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XXXVII.—Descriptions of new genera and species of Tenebrionidæ from Australia and Tasmania

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afterwards approaching each other, and at last slightly divergent.

♀. Posterior lobe of the prothorax deeply divided by an oval excision; rhinarium and upper lip blackish; inner border of the eyes and the cheeks yellowish. (The last three segments of the abdomen are missing.)

This species is allied to *T. Dictynna*, but very distinct by the two pale spots of the front of the thorax being very much smaller, the lateral bands more dilated, and the pterostigma longer. The ♀ is remarkable for the oval excision which divides the posterior lobe of the prothorax. The appendices of the ♂ are formed like those of *T. cyanops*; only the superior are rather more excavated internally, and the inferior rather less contiguous before the apex.

Until the present time the genus *Trichocnemis* was known only from South Asia and the Malayan archipelago.

8. *Agrion senegalense*, Rambur.

Two males similar to those of the African continent and islands.

9. *Brachybasis glabra*, Burm. (*Agrion*).

Agrion ferrugineum, Rambur.

Two males, similar to those of the African continent, Madagascar, and Mauritius.

Liège, 9th Feb., 1869.

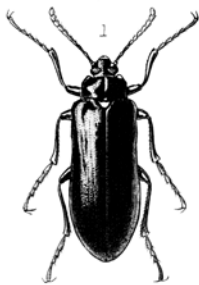
XXXVII.—*Descriptions of new Genera and Species of Tenebrionidæ from Australia and Tasmania.* By FRANCIS P. PASCOE, F.L.S. &c.

[Continued from p. 153.]

[Plate XII.]

THE three following appear to be degraded Tasmanian forms of *Cestrinus*, Er.* and are closely allied; they are narrower and more feebly constructed, and the prothorax wants the expanded margin. *Opatrum piceitarse*, Hope, belongs to this genus; with this species his *Isopteron opatroides* exactly agrees, only the latter has clear ferruginous antennæ. The same author's *Platynotus insularis* is, I believe, another member of the genus. The descriptions of these insects and some others, in the 'Transactions of the Entomological Society' (ser. I. vol. iv.), were very concise; and they were left un-

* Wieg. Arch. 1842, i. p. 172.



ticketed, as Prof. Westwood informs me; so that they had afterwards to be determined by these descriptions. As the vast collection of Mr. Hope was at his death in some disorder, it is not impossible that in some instances the true types may have been overlooked.

Cestrinus aversus.

C. elongatus, subdepressus, fuscus, subnitidus, subtiliter sparse griseo-pubescentis; elytris striato-punctatis, obovatis.

Hab. Tasmania.

Elongate, subdepressed, dark brown, slightly nitid, finely and remotely pubescent, the pubescence composed of very small stiff greyish bristles; head closely punctured, clypeus separated from the front by a slightly arched, deeply impressed groove; prothorax a little broader than long, closely punctured, widely emarginate at the apex, the sides slightly rounded and obsoletely crenated, the base truncate; scutellum small, transverse; elytra broader than the prothorax at the base, the greatest breadth towards the apex, striate-punctate, the punctures approximate and deeply impressed; body beneath and femora pitchy brown, finely punctured, tibiæ paler; antennæ and tarsi ferruginous. Length 3 lines.

Cestrinus punctatissimus.

C. elongatus, subdepressus, rufo-fuscus, opacus, subtiliter griseo-pubescentis; elytris striatis, creberrime punctatis, lateribus parallelis.

Hab. Tasmania.

Elongate, subdepressed, reddish brown, opaque, with scattered greyish bristles; head and prothorax as in the last; scutellum curvilinearly triangular; elytra broader than the prothorax, the sides nearly parallel, striated, each of the striæ filled with two or three rows of closely impressed irregular punctures; body beneath, legs, and antennæ pale reddish ferruginous, the former and femora punctured. Length 3 lines.

The closely arranged punctures on the elytra, many of them impinging on the lines between the striæ, will readily distinguish this species from the former.

Cestrinus posticus.

C. elongatus, fuscus, subtiliter sparse griseo-pubescentis; elytris striato-punctatis, apicem versus elevatis.

Hab. Tasmania.

