it. It is founded on a species of moderately large size, with spinose elytra.

Tabulation of the *Anthribid* genera known to be Australian:—

- A. Antennæ inserted on the side of the rostrum.
- B. A transverse carina (independent of the base) on the pronotum.
- C. Prosternum and mesosternum elevated and contiguous ... .. Bythoprotus.
- CC. Prosternum and mesosternum not as in *Bythoprotus*.
- D. Rostral scrobes visible from above, and not basal vertical and sulciform.
- E. Eyes small and very elongate.
- F. Carina of pronotum strongly arched ... Ancylostropis.
- FF. Carina of pronotum straight ... Genethila.
- EE. Eyes not as in the preceding two genera.
- F. Eyes approximate on the forehead ... Litocerus.
- FF. Eyes lateral, and distant from one another.
- G. Carina of pronotum straight ... Ethneca.
- GG. Carina of pronotum strongly arched ... Commista.
- BD. Rostral scrobes not visible from above unless they are basal vertical and sulciform.
- E. Eyes entire or nearly so.



- F. Rostral scrobes slightly visible from above, basal, vertical, and sulciform.
- G. Club of antennæ 4-jointed ... .. Eucorynus.
- GG. Club of antennæ 3-jointed ... .. Ecelonerus.
- FF. Rostral scrobes quite invisible from above.
- G. Rostral scrobes distinctly sulciform.
- H. The rostrum forms a perfectly even surface with the head ... .. Entromus.
- HH. The rostrum is on a different plane from the head ... .. Epargemus.
- GG. Rostral scrobes foveiform.
- H. Metasternum not extremely short.
- I. Antennæ notably shorter than head and prothorax.
- J. Joint 9 of antennæ scarcely wider than 8 ... .. Enspondus.
- JJ. Joint 9 of antennæ as wide as joint 10.
- K. Antennal club compact ... .. Tropideres.
- KK. Antennal club loosely articulate ... .. Apatenia.
- II. Antennæ considerably longer than head and prothorax ... .. Cacephatus.
- HH. Metasternum extremely short ... .. Xynotropis.
- EE. Eyes strongly emarginate ... .. Xenocerus.
- BB. The transverse carina of the pronotum coincides with the base (at any rate in the middle).
- C. Rostral scrobes strongly sulciform; antennæ notably shorter than head and prothorax ... .. Basitropis.
- CC. Rostral scrobes and antennæ not as in *Basitropis*.
- D. Front coxæ widely separated from one another.
- E. Rostrum emarginate at apex and not forming an even surface with the head ... .. Phlæobius,
- EE. Rostrum truncate at apex and forming an even surface with the head ... .. Streneoderma.
- DD. Front coxæ subcontiguous or very narrowly separated.
- E. Antennæ not reaching the base of the prothorax, and more or less stout.
- F. Rostral scrobes visible from above ... .. Ozotomerus.
- FF. Rostral scrobes not visible from above ... .. Cratoparis.
- EE. Antennæ reaching much beyond base of prothorax (at any rate in male) and extremely slender.
- F. Joint 3 of antennæ at least twice as long as 1 and 2 together.
- G. Basal joint of hind tarsi notably longer than 2 and 3 together ... .. Exillis.
- GG. Basal joint of hind tarsi about equal to 2 and 3 together... .. Euciodes.
- FF. Joint 3 of antennæ about equal to 1 and 2 together ... .. Notæcia.
- AA. Antennæ inserted on the upper surface of the rostrum.
- B. Eyes rounded or widely oval, somewhat finely granulate.
- C. Apex of front tibiæ with a strong spine perpendicular to the axis of the tibia ... .. Araecorynus.
- CC. Apex of front tibiæ normal.



- D. Eyes very large and prominent. Antennæ equal in length to two-thirds of body ... Misthosima.
- DD. Eyes much smaller and less convex. Antennæ half as long as body.
- E. Front tarsi very long and wide ... Doticus.
- EE. Front tarsi much shorter and narrower ... Aræocerus.
- BB. Eyes narrow and elongate, coarsely granulate ... Aræocerodes.

## EUCORYNUS.

The following species seems to belong to this genus, which has not as yet been recorded as Australian. The presence of an ante-basal carina on its pronotum together with the width of its rostrum (not narrower at its base than the head) and the sulci-form character of its antennal scrobes refer it to M. Lacordaire's "groupe" *Ecelonerides*. In that "groupe" the four-jointed club of its antennæ refers it to *Eucorynus*, and I do not find anything in M. Lacordaire's diagnosis of the genus inconsistent with the characters of the insect described below, except in the antennæ of the insect being somewhat shorter than they should be according to the diagnosis.

*E. Mastersi*, sp. nov. Cylindricus; nigro-piceus, antennis (clava excepta) tarsisque rufis; pube picea vestitus, hac pube alba et setulis erectis piceis et aliis albis maculatim variegata; capite rostroque crebre subgrosse æqualiter punctulatis; pronoto leviter transverso, ut caput punctulato, antice fortiter angustato, lateribus sat arcuatis; elytris leviter striatis, striis fortiter nec crebre punctulatis, interstitiis planis vix perspicue punctulatis; antennis robustis prothoracis basin attingentibus, articulis 1° 2° que quam 3<sup>us</sup> paullo brevioribus, 4° 3° sat æquali, 5°—7° paullo brevioribus, 8°—11° clavam compactam depressam (hac quam articuli 4<sup>us</sup>—7<sup>us</sup> conjuncti paullo breviori) formantibus. Long., 4 l.; lat., 1  $\frac{3}{5}$  l.

The erect setæ are fine and recurved and are piceous or white according to the colour of the depressed pubescence among which they are situated. The white spots are,—about 5 moderately large on the head, a considerable number (all small) on the pronotum, a considerable number (all small except a larger one on the shoulder) on the front half of the elytra, and a large one and a number of small ones on the apical one-third of the elytra. The tibiæ and abdomen are prettily variegated with piceous and white pubescence, and there is much scattered white pubescence on the rostrum. The two examples before me are probably females, which may account for their antennæ being shorter than in the specimens of *Eucorynus* examined by Lacordaire, which he believed to be males.

Queensland; sent to me by Mr. Masters and Mr. Cowley.



ENTROMUS (gen. nov. *Anthribidarum*).

Caput transversum; rostrum planum depressum, quam latius sublongius, antice emarginatum, ad basin quam caput haud angustius, scrobibus obtectis foveiformibus sed oblique retrorsum (ut sulci male definiti) productis; antennæ graciles, prothoracem medium paullo superantes, articulis basalibus 2 paullo incrassatis (2° quam 1<sup>us</sup> multo longiori), 3° 2° longitudine æquali, 3°—8° gradatim brevioribus, 9°—11° clavam oblongam formantibus, 9° obconico vix transversum, 10° brevi sat transversum, 11° leviter transversim obovato; oculi parvi integri sat subtiliter granulati; prothorax vix transversus, vix inæqualis (basin versus transversim rugatus), sat convexus, antice minus fortiter angustatus, carina antebasali male definita cum rugis transversis adjacentibus subconfusa, in prothoracis lateribus vix perspicue producta; scutellum sat parvum; elytra lata depressa, inæqualia, leviter striata, striis punctulatis; coxæ anticæ appoximatæ inter se; pedes modici, inter se sat æquales; tarsi breves, articulo basali quam 2<sup>us</sup> parum longiori, 3° in 2° inserto; unguiculi subtus dente armati; metasternum modicum; pygidium (exempli typici) elytris tectum; corpus pubescens.

This genus is difficult to place in Lacordaire's scheme of classification, although it seems to me unnatural to place it far from *Tropideres*. But according to Lacordaire the fact of its rostral scrobes being certainly not simply foveiform would remove it from the "groupe" "*Tropiderides*." These are almost exactly as in *Ecelonerus* in outline, but differ in commencing in a foveiform excavation, the wall of which is interrupted at its postero-interior portion from which a shallow somewhat ill-defined sulcus emerges and simulates the deep strongly defined sulcus of *Ecelonerus*. The short wide depressed form of the type of this genus removes it, however, according to M. Lacordaire, from the *Ecelonerides*. The structure of the basal part of the pronotum is unlike that of any other Australian *Anthribid* known to me, the ante-basal carina appearing merely as one (a little more conspicuous than the rest) of several fine transverse ridges, and (though very distinct and well-defined near the lateral margins of the pronotum) becoming very faint as it approaches the middle line of the pronotum. From *Tropideres* itself it differs, *inter alia*, by the greatly elongated 2nd joint of its antennæ. I believe the specimen before me to be a male, but am not sure. *Tropideres musivus*, Er., and *albuginosus*, Er., are probably congeneric with this insect, but the descriptions of those species seem to indicate a different arrangement of the inequalities of the elytra, &c.



