

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

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## XVII.

### CARABIDÆ.

An important and very able memoir by Mr. T. G. Sloane on Australian *Carabidæ* appears in the recently published Part (III., 1895) of the Proceedings of the Linnean Society of New South Wales. Some of Mr. Sloane's proposals—*e.g.*, the merging of the *Morionides* and *Trigonotomides* in the *Feroniides*, and of *Notonomus* and *Sarticus* in *Pterostichus*,\* while *Loxandrus*, *Prosopogmus*, &c., are treated as genera—certainly appears to me on first thoughts open to much objection; neither can I acquiesce in Mr. Sloane's apparent reluctance to regard sexual characters as of classificatory value (illustrated by his uniting *Nurus* and *Homalosoma* on the ground that they do not seem to differ except in respect of sexual tarsal characters). As however the memoir was published in Sydney only a week ago, I have not had time to do more than hastily run my eyes over it and am not justified in seriously criticising it on the strength of so slight an acquaintance with its contents, nor should I have discussed it on this occasion if it had not been that Mr. Sloane refers here and there to what I have myself written concerning some Australian *Carabidæ* and in at least one instance seems to invite further information from me which this seems a good opportunity to furnish.

In dealing with *Leptopodus*, Chaud., Mr. Sloane refers to my having expressed the opinion that it is scarcely distinct from *Simodontus* on the strength of its having been formed for the reception of *Pterostichus holomelanus*, Germ., but thinks that (although he agrees *P. holomelanus* is a *Simodontus*, yet) inasmuch as M. Chaudoir attributed also other species to *Leptopodus* some of which stood in need of a new name *holomelanus* ought to be relegated to *Simodontus* and *Leptopodus* retained for other species. I think Mr. Sloane is right in this view of the matter.

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\* I observe that in a footnote Mr. Sloane himself hesitates considerably on this point.



Mr. Sloane in a footnote states that *Rhytisternus sulcatipes*, Blackb., is *R. lævilaterus*, Chaud. I cannot look upon this as more than a guess, inasmuch as M. Chaudoir never really described *lævilaterus* but only indicated its differences from *R. liopleura*. Of course it may be *sulcatipes* but inasmuch as M. Chaudoir says that in *lævilatera* the fifth elytral stria is "omnino oblitterata," while in *sulcatipes* that stria is perfectly traceable throughout the length of the elytra; and as moreover *lævilatera* is said to be from Queensland while I have seen *sulcatipes* only from Southern Australia, I look upon the identity of the two as far from being established.

Discussing the affinities of *Cyclothorax* Mr. Sloane expresses a doubt whether that genus can be placed in any of the recognised tribes of *Carabidæ*. I think however it may be placed in the tribe for which (Proc. L.S., N.S.W., 1892, p. 85) I proposed the name *Amblytelides*.

Mr. Sloane agrees that, as stated by me Tr. Roy. Soc., S.A., 1894, p. 203, *Cyclothorax cinctipennis*, Black.=*C. (Phorticosomus) lateralis*, Cast.

Australian coleopterists owe a debt of gratitude to Mr. Sloane for such a memoir as this on which I am commenting. I sincerely hope that he will be able by degrees to treat all the larger genera of Australian *Carabidæ* as he has now treated *Homalosoma* and *Rhytisternus*, and that in due course the tribes of *Lebiides* and *Harpalides* will be dealt with by him after the manner in which he has dealt with the *Feroniides*.

#### TRECHUS.

*T. atriceps*, MacL. In Proc. L.S., N.S.W., 1892, p. 97, I mentioned having seen the type of this species at Sydney and noted that it seemed to be a *Thenarotes*. Recently Mr. Masters has been good enough to send me an example and I find that my opinion was correct. It is very close to my *Thenarotes discoidalis* var. ? *minor*, but certainly distinct, being much smaller and having the basal part of its prothorax differently sculptured. In *T. atriceps* there is a basal punctulate depression extending almost from the central channel to the lateral margin scarcely deepened into a fovea in the middle, while in *T. minor* the punctulate space is a distinct (though not sharply defined) fovea separated from the central channel by a considerable unpunctured interval.

#### GYRINIDÆ.

##### DINEUTES.

*D. inflatus*, sp. nov. Fem. Latissime ovatus; supra obscure viridis, prothorace elytrisq. sat longe intra marginem lateralem vitta sat lata obscure cupreo-aurea (hac postice



abbreviata) ornatis; subtus piceo-ferrugineus, pedibus anticis concoloribus, posterioribus 4 paullo dilutioribus; supra fere lævis obsolete rugatus, rugis in capite prothoraceque confusis in elytris longitudinaliter dispositis, in elytrorum parte externa paullo magis distinctis substriiformibus; elytris in parte mediana magis quam latera versus convexis, parte cupreo-aurea leviter subimpressa, apicibus singulatim rotundatis. Long., 6; lat., 4 l. (vix).

Easily distinguishable from all the previously described Australian *Gyrinidae* by its great width, its length being scarcely more than half again its breadth.

Victoria.

## HYDROPHILIDÆ.

### PHILHYDRUS.

*P. eyrensis*, sp. nov. Ovalis; nitidus; piceo-niger, palpis antennis tibiis tarsis et capitis prothoracis elytrorumque marginibus lateralibus rufis vel rufo-testaceis; supra sat æqualiter crebre sat fortiter (elytris quam caput prothoraxque paullo magis fortiter) punctulatus; elytris puncturis nonnullis (his seriatim dispositis) vix majoribus impressis. Long.,  $2\frac{1}{2}$  l.; lat.,  $1\frac{1}{4}$  l.

This species is extremely like *P. melanocephalus*, Fab., and is probably the insect on the authority of which *P. melanocephalus* has been credited (I believe it is in Dejean's Cat.) to Australia. But it differs from *melanocephalus* in its head not being impressed in front of the eyes, in the evidently less strong puncturation of its prothorax and in its palpi being scarcely infusate at the extreme apex.

Eyre's Peninsula.

### HYDROCHUS.

*H. Palmerstoni*, sp. nov. Minus elongatus; sat nitidus; viridis, elytris brunneis, cupreo-submicantibus; antennis palpis pedibusque sordide testaceis, genubus infuscatis; capite inter oculos longitudinaliter 3-sulcato; prothorace cordato sat crebre ruguloso-punctulato, indisco minus perspicue 3-areolato; elytris seriatim punctulatis, puncturis basin versus sat parvis postice permagnis foveiformibus. Long.,  $1\frac{1}{10}$  l.; lat.,  $\frac{2}{5}$  l.

A remarkable species on account of the peculiar sculpture of its elytra, the seriate punctures being in the basal one-fourth comparatively small and the interstices between the series continuous and well defined, while before the middle the seriate punctures become extremely large round foveæ of diameter greater than the width of a puncture and an interstice together in the



basal part so as to leave no continuous straight interstices between the foveæ.

Near Palmerston, N. Terr. ; taken by Mr. Walker.

BEROSUS.

*B. munitipennis*, sp. nov. Ovalis ; convexus ; nitidus ; supra pallide testaceus (exemplis nonnullis sparsim fusconotatis), capite prothoraceque rufescentibus ; subtus obscurus, antennis palpis pedibusque testaceis ; capite æquali, fortiter crebre antice minus crebre) punctulato, prothorace transverso fere ut caput (sed minus crebre quam hujus pars postica) punctulato ; elytris minus fortiter punctulato-striatis, ad apicem leviter emarginatis, parte emarginata extus ut spina gracilis perlonga producta, interstitiis planis sparsim sat fortiter punctulatis. Long.,  $2\frac{1}{2}$  l. ; lat.,  $1\frac{1}{3}$  l.

Allied to *B. externe-spinosus*, Fairm., but differing from that species, as described, by the much coarser puncturation of its head, its entirely testaceous legs, &c. ; differing from Queensland specimens in my collection (which I have no doubt are Fairmaire's species) and from all the other described Australian *Berosi*, also by the very long slender spine into which the external apices of its elytra are produced.

S. Australia ; taken by Mr. Zietz near Lake Callabonna.

NOTOBEROSUS (gen. nov. *Hydrophilidarum*).

*Beroso* affinis ; differt antennis brevioribus specie 6-articulatis (articuli 3<sup>us</sup> 4<sup>us</sup> que minutissimi cum 5<sup>o</sup> intime conjunguntur), hoc quam 6<sup>o</sup> multo latiori ; mesosterno haud carinato.

The insect for which I propose this name has very singular antennæ. Examined under a Coddington lens they appear to consist of six joints, the basal two much like those of a *Berosus*, the third conical and at its apex much wider than any of the three joints which compose the club. Under a compound microscope however the basal part of this apparent third joint seems to consist of two minute joints intimately joined to each other and the second of them to the large joint that follows.

*N. Zietzi*, sp. nov. Ovalis ; nitidus ; glaber ; supra albido-testaceus, clypeo capiteque in medio et postice plus minusve nigris vel obscure fuscis ; mesosterno metasterno et abdomine nigris ; antennarum clava vix infuscata ; capite prothoraceque (hoc transverso æquali) subtiliter crebre punctulatis ; elytris nullo modo striatis, sparsim inæqualiter (hic illic subseriatim) punctulatis ; nonnullorum exemplorum (? marium) puncturis raris permagnis juxta suturam positis. Long.,  $1\frac{3}{5}$  l. ; lat.,  $\frac{4}{5}$  l.

The punctures of the elytra are of several different sizes con-



fusedly and not closely intermingled; in some specimens (apparently, from the few examples taken, males) a few of these are much larger than the rest and are placed near the suture along its front half. In the male the hind margin of the penultimate ventral segment is widely and sinuously emarginate.

S. Australia; taken by Mr. Zietz near Lake Callabonna.

## NITIDULIDÆ.

### MACROURA.

*M. Baileyi*, Blackb. In Trans. Roy. Soc. S.A., 1894, p. 204, I stated that this species seemed to be identical with *Carpophilus obscurus*, Macl., on the authority of a specimen sent to me by Mr. Lea and compared by him with Macleay's type. I much regret to find that this was an error. I have since received the same species from Mr. Masters as *Nitidula concolor*, Macl., and on investigation I find that the latter name is right and that Mr. Lea's label must have been a *lapsus calami* or by some oversight have been attached to the wrong specimen. I therefore must withdraw my assertion regarding *C. obscurus*, Macl., and notify that it is *Nitidula concolor*, Macl., to which it applies.