Elongate, subdepressed, dark brown, with scattered greyish bristles; head and prothorax as in *C. aversus*, but narrower, and the punctures smaller; scutellum confounded with the

elytra; the latter gradually broader behind, and, towards the apex, prominently raised at the suture, striato-punctate, the punctures large, squarish, and regularly arranged; body beneath pitchy, finely punctured; legs and antennæ paler. Length $2\frac{3}{4}$ lines.

I have only a single specimen of this insect; but the peculiar elevation of the elytra posteriorly seems to mark it out as a good species.

Nearly related to *Cestrinus* is *Asida serricollis*, Hope*; it differs generically in the epipleuræ of its elytra being broader and horizontal or subhorizontal, and the mesosternum entire anteriorly, the last joint of the labial palpi oblong-ovate and somewhat acuminate, and the mentum trapeziform. I propose to call this genus *Achora*. *Opatrum denticolle*, Blanch. †, is probably another species.

TYPHOBLA.

Subfamily DIAPERINÆ.

Antennæ art. omnibus obconicis, ultimo excepto.

Tarsi postici art. primo elongato.

The character of the antennæ at once separates this genus from *Diaperis*; to this may be added the peculiarly deep opacity of the coloration and the more flattened form. There is a slight transverse elevation on the forehead of one of my specimens ‡.

Typhobia fuliginea.

A. ovalis, subdepressa, nigra, opaca; corpore infra, antennis pedibusque rufo-testaceis, nitidis.

Hab. Queensland; Victoria.

Rather narrowly oval, subdepressed, black, opaque; head somewhat pitchy, finely punctured; prothorax impunctate, anterior angles slightly produced, the lateral marginal line glossy reddish testaceous; scutellum transversely triangular; elytra finely striate-punctate, the punctures minute, the intervals of the striæ broad and very slightly convex; body be-

* Trans. Ent. Soc. ser. 1. iv. p. 103.

† Voy. au Pôle Sud, Ins. Col. pl. 10. fig. 13.

‡ The males of a great many species of the subfamily, especially in the genera *Platydema* and *Arrhenophlita*, have the head furnished with two short horns, either between the eyes or a little above them. But in a species from Brazil, lately given me by Alexander Fry, Esq., these horns are transferred, so to say, to the apex of the prothorax. This remarkable insect will form a new genus. I have adopted the name *Arrhenophlita* of Kirby (Faun. Bor.-Amer. Ins. p. 235) instead of *Hoplocephala*, which had been used years previously by Cuvier for a genus of Ophidians.

neath, legs, and antennæ glossy reddish testaceous. Length $2\frac{1}{4}$ lines.

Platydema aries.*

P. ovalis, modice convexa, nigra, nitida; elytris striato-punctatis, fasciis duabus, ad suturam interruptis, luteis.

Hab. Brisbane.

Oval, moderately convex, black, shining; head finely and rather closely punctured, on the inner side and a little above each eye, in the male, a short vertically compressed horn, obliquely truncate at the apex and densely fringed with short yellowish hairs; prothorax twice as broad at the base as long, finely punctured, an oblong fovea on each side posteriorly; scutellum curvilinearly triangular; elytra more convex behind the middle, striate-punctate, the striæ very shallow, the intervals between them broad, flat, and minutely punctured; near the base a broad yellow band, and a similar one near the apex, both interrupted at the suture; body beneath, legs, and antennæ dull luteous, the former clouded with brown. Length $2\frac{1}{4}$ lines.

Resembles *P. tetraspilota*, Hope, in coloration, but a vastly more bulky insect, and remarkable for the form of the horn, with which the male only is armed.

Platydema oritica.

P. ovalis, modice convexa, nigra, nitida; elytris striato-punctatis; antennis pedibusque pallide ferrugineis.

Hab. Victoria?

More broadly oval than the last, glossy black; head of the male with two horizontal triangular and acuminate horns, tipped with ferruginous, between the eyes; prothorax as in the last, but narrower and more convex; scutellum curvilinearly triangular; elytra more convex at the middle, striate-punctate, the intervals between the striæ convex, minutely punctured; body beneath dark glossy brown; legs and antennæ yellowish ferruginous. Length $2\frac{1}{2}$ lines.