*E. dorsoplagiatus*, sp. nov. Piceus, pube picea albaque variegatus; hac rostrum scutellum que dense vestienti et in elytris maculam magnam quadratam communem formanti; antennis pedibusque rufis, his pube picea et alba variegatis; rostro longitudinaliter 3-carinato; prothorace inæqualiter ruguloso-punctulato, dorso obsolete inæquali; elytrorum interstitiis  $3^{\circ} 5^{\circ}$  que carinatis, parte posticali subverticali, interstitiis  $3^{\circ} 5^{\circ}$  que mox ante declivitatem posticam valde callosis, inter hæc interstitio  $4^{\circ}$  rufo, interstitiis alternis (parte maculam dorsalem albam ferenti excepta) tuberculis parvis nigris instructis; macula dorsali alba maculis parvis nigris perpaucis interrupta et ad latera crenulata. Long.,  $3\frac{1}{2}$  l.; lat.,  $1\frac{1}{2}$  l.

The common white spot on the elytra is so densely pubescent that the underlying sculpture is entirely concealed. The spot occupies in its front all the width between the seventh interstices of the two elytra but narrows a little to its apex where it occupies the width between the two fifth interstices. Its front margin is a little behind the base of the elytra but in its middle runs forward triangularly to the scutellum; its sides are somewhat zig-zagged, being cut into most conspicuously by a black spot a little behind the middle; its apex (a little in front of the hind declivity) is arcuately and irregularly emarginate and its surface is interrupted by a few very small black spots. The red pubescence near the apex of the elytra is not entirely confined to the fourth interstices but appears as spots on some of the other interstices, and there is also a little white pubescence near the apex. The third and fifth interstices of the elytra are a little more strongly elevated near the base than in the middle of their length. It is (as already noted) very probable that *Tropideres musivus*, Er., and *albuginosus*, Er., are congeneric with this insect. Assuming them to be so this insect differs from them specifically,—from *musivus*, *inter alia*, by its considerably larger size, by its not having three fascicles of pubescence on its prothorax and by the proportions of its antennal joints,—from *albuginosus*, *inter alia multa*, by its antennæ not long enough to reach the base of the prothorax.

Victoria; sent to me by Mr. Kershaw.

EPARGEMUS (gen nov. *Anthrribidarum*).

Caput transversum; rostrum planum, depressum, quam latius vix longius, cum capite nullo modo continuum, mox ante basin angustatum (et hic quam inter oculos caput subangustius), hinc antrorsum ad apicem gradatim dilatatum, antice truncatum, scrobibus obtectis foveiformibus sed oblique retrorsum (ut sulci male definiti) productis; antennæ sat robustæ, prothoracem medium vix superantes, articulis



basalibus 2 leviter incrassatis ( $2^{\circ}$  quam basalis vix breviori),  $3^{\circ}$  quam  $2^{\text{us}}$  manifeste longiori,  $3^{\circ}$ — $8^{\circ}$  gradatim brevioribus,  $9^{\circ}$ — $11^{\circ}$  clavam oblongam formantibus,  $9^{\circ}$  vix transverso,  $10^{\circ}$  brevi transverso,  $11^{\circ}$  vix transverso quam  $9^{\text{us}}$  vix breviori; oculi sat magni, integri, sat subtiliter granulati; prothorax transversus, vix inæqualis, sat convexus, antice et postice fortiter angustatus (margine antico quam basis sat angustiori), carina antebasali bene definita retrorsum in medio angulata in prothoracis lateribus vix perspicue producta; scutellum parvum; elytra convexa, inæqualia, leviter striata, striis subtiliter sat crebre punctulatis; coxæ anticæ inter se manifeste separatæ; pedes modici, inter se sat æquales; tarsi modici, articulo basali quam  $2^{\text{us}}$  sat longiori,  $3^{\circ}$  in  $2^{\circ}$  inserto; unguiculi subtus dente parvo armati; metasternum minus breve (quam segmentum ventrale basale vix longius); pygidium manifestum; corpus pubescens.

This genus is difficult to place in Lacordaire's arrangement. Its rostral scrobes are much like those of *E. dersoplagiatus*, being of oblong form and running hindward obliquely on the under surface of the head, but scarcely long and deep enough to be called 'unreservedly "sulciform."' It is difficult to say whether Lacordaire would have placed it in the groups having the base of the rostrum narrower than the head, the rostrum being scarcely (but nevertheless a little) narrower a little *in front* of the base than the head between the eyes. To me it appears that it ought not to stand far from *Tropideres*, although a strict application of Lacordaire's tabulation-characters would place it in the "*Phlæophilides*," but in the diagnosis of that "groupe" "scrobes découvertes" is one of the characters, which they certainly are not in this genus—nor does the species before me agree in its general characters or facies with any genus known to me of that group. I believe the specimen on which I have founded this genus to be a male.

*E. marmoratus*, sp. nov. Picea, pube nigricanti ochrea et alba variegata, antennis (clava excepta) et pedibus (plus minusve) rufescentibus; capite rostroque (his haud continue planis) crebre rugulose punctulatis, rostro longitudinaliter obsolete carinato; prothorace quam longiori fere ut 4 ad 3 latiori, supra longitudinaliter sat dense rugato, lateribus ab apice longe ultra medium arcuatim divergentibus hinc ad basin fortiter convergentibus,—elytris inter humeros et scutellum (et in humeris) callosis, interstitiis alternis leviter convexis et tuberculis nonnullis parvis instructis; corpore subtus sat æqualiter albido-pubescenti; pedibus maculatim albo- et piceo-pubescentibus.

Var pubis pallidæ colore brunneo-testaceo. Long.,  $2\frac{3}{8}$  l.; lat., 1 l.



In a fresh specimen the sculpture of the derm is almost entirely concealed by the pubescence, even the callosities near the base of the elytra being scarcely discernible; these are not strongly marked even in an abraded example; that between the scutellum and the shoulder is the larger, and appears feebly bifid from some points of view. The pattern formed by pubescence of different colours is extremely intricate and difficult to describe. The rostrum is entirely clothed with pale pubescence; on the head dark, pale, and ochreous pubescence are vaguely intermingled; on the pronotum the middle of the disc and base is dark with a few pale spots, the front and sides being mostly pale with some dark patches; the pubescence of the front two-thirds of the elytra is dark, irrorated with pale hairs, which are condensed (interruptedly) along some of the alternate interstices and in small spots near the sides; the apical one-third of the elytra is occupied by a large common patch (which however does not reach the margins) of pale pubescence, close to the lateral margins of which (and about their middle) is a conspicuous dark spot, while another conspicuous dark spot occupies the sutural apical space on each elytron. The small indistinct tubercles on the alternate interstices are clothed, some with ochreous, some with very dark, pubescence. In an absolutely unabraded specimen the front part of the fifth interstice appears more strongly elevated than the other interstices, but this seems to be due to longer and closer pubescence, as I do not find it in abraded specimens. The greatest dilatation of the sides of the prothorax is at the extremities of the ante-basal carina, from which point the sides converge both forward and hindward.

Victoria and N.S. Wales (specimens in the S.A. Museum are without indication of habitat, but are probably from S.A.).

ENSPONDUS (gen. nov. *Anthribidarum*).

Caput transversum; rostrum depressum planum, cum capite haud continuum, breve, transversum, quam caput haud angustius, scrobibus lateralibus, magnis, foveiformibus, obtectis; antennæ modicæ, prothoracem medium paullo superantes, articulis basalibus 2 quam sequentes robustioribus ( $2^{\circ}$  quam  $1^{\text{us}}$  paullo longiori),  $2^{\circ}$ — $5^{\circ}$  longitudine sat æqualibus,  $6^{\circ}$ — $8^{\circ}$  paullo brevioribus,  $9^{\circ}$  quam  $8^{\text{us}}$  paullo longiori sed parum latiori,  $10^{\circ}$   $11^{\circ}$  que clavam formantibus quam  $9^{\text{us}}$  duplo latioribus,  $10^{\circ}$  vix  $11^{\circ}$  haud transversis,  $11^{\circ}$  obeonico; oculi modici integri, sat subtiliter granulati, inter se late separati; prothorax vix transversus, valde inæqualis, sat convexus, antice fortiter angustatus, carina antebasali basi sat approximata bene definita leviter antrorsum arcuata in prothoracis lateribus fere ad medium producta; scutellum parvum; elytra convexa, inæqualia, striata; coxæ anticæ



subcontiguæ; pedes modici, inter se sat æquales; tarsi sat elongati, articulo basali quam 2<sup>us</sup> sat longiori, 3° in 2° inserto; unguiculi subtus dente parvo armati; metasternum modicum (quam segmentum ventrale basale paullo longius); pygidium manifestum; corpus pubescens.