## LAMELLICORNES.

### ONTHOPHAGUS.

*O. Leai*, sp. nov. Robustus; piceus, antennis palpisque testaceis; nonnullorum exemplorum pedibus rufescentibus; subtus rufo-hirsutus; clypeo antice late rotundato; capite creberrime subtilius transversim, prothorace (hoc subcanaliculato) paullo minus crebre minus subtiliter longitudinaliter, ruguloso; elytris modice striatis, striis vix manifeste punctulatis; interstitiis sat planis sparsim leviter nec subtiliter punctulatis; tibiis anticis extus 4-dentatis (processu apicali incluso).

Maris; capite postice lamina subtransversa erecta alta armato, hac ad apicem utrinque et in medio acute prominenti; prothorace antice latissime perpendiculariter declivi, superficie perpendiculari areis 3 concavis constituta, supra aream perpendicularem medianam prothoracis dorso ut lamina horizontalis profunde bifida producta. Long., 8—9 l.; lat., 5—5½ l.

This fine species is in most respects very much like *O. ferox*, Har., but differs from it in the shape of the frontal horn of the male which is a transverse lamina (not much wider however than high), rugulose on its face and smooth on its hind surface, soutline (viewed from the front) forming three triangles one on each side with its apex directed outward and one on the top with its apex directed upward; the rugulosity of the prothorax



moreover is markedly finer and closer than in *ferox* and of conspicuously longitudinal arrangement, the anterior projection of the prothorax is more flatly horizontal with its lobes non-divergent, &c., &c.

N.S. Wales; taken near Forest Reefs by Mr. A. M. Lea.

#### APHODIUS.

*A. callabonnensis*, sp. nov. Minus convexus; sat nitidus; piceus vel nigro-piceus, prothoracis lateribus elytris (maculis nonnullis fuscis exceptis) pedibusque (præsertim femoribus posterioribus) testaceis; capite mutico, sparsim sat fortiter punctulato, clypeo antice sinuato-truncato; prothorace ad latera capillis elongatis fimbriato, postice haud marginato, lateribus modice arcuatis, angulis posticis obtusis; scutello parvo sparsim punctulato; elytris subtiliter striatis, striis seriatim punctulatis, interstitiis suturali 3° 5° que fortiter convexis externis uniseriatim punctulatis; tibiis anticis extus bidentatis (dente apicali incluso); tibiis posticis setis inæqualibus instructis; tarsorum posticorum articulo primo elongato (quam 2<sup>us</sup> 3<sup>us</sup> que conjuncti paullo longiori), 2° quam 3<sup>us</sup> longiori.

Maris prothorace subtiliter, feminae magis fortiter, sparsim punctulato. Long.,  $2\frac{4}{5}$  l.; lat.,  $1\frac{1}{5}$  l.

Allied to *A. sus*, Fab. The fuscous spots on the elytra are one on the fourth interstice immediately in front of the middle and several considerably behind the middle placed in a transverse line and more or less run together. Also resembles *A. lindensis*, Blackb., differing from it *inter alia* by its bidentate front tibiæ, clypeus truncate in front, sides of prothorax not emarginate behind, elytral costæ more prominent. *A. Candezei*, Har., also seems (from description) to resemble the present species but belongs to a different section of the genus having its prothorax margined behind.

Lake Callabonna; taken by Mr. Zietz.

#### ATÆNIUS.

*A. Zietzi*, sp. nov. Subovatus; nitidus; rufus vel piceo-rufus, nonnullorum exemplorum capite prothoraceque obscurioribus; clypeo antice triangulariter emarginato; capite crassissime ruguloso; prothorace inæqualiter nec crebre sat grosse punctulato; elytris fortiter punctulato-striatis, in striis puncturis parvis minus perspicuis, interstitiis sat æqualibus leviter convexis (nullo modo cariniformibus), humeris dente minuto acuto armatis. Long., 2 l.; lat.,  $\frac{4}{5}$  l.

Distinguished by its equal (*inter se*) and non-cariniform elytral interstices from *A. australis*, Hope and from all the Australian



*Atæni* that I have described except *A. goyderensis* (of the Horn expedition); the latter differs from it by its black color and much less coarsely punctulate prothorax. The species described by Sir W. Macleay as *Ammæcii* (some at least of which seem to be *Atæni*) all have either cariniform elytral interstices, or very deeply punctulate elytral striæ or differ greatly in size from the present species, and are all from parts of Australia very far distant from Lake Callabonna.

Lake Callabonna; taken by Mr. Zietz.

#### TROX.

*T. Crotchi*, Har. I have lately received an example from the collection of M. Thomson under this name, which agrees very well with Harold's description and I have no doubt is correctly named. It is clearly identical with specimens from Central Australia which I had attributed to *T. Crotchi* and is very close to *T. eremita*, Blackb., but I think the latter is a good species, as it differs from the type of *Crotchi* in having the larger tubercles on its elytra less large and of more elongate form also more numerous than the corresponding tubercles in *Crotchi* and also differs in the external teeth of its front tibiæ considerably smaller and more obtuse.

*T. strzeleckensis*, sp. nov. Sat late ovatus; opacus; niger, indumento sordido vestitus; capite minus crebre nec rugulose punctulato, bituberculato; clypeo antice fortiter angulato; prothorace quam longiori fere duplo latiori, postice in medio fortiter lobato, ut caput punctulato, supra costis tuberculisque nitidis sat angustis inæquali, lateribus sat fortiter trilobatis, angulis posticis obtuse rectis; elytris seriebus 10 tuberculorum elongatorum (his costas fractas simulantibus) inter se æqualibus insignibus, tuberculis majoribus vix elevatis nitidissimis per superficiem totam hic illic intermixtis, serierum interspatiis seriatim minute granulatis; tibiis anticis extus dentibus 2 (mediano et apicali) permagnis armatis; prosterno postice vix prominulo. Long., 6—7 l.; lat., 4—4 $\frac{1}{5}$  l.

The sculpture of the elytra is the strongly distinctive character of this species; it consists of eight opaque rusty-looking cariniform lines on each elytron which are similar *inter se* except that the second and fourth are less broken near the base than the rest, each of which is broken into short pieces (about 15 in number), and besides which there are on each elytron a somewhat similar but less defined line close to the suture and two ill-defined ones between the eighth and the lateral margin, a number of scarcely elevated somewhat star-shaped nitid spaces scattered confusedly over the elytra, and a row of very minute granules between each



two of the above mentioned broken carinae. This insect is perhaps near to *T. Brucki*, Har. (which is known to me only by description), but cannot be identical with it since *Brucki* is described "processu prosternali valde tumidulo" whereas the prosternal process of this species is as slightly developed as in any *Trox* known to me; it is angular behind but scarcely projects beyond the general contour of the prosternum.

Lake Callabonna and Strzelecki Creek; taken by Mr. Zietz.

#### LIPARETRUS.

*L. distinctus*, sp. nov. Sat nitidus; supra fere glaber; brunneo-testaceus, nonnullorum exemplorum capite subinfusato; hoc cum prothorace crebre subfortiter punctulato; clypeo antice plus minusve fortiter tridentato vel trisinuato; prothorace fortiter transverso, manifeste canaliculato, antice minus angustato, lateribus sat rotundatis; elytris sat fortiter geminato-striatis, interstitiis sat crebre sat fortiter punctulatis; pygidio crebre fortiter punctulato; tibiis anticis extus dentibus 2 (apicali incluso) elongatis acutis et alio parvo supra medium armatis; tarsorum posticorum articulis basalibus 2 subaequalibus; antennis 9-articulatis.

Maris segmento 2° ventrali penicilla hirsuta perlonga postice in medio instructo; feminae mutico. Long.,  $3\frac{1}{2}$  l.; lat., 2. l.

This is the only described species (of the section having the front of the clypeus tridentate) of uniform testaceous color.

Lake Callabonna; taken by Mr. Zietz.

*L. melanocephalus*, sp. nov. Præcedenti valde affinis; capite, elytrorum basi summa, sternis, segmentis ventralibus (apicali excepto) et tibiis tarsisque posticis atris; tarsorum posticorum articulo 2° quam 1<sup>us</sup> manifeste breviori; cetera ut præcedentis (*L. distincti*).

Maris segmentis ventralibus (apicali excepto) in medio penicilla transversa instructis; feminae muticis. Long., 3 l.; lat.,  $1\frac{4}{5}$  l.

Lake Callabonna; taken by Mr. Zietz.

*L. aridus*, sp. nov. Sat nitidus; supra fere glaber; testaceus; capite minus crebre minus subtiliter punctulato; clypeo antice subtruncato (maris quam feminae minus late); prothorace fortiter transverso, sat sparsim sat subtiliter punctulato, haud canaliculato, antice minus angustato, lateribus angulisque posticis rotundatis; elytris leviter geminato-striatis, interstitiis leviter sat crebre punctulatis; pygidio sparsim leviter (fere obsolete) punctulato; tibiis anticis extus dentibus 2 (apicali incluso) modicis et alio minuto supra medium armatis; tarsis gracilibus, posticorum articulo 2° quam 1<sup>us</sup> manifeste longiori; antennis 9-articulatis.



Maris quam feminae statura magis angusta, antennarum flabello magis elongato. Long., 3 l.; lat.,  $1\frac{2}{5}$ — $1\frac{7}{10}$  l.

At once distinguishable (in the group of *Liparetri* having the antennae 9-jointed, the clypeus more or less rounded or subtruncate in front, and the body glabrous, or nearly so, above) by its uniform pale testaceous color. The flabellum of the antennae is nearly white.

Lake Callabonna ; taken by Mr. Zietz.

#### COLPOCHILA.

*C. palpalis*, sp. nov. Sat elongata ; nitida ; supra subglabra, prothorace et elytrorum basi capillis elongatis fimbriatis ; subtus (abdomine pygidioque capillis subtilibus erectis sparsim vestitis exceptis) dense hirsuta ; albido-testacea, capite (hoc plus minusve infuscato) pedibusque (horum dentibus spinis et carinis plus minusve infuscatis) rufescentibus, prothorace pallide brunnescenti ; capite fortiter sat crebre rugulose (clypeo, parte postica excepta, subtiliter nec rugulose), prothorace subtiliter sparsissime, elytris (his obsolete geminato-striatis) leviter vel vix manifeste, pygidio leviter sparsissime, punctulatis ; antennis 9-articulatis ; prothorace quam longiori fere duplo latiori, antice modice angustato, obsolete canaliculato, basi vix bisinuata, lateribus fortiter rotundatis, angulis anticis acutis posticis rotundatis ; elytrorum apice haud producto.