Dr. Howitt has not given me the locality of the above, nor of the following, which differs in some degree generically from *Platydema* in that the fourth, fifth, and sixth joints of the antennæ are obconic, and not transverse, although gradually thicker outwards.

Platydema limacella.

P. breviter ovata, nigra, nitida; elytris striato-punctatis, humeris luteis.

Hab. Victoria?

* De Cast. et Brullé, Ann. d. Sci. Nat. xxiii. p. 350.

Shortly ovate, moderately convex, black, shining; head of the male with two short pointed horns, antennary ridges, apex of the clypeus, and antennæ luteous; prothorax finely punctured, twice as broad as long at the base, a little depressed near the scutellum, the margins luteous; scutellum curvilinearly triangular; elytra striate-punctate, the intervals of the striæ minutely punctured, broad, and convex, the shoulders luteous; epipleuræ of the elytra and body beneath dull luteous; legs clear luteous. Length 2 lines.

The following is, no doubt, a *Platydema*; but there is no trace of horns in either of my two specimens: probably they are both females.

Platydema thaliooides.

P. elliptica, convexa, rufo-testacea, nitida; prothorace utrinque macula arcuata, elytrisque (sing.) maculis tribus magnis nigris; antennis basi exceptis nigris.

Hab. Sydney.

Elliptic, convex, reddish testaceous, shining; head finely punctured, rather depressed between the antennary ridges; prothorax smooth, slightly expanded at the lateral margins, a large black arched spot or stripe extending from the anterior to the posterior angles on each side, leaving in the middle of the disk a nearly triangular patch; scutellum curvilinearly triangular; elytra minutely seriate-punctate, on each a round black scutellar spot, and two transverse, also black, the first in the middle, the second near the apex, both large and approaching the suture; body beneath brownish testaceous, the metasternum clouded with black; legs testaceous; antennæ black, the two basal and base of the third joint fulvous testaceous. Length $2\frac{1}{2}$ lines.

*Ceropria?** *valga.*

C. breviter ovalis, nigra, subnitida, antennis art. duobus basalibus, labro tarsisque fulvis; tibiis intermediis et posticis valde curvatis.

Hab. Queensland.

Shortly oval, black, subnitid, the two basal joints of the antennæ, upper lip, and tarsi fulvous; head very short in front; the clypeus broad, truncate anteriorly, the antennary ridges impinging only slightly on the eyes; antennæ with the fourth and following joints to the tenth inclusive more or less obconic, and only slightly dilated on one side, the last ovate; prothorax nearly twice as broad as long, widely emarginate at

* De Cast. et Brullé, Ann. des Sci. Nat. xxiii. p. 396.

the apex, nearly impunctate; scutellum transversely triangular; elytra rather broader than the prothorax, the sides nearly parallel, striate-punctate, the intervals of the striæ flattish; body beneath dark glossy brown; femora and tibiæ pitchy, tibiæ curved, especially the intermediate and posterior. Length 4 lines.

Differs from *Ceropria* in the antennæ, which are scarcely serrated on the inner edge, and in the shortness of the head anteriorly, the eyes nearly free, &c. As the genus has a very extended geographical range, and there are only two described species from Australia, it seems best for the present to consider this one an aberrant member.

*Pterohelæus** *nitidissimus*.

Pterohelæus striato-punctatus, De Brême, Essai &c. p. 31, pl. 2. fig. 6 (*nec* Boisduval).

P. ovalis, nitidissime niger; elytris subtilissime seriatim punctatis.

Hab. South Australia.

Oval, moderately convex, very glossy deep black; head finely and closely punctured, clypeal groove broad and shallow; prothorax very minutely and rather closely punctured, rounded at the sides, the edge of the expanded margin anteriorly recurved, an irregular well-marked groove at the base interrupted in the middle; scutellum curvilinearly triangular; elytra a little contracted behind the shoulders, very finely seriate-punctate, the punctures less regularly arranged near the suture; body beneath and legs very glossy black, propectus opaque, granulate; antennæ reaching to the base of the prothorax, third joint half as long again as the fourth. Length 5-5½ lines.