The insect for which I propose this generic name cannot be referred to any existing genus that I can discover. In Lacordaire's classification its place is in the "Groupe" *Tropiderides*. In his tabulation of the genera of that groupe its place is doubtful, the ante-basal carina of its pronotum having its convexity forward, but not nearly so strongly as in the genera he places in the aggregate distinguished by that character. Among them the tabulation would make it *Hypseus* (though its eyes are scarcely "very finely" granulate)—but *Hypseus* has very different antennæ, and eyes converging on the forehead. If the forward arch of the carina be regarded as too slight to place the insect in the *Hypseus* aggregate, Lacordaire's tabulation would make it doubtfully an *Apatenia*,—but that genus has eyes and antennæ like those of *Hypseus*,—*inter alia* joints 9 and 10 of the antennæ being equal to each other. The most striking character of the insect before me consists in there being only two joints in the club of its antennæ, joint 9 evidently belonging to the funiculus and being not much longer and wider than the eighth joint. Judging by the ventral segments (less convex and not overlapping the edge of the pygidium in one,—more convex and just covering the edge of the pygidium in another) I think I have both sexes before me, and if so there is little or no superficial sexual difference.

*E. bigibbosus*, sp. nov. Oblongus; piceus pube cinerea ochrea brunneaque variegata, antennis (clava excepta) pedibusque (his fusco-variegatis) rufescentibus; capite rostro pronotoque crebre subtilius rugulosis; hoc in disco paullo pone medium tuberculis 2 magnis fasciculatis ornato; elytris confertim subtilissime subaspere punctulatis, subtiliter punctulato-striatis, interstitiis alternis quam cetera vix magis elevatis (3° pone basin et in medio, 5° ante apicem, tuberculis singulis fasciculatis ornatis) et fasciculis parvis pilosis variegatis. Long., 2 l.; lat.,  $\frac{4}{5}$  l.

This insect is easily recognisable by the presence, on either side of the middle line of the pronotum, of a large tubercle bearing a fasciculus of hairs. There is a smaller fasciculated tubercle near the base and another about the middle of the 3rd elytral interstice, and also another near the apex of the 5th interstice. There are also very small fascicles (beneath which the derm is scarcely tuberculate) on the alternate interstices, most conspicuous on the subsutural interstice and becoming gradually less



so towards the lateral margins. The surface of a specimen in good condition is of an ashy colour, being densely clothed with brownish and whitish hairs very evenly intermingled. On this ashy ground the tubercles and fascicles show as dark spots, their vestiture being fuscous with an intermixture of ochreous. The whitish pubescence somewhat predominates along the central line of the pronotum, and in the form of a wide, very indistinct fascia, a short distance behind the base of the elytra. The pubescence so closely and thickly clothes the surface that its sculpture is entirely invisible, excepting the two large tubercles on the pronotum and the three smaller ones on each elytron. The scutellum is white. The tubercles are a little larger in some examples than in others.

S. Australia.

#### TROPIDERES (?)

It is with great hesitation that I refer to *Tropideres*, the minute *Anthrribid* described below. Nevertheless, it seems to lack any character that would definitely exclude it from the heterogeneous aggregate of species which the genus, as characterised by M. Lacordaire, is made to contain, at any rate, unless the fact of the 2nd joint of its antennæ being much longer than the basal joint be in itself deemed sufficient. The following are its structural characters:—Head wide, rostrum scarcely transverse, at its base as wide as the head, scarcely emarginate in front, its sides parallel, its scrobes lateral foveiform and concealed, its plane not evenly continuous with that of the head; antennæ not long enough to reach the base of the prothorax, joint 1 short, joint 2 very evidently longer than 1, 3 a little longer and more slender than 2, joints 3-8 gradually shorter, 9-11 forming an oblong but compact club, 9 longer than 10, which is transverse; eyes fairly large and prominent, finely granulated and widely separated from each other; prothorax gently transverse, narrowed from base to front, but not strongly, its surface even, its antebasal carina arched with convexity hindward (very close to the base but distinct from it in the middle, forming a right angle with its lateral extension which is not strongly defined and does not very nearly reach the middle of the lateral margin); elytra slightly gibbous close to the base on the disc, but otherwise even or nearly so, obscurely punctulate striate; front coxæ almost contiguous to each other; legs somewhat short and of nearly equal length; tarsi moderately long, their basal joint considerably longer than the second; body convex, gently oblong-ovate, pubescent; metasternum on the middle line about as long as the basal ventral segment.

*T. evanescens*, sp. nov. Piceus, antennis (clava excepta) pedibusque rufescentibus; pube sat elongata albida disperse



vestitus; supra crebre minus subtiliter (in prothorace paullo magis subtiliter) aspere punctulatus; elytris indistincte punctulato-striatis. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{1}{2}$  l. (vix).

I have described the characters of this insect (above) in discussing its generic position fully, and need not repeat them here. I do not think my example is abraded. Its upper surface is thinly clothed with rather long adpressed fine whitish hairs which are slightly condensed into two very indistinct fasciæ on the elytra, in front of and behind the middle. On the undersurface the pubescence is more even and slightly closer.

S. Australia; Eyre's Peninsula.

CACEPHATUS (gen. nov. *Anthribidarum*).

Caput sat breve; rostrum transversum, sat planum, cum capite haud continuum, ad apicem truncatum, ad basin quam caput haud angustius, scrobibus lateralibus magnis foveiformibus obtectis; antennæ corpus medium attingentes, robustæ, articulis basalibus 2 leviter incrassatis (2° quam 1<sup>us</sup> sublongiori), 3°—8° elongatis inter se subæqualibus, 9°—11° clavam laxam formantibus, 9° quam lato sat longiori, 10° quam 9<sup>us</sup> vix latiori sed brevi leviter transverso, 11° ovali; oculi magni integri subtilius granulati, antrorsum in fronte sat fortiter convergentes; prothorax leviter transversus, antrorsum fere a basi angustatus, æqualis, carina antebasali basi sat approximata bene definita retrorsum arcuata ad latera angulata (nullo modo acute) et antrorsum fere ad latera media producta; scutellum parvum; elytra sat convexa, late subcylindrica, sat æqualia, punctulato-striata; coxæ anticæ inter se anguste separatæ; pedes sat elongati (præsertim antici); tarsi sat elongati, articulo basali quam 2<sup>us</sup> multo longiori, 3° in 2° inserto; unguiculi subtus dente basali armati; metasternum modicum (quam segmentum ventrale basale parum longius); pygidium manifestum; corpus pubescens.

The insect for which I propose this name is evidently a member of Lacordaire's "Groupe" "*Tropiderides*," and in his tabulation of the genera it evidently stands with *Apatenia*, from which its long antennæ having their tenth joint transverse and very much shorter than the ninth, *inter alia*, distinguish it.

*C. sericeus*, sp. nov. Brunneus, pube albido-sericea vestitus; supra confertim subtiliter subaspere punctulatus; elytris ad basin singulatim leviter gibbis, minus fortiter striatis, striis subtilius sat crebre punctulatis, interstitiis vix subconvexis, sculptura postice obsoleta. Long.,  $2\frac{1}{2}$  l.; lat., 1 l.

The characters cited in the generic diagnosis need not be repeated here. There are three examples before me, all of which



appear to be somewhat abraded. It is manifest however that the whitish pubescence clothes the head and pronotum somewhat evenly. On the elytra the pubescence is interrupted by small patches of darker colour showing (in the examples before me) the derm, but I suspect that in a fresh specimen the dark spots are clothed with pubescence of the colour of the derm,—as I find some indication of such pubescence on some of the spots.

XYNOTROPIS (gen. nov. *Anthribidarum*).