Maris antennarum flabello quam articuli praecedentes 5 conjuncti sat longiori ; palporum maxillarium articulo apicali dilatato, quam praecedentes 2 conjuncti sat longiori ; tibiis anticis (exempli typici) carentibus.

Feminae antennarum flabello quam articuli praecedentes 5 conjuncti vix longiori ; palpis maxillariis normalibus ; tibiis anticis extus fortiter 3-dentatis. Long., 10 l. ; lat.,  $5\frac{1}{3}$  l.

This insect is very remarkable by reason of the form of the palpi in the male, which are fully as long as the head, the apical joint being dilated and especially elongate ; its form is curved and its upper surface is deeply bisulcate, the space between the sulci convex, presenting the appearance of the joint being a husk split open lengthways and revealing an enclosed kernel. It is unfortunate that the only male in the collection has lost its front legs as without examining those organs it seems just possible that the species ought to be regarded as an aberrant member of the *Clavipalpid*es. Its simple claws, however, and mandibles of the *Sericoid* type point strongly to the probability that the front legs of the male are not of the *Clavipalpid* type. I have dissected a female and failed to find any character to distinguish it from a female *Colpochila*, so I feel little doubt that the insect



belongs to the *Sericoides* and can be separated from *Colpochila* only by the peculiar palpi of the male. It seems undesirable to omit describing this insect in spite of the imperfection of the male type, as it is from a remote inland locality whence more material cannot be expected at any early date; nor does it seem practicable to found a new genus on it without examining an unbroken male. If the difference from *Colpochila* prove to be limited to that of the male palpi I doubt whether it can rightly be treated as generically distinct from *Colpochila*, and, for the present at any rate, it seems best to place it in that genus, of which it has entirely the facies. In my tabulation of *Colpochila* (Proc. L.S.N.S.W. 1890, pp. 520, &c.) it falls under "EE" on p. 521, along with *C. gigantea*, Burm., from which it is very distinct by many characters—*inter alia* its nearly white color and the antennal flabellum of the male consisting of only three joints. The characters of the palpi in the male of course distinguish it from all the other described species of the genus.

Lake Callabonna; taken by Mr. Zietz.

CALLABONICA (gen. nov. *Heteronycidarum*).

Mentum quadratum, tectiforme; labrum (speciei typicæ) verticale supra clypeum sursum productum; antennæ (speciei typicæ) 8-articulatæ, flabello 3-articulato, articulis brevibus; alæ obsoletæ; cetera ut *Heteronyxis*.

It seems impossible to refer the species for which I propose this name to any hitherto characterised genus; its appendiculate claws aborted wings (which are only about half as long as the elytra) and remarkable mentum taken together render it easy of identification. The mentum is somewhat of the form known in geometry as a "triangular prism," being formed of two plane surfaces meeting down the middle line and sloping down from the middle line on either side, the extreme front also being sloped (or obliquely truncate) and representing I presume the ligula. Unfortunately there is not an example that can be devoted to dissection. The general appearance is that of a very short *Heteronyx*, with very convex elytra much rounded on their lateral outline. The genus is no doubt near *Pseudoheteronyx* but differs from it *inter alia* by the form of its mentum, by its wings not being altogether wanting, and by its longer metasternum (which however is somewhat shorter than in *Heteronyx*). It also bears some general resemblance to *Byrrhomorpha* from which however its appendiculate claws at once separate it. It is certainly incapable of flight, and no doubt is found (like *Pseudoheteronyx*) under stones.

*C. propria*, sp. nov. Nitida; nigra, antennis palpisque testaceis, pedibus rufescentibus; capite æqualiter confertim sat fortiter



ruguloso, prothorace elytrisque grosse sat crebre sat æqualiter (elytris quam prothorax paullo magis crebre), pygidio leviter squamose sat subtiliter, punctulatis; corpore supra sparsim vix manifeste (capite magis crebre) fulvo-pubescenti, subtus pygidioque pilis erectis minus crebre vestitis; clypeo antice late leviter emarginato; hunc labro superanti; prothorace quam longiori fere duplo latiori, antice vix angustato, angulis anticis acutis productis posticis obtusis, lateribus sat arcuatis; elytris haud striatis; coxis posticis metasterno longitudine sat æquali; tibiis anticis extus fortiter acute tridentatis; tarsorum posticorum articulo 2° quam 1<sup>us</sup> duplo longiori. Long.,  $5\frac{1}{2}$  l.; lat., 3— $3\frac{1}{2}$  l.

I do not find any notable sexual difference, but the proportionally wider specimen is probably a female.

Lake Callabonna; taken by Mr. Zietz.

#### HETERONYX.

*H. suturalis*, sp. nov. Modice elongatus, sat convexus; postice vix dilatatus; sat nitidus; ferrugineus, elytrorum sutura infuscata; subtiliter minus crebre pubescens; capite grosse subcrebre (clypeo magis crebre), prothorace sat sparsim sat fortiter, elytris squamose subtilius sat crebre, pygidio leviter sat grosse, punctulatis; clypeo antice late leviter marginato, ante oculos minus dilatato, sutura clypeali subtili fere recta; prothorace quam longiori fere duabus partibus (postice quam antice dimidia parte) latiori, lateribus sat arcuatis, basi leviter bisinuata, angulis anticis sat acutis vix productis posticis rotundato-obtusis; elytris haud striatis, transversim minus manifeste rugatis; tibiis anticis extus dentibus 2 (apicali incluso) acutis magnis (alioque parvo supra medium posito) armatis; labro clypeum sat late superanti; antennis 9-articulatis; coxis posticis ad latera quam metasternum manifeste brevioribus, quam segmentum ventrale 2<sup>um</sup> paullo longioribus; tarsis posticis modice elongatis, articulo 2° quam 1<sup>a</sup> parum longiori; unguiculis appendiculatis. Long.,  $3\frac{1}{2}$  l.; lat.,  $1\frac{1}{5}$  l.

This species belongs to my "Group VII." of *Heteronyx* (vide P.L.S.N.S.W. 1889, p. 1219) which is tabulated in loc. cit. pp. 662, &c. In the tabulation it falls beside *H. vacuus*, Blackb., to which it is closely allied, differing however *inter alia* by its more strongly transverse and more coarsely punctulate prothorax, and the well-marked infuscation of its elytral suture.

Lake Callabonna; taken by Mr. Zietz.

#### HYPHORYCTES (gen. nov. *Dynastidarum*).

Mentum hirsutum, sat elongatum, sat convexum, antice rotundatum; palpi modici, articulo apicali elongato-ovali; mandibulæ



externe bidentatæ (fere ut *Isodontis*); clypeus antrorsum angustatus, a capite sutura subtili angulata in medio tuberculo armata divisus; caput haud carina marginatum; prothorax æqualis; pedes breves crassissimi, tibiis anticis extus obtuse bidentatis (processu apicali excluso) posterioribus 4 transversim bicarinatis, tarsorum posticorum articulo basali fortiter ad apicem dilatato; processus prosternalis validus hirsutus; organa stridulationis nulla; maris tarsorum anticorum unguiculus externus crassus bifidus.

I cannot refer the species for which I propose this name to any existing genus, nor is it clear in which of his subtribes of *Dynastides* Lacordaire would have placed it, as the absence of sexual characters in the head and prothorax would associate it with subtribes in which the basal joint of the hind tarsi is of very different structure. It is generically very close to *Pentodon australis*, Blackb., but differs from it *inter alia* by the much more strongly dilated basal joint of its hind tarsi.

*H. maculatus*, sp. nov. Sat elongatus; minus nitidus; testaceo-rufus, suturis et carinis corporis pedumque fere omnibus et prothoracis utrinque macula laterali infuscatis; capite crebre subfortiter ruguloso, clypeo antice truncato leviter reflexo; prothorace quam longiori dimidia parte latiori, antice fortiter angustato, sparsim subtiliter (vix manifeste) punctulato, lateribus (superne visis) parum arcuatis; scutello magno lævi; elytris vix (vel nullo modo) striatis, obsolete seriatim punctulatis; pygidio antice crebre subtiliter postice vix manifeste punctulato. Long., 6—8 l.; lat.,  $3\frac{1}{2}$ —5 l.

I have seen several examples of this insect; one of them has the elytra faintly striate with indications of about four obsolete costæ and some very faint but distinct punctures; in the other examples this sculpture is scarcely discernible; the difference is not sexual. I have no doubt they all appertain to one species.

Thursday Island; also Cape York.

#### NOVAPUS.

*N. rugosicollis*, Blackb. At the time when I described this species (Proc. Linn. Soc. N.S.W. 1890 p. 305) I was doubtful of the sex of the type but concluded with hesitation that it was a male. Subsequent examination of more recently acquired examples of the genus has satisfied me that it is a female. I have no doubt the male has a large excavation on the prothorax.

*N. nitidus*, sp. nov. Mas. Brevis; latus; nitidus; subtus sat dense rufo-hirsutus; piceo-rufus; capite cornu recurvo acuto armato; prothorace quam longiori fere duplo latiori, antice valde angustato, excavatione permagna a basi ad apicem extensa pernitida fere lævi impresso (hujus lateribus sursum



obtuse prominentibus), partibus lateralibus sat fortiter sat crebre punctulatis, lateribus fortiter rotundatis, angulis anticis sat acutis posticis obtusis, margine antico fere truncato, elytris fere lævibus. Long.,  $10\frac{1}{2}$  l.; lat., 6 l.

A second example of this insect (in the collection of C. French, Esq.) is larger (long. 12 l.) and has the lateral parts of the prothorax a little less closely punctulate, but presents no other difference. The clypeus of this species as of the others of the genus known to me is somewhat narrowly produced forward in the middle, and the apex of the projection is rather strongly reflexed. This species may be at once distinguished from all the others of the genus that I have seen by its almost lævigata elytra which are marked only with a fine sutural stria two or three obsolete striæ (resembling faint wrinkles) and some very faintly impressed and distantly placed punctures.