A typical specimen, I believe, in the Oxford Museum shows that this is *P. striato-punctatus*, De Brême; and his description, with one exception, fairly enough accords with it; I hold, however, that it cannot be the same species as that described (?) by Dr. Boisduval in the following words:—"Elongato-ovata nigra; thorace lævi; elytris elongatis, punctis majoribus impressis striatim digestis"†. The exception alluded to is the phrase "fortement ponctué," which may be a slip of the pen for "faiblement ponctué." Dr. Boisduval's "striatim" might in the same way have been intended for "seriatim," but for the specific name "*striato-punctatus*" and the French translation "alignés en stries." There are no striæ whatever in

* De Brême, Essai &c. p. 27.

† Voy. de l'Astrol. p. 266.

the species before us, nor are there any mentioned by M. de Brême.

Pterohelæus vicarius.

P. sat late ovalis, fusco-niger, nitidus; sulco clypeali distincto; elytris leviter seriatim punctatis.

Hab. Queensland; New South Wales; Victoria.

Rather broadly oval, brownish black, shining; head thickly and roughly punctured, clypeal groove well defined, narrowly and sharply limited, the transverse portion above curved downwards; prothorax minutely but not very closely punctured, rounded at the sides, the expanded margins not recurved, the irregular basal groove on each side nearly obsolete; scutellum broadly triangular, its apex rounded; elytra a little contracted behind the shoulders, finely, but not minutely, seriate-punctate, the punctures less regularly arranged near the suture and base; body beneath and legs glossy brownish black, the propectus opaque, granulate; antennæ short, third joint nearly twice as long as the fourth. Length 6-7 lines.

Broader and much less finely punctured than the last species, and not particularly glossy, &c. In some collections it is labelled *P. striato-punctatus*, Boisd.; but the same objection applies to this as to *P. nitidissimus*. Both species have the abdominal segments finely striated longitudinally (a character common to many Tenebrionidæ) and the clypeal grooves well marked.

Pterohelæus litigiosus.

P. paulo anguste ovalis, ferrugineo-fuscus, nitidus; clypeo antice late emarginato, sutura indistincta; elytris tenuiter striato-punctatis.

Hab. Sydney.

Rather narrowly oval, rusty-brown, shining; head finely punctured, a little concave in front; clypeus broadly emarginate anteriorly, separated from the front by a narrow indistinct line; prothorax very minutely punctured, a short longitudinal groove near the apex, none at the base, the expanded margins not recurved; scutellum transversely triangular; elytra callous at the base, rather finely seriate-punctate, the intervals of the rows slightly raised, the fourth and eighth intervals rather more so than the others, the expanded margins narrow; body beneath, legs, antennæ, and margins of the prothorax and elytra reddish ferruginous. Length 7 lines.

In colour and outline resembling *P. silphoides*, but rather broader, and not dull brown as in that species, the intervals

of the striæ more elevated, the punctures larger, and, above all, a broad callosity at the base of the elytra.

Pterohelæus alternatus.

P. subanguste ovalis, niger, nitidus; clypeo antice vix emarginato, sutura fere obsoleta; elytris in medio planatis, leviter seriatim punctatis, interstitiis alternis elevatis.

Hab. "Interior."

Rather narrowly oval, black, shining, somewhat depressed; head finely punctured; clypeus scarcely emarginate in front, its suture nearly obsolete; prothorax minutely punctured, a broad shallow fovea on each side at the base, no groove, the expanded margins not recurved; scutellum curvilinearly triangular; elytra flattish at the middle and base, finely seriate-punctate, the alternate intervals of the rows raised, the fourth, eighth, twelfth, and sixteenth (the last) much more so than the others, the expanded margins broad at the base, gradually narrower to the apex; body beneath and legs black, slightly glossy, tibiæ covered with short spinous hairs; antennæ short, not reaching to the end of the prothorax, black. Length 8 lines.

A very distinct species, in outline resembling *P. Reichel*, but the elytra with expanded margins and strongly marked elevated lines, &c. Dr. Howitt merely gives "Interior" as its locality.

Pterohelæus minimus.

P. oblongo-ovalis, piceus, subnitidus, marginibus clypeoque pallidioribus; prothorace confertissime oblongo-punctato; elytris subtuberculatis, subtiliter et vage punctatis.

Hab. Cooper's Creek.