Caput transversum planum; rostrum transversum planum cum capite omnino continuum, ad basin quam caput haud angustius, scrobibus foveiformibus obtectis; antennæ sat graciles, prothoracis basin attingentes, articulis basalibus 2 quam sequentes paullo robustiores (2° longiori), 2° 3° que inter se longitudine æqualibus, 5°—5° gradatim brevioribus, 6°—8° moniliformibus, 9°—11° clavam sat compactam formantibus, 9° 10° que inter se sat æqualibus fortiter transversis, 11° subgloboso; oculi modici, fortiter convexi, sat fortiter granulati; prothorax transversus sat æqualis, fortiter convexum, antice super caput fortiter anguste prominens, carina ante-basali bene definita arcuata retrorsum convexa in lateribus vix perspicue producta; scutellum parvum; elytra fortiter convexa, æqualia, sat breviter ovalia, punctulato-striata; coxæ anticæ inter se bene separatae; pedes modici, inter se sat æquales; tarsi breves articulo basali (tarsorum anticorum vix, posticorum manifeste) quam 2<sup>us</sup> longiori, 3° in 2° inserto; unguiculi subtus dente acuto armati; metasternum brevissimum; pygidium manifestum sat latum; corpus supra obscure metallicum, pilis elongatis adpressis maculatim ornatum.

The shape of the insect for which I found this genus (with its strongly convex oval elytra, somewhat suggesting the thought of *Otiorhynchus*) together with the metallic gloss of its surface, renders it very easy of identification. In Lacordaire's classification it falls into the "Groupe" *Tropiderides* by virtue of the following characters:—Antennæ inserted in the sides of the rostrum, ante-basal carina of pronotum present, rostrum short flat, and at base not narrower than the head, rostral scrobes foveiform, eyes entire, sides of rostrum sub-parallel. Its structural characters seem to place it near *Tropideres*, from which it differs by, *inter alia*, its general build and extremely short metasternum which is not longer on its middle line than the shortest of the ventral segments. The metasternum is moderately short in *Tropideres*, but not nearly so short as in this genus.

*X. micans*, sp. nov. Ovalis; sat nitida; supra picea, obscure aureo- et cupreo-micans; maculatim albido - pubescens;



subtus nigra, vix aurata, vix pubescens; antennis (clava excepta) pedibusque (femorum basi excepta) rufis; capite pronotoque confertim aspere punctulatis; elytris vix striatis, grossissime seriatim punctulatis; sternis fere ut pronotum, abdomine subtiliter, punctulatis. Long.,  $1\frac{1}{2}$  l.; lat.,  $\frac{1}{2}$  l.

The metallic glow on this species—though quite unmistakeable—is by no means brilliant; it is of an evidently coppery tone on the front part of the pronotum, but very little noticeable on the rest of that segment, and on the elytra is brassy. On the example before me (which I took myself and am confident is not materially injured by abrasion) the whitish pubescence is thinly and vaguely dispersed on the head and pronotum with very little tendency to be condensed anywhere, while it clothes the scutellum densely, and on the elytra forms a wide ill-defined lateral margin and some not very conspicuous dorsal blotches which range themselves somewhat in the form of two very arcuately transverse rows (their convexity directed forward), one behind the other in front of the middle.

Tasmania; Lake district.

#### BASITROPIS.

The Australian species of this genus appear to be entirely Northern in distribution and rare (as regards individual specimens) but probably numerous. I have before me six specimens which represent at least four and possibly six species. In five of them the markings of the upper surface are extremely similar while in one they are entirely different from those of the five. Three species have been described from Australia. In one of them (*solitarius*, Pasc.) the alternate interstices of the elytra are said to be "raised," which is not the case in any of the specimens before me. The descriptions of the other two are so meagre as to be almost useless. However one of my specimens agrees with the description (such as it is) of *B. ingrata*, Pasc., and may possibly be that insect,—but I cannot regard any of them as reconcilable with the description of *B. peregrina*, Pasc., which is represented as having "an obscure yellowish-grey band near the apex," consisting of pubescence, and being long., 3 l. The specimens before me (except that already mentioned as *B. ingrata*?) are all decidedly larger and have two bands of pale-coloured pubescence neither of which is at all "obscure." I must consider therefore that I have not seen *B. peregrina* or *B. solitaria*.

In respect of its generic characters the diagnoses of *Basitropis* are very incomplete, owing to the want of detail as to sexual characters. Jekel (the author of the genus) does not refer to them, but his description and figure do not altogether agree with



Lacordaire's statement. The former says that the antennal club consists of three joints while the latter somewhat inconsistently states (in the generalities of the "Groupe") that in the male the club consists of four or five joints, and then in the formal diagnosis affirms that joints 6-8 are gradually transverse and that joints 9-11 form the club; and that the females can hardly be distinguished from the males except by their shorter antennæ. Turning to the specimens before me I find a slight difference in the structure of the ventral segments between two of them and the other four,—the two having those segments distinctly though slightly depressed down the middle line and the apical ventral segment so related to the pygidium that when the ventral segments are looked at from directly above (the specimen being laid on its back) the edge of the pygidium can be seen beyond it, while the ventral segments of the other four are evenly convex and the apex of the apical segment just covers and conceals from sight the edge of the pygidium. The two specimens have antennæ in which joints 6-8 are so strongly and gradually dilated that it is difficult to say at which joint the club really begins (which might account for Lacordaire's contradictory statements),—while the antennæ of the other four have a distinctly three-jointed club and are I think females,—the two being males. I take it that Jekel founded the genus on the female, and that Lacordaire diagnosed a male and either failed to observe the antennæ of the female correctly, or regarded as male and female specimens that were really the males of two species.

The genus is a very well marked one among the Australian *Anthribidæ* by the unusual character of the antennal scrobes being basal and sulciform, in conjunction with the ante-basal carina of the pronotum wanting and the lateral carinæ continued nearly to the apex where they do not form an angle. I observe in all the specimens before me that the carinæ of the pronotum are finely and closely denticulate in their entire length but as this character is not referred to by Jekel or Lacordaire it may not be present in *B. nitidicutis*, Jekel (from India and Java), the typical species.

It is to be noted that M. Lacordaire describes under the name *Gynandrocerus* an African genus which he says differs from *Basitropis* only by the sexual antennal characters which approach those I have described above. If there is really no other difference between the two genera *Gynandrocerus* cannot stand.

*B. relictæ*, sp. nov. Mas. Cylindrica; picea, pube densissima nigro-picea vestita, hac pube pallida partim testacea partim alba variegata; capite subgrosse sat crebre æqualiter punctulato; rostro fortiter transverso, inæquali, postice longitudinaliter obsolete canaliculato, antice arcuatim



emarginato; antennis robustis prothoracem medium paullo superantibus, articulis basali crasso superne nullo modo visibili, 2° quam basalis breviori minus crasso quam latiori vix longiori, 3° 4° que inter se sat æqualibus quam 2<sup>us</sup> sat longioribus, 5° quam 4<sup>us</sup> paullo breviori ad apicem dilatato quam latiori parum longiori, 6° intus ad apicem dilatato transverso quam 5<sup>us</sup> paullo breviori, 7° intus etiam magis dilatato quam longiori duplo latiori quam 6<sup>us</sup> vix breviori, 8° 7° similis sed paullo magis transverso, 9° 10° que inter se æquilatis (hoc paullo breviori) quam 8<sup>us</sup> parum latioribus, 11° breviter transversim subovato; oculis in fronte modice inter se approximatis; prothorace vix transverso, æquali, subgrosse minus profunde nonnihil acervatim punctulato, lateribus a basi longe ultra medium sat parallelis dein convergentibus; elytris striatis, striis fortiter nec crebre punctulatis, interstitiis planis; coxis anticis subcontiguis. Long.,  $4\frac{1}{2}$  l.; lat.,  $1\frac{3}{5}$  l.

The markings of the surface are caused by patches of pubescence different in colour from the ground. On the upper surface the pubescence forming the ground is of a smoky blackish tone; on the head and prothorax there are numerous small spots of testaceous brown; the scutellum is covered with white pubescence; on the elytra spots (very various in size) of white pubescence form two zones—one post-basal, the other ante-apical. The post-basal zone is an irregular common festoon of unequal spots with its ends on the shoulders; the ante-basal zone is on each elytron a transverse spot of irregularly triangular form—its base near but not touching the suture, its apex (which is truncate) near but not touching the lateral margin. Besides the two zones there are a few small white pubescent spots about the lateral margin and apex. The undersurface and legs are densely clothed with pale grey very fine pubescence. On this ground coarse puncturation appears as dark spots on the sterna, there is an elongate spot of ochreous pubescence on the lateral margins of each ventral segment, and the legs are variegated with dark pubescence. Joints 9 and 10 of the antennæ are scarcely narrower than the interval between the eyes.