N. Queensland.

*N. bidentatus*, sp. nov. Mas. Sat brevis; minus latus; sat nitidus; subtus sat dense rufo-hirsutus; rufus; capite cornu vix recurvo acuminato minus elongato armato; clypeo antice fere æqualiter rotundato, margine reflexo sat alte cincto; prothorace quam longiori vix dimidia parte latiori, antice valde angustato, excavatione permagna a basi ad apicem extensa fere lævi impresso (hujus lateribus sursum obtuse prominentibus), partibus lateralibus antice sparsissime punctulatis postice lævibus, lateribus rotundatis postice sinuatis, angulis anticis acutis posticis fere (nec acute) rectis, margine antico leviter fere æqualiter emarginato prope medium utrinque tuberculo parvo acuto armato; elytris striis nonnullis leviter impressis, his seriatim (interstitiis confuse) inæqualiter punctulatis. Long., 9 l.; lat.,  $5\frac{1}{2}$  l.

The two small sharp tubercles placed one on either side of the middle of the front margin of the prothorax distinguish this species from all the others yet described of the genus.

Central Australia; McDonnell Ranges.

#### PSEUDORYCTES.

*P. monstrosus*, sp. nov. Mas. Nitidus; rufus, capite elytris pygidioque nigris; capite hirsuto antice perpendiculari, parte perpendiculari planato crasse ruguloso, cetera sparsim punctulato; antennarum flabello elongato, hujus articulis singulis quam articuli ceteri conjuncti manifeste longioribus; prothorace sparsim minus evidenter punctulato, sparsim hirsuto, spinis 3 perlongis (quam prothoracis latitudo sublongioribus) sat gracilibus armatis (ex his alio antico sinuato antrorsum et sursum oblique directo, aliis fere erectis utrinque paullo ante medium positis); scutello elytrisque



fere lævibus nitidissimis, his stria suturali fortiter impressis; corpore subtus dense hirsuto; pygidio fere glabro. Long., 9 l.; lat.,  $5\frac{1}{2}$  l.

This extraordinary species is instantly distinguishable from its described congeners by the remarkable armature of its prothorax which consists of three somewhat slender horns of about equal length, each of them about as long as the prothorax is wide. Its black head prothorax and pygidium are also notable. The perpendicular front of its head viewed from in front is flattened,—not concave as in that of *P. mullerianus*,—and is almost of semi-circular shape, the chord of the semicircle (which however is slightly arched) forming its upper outline.

Gascoigne District, W. Australia; in the collection of Mr. French.

*P. trifidus*, sp. nov. Mas. Latus; sat nitidus; rufo-brunneus; capite antice perpendiculari, parte perpendiculari concavo; antennarum flabello elongato; hujus articulis singulis quam articuli ceteri conjuncti multo longioribus; prothorace sparsim subtiliter (parte excavata magis crasse) punctulato, cornubus 3 armatis (his quam prothoracis latitudo fere triplo brevioribus, cornu antico valde trifido, lateralibus crassissimis sed apicem versus sat gracilibus); scutello sparsim punctulato; elytris inæqualiter striatis, striis crebre sat fortiter punctulatis, interstitiis sparsim inæqualiter punctulatis; corpore subtus dense hirsuto; pygidio crebre (apicem versus sparsissime) punctulato. Long., 12 l.; lat., 7 l.

This species is easily recognisable by the armature of its prothorax; the front horn is directed forward over the head and turned upward at the apex which consists of three large triangular teeth (the middle one erect, the lateral ones directed outward on either side); the lateral horns are placed very widely apart and are erect but a little curved (so as to be convergent at their apices), and are extremely thick at their base but in their upper half become slender with almost pointed apices. The striation of the elytra is much better defined than in *P. mullerianus*, White.

Queensland; Darling R. district; in the collection of Mr. G. Masters.

#### HORONOTUS.

*H. optatus*, Shp. I have before me three male specimens forwarded by Mr. French evidently of this species. I should judge from the description of *H. variolicollis*, Fairm., that it is founded on the same species and must become a synonym. It seems also probable that my *Palmerstonia minor* is the female (which appears to have been unknown to both Sharp and Fairemaire) of



the same species. Whether the Australian species referred by Sharp and Fairemaire to this Indian genus *Horonotus* are satisfactorily placed there or are better regarded as generically distinct (in which case my name *Palmerstonia* will stand) I am not in a position to determine positively, as I have not an example of any Indian species for comparison, but it may be noted that according to Burmeister (the author of the genus) and Lacordaire, one of the generic characters of *Horonotus* consists in the prothorax being armed with an excavation and also one or more prominences in both sexes. In my *Palmerstonia* and in the only Australian species attributed to *Horonotus* of which the female is known (*H. duplex*, Shp.) the prothorax of the female is quite even; this appears to me to be an important character and to render justifiable the use of a distinctive generic name.

#### SEMANOPTERUS.

*S. rectangulus*, sp. nov. Ovalis; sat latus; nitidus; piceus, capite prothoraceque nigris, antennarum clava rufescenti; subtus longe sat dense rufo-pilosus; capite transversim rugato tuberculo conico inter oculos armato; prothorace quam longiori plus quam dimidio latiori, minus crebre (in medio obsolete, sed in depressione crasse squamose) punctulato, antice angustato, lateribus sat fortiter rotundatis mox ante basin subito fortiter incurvis hinc ad basin (superne visis) rectis, angulis anticis sat prominulis posticis acute rectis; elytris 4 costatis (costa suturali inclusa), interstitiis sat crasse nec crebre nec profunde punctulatis; tibiis anticis extus fortiter (maris quam feminae magis acute) tridentatis; segmento ventrali 6° punctulato, postice vitta transversali laevi marginato; processu prosternali angusto carinato.

Maris prothorace antice fossa magna rotundata profunda, postice sulco longitudinali in medio dilatato, impresso; segmento 6° ventrali postice emarginato.

Feminae prothorace longitudinaliter sulcato, sulco et ante et pone medium dilatato; segmento ventrali 6° simplici. Long., 7 l.; lat., 4 l.

It is extremely difficult to arrive at any satisfactory conclusion as to the limits of species in this most perplexing genus; specimens taken in company and certainly seeming to be of but one species vary considerably in the puncturation of the upper surface (especially in the distinctness of the prothoracic punctures and in the extent to which the punctures of the elytral interstices invade the edges of the costae) and even in the width of the prothorax. The insect described above is however easily recognisable by the peculiar outline of the prothorax which is very suddenly and strongly contracted a little in front of the



base and thence (viewed from above) quite parallel hindward, the hind angles being sharply rectangular (almost dentiform). The shape of the prosternal process also calls for attention. This in the genus *Semanopterus* rises perpendicularly behind the coxæ and its summit is bent forward so as to project slightly between the coxæ towards the head. In the present species it is densely clothed with long setæ and is considerably narrower than in some species of the genus; its perpendicular face is strongly convex,—almost cariniform,—and its forward bend is only slight, the bent-forward part being quite narrow and almost evenly continuing the curve and convexity of the perpendicular part. In some species the bent-forward part is much wider flatter and almost at a right angle to the perpendicular part.

Alice Springs, Oodnadatta, Leigh's Creek and Barrow's Creek.

*S. persimilis*, sp. nov. Ovals; sat latus; nitidus; piceo-niger, subtus obscure rufescens longe sat dense rufo-pilosus; capite crasse squamose ruguloso, tuberculo conico inter oculos armato; prothorace quam longiori dimidio latiori sat crebre sat fortiter (in depressione crasse squamose) punctulato, antice angustato, lateribus sat fortiter rotundatis mox ante basin subito fortiter incurvis hinc ad basin (superne visis) rectis, angulis anticis sat prominulis posticis acute rectis; elytris 4-costatis (costa suturali inclusa), interstitiis sat crasse nec crebre nec profunde punctulatis; tibiis anticis extus valde fortiter (maris quam feminae etiam magis fortiter) tridentatis; segmento ventrali 6° punctulato, postice vitta transversali lævi marginato; processu prosternali sat angusto carinato, parte summa antrorsum directa minute planata et antrorsum delevi.

Maris prothorace antice fossa magna rotundata profunda, postice sulco longitudinali, impresso; segmento 6° ventrali postice emarginato.

Feminae prothorace longitudinaliter sulcato, sulco et ante et pone medium dilatato; segmento ventrali 6° simplici. Long., 7—8 l.; lat., 4—4 $\frac{2}{5}$  l.

This species is very closely allied to *S. rectangulus*, Blackb., from which it differs by the nearly black color of its upper surface, the evidently stronger puncturation of its prothorax, the larger teeth on the external margin of its front tibiae, the more confused sculpture of its clypeus and the different shape of its prosternal process. This latter (as in *rectangulus*) consists of an erect somewhat narrow piece keeled on its hind face rising from the surface of the prosternum behind the coxæ and at its summit bent forward slightly towards the head; but whereas in *rectangulus* this bending forward is the result merely of the top



of the process being slightly curved, in *persimilis* a small flattish lamina appears to jut out (from the top of the process) directed towards the head and also sloping downwards, so that from a certain point of view (*i.e.* from the side) the top of the process seems to be obliquely truncate with its point furthest from the head subtuberculiform. The process (as in *rectangulus*) is densely hirsute but in this species the front part of the flattened top is glabrous. This species is distinguished from all the recognisably described *Semanopteri* (except *rectangulus*) by the peculiar outline of its prothorax which (viewed from above) looks as if a small piece had been cut-out on either side close to the base.

N. Queensland; sent by Mr. French.

*S. dentatus*, sp. nov. Late ovalis; minus convexus; nitidus; piceo-niger, subtus vix rufescens, rufopilosus; capite crasse squamose nec profunde ruguloso, tuberculo magno armato, pone tuberculum fossa lævi impresso; prothorace quam longiori plus quam dimidio latiori, subgrosse minus crebre nec profunde (in depressione et versus angulos anticos crasse squamose) punctulato, antice angustato, margine antico in medio leviter elevato, lateribus sat rotundatis, angulis anticis sat prominulis posticis (superne visis) rectis (haud acute); elytris minus æqualiter sat crasse leviter punctulato-striatis, vix manifeste costatis, puncturis striarum et interstitiorum nonnihil confusis; tibiis anticis extus fortiter tridentatis; abdomine sparsim leviter squamose punctulato; processu prosternali minus angusto, retrorsum fortiter bidentato.

Mas latet.

Feminae prothorace antice fossa rotundata, postice sulco longitudinali obsoleto, impresso. Long., 11 l.; lat., 6 l. (vix).