Oblong-oval, pitchy brown, subnitid, the margins of the prothorax and elytra, and the anterior part of the head paler, yellowish brown; head densely punctured, the clypeal groove very indistinct; prothorax rather short, covered with fine oblong punctures, the intervals very narrow, and in certain lights causing the surface to assume a delicately corrugated appearance, the expanded margins narrow and slightly reflected; scutellum transversely triangular; elytra minutely and irregularly punctured, with scattered minute tubercles, especially near the suture, the expanded margins very narrow; body beneath and legs glossy reddish testaceous; antennæ short, inclining to testaceous. Length $3\frac{1}{2}$ lines.

The smallest species of the genus, and very distinct on account of the sculpture of the prothorax and elytra. I have

placed it after *Pterohelæus peltatus*, Er., which it resembles in outline.

The three following are closely allied in general appearance, but are distinguished by several small but well-marked points of difference. They seem to lie between *P. Walkerii* and *P. silphoides*, not so broad as the first nor so narrow as the last, and all moderately convex. Two of these species have the sutural margin raised; one (*P. laticollis*) has the expanded margins of the elytra rather broad, the broadest part in the middle; the other (*P. hepaticus*) has them much narrower, very slightly contracted behind the shoulders, the rest to beyond the middle of nearly equal breadth; the third (*P. dispar*) affects two forms, apparently depending upon sex, the male being elliptic, the female obovate; in this the sutural margin is without any elevation.

Pterohelæus laticollis.

P. fuscus, nitidus, marginibus dilutioribus; oculis approximatis; prothorace elytris latiore, his postice gradatim angustioribus.

Hab. Melbourne.

Dark glossy brown, the expanded margins of the elytra and prothorax considerably paler; head rather narrow behind the antennary ridges, concave between them; the eyes rather large and approximate; clypeus very convex, except at its anterior angles, its suture indistinct; prothorax short, broader than the elytra at its base, minutely punctured, the margins broad and only very slightly reflected, the basal foveæ strongly impressed; scutellum curvilinearly triangular; elytra gradually and rather rapidly narrowing from the base, seriate-punctate, the alternate intervals of the rows forming slightly elevated lines, the suture strongly elevated from below the scutellar striola, the punctures rather small, the expanded margins, owing to a contraction of the sides of the disk, broadest at the middle, behind very distinctly reflected; body beneath and femora very glossy chestnut-brown; antennæ, tibiæ, tarsi, and epi-pleuræ of the elytra reddish ferruginous. Length 10 lines.

Pterohelæus hepaticus.

P. fuscus (aliquando rufo-brunneus), subnitidus, marginibus dilutioribus; oculis distantibus; prothorace elytris haud latiore, his postice gradatim angustioribus.

Hab. Melbourne.

Dark brown (or sometimes light reddish brown), paler at the margins, less glossy than the last; head rather narrow

behind the antennary ridges; the clypeus very convex, its suture above indistinct, but forming a well-marked groove on each side; the eyes widely apart; prothorax not broader than the elytra at their base, much longer and narrower than in the last, the basal foveæ represented by a large shallow depression on each side; scutellum transversely triangular, the sides curvilinear; elytra gradually narrowing from the base, the sides of the disk not contracted, seriate-punctate, the intervals of the rows not raised, the punctures rather small, the expanded margins of nearly equal breadth, or only very gradually narrowing behind, the suture raised as in the last; body beneath and legs glossy chestnut-brown; antennæ glossy ferruginous. Length $8\frac{1}{2}$ lines.

Pterohelæus dispar.

P. breviter ellipticus (♂), *oblongo-obovatus* (♀), *piceus*, *nitidus*, *marginibus dilutioribus*; *oculis haud distantibus*; *elytris basin versus parallelis* (♂ in medio paulo latioribus), *lineis elevatis nullis.*

Hab. Swan River.

Shortly elliptic in the male, oblong-obovate in the female, shining pitchy brown, the margins much paler; head rather narrow in front; clypeus convex, its suture rather indistinct; the eyes not remote; prothorax shorter proportionally in the male, the basal foveæ shallow, between them opposite to the scutellum an indistinct groove; scutellum triangular; elytra nearly parallel at the sides, and not broader than the prothorax in the female, broader in the middle in the male, finely seriate-punctate, the intervals without raised lines, the suture not elevated, the expanded margins of nearly equal breadth at the sides, and a little reflected at the edge; body beneath and femora dark chestnut-brown, shining; antennæ, tibiæ, and tarsi paler. Length (♂) 7, (♀) 9 lines.