A specimen from N. Queensland may be the female of this species. Its antennæ are a trifle shorter than those of the described male and distinctly more slender, their basal 7 joints cylindric and not differing much in size except in the 4th being somewhat the longest, the 8th is distinctly dilated and transverse, joints 9—11 forming a club, and much like joints 9—11 of the male, but less dilated. The only differences that I observe (not already mentioned) from the male consist in the eyes being a little less approximate to each other, and the elytra having



(besides the zones of white pubescence) numerous small white pubescent spots sprinkled over the whole surface. On the whole I incline to think this specimen the female of a species distinct from that of which the male is described above.

An example from Port Darwin agrees with the above description of the male except in its smaller size (Long.  $3\frac{3}{4}$  l.), and in the pale pubescence of its elytra being of a distinctly ochreous tone.

N. Queensland.

*B. pallida*, sp. nov. Fem. Sat cylindrica, postice paullo angustata; picea, pedibus antennisque rufescentibus; pube adpressa densissima testacea alba et fusca læte intermixta vestita; capite subgrosse sat crebre æqualiter punctulato; rostro sat fortiter transverso, longitudinaliter indistincte carinato, antice leviter emarginato; antennis minus robustis prothoracem medium paullo superantibus, articulis basali crasso superne nullo modo visibili,  $2^{\circ}$ — $4^{\circ}$  inter se sat æqualibus quam basalis longioribus,  $5^{\circ}$ — $7^{\circ}$  inter se sat æqualibus quam  $4^{\text{us}}$  sat brevioribus,  $8^{\circ}$  quam  $7^{\text{us}}$  paullo longiori antrorsum leviter dilatato,  $9^{\circ}$ — $11^{\circ}$  clavam formantibus,  $9^{\circ}$   $11^{\circ}$  que inter se sat æqualibus vix transversis,  $10^{\circ}$  brevi fortiter transverso; oculis in fronte minus approximatis; prothorace sat æquali (longitudine latitudini æquali), fere ut caput punctulato, lateribus a basi longe ultra medium leviter (dein sat fortiter sinuatim) convergentibus; elytris leviter striatis, striis fortiter sat crebre punctulatis; corpore subtus pedibusque sat æqualiter dense albido-pubescentibus; coxis anticis inter se approximatis sed haud contiguis. Long.,  $4\frac{1}{2}$  l.; lat.,  $1\frac{1}{2}$  l.

The prevailing pubescence of the upper surface is of a pale testaceous brown colour; on this ground, white pubescence is distributed as follows,—dispersedly on the head and rostrum,—on the pronotum a line down the middle and an elongate patch on either side near the margins,—on the elytra a large humeral patch limited by an oblique line from the scutellum to the lateral margins at about a third of its length from the base, some small spots along the suture and lateral margins, and a large somewhat arcuate patch near the apex; pubescence of very dark colour forms the lateral margins of the pronotum and is continued a short distance along the margins of the elytra, forms a large basal spot in the basal white patch, a very small spot on the third interstice slightly behind the middle (just in front of the hindmost white patch) and a larger spot on the third interstice near the apex (within the arch of the hindmost white patch).

The colour and distribution of the markings in this species are entirely different from those of the other described species of



*Basitropis* (at any rate of all the Australian ones, and all other known to me). In respect of other characters not likely to be sexual it differs from *B. relictæ*, *inter alia*, by its somewhat larger and less cylindric shape, the feeble emargination of the front of its rostrum, the more elongate form of its prothorax which is distinctly (though not much) narrower across its middle than across its base (in *relictæ* that segment is if anything wider across its middle than its base), its evidently narrower rostrum, and the more evident interval between its front coxæ. It is to be noted, however, that in neither of the above species are the front coxæ separated by a continuous process of the prosternum.

Port Darwin (N. Territory of S. Australia). Taken by the late Dr. Bovill.

STRENEODERMA (gen. nov. *Anthribidarum*).

Caput transversum; rostrum transversum supra sat planum, ad apicem truncatum, ad basin quam caput haud angustius, scrobibus foveiformibus obtectis; submentum planatum profunde triangulariter emarginatum; antennæ graciles, articulis basalibus 2 quam sequentes robustioribus (2° breviori), articulis 3°—8° gradatim brevioribus, 9°—11° clavam distinctam formantibus, hac laxè articulata; oculi magni, fere integri, sat convexi, minus fortiter granulati; prothorax fortiter transversus, transversim fortiter convexus, carina antebasali nulla, carina basali ad latera angulata et antrorsum ad latera media producta; scutellum parvum; elytra sat brevia, striata, postice subverticalia; coxæ anticæ inter se latissime remotæ; pedes modici, anticis quam ceteri longioribus; tarsorum anticorum articulus basalis quam ceteri conjuncti parum (posteriorum multo) brevior, 3° in 2° inserto; unguiculi subtus dente parvo armati; metasternum breve; pygidium manifestum, subquadratum.

According to M. Lacordaire's classification the small insect for which I found this genus is a member of the "Anthribides vrais," by virtue of the following characters in combination:—Antennæ inserted on the sides of the rostrum, carina of pronotum basal, rostrum of subparallel form, body not elongate-cylindric. In that group it is distinguishable by the following characters:—Front coxæ very widely separated (more widely than in *Phlæobius*), rostrum truncate at its extremity, antennæ and legs extremely like those of *Aræocerus*. The outline of the prothorax and elytra is not unlike that of *Ceutorrhynchus*. I am uncertain as to the sex of the examples before me. The front margin of the eye itself forms the hind wall of the scrobe.

*S. planatum*, sp. nov. Piceum vix rufescens, antennis (clava excepta) et tarsorum apice testaceis; sat opacum; sparsim



minus perspicue cinereo-pubescent; supra confertim subtilissime (haud multo aliter quam *Aræocerus fasciculatus*, De Geer) subaspere punctulatum; rostro cum capite continuo; prothorace vage inæquali; elytris striatis, in parte suturali conjunctim planatis; pedibus pube cinerea plus minusve perspicue maculatis; antennis prothoracem medium paullo superantibus, clava quam articuli 4<sup>us</sup>—8<sup>us</sup> conjuncti vix brevioribus, articulis 9° vix (10° manifeste) transverso 11° obconico quam latiori parum longiori. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{4}{5}$  l. (vix).

There are indications on the specimen before me of the whitish hair-like scales on the upper surface having been in places condensed into somewhat conspicuous blotches which are chiefly about the middle of the front of the prothorax, on the scutellum and about the sides of the prothorax and elytra, especially near the shoulders, and it is possible some such markings may have been rubbed off, although the presence of the even thinly distributed pubescence seems inconsistent with the surface being much abraded. A vague depression runs down the middle of the prothorax longitudinally, on either side of which slightly behind the middle is a distinct transverse gibbosity. The fourth interstice of each elytron is more conspicuous than the other interstices, chiefly through the space between the fourth interstices of the two elytra (including the suture) being flattened. Most of the interstices are furnished in some part of their length with unequal feebly raised tubercles. The head and rostrum together form a perfectly even flattened surface without any trace of distinction *inter se*. The insect has much of the structure of *Aræocerus* but with the rostrum and scrobes of a true *Anthribid*.

Victoria.

*S. contemptum*, sp. nov. Fere ut præcedens (*S. planatum*) coloratum et pubescens sed pedibus dilutioribus et elytris ad apicem rufis; rostro cum capite continuo; prothorace æquali, lateribus mox ante basin manifeste sinuatis, angulis posticis extrorsum manifeste acutis; elytris æqualiter convexis, interstitiis vix perspicue tuberculatis; antennis prothoracis basin attingentibus, clava quam articuli 3<sup>us</sup>—8<sup>us</sup> conjuncti vix breviori, articulis 9°—11° elongatis (10° quam 9<sup>us</sup> et 11<sup>us</sup> manifeste breviori. Long.,  $1\frac{1}{5}$  l.; lat.,  $\frac{4}{5}$  l. (vix).

This species closely resembles the preceding in general appearance, but is certainly distinct. The pronotum is devoid of inequalities and the elytra have no longitudinal flattening on the sutural region, their interstices also being all but devoid of inequalities. The sides of the prothorax are quite strongly incurved just in front of the base, and the hind angles of that



segment are very distinctly pointed outward, neither of which characters is found in *S. planatum*. The antennæ are considerably longer in *S. contemptum* than in *S. planatum*, their club especially, of which all the joints are at least twice as long as wide. It is not improbable that these antennal differences may indicate that my example of *contemptum* is a male, and that of *planatum* a female, but they are certainly not the sexes of one species. There is scarcely any indication of the pubescence being condensed in patches on the example before me, but I do not attach much importance to this character, as I find that the condensed long scales on the small *Anthribidæ* are very easily rubbed off, and therefore very unreliable for identification of species.