The remarkable form of the prosternal process at once separates this species from its described congeners. The process may be described as rising upwards from the level of the prosternum behind the coxæ, but instead of rising erectly it inclines forward, and its hinder face bears two large transverse blunt teeth or tubercles (one below the other) and is nearly glabrous. The nitid depression on the head behind the tubercle is also very distinctive. As the apical ventral segment is not emarginate I presume the example before me is a female. The prosternum *in front* of the coxæ is somewhat wide, with a strong median keel.

N. Queensland.

*S. carinatus*, sp. nov. *S. persimili* valde affinis; differt dentibus tibiæarum anticarum minoribus, tarsorum posticorum articulo basali ad apicem minus lato, processu prosternali ad summum sat longe horizontali anguste cariniformi, nec tuberculato. Long., 7 l.; lat., 4 l.



This species is extremely like *S. rectangulus*, Blackb., and *S. persimilis*, Blackb., but differs from both by characters that appear to me quite inconsistent with specific identity. The most notable of these is the form of the prosternal process, which at the top is bent forward towards the head in such fashion that its bent-forward portion almost forms a right angle with its erect portion,—but this (*i.e.*, the bent-forward portion) instead of being a small flattish lamina bounded posteriorly by a tubercle (as it is in *persimilis*) is a narrow keel (its outline viewed from the side being seen however to be slightly concave); while in *rectangulus* the bent-forward portion is scarcely existent being represented merely by the erect portion being slightly curved towards the head at its summit. The prosternum *in front of* the coxæ is in all these three species narrow and roundly cariniform. The puncturation of the prothorax is in this species almost as in *rectangulus* but the sulcus of the hind part of the prothorax is simple as in *persimilis* (not dilated in its middle into a fovea as it is in *rectangulus*).

Northern Territory of South Australia; near Palmerston.

N.B.—The species of *Semanopterus* named previously to those I have described are *S. (Phileurus) subcostatus*, Cast., *S. Adelaide*, *subæqualis* and *depressus*, Hope, and *S. convexiusculus* and *depressiusculus*, Macl. None of them are described sufficiently for confident identification and it is possible that I may have described some of them, especially the first,—the description of which would apply so far as it goes to any *Semanopterus*. I, however, have species in my collection which seem likely to be *Adelaide*, *subæqualis*, and *convexiusculus* and are certainly distinct from those I have described. I should judge from their names that *S. depressus* and *depressiusculus* cannot be identical with any of my species unless it be *S. dentatus*,—but they are both described as having costate elytra, while *dentatus* is of all the *Semanopteri* known to me the only one on which no clearly defined elytral costæ can be traced.

#### ISCHIOPSOPHA.

*I. Bourkei*, sp. nov. Nitidissimus; læte viridis (vel certo adspectu coeruleus), antennis palpisque piceis plus minusve viridi-micantibus, abdominis suturis parte mediana maculisque lateralibus certo adspectu nigricantibus; supra tota creberrime omnium subtilissime coriacea; capite sparsius subtilius punctulato, clypeo profunde bifido; prothorace (lobo basali excepto) quam longiori (et postice quam antice) duplo latiori, latera versus leviter sparsim (in disco vix manifeste) quam caput multo minus fortiter punctulato, lobo basali magno scutellum fere obtegenti ad apicem emar-



ginato ; elytris lævibus nisi juxta marginem lateralem transversim strigatis, sutura postice carinata et ad apicem spinoso-producta ; pygidio concentrice sat fortiter strigato ; subtus sublævis vel potius obsolete sparsissime punctulata, segmentis ventralibus singulis utrinque spatio crebre oblique strigato ornatis ; processu mesosternali elongato sat horizontali.

Maris capite elongato, tibiis anticis extus (processu apicali excepto) dente minuto subapicali (et altero submediano haud vel vix manifesto) armatis ; abdomine longitudinaliter concavo.

Feminae capite minus elongato, tibiis anticis extus dentibus 3 (apicali incluso) sat fortibus armatis ; abdomine sat æqualiter convexo, segmento 5° postice puncturis nonnullis sat magnis impressis. Long., 13 l.; lat., 6½.

I cannot find among the numerous species of *Ischiopsopha* described (some of them as *Lomapteræ*) as occurring in New Guinea and Malay that this large and magnificent insect has a place. Compared with *I. (Lomaptera) pulchripes*, Thoms., the present species is larger and of a more robust build,—differently colored, its green tending towards blue whereas that of *pulchripes* tends towards golden,—its head is very similar except more finely sparsely and faintly punctured, especially in the hinder part,—its prothorax is much more strongly transverse, devoid of transverse strigosity, and very much less strongly punctured (the punctures even close to the lateral margin being very sparse and scarcely so strongly impressed as those halfway between the middle of the prothorax and the lateral margin in *pulchripes*),—its elytra are practically punctureless (in the female the punctures where most distinct are scarcely so much so as in the middle of the prothorax of *pulchripes*, in the male they are still fainter) their sutural apex is more prominent, and their system of submarginal transverse scratches is almost exactly as in *Hemipharis insularis*, L. and G.,—its legs are very differently colored,—its whole surface under a strong lens is seen to be finely coriaceous or covered evenly with a system of excessively close and fine puncturation underlying all the other sculpture. The bluish tone of color is more marked in the males than females.

N. Queensland ; taken by Captain Edmund Bourke, R.N., and presented to me.

#### ASTRÆUS.

*A. Meyricki*, Blackb. I see that Herr. van de Poll in Tijdschr. ent. xxxvi., p. 67, says that this name has been given to the same species as that which he called *A. Badeni*. I have already (Proc. L.S., N.S.W., 1894, p. 101) drawn attention to the facts that



Herr van de Poll and I both described some Australian *Astræi* in 1889, that his descriptions seem to have been published before mine, and that probably his *A. Jansoni* and my *A. Tepperi* are names of one and the same species. When writing that note I considered the question whether *Meyricki* and *Badeni* are identical and considered it doubtful, an opinion I still hold. Herr van de Poll gives as the first-named habitat of *A. Badeni* "Gawler, S.A.," and adds as a second locality "Swan River." I doubt whether any *Astræus* is common to these very distant localities, and if the type of *A. Badeni* really came from Gawler I should expect to find it different from *A. Meyricki* which is from N.W. Australia. No doubt the two species are at any rate much like each other, but I notice that *A. Badeni* as figured has the basal spot of its elytra extending across two interstices while in *A. Meyricki* it seems to be constantly limited to one interstice,—nor do I find any trace in *Meyricki* of the fine red line which is depicted across the basal margin of the elytra in *Badeni*. On these grounds I look upon it as quite likely that if the types of the two could be compared other differences would be found.

## BUBASTES.

*B. splendens*, Blackb. The *Coleoptera* collected at L. Callabonna by Mr. Zietz include what I take to be a second specimen of this insect. It is notably smaller than the type with elytra tending towards violet in color and the puncturation throughout seems to be a trifle less strong but, judging from the extreme variability of its congener *B. inconsistens*, Thoms., these differences are unlikely to be specific.

## CHRYSOBOTHRI.

*C. interioris*, sp. nov. Obscure ænea, hic illic cuprascens, elytrorum foveis sat læte cupreis; capite antice sat crasse ruguloso-punctulato et transversim inæquali, postice crebre subtilius punctulato (in medio lævi et canaliculato), oculis minus approximatis; prothorace quam longiori duabus partibus latiori, leviter canaliculato (canali antice obsoleto), crebre subtilius transversim rugato et sat crebre punctulato, antice et postice æqualiter angustato, inæquali (præsertim utrinque oblique leviter impresso), lateribus (superne visis) in parte mediana rectis vel fere concavis hinc et antice et postice angulatim convergentibus, basi valde trisinuata; elytris crebre subtilius punctulatis, costis discoidalibus 4 et costa abbreviata subscutellari instructis, foveis 3 impressis, lateribus denticulatis fere ab humero, apice obtuso; corpore subtus in parte mediana sparsim (latera versus sat crebre) punctulato, puncturis a parte antica retrorsum gradatim



minus fortiter impressis; prosterni margine antico late emarginato; segmento apicali ventrali 2-emarginato et 3-spinoso. Long.,  $6\frac{3}{4}$  l.; lat.,  $2\frac{3}{5}$  l.

The eyes are wider apart than in most *Chrysobothris* known to me. The prothorax is of peculiar form (the form probably that M. Thomson calls "subhexagonalis"), approximated however though only feebly by one or two other species in my collection; the middle part of its sides is slightly concave and at the front and hind apices of this middle part the outline is very distinctly angulated and thence proceeds obliquely to the comparatively narrow front and hind margins respectively, so that the segment is quite decidedly "octagonal" (except in so far as its regularity is marred by the trisinuation of the base). Another well-marked character is afforded by the hind outline of the apical ventral segment which is widely emarginate, either side of the emargination being produced in a strong spine, while the longitudinal carina that runs down the segment is produced hindward (dividing the emargination into two) in a third spine very little shorter than the lateral ones. I am unfortunately not able to detail the differences between this species and any other described Australian *Chrysobothris* as there is not one of those hitherto named that has been recognisably described. I have in my collection examples (conjecturally identified) of most of them but it is of no use to compare a new species with an old one unless one is quite certain of the latter. Limiting myself to the characters mentioned in the descriptions I may say however that the 3-spinose apex of its abdomen distinguishes this insect from *C. subsimilis*, Thoms., and *amplicollis*, Thoms., and that the strong oblique lateral impressions of its prothorax distinguish it from *C. Mastersi*, Macl., and *viridis*, Macl. The other species are practically undescribed, although it may be noted that Mr. Saunders' re-description of *C. Australasice*, Hope, seems to imply that the apex of its abdomen is not tri-spinose; their localities however are such as to render extremely improbable their identity with this Central Australian species. The elytral costæ of the present insect are very well defined and are placed as in the other Australian species; the foveæ are placed as follows,—one close to the middle of the base, one in front of the middle between the second and third costæ, one behind the middle interrupting the third costa. The front femora are strongly dentate beneath, the intermediate tibiæ nearly straight. The basal two ventral segments are shallowly concave longitudinally.

Lake Callabonna; taken by Mr. Zietz.

#### AGRYPNUS.

*A. Mastersi*, Macl. Specimens of *Agrypnus* taken by Mr. Zietz near Lake Callabonna vary from the type prevalent in N.