Helæus squamosus (Howitt's MS.). Pl. XII. f. 4.

H. oblongus, *parallelus*, *ferrugineo-fuscus*, *opacus*, *sparse fulvo-squamosus*; *elytris sing. unicastatis.*

Hab. Cooper's Creek; Darling River.

Oblong, parallel at the sides, impunctate, rusty-brown, opaque, sparsely covered with fulvous hairs simulating scales; head a little prolonged anteriorly; clypeus rounded; prothorax rather transverse, with a strongly marked carina in the middle, the foliaceous margins broad and reflexed; scutellum transversely triangular; elytra moderately convex, depressed along the sutural region, the suture finely raised, and near it on each side a strongly marked carina, which terminates abruptly at a

little distance from the apex, a line of small tubercles towards the foliaceous margins, which are moderately broad, but expanded inwardly near the shoulders; body beneath and legs opaque rusty-brown clothed with fine scattered hairs. Length 12 lines.

A very distinct species, having no similitude to any of its congeners. Unfortunately, it is not quite perfect as to its antennæ and anterior tarsi; and their reproduction in the figure must be taken with a slight reservation. In fresh examples, it is very likely the flattened hairs (they are not true scales) are more numerous than I have represented.

Saragus limbatus.

S. late ovalis, modice convexus, nigrescens vix nitidus; elytra leviter seriatim punctatis, interstitiis alternis paulo elevatis, latera versus sensim minus conspicuis.

Hab. Melbourne; Gawler.

Broadly oval, moderately convex, brownish black, scarcely nitid; head and prothorax finely punctured, the latter slightly convex, the basal foveæ nearly obsolete, the anterior angles rounded, posterior produced and recurved, foliaceous margins moderately broad, a little reflexed, and edged with a thickened border; scutellum transversely triangular; elytra not broader than the prothorax, finely seriate-punctate, the intermediate spaces between the rows raised, three or four on each side the suture the most so, those towards the sides gradually disappearing, foliaceous margins narrowing gradually posteriorly, transversely corrugated; body beneath and legs dark chestnut-brown, a little glossy, the abdominal segments longitudinally corrugated; antennæ ferruginous brown. Length 7 lines.

In outline resembling *S. simplex*, Hope (= *S. asidoides*, Pasc.), but differing in the sculpture of the elytra, &c. Dr. Howitt sends me another *Saragus*, from Port Augusta in South Australia, unfortunately without head or legs, but certainly one of the most remarkable of the subfamily. *S. australis*, Bois., seems to be not the same described under that name by the Marquis de Brême.

Dr. Howitt has sent me not less than four new genera of that handsome and almost exclusively Australian* subfamily, Cyphaleinæ. As a considerable addition has now been made

* The only exception is a Sumatran insect, which I have recently characterized under the name of *Artactes nigratarsis* (Proc. Ent. Soc. 1868, p. xii). It will be more fully described and figured hereafter.

to the group since M. Lacordaire's volume was published in 1859, the following tabulation may be useful:—

- Prosternum prolonged and compressed anteriorly (carinated).
 Antennæ rather short, joints gradually thicker and shorter from 7th or 8th to 10th.
 Tibiæ dilated at the end *Lepispilus*, Westw.
 Tibiæ not dilated.
 Body glabrous.
 Epipleuræ of the elytra entire.
 Intercoxal process broad, slightly rounded anteriorly *Platyphanes*, Westw.
 Intercoxal process narrower and triangular.
 Antennæ with the three penultimate joints obconic *Hectus*, n. g.
 Antennæ with the two penultimate joints transverse *Opigeniu*, n. g.
 Epipleuræ of the elytra incomplete or suddenly narrowed behind.
 Body oblong, depressed.
 Antennæ with the penultimate joints oblong *Olisthaena*, Er.
 Antennæ with the penultimate joints transversely obconic *Decialma*, n. g.
 Body hemispherical *Hemicyclus*, Westw.
 Body pilose *Altes*, n. g.
 Antennæ rather long, the penultimate joints little thicker than the rest.
 Basal joint of posterior tarsi as long as the rest together *Chartopteryx*, Westw.
 Basal joint of posterior tarsi shorter *Oremais*, Pasc.
 Prosternum not prolonged or compressed anteriorly.
 Mesosternum notched for the reception of prosternal process.
 Tarsi pilose beneath.
 Body oblong.
 Epipleuræ of the elytra suddenly narrowed behind *Prophanes*, Westw.
 Epipleuræ of the elytra gradually narrowed behind.
 Eyes partially covered by the prothorax *Lygestira*, Pasc.
 Eyes clear of the prothorax *Cyphaleus*, Westw.
 Body hemispherical *Artactes*, Pasc.
 Tarsi partially pilose beneath *Barytipha*, n. g.
 Mesosternum not notched *Mithippia*, n. g.