N. Queensland ; given to me by Mr. Koebele.

NOTECIA (gen. nov. *Anthribidarum*).

Mas. Rostrum transversum, depressum, ad apicem arcuatim emarginatum, ad basin quam caput haud angustius, scrobibus lateralibus foveiformibus apertis; antennæ quam corporis dimidium sublongiores, graciles, clava minus laxè 3-articulatis, articulis basalibus 2 quam sequentes robustioribus (2° longiori), 3° 4° que inter se sat æqualibus, 5°—8° quam 4<sup>us</sup> sat brevioribus, 9° obconico 8° longitudine æquali, 10° brevi transverso, 11° quam 9<sup>us</sup> vix longiori; oculi magni, sat subtiliter granulati, antice sat profunde emarginati, supra inter se approximati; prothorax transversus æqualis, carina antebasali nulla, carina basali ad latera angulata et antrorsum ultra prothoracis medium producta; scutellum parvum; elytra subcylindrica brevia (quam conjunctim latiora circiter ut 10 ad 7 longiora), ad basin leviter gibbosa, striata, postice verticalia; coxæ anticæ subcontiguæ; pedes modici; tarsi antici quam tibiæ haud breviores, articulo basali quam ceteri conjuncti sublongiori; unguiculi subtus dente parvo armati; pygidium manifestum; corpus pubescens.

The insect for which I propose this generic name falls into M. Lacoradire's group "*Anthribides vrais*" by virtue of the following characters:—Antennæ inserted on the sides of the rostrum, carina of pronotum basal, rostrum parallel-sided, body not elongate. The genus, however, can hardly be placed in M. Lacordaire's tabulation of the genera of that group as its two main divisions are "front coxæ widely separated, rostrum strongly emarginate in front," and "front coxæ subcontiguous, rostrum not or scarcely emarginate in front," whereas in this genus the front coxæ are subcontiguous and the rostrum is quite strongly emarginate in front. Its most striking characters are found in its very large eyes, strongly emarginate in front, and



separated from each other on the forehead by a space only about one-third of the width of the rostrum, and its open scrobes which cut the upper surface of the rostrum sufficiently to be both visible when viewed from above. This form of scrobes is an approach to their form in the *Aræocerides*, in which, however, both scrobes are *entirely* visible when viewed from above, and the interval between them is less than the interval between the eyes, whereas in this genus (and others with the scrobes visible and lateral) the interval between them is greater than that between the eyes and only a small part of both scrobes can be seen together.

*N. reticulata*, sp. nov. Piceo-rufa, pube albida variegata; hac in rostro vage, in capite medio longitudinaliter (et circa oculos) lineatim, in prothorace vage, in scutello confertim, in elytris reticulatim et maculatim, in pygidio ita ut annulos 2 format, in sternis abdominis lateribus pedibusque (in his interrupte) sat dense, disposita; antennarum clava et pedum nonnullis partibus obscuris; corpore toto (pube haud abrasa) confertim subtilissime subaspere punctulato; prothorace fortiter transverso, antice minus fortiter angustato, lateribus parum arcuatis; elytris indistincte (latera versus magis perspicue) striatis, striis vix perspicue punctulatis. Long.,  $1\frac{3}{4}$  l.; lat.,  $\frac{7}{10}$  l.

On this pretty little species fine dense red-brown very short pubescence covers the upper surface so closely that there is little apparent sculpture; but, no doubt, if the pubescence were removed underlying sculpture would appear. On the red-brown derm-pubescence there is variegation formed by longer pubescence of ashy-white colour. This longer pubescence is vaguely scattered over the rostrum and pronotum and densely clothes the small scutellum; on the head it forms fine lines and on the elytra it runs in fine sinous longitudinal lines, which are here and there transversely connected,—some of the transverse connections (especially between the third and fourth longitudinal lines) being dilated into conspicuous blotches. The derm-pubescence is more red than brown on the head and becomes gradually less red and more brown hindward. The inequalities of the elytral surface (which are likely to be a generic character) are feebly defined, and best observed by looking at the insect from the side when there is seen to be feeble gibbosity near the base with irregular depression behind the gibbosity, then a scarcely elevated longitudinal ridge on the third interstice slightly behind its middle and a still slighter elevation a little nearer the base on the subsutural interstice while between the ridge on the third interstice and the lateral margin the surface is scarcely visibly depressed.

N. Queensland; sent to me by the late Mr. Cowley.



## MISTHOSIMA.

The species described below may be referred I think to this genus which was founded by Mr. Pascoe to include two insects from Borneo. It agrees very well with the characters attributed to the genus by its author and if not a true congener of the already described species must represent a closely allied new genus distinguishable by characters not mentioned in the diagnosis. The only discrepancies are slight, consisting in the second antennal joint being scarcely shorter than the basal one and the metasternum not quite so short as in *Aræocerus* (as, according to description, it should be) but these alone scarcely justify the formation of a new genus.

*M. dorsonotata*, sp. nov. Oblonga; picea, antennarum basi labro femoribus tibiisque testaceis; pube densa fusca vestita, hac pube cinerea concinne maculatim variegata; antennarum articulo 2° quam 1<sup>us</sup> vix breviori; supra confertim aspere subtiliter (in elytris quam alibi paullo minus subtiliter) punctulata; elytris subtilissime striatis; pube in corpore subtus quam in corpore supra magis cinerea. Long.,  $1\frac{3}{4}$  l.; lat.,  $\frac{3}{5}$  l.

The ashy or whitish pubescence of the upper surface is distributed as follows:—On the head it predominates (the fuscous colour forming two longitudinal lines dilated in front and behind); on the prothorax it is most conspicuous on the sides and middle line; on the elytra it forms numerous small clearly defined evenly distributed spots, three somewhat larger placed transversely across the base, and a common much larger triangular patch (its apex pointing forward) about the middle of the suture.

North Queensland.

## DOTICUS.

This genus is unsatisfactorily close to *Aræocerus*. Its author (Mr. Pascoe) says that it differs from *Aræocerus* by the greater length of its front legs, the greater width of its tarsi and the deeper insertion of the third tarsal joint in the second. To this it may be added that (so far as my experience goes) the species with the legs of *Doticus* are considerably larger than any with the legs of *Aræocerus*. Nevertheless I am of opinion that the generic distinction of the two cannot be maintained. I have before me a specimen which is certainly I think *D. palmaris*, Pasc. *Metadoticus*, Olliff, seems to be quite indistinguishable from *Doticus*. The name used by Olliff seems to have been suggested by the author of *Doticus*, and yet there is nothing in his diagnosis to distinguish it from that of *Doticus*, nor does he mention *Doticus*, but compares *Metadoticus* to *Ethneca*, with which *Doticus* has so little connection that it would be hard to find two



*Anthribidæ* much less allied to each other than they are. Olliff's species (the too common *Metadoticus pestilens*) is quite unmistakable and the insect generally called by that name agrees so perfectly with Olliff's somewhat full specific description that it seems impossible we can be mistaken in our identification of *M. pestilens*. I can find no generic distinction between *M. pestilens* and the insect mentioned above as *D. palmaris*.

*D. æqualipennis*, sp. nov. Late ovalis; piceus, pube brunnea maculatim vestitus; supra confertim subtilissime subaspere punctulatus; prothorace minus fortiter transverso, antrorsum a basi arcuatim fortiter angustato, æquali; elytris æqualibus, striatis, striis sat fortiter nec crebre punctulatis, interstitiis planis. Long.,  $3\frac{1}{2}$  l.; lat.,  $1\frac{3}{5}$  l.

The head is entirely covered with bright brown pubescence except a longitudinal vitta of dark brown pubescence on either side of the middle; the pronotum is confusedly variegated with bright brown pubescence on the piceous derm; on the elytra the piceous derm is variegated by bright brown pubescence arranged longitudinally on the interstices, the pubescence being continuous (on the specimen before me, which is evidently not at all abraded) on the front one fifth part of most of the inner seven interstices and nearly so on about the hinder half of the inner five interstices, but on the rest of the interstitial surface it takes the form of small square spots; where the pubescence is not of bright brown colour it is scarcely less dense, but is of the colour of the derm; that of the under surface is uniformly of a pale ashy colour. This species seems to agree absolutely with *D. palmaris*, Pasc., and *M. pestilens*, Oll., in its structural characters. It is very distinct from both, as a species, owing to the even surface of its pronotum and elytra.

Queensland; sent to me by Mr. G. Masters as No. 77.