Queensland to an extent that seems scarcely consistent with specific identity,—the prothorax being very much more finely punctulate and having its sides much more sinuate behind the middle. Nevertheless as that eminent specialist Dr. Candéze has stated his opinion, after examining a long series of *Agrypni* from various parts of Australia, that he has seen only one species and that it is an extremely variable one, I deem it better to abstain from treating these Central Australian specimens as specifically distinct from *Mastersi*.

## LACON.

*L. Zietzi*, sp. nov. Piceus; minus nitidus; squamulis piliformibus griseis vestitus (his in elytrorum interstitiis alternis paullo densioribus), antennis pedibusque rufescentibus; prothorace quam longiori vix latiori, crebre subfortiter punctulato, canaliculato (canali antice obsoleto), a basi ad apicem gradatim (leviter sinuatim) angustato, basi quam margo anticus duplo latiori, angulis posticis obtusis extus paullo dilatatis; elytris quam prothorax parum latioribus, punctulato-striatis, interstitiis subfortiter punctulatis inter se æqualibus; sulcis tarsorum nullis. Long., 5 l.; lat.,  $1\frac{3}{5}$  l.

The slightly denser disposition of the vestiture on the alternate interstices of the elytra than on the others,—which is more apparent in some examples than in others,—gives this species a faint appearance of being striped and renders it a little doubtful whether Dr. Candéze would place it in his tabulation (Mém. Liège (2) IX., 1882, pp. 49, &c.) among the unicolorous or the variegated species. Among the former it would stand beside *L. princeps*, Cand., and *crassus*, Cand., from which its size and the posterior angles of its prothorax not truncate readily distinguish it,—while among the variegated species it would be at once distinguished by the absence of tarsal sulci. It should be noted that although careful measurement shows the prothorax to be a trifle wider than long, that segment to a casual glance appears longer than wide.

Lake Callabonna; taken by Mr. Zietz.

## MONOCREPIDIUS.

*M. commodus*, sp. nov. Modice angustus; sat parallelus; minus nitidus; pube fulva vestitus; totus ferrugineus, antennis pedibusque dilutioribus, scutello elytrorumque basi rufescentibus; antennarum articulo 3° quam 2<sup>us</sup> parum longiori, quam 5<sup>us</sup> duplo breviori; prothorace trans angulos posticos quam longiori vix latiori, subtiliter manifeste canaliculato (nonnullorum exemplorum canali antice posticeque abbreviato), sat crebre minus subtiliter umbilicato-punctulato, angulis posticis divergentibus, bicarinatis (carina interna



brevi minus perspicua); elytris ad apicem sat rotundatis nonnullorum exemplorum angulo suturali brevissime acuto), punctulato-striatis, interstitiis leviter convexis crebre subaspere punctulatis; prosterno medio fortiter gibbo, fortius vix crebre punctulato, hoc ad latera haud deplanato, suturis prosternalibus rectis, pronoti margine antico in prosternum deflexo; tarsorum lamella sat angusta.

Maris antennis prothoracis basin sat longe superantibus; prothorace a basi ad apicem sinuatim angustato.

Feminae antennis prothoracis basin vix attingentibus; prothorace ad medium quam trans basin parum angustiori. Long.,  $6\frac{1}{2}$ — $7\frac{1}{2}$  l.; lat.,  $1\frac{4}{5}$ — $2\frac{1}{5}$  l.

The Australian species of *Monocrepidius* may be best subdivided, in my opinion, by the structure of the lateral margin of the pronotum and prosternum which assumes three different forms. In some species (e.g., *Australasiae*, Boisd.) it is strictly lateral; in others (e.g., *acuminatus*, Macl.) it is deflexed in front so that (viewed from directly above) the front part of it passes out of sight and both margins can be seen together in their entirety only by turning the specimen upside down and looking at them on the prosternum, but in other respects it is as in the former group; in a third group of species (e.g., *nigripennis*, Cand.) it passes on to the prosternum behind the middle of the segment (so that the greater part of it is invisible when the pronotum is viewed from directly above) and is bordered on the prosternum by a well-defined sulcus (these species mimicking some *Eucnemidæ* in their structure).

The present species belongs to the second of these groups, and is distinguishable by exceptionally good characters, among which the most noticeable are the remarkably convex—strongly protuberant—middle part of its prosternum, and the umbilicated punctures of its prothorax (inside each of which there appears to be a small granule).

Lake Callabonna; taken by Mr. Zietz.

*M. inamœnus*, sp. nov. Modice angustus; sat parallelus; minus nitidus; pube fulva vestitus; supra obscure brunneus, corpore subtus ferrugineo, antennis palpis pedibusque testaceis; capite postice longitudinaliter carinato; antennarum articulo 3° quam 2<sup>us</sup> vix longiori, quam 5<sup>us</sup> duplo breviori; prothorace trans angulos posticos quam longiori subangustiori, leviter canaliculato (canali antice sat obsoleto), confertissime vix aspere punctulato, angulis posticis parum divergentibus bicarinatis (carina interna sat forti minus abbreviata); elytris ad apicem sat rotundatis (angulo suturali brevissime acuto), punctulato-striatis, interstitiis leviter convexis sub-



tiliter transversim rugatis; prosterno medio fortius vix crebre punctulato, hoc ad latera sulcato, suturis prosternalibus rectis, pronoti margine in prosternum deflexo; tarsorum lamella angusta.

Maris antennis prothoracis basin vix superantibus; prothorace a basi ad apicem sinuatim angustato.

Feminæ antennis prothoracis basin haud attingentibus; prothorace ad medium quam trans basin parum angustiori. Long.,  $5-5\frac{1}{2}$  l.; lat.,  $1\frac{3}{5}$  l.

This species belongs to the third of the groups that I have suggested above as convenient subdivisions of *Monocrepidius*. It is remarkable for the extremely close puncturation of its prothorax. It may be noted that the piece of the prosternum included between the prosternal suture and the margin of the pronotum is (not as in some species acuminate, but) obliquely truncate in front. In Dr. Candéze's tabulation of *Monocrepidius* (Mon. II. pp. 191, &c.) the present species would stand beside *M. fictus*, Cand., from which *inter alia* its considerably larger size will distinguish it.

Lake Callabonna; taken by Mr. Zietz.

#### APHILEUS.

*A. ferox*, sp. nov. Sat latus; sat depressus; fusco-piceus, palpis antennis pedibusque testaceis vel piceo-testaceis; breviter cinereo-setulosus; mandibulis elongatis, quam caput (labro excluso) sat longioribus, curvatis, ad apicem acutis (haud bidentatis), pone medium intus dente valde elongato armatis; capite sat nitido inter oculos concavo, sat crebre punctulato; prothorace sat nitido, quam longiori tribus partibus latiori, obsolete canaliculato, sat crebre (ad latera fere ut caput, in medio paullo minus crebre) punctulato, trans basin quam trans marginem anticum plus quam dimidia parte latiori, subquadrato (sed lateribus versus apicem summum fortiter convergentibus, versus basin summam fortiter divergentibus), lateribus distincte explanatis sed vix manifeste marginatis, angulis posticis divergentibus; elytris striatis, striis subtilius punctulatis, interstitiis parum convexis obsolete rugulosis, apice suturali breviter spiniformi. Long. (mands. incl.), 18 l.; lat.,  $5\frac{4}{5}$  l.

Larger than *A. lucanoides* and less widely shaped; differs from that species also *inter alia* by its very distinct mandibles and its more nitid prothorax with much closer puncturation. In the example before me there is a very conspicuous tubercle on the disc of the prothorax a little to the left of the central line, but in all probability this is an individual aberration.

N. Queensland; presented to me by Mr. French.



## LAIUS.

*L. eremita*, sp. nov. Subopacus; haud setosus; coccineus, antennis nigris, elytrorum maculis binis (his marginem lateralem nec suturam attingentibus, altera minori basali altera majori subapicali) piceis, pedibus infuscatis; capite elytrisque (his sat brevibus) creberrime rugulosis vel potius coriaceis; prothorace valde transverso, inæquali, subnitido, puncturis sat magnis leviter impressis; oculis fortiter convexis.

Maris antennarum articulo 2° valde compresso-dilatato, obovato, ad apicem subtruncato; capite trans oculos quam prothorax fere latiori. Femina latet.

Long.,  $1\frac{4}{5}$  l.; lat.,  $\frac{7}{10}$  l.

A very distinct species owing to the uniform red color of its body with the exception of the two dark spots on the elytra; its unicolorous black antennæ are also characteristic.

Central Australia; near Oodnadatta.

## PTEROHELEUS.

*P. fraternus*, sp. nov. Late ovalis; sat nitidus; piceus antennis tarsisque dilutioribus; capite subtiliter obsolete minus crebre punctulato; prothorace fere lævigato, quam longiori (et postice quam antice) fere triplo latiori, ad latera late explanato, marginibus lateralibus vix recurvis, angulis anticis obtusis sat productis posticis sat acutis, basi sat fortiter trisinuata; elytris subtiliter seriatim punctulatis, vix striatis, ad latera late explanatis, margine explanato ante medium intus dilatato apicem versus angustiori. Long., 7 l.; lat.,  $4\frac{1}{2}$  l.

This species in its broad form with wide lateral margins of prothorax and elytra resembles *P. piceus*, Kirby, near which it should be placed in the first group of the genus as subdivided by Sir W. Macleay (P.L.S., N.S.W., 1887, p. 520). Its comparatively small size will distinguish it from all the other members of that group. Placed beside *P. piceus* it differs from the latter chiefly by its head and prothorax being even less distinctly punctured and its elytral sculpture consisting of mere rows of fine punctures becoming very faint near the apex, the interstices between which are perfectly flat; while the elytra of *piceus* are distinctly punctulate-striate with distinctly convex interstices.

Central Australia; in my collection; specimens taken by Mr. Zietz near Lake Callabonna scarcely differ.

## HELEUS.

*H. interioris*, MacL. Among the *Coleoptera* brought from Lake Callabonna by Mr. Zietz are a series of specimens which I attribute to this species, although Sir W. Macleay's description



is not of a kind to justify very great certainty. Unfortunately Sir William in his descriptions of *Helæi* has relied as a principal character on the number of granules on the elytra and this undoubtedly appears to be subject to much variety. I am convinced that the series before me cannot be regarded as representing more than one species, but there are scarcely two of them in which the elytra are identically granulate. I think them likely to be *H. interioris* because, although the description of that species mentions scarcely a character that is really specific, they all have near the suture a row of granules closer and more conspicuous than those in the other rows (and more markedly so than in most other *Helæi*) and this character is mentioned in Sir W. Macleay's description of *H. interioris*. The reliable characters of the insect before me seem to consist in its comparatively narrow elongate form and the strongly "turned up" direction of the expanded sides of the elytra. It is quite true that Sir W. Macleay calls the "margin" "a little reflexed" but a comparison of the terms he uses in describing other species points to the conclusion of his intending to signify that the expanded margin in *H. interioris* is more reflexed than in most other *Helæi*.

#### EPHIDONIUS.

*E. parvicollis*, sp. nov. Ovalis; opacus; niger; corpore subtus picescenti; capite creberrime subtilius subaspere (puncturis majoribus minoribus que intermixtis) punctulato; prothorace quam caput dimidia parte latiori quam elytris fere duplo angustiori, quam longiori (et postice quam antice) dimidia parte latiori, postice utrinque sulco obliquo obsolete impresso (his ambobus literam V obscure simulantibus), creberrime subtilissime punctulato (vel potius coriaceo) et puncturis paullo majoribus sparsim impresso, lateribus sat explanatis et leviter recurvis, angulis anticis obtusis posticis acute rectis vix retrorsum directis; elytris quam prothorax quadruplo longioribus, costis quinque (sutura inclusa) ornatis, inter costam et costam puncturarum seriebus 4 impressis (serierum interstitiis leviter convexis); labro antice vix emarginato; maris a feminae tibiis haud distinctis. Long., 9 l.; lat.,  $4\frac{3}{5}$  l.

This species seems to be near *E. Duboulayi*, Bates, but differing in several respects,—in its entirely opaque upper surface (Mr. Bates implies that *Duboulayi* is not more opaque than *acuticornis*), its scarcely emarginate labrum, the close puncturation of its head, the simple tibiæ of the male, &c. The elytral costæ under a strong lens show the same minute tuberculation continued behind (where the costæ become very faint) as Mr. Bates describes in *E. Duboulayi*.

Lake Callabonna; taken by Mr. Zietz.



## CISTELIDÆ.

## HOMOTRYSIS.

*H. arida*, sp. nov. Fem. Sat elongata; leviter ovata; minus convexa; nitida; pilis elongatis erectis sat crebre vestita; rufobrunnea, capite postice prothoraceque picescentibus, antennis palpis pedibus labro (et clypeo antice), rufo-testaceis; capite (cum prothorace) dupliciter (subtiliter et sat fortiter) sat crebre confuse punctulato; oculis minus convexis distantibus (spatio intermedio quam antennarum articuli 3<sup>i</sup> longitudo sat latiori); prothorace quam longiori parum latiori, haud canaliculato (disco utrinque vix impresso), antice modice angustato, lateribus leviter sat æqualiter (superne visis) arcuatis, basi sinuatim truncata, angulis posticis obtuse rectis (superne visis obtusis); scutello punctulato, in medio leviter carinato; elytris sat fortiter striatis, striis punctulatis (puncturis antice magnis quadratis, retrorsum gradatim obsolescentibus), interstitiis sat planis fortius minus crebre punctulatis; antennis quam corporis dimidium paullo brevioribus, articulo 3<sup>o</sup> quam 4<sup>us</sup> manifeste longiori; segmento ventrali apicali æquali, postice rotundato-truncato. Long.,  $5\frac{1}{5}$  l.; lat., 2 l.

The principal characters of this species,—among its congeners with longish erect pilosity clothing the upper surface,—lie in its feebly convex eyes, exceptionally elongate prothorax, nearly uniformly colored upper surface, and elytra with both striæ (these however only in front) and interstices conspicuously punctulate.

Central Australia; near Oodnadatta.

*H. sitiens*, sp. nov. Fem. Præcedenti affinis; tota picea, labro antennis pedibusque paullo dilutioribus; capite (clypeo excepto) sparsim subtilius punctulato; prothorace quam longiori fere dimidia parte latiori, ad latera sat fortiter rotundato, minus fortiter punctulato, in disco (exempli typici) haud impresso, antice vix angustato, angulis posticis magis rotundatis; scutello medio nullo modo carinato; antennarum subtiliorum magis elongatarum articulo 3<sup>o</sup> quam 4<sup>us</sup> magis longiori; cetera ut præcedentis (*H. aridæ*). Long., 5 l.; lat.,  $1\frac{3}{5}$  l.

Closely allied to *H. arida*, but differing from it by well defined characters,—especially by its antennæ and legs of dark color, the third joint of its antennæ longer in proportion to the fourth, its prothorax much more transverse and otherwise differently shaped, &c.

Central Australia; Hergott Springs.

*H. callabonensis*, sp. nov. *H. aridæ* affinis; differt fere ut *H. sitiens* sed colore et capitis sculptura *H. aridæ* haud dis-



pari; prothorace minus crebre vix dupliciter punctulato; elytrorum versus apicem striis magis perspicue punctulatis interstitiis manifeste convexis angustatis.

Maris tibiis anticis (paullo supra medium) dente valido armatis.

Feminæ tibiis muticis. Long.,  $4\frac{1}{2}$ —5 l.; lat.,  $1\frac{1}{2}$ — $1\frac{3}{5}$  l.

This species is closely allied to the preceding two. I should hesitate to consider its differences more than accidental peculiarities of an individual if I had seen only a single example, but I have before me several of each sex in all of which the distinctive characters are quite constant. *H. arida* may be at once distinguished from the other two by its considerably more elongate and less transverse prothorax arched on the sides only feebly. *H. sitiens* differs from the other two by the dark color of its antennæ and legs as well as by the sparseness of the punctures between its eyes and from *arida* by its more slender antennæ with comparatively longer third joint,—while *H. callabonensis* differs from the other two by the finer punctures of the prothorax being almost absent by the striæ of its elytra being quite conspicuously punctulate to the apex and by its elytral interstices becoming narrower and quite evidently convex near the apex.

Central Australia; taken near Lake Callabonna by Mr. Zietz.

N.B.—In my tabulation of species of *Homotrysis* (Tr. Roy. Soc. S.A. 1891 pp. 320-1) the three above described would form a separate section under "AA" on page 321 (assuming, that is, that the eyes of the male,—as is probably the case,—are not materially different in *H. arida* and *sitiens* from those of *H. callabonensis*). The tabulation then will end as follows:—

AA. Interval between eyes in both sexes greater than the width of either eye as seen from above.

B. Punctures of elytral striæ,—at least in front half of elytra, —well defined, and quite distinct from the much smaller interstitial punctures.

C. Head strongly and rather closely punctulate between the eyes.

D. Coarser punctures of prothorax much confused with fine puncturation... *arida*, Blackb.

DD. Prothorax almost devoid of fine punctures ... *callabonensis*, Blackb.

CC. Punctures between the eyes very fine and very sparse... *sitiens*, Blackb.

BB. Punctures of elytral striæ scarcely defined as distinct from those of the interstices... *carbonaria*, Germ.



## NOCAR.

*N. debilis*, Blackb. This species is identical with *Cistela depressiuscula*, Macl., an example of which I have to thank Mr. Mr. Masters for. As mine is the more recent name it must sink and the insect must be known as *Nocar depressiusculus*, Macl.

## CEDEMERIDÆ.

## ANANCA.

This genus is already a receptacle for widely different forms and is only waiting its time to undergo a revision which will probably involve the removal from it of all the Australian species attributed to it. Mr. Champion of the London Entomological Society (who ranks high among the specialists of our day on the *Heteromera* and to whom I am indebted for much valuable assistance in working on the family) has the Australian *Cedemeridæ* at present in hand, and I understand is about dealing with them in a memoir which I anticipate with the deepest interest. Under these circumstances it would be out of the question even if I felt competent for the task for me to meddle with it. In the Zietz collection, however, there is a species of *Cedemeridæ* which it seems very inconvenient to omit in my present work of describing the new species of that collection and as it seems quite safe to assume that the species in question is not among those in Mr. Champion's hands I venture to subjoin a description of it. In describing it the only existing genus to which it can be provisionally referred is *Ananca*. It certainly has much resemblance to some of the Australian species that bear the name *Ananca* but I doubt whether it will stand permanently as really congeneric with any of them. Its very much smaller size at once suggests wide departure from such species as *Cedemera puncta*, W. S. Macleay, *C. australis*, Boisd., *Nacerdes nigronotata*, Bohem., which may be regarded as fair types of the Australian insects that have been attributed to *Ananca*. These latter species however differ much *inter se* in the structure of their palpi and tarsi, —so much indeed that the three I have named may possibly be held to represent three distinct genera. The species I describe below could not, in that case, be associated with any of those three. Of them I think *nigronotata*, Boh., is the one it comes nearest to but it differs from it in notable characters, especially in its much shorter muzzle, in its smaller and much more slender tarsi, in its shorter maxillary palpi the apical joint of which is less securiform, in its shorter legs, and in its prothorax not much narrower than its elytra. Its eyes are much like those of *nigronotata* and its front tibiæ have two apical spines.

*A. Zietzi*, sp. nov. Testaceo-fusca, sternis abdomineque nigri-



cantibus exceptis; sat nitida; minus dense pubescens; antennis quam corporis dimidium brevioribus; capite crebre distincte, prothorace vix manifeste (hoc quam longiori parum latiori, in medio transversim inæquali, lateribus antice sat rotundatis), elytris subtilius sat crebre, punctulatis; his lineis subtiliter elevatis circiter 3 vix distincte instructis. Long.,  $3\frac{1}{2}$ —4 l.; lat., 1 l.

Lake Callabonna; taken by Mr. Zietz.

## CURCULIONIDÆ.

### TALaurinus.

*T. strangulatus*, sp. nov. Niger, squamis pallidis plus minusve vestitus et in tuberculis omnibus setis singulis pallidis instructus; capite coriaceo vix manifeste punctulato; rostro brevi quam caput paullo angustiori, fortiter concavo, ad apicem emarginato, carinis internis vix distinctis externis crassis minus obliquis bene determinatis obsolete grosse punctulatis; prothorace quam longiori parum latiori, mox pone marginem anticum profunde transversim sulcato, sparsim tuberculato, antice quam trans basin paullo latiori, lateribus sat arcuatis; elytris tuberculis parvis nitidis subseriatim instructis, angulis humeralibus tuberculiformibus sed vix antrorsum prominentibus; tibiis elongatis gracilibus.