#### ARÆOCERUS.

This genus is somewhat numerously represented in Australia, although no species of it have yet been recorded in Australia in such fashion as to be capable of confident identification. In 1835 Boisduval published a diagnosis consisting of nine words of *Anthribus sambucinus*, which he thought might be a variety of *Anthribus coffeæ*, Fab., and the latter (according to Lacordaire) is identical with *Aræocerus fasciculatus*, De Geer. Doubtless therefore *A. sambucinus* is an *Aræocerus* and it now stands in our Catalogues as a variety of *A. fasciculatus*. I have not access to De Geer's description of *A. fasciculatus*, but I know the insect as a Hawaiian *Aræocerus* that the eminent Coleopterist Dr. Sharp named for me. I have examples from tropical Queensland of an *Aræocerus* that I cannot separate



from *fasciculatus*, but I do not think it likely to be *sambucinus*, Boisd., as the habitat of the latter is presumably the neighbourhood of Sydney, where I have taken an *Aræocerus* perfectly distinct from (though closely resembling superficially) *fasciculatus*, and which I have little doubt is the true *sambucinus*.

The species of this genus are very difficult to deal with on account of their pubescence being extremely easily rubbed off,—so that it is necessary to rely almost entirely on structural characters for identification and the descriptions of markings can be but little trusted for identifying any but very fresh specimens,—and also from the absence (alluded to by M. Lacordaire) of any readily available character for determining the sex of a specimen. In studying a considerable number of examples of *Aræocerus* from widely separated parts of Australia I find, owing to the difficulties mentioned, a certain number of forms which I believe to represent additional species, but which I hesitate to treat as certainly distinct, and in the following pages I have limited myself to the well-marked species.

The characters of some of the *Aræoceri* described below do not altogether agree with Lacordaire's diagnosis of the genus, but I am satisfied that the characters in question are not truly generic.

The following tabulation will assist in the determination of the *Aræoceri* known to me as Australian.

A. Each elytron having a well developed basal crest *bicristatus*, Blackb.

AA. Elytra even at the base,—or nearly so.

B. Ninth joint of antennæ not or scarcely longer than tenth.

C. Legs dark... .. *Koebelei*, Blackb.

CC. Legs of pale colour ... .. *fasciculatus*, DeG.

BB. Ninth joint of antennæ notably longer than tenth.

C. Antennæ long enough to reach the base of the prothorax.

D. Antennal club moderately robust (about as much so as in *D pestilens*, Olliff) ... *sambucinus*, Boisd.

DD. Antennal club notably more slender ... *lindensis*, Blackb.

CC. Antennæ not long enough to reach base of prothorax ... .. *asperulus*, Blackb.

A. *bicristatus*, sp. nov. Ovalis, minus latus; sat convexus; picea, pube læte brunnea dense vestita, hac pube cinerea et nigricanti variegata (hac in pronoto ad latera et medium et in elytris maculatim, illa in elytris sparsissime maculatim, dispositis); antennis prothoracis basin attingentibus, testaceis, clava fusca, articulo 9<sup>o</sup> quam 10<sup>us</sup> vix longiori; prothorace minus fortiter transverso, antice fortiter angustato, lateribus leviter arcuatis, basi bisinuata, supra crebre aspere punctulato, angulis posticis acutis; elytris crebre aspere



(quam pronotum vix magis subtiliter) punctulatis, striatis striis puncturis sat magnis leviter impressis, interstitiis tuberculis seriatim instructis, his vix elevatis nisi in interstitio 3° in quo tuberculus anticus cristam longitudinalem bene elevatam format (fere ut *Dotici pestilentis* Olliff sed minus elevatam); femoribus ad apicem haud ut dens productis; tarsis sat fortiter (fere ut *A. fasciculati*, De Geer) elongatis.

Maris tibiis anticis intus ciliatis; tarsis anticis quam feminae multo robustioribus, et setulis elongatis vestitis. Long.,  $1-1\frac{3}{5}$  l.; lat.,  $\frac{2}{5}-\frac{3}{5}$  l.

Readily distinguishable among the Australian *Aræoceri* by the crest-like tubercle near the base of the third interstice of its elytra. In a fresh specimen the alternate elytral interstices bear a number of rather conspicuous little tubercles covered with pubescence (on some of the tubercles darker, on others lighter, than that of the general surface) which is a little longer than of the general surface, while the basal margin of the elytra is entirely and narrowly bordered with red-brown pubescence. In abraded specimens the interstitial tubercles are much less conspicuous. Compared with *Doticus palmaris*, Pasc., and *pestilens*, Olliff, the present species is, *inter alia*, very much smaller and narrower.

Queensland; given to me by Mr. Koebele.

*A. Koebelei*, sp. nov. Sat late ovalis; sat convexus; nigricans, prothorace antice et postice et pedibus plus minusve rufescentibus, antennis (clava excepta) rufis; pube albo-vel rufo-cinerea in pronoti parte anteriori et in elytrorum partibus scutellari humeralique et interstitiis alternis maculatim vestitus; antennis prothoracis basin attingentibus, articulo 9° quam 10<sup>us</sup> vix longiori; prothorace fere ut *A. bicristati* sed magis transverso; elytris fere ut *A. bicristati*, sed interstitio 3° basin versus haud gibboso; femoribus ut *A. bicristati*; tarsis quam *A. bicristati* magis robustis, minus elongatis. Long.,  $1\frac{1}{2}-2$  l.; lat.  $\frac{3}{5}-1$  l.

Maris tibiis anticis leviter sinuatis, intus ciliatis et subtiliter crenulatis; tarsis anticis breviter pilosis et leviter dilatatis.

Readily distinguishable from its Australian congeners known to me by its almost black colour, and its dark legs. It is a much broader and more robust species than *A. bicristatus*. In a fresh specimen the whitish pubescent spots stand out very conspicuously on the blackish general surface. They form a slight mottling on the head, and front and base of the pronotum, an elongate patch including the scutellum, a patch (of somewhat reddish tone) on each shoulder, and a number of small spots on the alternate inter-



stices of the elytra. I have two examples sent to me by Mr. Masters which may possibly represent a closely allied distinct species, as they are of even broader and more robust form than the type, with the pale spots on the elytra evidently (though only slightly) raised, but their colours and markings agree so exactly with those of the type that I am disposed to think them merely fine and highly developed examples of the one species.

Queensland; given to me by Mr. Koebele.

*A. lindensis*, sp. nov. Mas. Brevis; latus; sat convexus; rufo-brunneus, sternis et antennarum clava piceis; pube cinerea in partibus vestitus sicut partes haud pubescentes ut notulae obscurae apparent (harum praesertim manifesta est in elytris notula magna basalis subsuturalis,—in exemplis nonnullis cum alterius elytri notula conjuncta); antennis prothoracis basin vix attingentibus, articulo 9° quam 10<sup>us</sup> sesquilongiori, clava sat gracili; prothorace sat transverso, confertim subtilius granulato-punctulato, antice angustato, lateribus modice arcuatis, angulis posticis (superne visis) sat rectis; elytris striato-punctulatis, interstitiis confertim aspere punctulatis; femoribus subtus (anticorum parte media acute trispinosa) mox ante apicem profunde emarginato, apice ipso deorsum (ut dens parvus) acuto; tibiis anticis intus subtiliter manifeste crenulatis; tarsorum anticorum articulo basali sat breve setulis elongatis vestito; coxis anticis inter se anguste separatis. Long., 1—1 $\frac{1}{5}$  l.; lat.,  $\frac{1}{2}$ — $\frac{3}{5}$  l.

This species is at once separable from the preceding two (*bicristatus* and *Koebelei*) and from *fasciculatus*, De G., by the peculiar structure of the front femora of its male. The markings (resulting from the presence of spaces on which the ashy pubescence is wanting) form a vague mottling on the prothorax and elytra, of which the most conspicuous feature is a rather large basal elytral spot close to the scutellum on either side (the two spots united in some examples). This basal elytral spot appears very dark and well defined when the insect is looked at obliquely from in front, but is much less noticeable when looked at from behind. The other parts of the elytra devoid of ashy pubescence appear as small spots running into indistinct oblique fasciae,—in some examples their fascia-like disposition scarcely discernible.

Although I have taken about seven specimens of this insect, they are all males.

S. Australia (Eyre's Peninsula).

*A. sambucinus*, Boisd. Praecedenti (*A. lindensi*) affinis; minus brevis; antennarum clava magis robusta; elytris ad basin haud vel vix perspicue plaga obscura notatis; tarsorum anticorum articulo basali sat majori.