Maris femoribus anticis sat dilatatis; segmento ventrali apicali pone medium transversim leviter sulcatum, sulci margine postico in medio carina transversa acuta armato.

Femina latet. Long., 7 l.; lat., 3 l.

This is a species of narrow subparallel form, its upper surface subopaque (the elytra more so than the prothorax) and bearing small tubercles all of them isolated and separated from each other by distinct intervals many of which are much larger than the area of the individual tubercles. The tubercles of the prothorax are much larger than those of the elytra and resemble small flattish warts while some of those on the elytra (especially towards the sides) are acutely conical granules. The squamosity of the specimen before me is confined to the sides where it forms small patches but probably in a perfectly fresh example it is generally distributed over the surface. I think the following characters in combination will distinguish this species; rostrum deeply concave with very well developed external ridges; prothorax very sparsely tuberculate (much more sparsely than in, e.g., *T. tuberculatus*, MacL.), and with an extremely strong transverse sulcus a little behind the front margin; shoulders of elytra scarcely projected forward; apical ventral segment of male bearing a feeble transverse impression extending all across it a little



behind the middle and limited in the middle part of its hind margin by a sharply defined transverse carina; tarsi long and slender. From certain points of view the elytra appear to be feebly striate and the seriate arrangement of their tubercles is very irregular.

Central Australia; Oodnadatta.

## LONGICORNES.

### PARANDRA.

*P. Frenchi*, sp. nov. Nigro-picea, corpore subtus pedibusque plus minusve rufescentibus; nitida; capite sat crebre minus fortiter punctulato, inter oculos sat fortiter bituberculato; prothorace quam longiori dimidia parte latiori, obsolete subcanaliculato, fere ut caput sed paullo minus crebre punctulato, basin versus sat fortiter angustato, lateribus pone medium subangulatis (hinc ad basin sinuatim convergentibus), margine antico sinuato, angulis omnibus obtusis bene determinatis (anticis antrorsum, posticis extrorsum, prominulis), basi leviter sinuato-emarginata; elytris quam prothorax parum latioribus, punctulatis (ad basin ut prothorax, retrorsum gradatim magis crebre magis subtiliter); segmento ventrali apicali transverso, granulato (a basi retrorsum gradatim magis fortiter magis crebre), postice late rotundato. Long.,  $9\frac{1}{2}$  l.; lat.,  $3\frac{1}{2}$  l.

I cannot identify this insect with any *Parandra* yet described. For the sake of precision it will be well to compare it with a previously-named species. Placed beside *P. puncticeps*, Shp., it is seen to be a narrower, more parallel, and more convex insect with the puncturation of its head a little finer but not much different, and that of its prothorax and elytra like that of its head (and therefore very different from the same in *puncticeps*) except that on the prothorax the punctures are a trifle less close and on the elytra they become gradually smaller and closer from the base hindward so that towards the apex of the elytra they differ considerably from those on the head. In *P. Frenchi* the sides of the prothorax are much more narrowed (and that more sinuately) behind their quasi-angulation than in *puncticeps* and the lateral margins are wider and better defined while the front angles are decidedly prominent. The large obtuse tubercles between the eyes are wanting in *P. puncticeps*, and the mandibles are very different in the two insects. I am doubtful of the sex of the type of *P. Frenchi*, but I believe it is a female. Its mandibles are much like those of the *Lucanid* *Lissotus subtuberculatus*, Westw., as figured Tr. Ent. Soc., 1885, t. 12, fig. 2.

N.S. Wales; in the collection of Mr. French.



## CATYPNES.

*C. planicollis*, sp. nov. (Mas.?) Nitidus; minus elongatus; brunneus, capite obscuriori, elytris apicem versus pedibusque dilutioribus; capite magno in medio sulcato, fortiter ruguloso (area utrinque prope sulcum medianum nitida sparsim grosse punctulata excepta), mandibulis sat productis ad apicem bidentatis; prothorace (spinis exclusis) quam longiori fere duplo latiori, supra in disco planato sparsim subtiliter punctulato et foveis 3 grosse rugulosis impresso (sc. una mediana sublanceiformi, et utrinque ad basin una ovali oblique posita), lateribus late declivibus rugulosis et ad marginem spinis minoribus 2 armatis (his ad apicem retrorsum curvatis); elytris sparsim distincte punctulatis et obsolete 3—vel 4—costatis apice suturali breviter spiniformi; antennis quam corpus paullo brevioribus; pedibus inermibus, abdomine sublævi, sed segmento ventrali apicali (hoc in medio leviter emarginato) sparsim punctulato. Long., 12 l.; lat.,  $4\frac{1}{5}$  l.

I feel some hesitation in referring this species to *Catypnes* owing to discrepancies between the utterly insufficient original diagnosis of Mr. Pascoe and the fuller subsequent one of M. Lacordaire. For example Mr. Pascoe asserts that the eyes are "nearly entire" while M. Lacordaire calls them "assez fortement échancrés." The insect before me, however, agrees very well with M. Lacordaire's diagnosis; and therefore it would be unjustifiable (at any rate without examination of the type, which is of course impossible for me) to found a new genus for it. It is fortunately a species which can be distinguished from nearly all the other Australian *Prionides* by the combination of a very small number of its characters, viz., "sides of the prothorax not denticulate or crenulate but each bearing two well-defined spines, eyes strongly emarginate (almost exactly similar to those of *Toxeutes*), antennæ shorter than the body with basal joint very much shorter than the third, hind tarsi with basal joint shorter than the third and fourth together, third joint of the tarsi very deeply bilobed and spongiose beneath, legs extremely smooth and nitid without any denticulations, head (at least in the male) transverse and very large.

The present species is readily distinguishable from *C. Macleayi*, Pasc., by the sides of its prothorax having only two (not three) spines. The prothorax of this insect bears a remarkable resemblance in outline to that of *Toxeutes arcuatus*, Fab., but with its lateral spines very much smaller and (though directed hindward) scarcely arched.

Western Victoria; presented to me by Mr. Jung of Yorketown.



## TYPHOCESES.

*T. adpersa*, sp. nov. Brunnea, capite prothoraceque obscurioribus, elytris dilutioribus, squamis piliformibus niveis (his in prothorace plus minusve lineatim, in elytris ut maculæ numerosæ minutæ et fascia linearis vix antemediana, in abdominis segmentis singulis ut fascia apicalis, in partibus ceteris disperse, dispositis) vestita; setis gracilibus erectis vel suberectis sparsim instructa; capite obscure punctulato; prothorace supra sat deplanato, grosse ruguloso (exempli typici disco hic illic quasi ab indumento sculpturam tegenti instructo), lateribus in medio fere parallelis apicem versus rotundato - angustatis pone medium subito fortiter arcu emarginatis (sicut certo adspectu pone medium dens magna videtur); elytris ad basin rectis, basin versus sat crebre fortius rugulose (retrorsum gradatim magis sparsim magis obsolete) punctulatis, lateribus postice gradatim leviter convergentibus, apice singulatim rotundato - subacuminato, humeris rotundatis subcallosis. Long.,  $7\frac{1}{2}$  l.; lat.,  $2\frac{1}{2}$  l.

The specimen described is evidently a male, its antennæ being considerably longer than the body, but they are devoid of the ciliæ with which in the other species of the genus the basal joints of the male antennæ are clothed; joints 3-7 are armed with a fine spine at their apex. There is a second specimen evidently a female of the same species, as its antennæ are scarcely longer than the body, but it differs from the example described in being entirely black, but with exactly similar snow-white scales similarly disposed. It differs from the described specimen also in its prothorax being evenly rugulose instead of having some of the rugulosities on the disc obliterated by what looks like (but is not) patches of some extraneous indumentum. The markings on the elytra are almost absolutely the same as those on the elytra of *Zygocera pruinosa*, Boisd., the post-median fascia however being absent and the anterior fascia running from the suture obliquely hindward instead of forward.

N. Queensland; forwarded by Mr. French.

## ISCHIOPLITES.

*I. metutus*, Pasc. Mr. French of Melbourne has forwarded to me two examples, which he tells me were taken in N. Queensland, of an insect that seems to agree perfectly with the description of this species. It is possible that a comparison with the type might reveal differences but I can find none to distinguish it from the description, which is a fairly detailed one.

## ILLÆNA.

This genus is an enigma to the Australian coleopterist. I



should feel very thankful if some coleopterist in Berlin would do me the favor of procuring one of Erichson's types for me to examine (which might perhaps be possible if the specimens in the Museum are fairly numerous), or failing that examine the type and write me a description of it, especially indicating the nature of the armature of the prothorax which in one place Erichson calls "lateribus medio obsolete nodosus" and in another speaks of as being furnished "lateribus pone medium tuberculo parvo." Pascoe described a genus *Neissa* as resembling what *Illæna* must be, but no doubt distinct from it because furnished with a spine on either side of the prothorax. Subsequently I suggested (P.L.S.N.S.W. 1889, p. 455) that Erichson's expressions are not consistent enough to warrant this conclusion and expressed the opinion that *Neissa* and *Illæna* are probably identical. Subsequently still, Mr. Gahan [Tr. E.S. 1893, p. 196] mentioned his having seen an insect named (by M. Chevrolat) *I. exilis*, the prothorax of which was spined laterally and added the information that Mr. Walker had found examples of it in Tasmania (Erichson's locality). Recently my opinion on the matter has been somewhat shaken by the examination of a minute Longicorn (taken in N.S. Wales by Mr. Lea) which seems to agree much better than *Neissa* does with Erichson's description of *Illæna*; indeed I do not find any character on which this insect could be definitely stated to differ from that description provided the diagnosis of the prothoracic armature be accepted as "lateribus medio obsolete nodosus" rather than the other diagnosis which implies the presence of defined lateral tubercles. As regards Mr. Lea's insect as a *species* it must be very like, if not identical with, Erichson's species; and although the great difference in locality would suggest the probability that if Erichson's type could be compared it would prove distinct, I deem it better to regard this insect *pro tem.* as "*Illæna exilis*, Er.?" and suppose that the species is widely distributed.

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Blackburn, Thomas. 1895. "Further notes on Australian Coleoptera, with descriptions of new genera and species. Part XVII." *Transactions of the Royal Society of South Australia* 19, 27–60.

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