Maris femoribus tibiisque anticis fere ut *A. lindensis*, sed spinis (in illius parte media subtus positis) multo brevioribus vel granuli formibus; tarsorum anticorum articulo basali paullo magis robusto et setulis elongatis vestito.

Feminae femoribus anticis ad apicem vix deorsum productis, tibiis intus haud crenulatis, tarsis haud setulis elongatis vestitis. Long.,  $1\frac{1}{2}$ — $1\frac{3}{5}$  l.; lat.,  $\frac{7}{10}$  l.

Distinctly larger than *A. lindensis* and without (or almost without) any indication of the dark blotches at the base of the elytra. Differs from the male of *lindensis* (and no doubt from the female also) by the much less slender club of its antennæ and the notably larger basal joint of its front tarsi. The male differs from the male of *A. lindensis* by the sexual ante-apical emargination and apical tooth of its femora being present only in the front pair and by the very much feebler inequalities on the middle part of the undersurface of its front femora. Differs from *fasciculatus*, De G. *inter alia* by its sexual characters.

Widely distributed in Southern Australia.

*A. asperulus*, sp. nov. Ovalis; minus latus; sat convexus; piceus, pronoto antice elytris tibiisque dilutioribus, antennis (clava excepta) rufis; pube cinerea sparsim (exemplorum visorum haud maculatis) vestitus; antennis prothoracem medium parum superantibus, articulo 9<sup>o</sup> quam 10<sup>us</sup> sesquolongiori; prothorace sat fortiter transverso, ante basin anguste transversim depresso, in ceteris partibus æquali nullo modo canaliculato, confertim minus subtiliter aspere punctulato, angulis posticis extrorsum manifeste prominulis; elytris striatis, striis cancellato-punctulatis, interstitiis aspere subfortiter crebre punctulatis; femoribus mox ante apicem subtus profunde emarginato, apice ipso deorsum (ut dens parvus) acuto; tarsis quam *A. fasciculati*, De Geer, sat brevioribus sat robustioribus; coxis anticis inter se sat late separatis. Long.,  $1\frac{1}{2}$  l.; lat.,  $\frac{7}{10}$  l. (vix.).

I am not sure that a new genus ought not to be formed for this insect on account of its short antennæ, comparatively widely separated front coxæ, and curiously shaped femora, but as in the preceding two species the first of the above characters is approached and the last is even exaggerated, I think they may be regarded as a gradual divergence from the typical characters of *Aræocerus* rather than the indication of a really distinct genus. The present species owing to its elongate oval form and pubescence not condensed into spots (I do not think the two specimens before me are abraded) has scarcely the facies of *Aræocerus*, but the preceding two species (which are undoubtedly allied to it) have quite the facies of *Aræocerus*. The insertion of



the antennæ is altogether as in a typical *Aræocerus* in being slightly nearer to the middle line of the head and rostrum than is the inner margin of the eye. The specimens before me are females. Their antennal club is short and moderately stout.

S. Australia ; Eyre's Peninsula.

ARÆOCERODES (gen. nov. *Anthribidarum*).

Caput transversum ; rostrum transversum, supra sat planum, ad apicem truncatum, ad basin quam caput haud angustius, scrobibus ut *Aræoceri* ; antennæ prothoracis basin paullo superantes, sat graciles, articulis basalibus 2 quam ceteri robustioribus (2° longiori), 8° ad apicem leviter dilatato, 9°—11° clavam elongatam laxè articulatam formantibus ; oculi oblongo-ovales haud (vel vix) emarginati, grossissime granulati ; prothorax transversus, æqualis, antice modice angustatus, carina antebasali nulla ; carina basalis ad latera angulata et antrorsum brevissime producta ; scutellum angustum ; elytra convexa, æqualia, striata, striis fortiter nec crebre punctulatis ; coxæ anticæ sat contiguæ ; pedes modici, anticis quam ceteri longioribus ; tarsi modici, articulo 3° in 2° profunde inserto ; unguiculi subtus dentati.

Structurally near to *Aræocerus*, but of evidently more cylindric form and with narrow, elongate, very coarsely granulated eyes. The species is the smallest *Anthribid* that I have seen.

*A. lilliputanus*, sp. nov. Pallide testaceus, antennarum clava obscura ; pube albido-testacea vestitus, hac in elytris trifasciatim disposita ; capite prothoraceque confertim subfortiter granulatis ; prothoracis angulis posticis (superne visis) retrorsum acutis. Long.,  $\frac{2}{3}$  l. (vix) ; lat.,  $\frac{3}{10}$  l.

The characters not mentioned in the above specific description are fully stated in the generic diagnosis and need not be repeated. Its excessively minute size will at once distinguish this insect from all the previously described Australian *Anthribidæ*.

N. Queensland ; sent to me by the late Mr. Cowley.

PHYTOPHAGA.

CLEPTOR.

I have before me examples of both species of this genus, named by Mr. Jacoby and agreeing so well with Lefèvre's descriptions that I can feel no doubt of their identity. But I think the genus is not rightly placed next to *Edusa* as it seems to me very much closer to *Colaspoides*, of which it entirely reproduces the prosternal characters. M. Lefèvre indeed characterises the *Edusitæ* *inter alia* by the phrase "prosternum oblongum" and yet places *Cleptor* in that group in spite of his diagnosis of its



prosternum as being "latius quam longum." I can really find no very marked character to distinguish *Cleptor* from *Colaspoides* except in its eyes being almost without sinuation. M. Lacordaire distinguished the "*Edusites*" from the "*Endocephalites*" (containing *Colaspoides*) by the presence in the former of transverse elytral rugosities, but this distinction is not reliable. M. Lefèvre mentions the rugosities as only "generally" present in the former group, M. Lacordaire himself admits that in some *Edusites* "elles peuvent passer inaperçues," and I possess species of *Colaspoides* in which they are not quite wanting. The groups then (as characterised by M. Lacordaire) cannot be maintained; nor does M. Lefèvre, though accepting the groups, suggest any better distinction. Whether it would be practicable and desirable to regard *Edusa* and *Colaspoides* as the typical genera of two groups (which would have very different contents from those mentioned above) distinguished from each other by the form of the prosternum I must leave to the decision of authors better equipped than I am for studying a large cosmopolitan collection of *Eumolpides*, but however the genera should be grouped I am convinced that *Cleptor* ought to stand close to *Colaspoides*. Along with the examples of *Cleptor* mentioned above Mr. Jacoby sent me a specimen as *Colaspoides xanthopus*, Har., which appears to be correctly named, but is certainly, I think, a *Cleptor*. It is identical with a specimen I received from the Chapuis' collection ticketed "*Neotaxis fulgida*." I cannot find that Dr. Chapuis ever published such a genus and species. Possibly the genus *Cleptor* was published at such time as to forestal *Neotaxis*,—but at any rate it indicates that Dr. Chapuis did not place Harold's insect in *Colaspoides*.

The following is a new species of *Cleptor*.

*C. Haroldi*, sp. nov. Glaber, supra cyanescens viridi-micans, subtus niger (certo ad aspectu aureo-vel cupreo micans), antennis ferrugineis apicem versus obscurioribus, pedibus piceis plus minusve rufescentibus; pronoto crebre subtilius punctulato, puncturis singulis oblongis; scutello lævi; elytris in disco medio crebre fortiter (in ceteris partibus minus crebre minus fortiter) vix seriatim punctulatis, pone basin vix manifeste impressis, pone humeros certo ad aspectu transversim leviter rugatis. Long.,  $2\frac{1}{2}$  l.; lat.,  $1\frac{3}{5}$  l.

Compared with *C. rufimanus*, Lef., the pronotum is considerably more closely punctulate, with the lateral puncturation much more evidently offering a longitudinally rugate appearance, while the puncturation of the elytra is much finer near the lateral margins; the form also is notably less convex. Compared with *C. inermis*, Lef., and *xanthopus*, Har., *inter alia multa* there is scarcely any indication of a transverse impression near the base of the elytra.

N. Queensland.





Blackburn, Thomas. 1900. "Further notes on Australian Coleoptera, with descriptions of new genera and species. Part XXVII." *Transactions of the Royal Society of South Australia* 24, 113–169.

**View This Item Online:** <https://www.biodiversitylibrary.org/item/113934>

**Permalink:** <https://www.biodiversitylibrary.org/partpdf/244349>

**Holding Institution**

Missouri Botanical Garden, Peter H. Raven Library

**Sponsored by**

Missouri Botanical Garden

**Copyright & Reuse**

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.