OPIGENIA.

Subfamily *CYPHALEINÆ*.

Oculi liberi.

Antennæ breviusculæ, art. 9^o, 10^o transversè obconicis.

Mesosternum breve, profunde incisum.

Head not inserted in the prothorax so far as the eyes; cly-

peus truncate in front, its suture obsolete. Eyes moderate, distant above. Antennæ rather short, the third joint twice as long as the second, fourth to eighth gradually shorter and broader, ninth and tenth transversely obconical, the last rounded. Mentum trapeziform, narrow at the base, strongly convex on the median line; lower lip transverse, rounded at the sides, slightly emarginate in front. Maxillary lobes narrow, the inner falciform, not produced into a hook. Labial palpi with the last joint very large, broadly obconic. Prothorax transverse, broadly emarginate at the apex, anterior angles rounded. Elytra oblong, convex; epipleuræ gradually narrower behind. Legs rather short; basal joint of the posterior tarsi longer than the two next together. Mesosternum deeply notched. Intercostal process narrowly triangular.

The type of this genus has no very obvious affinity to, and is different in habit from all others of this subfamily, although its technical characters are not very special. The internal maxillary lobe, unlike most of the genera of the Cyphaleinæ, is not produced into a hook, although the apex is pointed.

Opigenia iridescens.

O. oblongo-ovata, modice convexa, aureo-viridis, in certo situ purpureo resplendens.

Hab. Victoria.

Oblong-ovate, moderately convex, golden-green, with rich purple reflections; head rather finely and closely punctured; antennæ glossy ferruginous; prothorax finely but less closely punctured than the head; scutellum triangular, black; elytra broader than the prothorax, their greatest breadth a little behind the middle, seriate-punctate, the punctures small and not approximate, the intervals of the rows broad and finely punctured; body beneath and legs glossy black, the former finely punctured. Length 6 lines.

HECTUS.

Subfamily *CYPHALEINÆ*.

Prosternum antice productum, carinatum.

Processus intercoxalis brevis, antice rotundatus.

Oculi liberi.

In other respects this genus agrees with *Lygestira*, except that it has no raised lines on the elytra—if that be a generic character. My specimen, the only one I have seen, appears to be a male, but it has the anterior tarsi only dilated; in *Lygestira*, judging from the few examples I have been able to examine, the intermediate tarsi as well are dilated, although but slightly.

Hectus anthracinus. Pl. XII. fig. 6.

H. modice convexus, æneo-niger, nitidissimus; elytris vage et sparse punctatis.

Hab. Rockhampton.

Moderately convex, not depressed, brassy black, very glossy; head and prothorax finely punctured, anterior angles of the latter strongly produced and acuminate; scutellum nearly equilaterally triangular; elytra a little broader than the prothorax at the base, their sides slightly parallel, not broader behind, sparingly and irregularly punctured, the punctures of moderate size; body beneath and legs brownish black, very glossy; antennæ dark ferruginous. Length 6 lines.

*Lepispilus** *Stygianus*.

L. niger, nitidus; prothorace brevi, valde transverso, angulis anticis haud producto, rotundato.

Hab. "Alps of Victoria."

Entirely black, glabrous, shining; head small comparatively; clypeus not distinctly separated from the front, its punctures not more crowded than those on the rest of the head; prothorax short, very transverse, minutely punctured, anterior angles not produced, broadly rounded; scutellum equilaterally triangular; elytra large, very convex, much broader behind (probably in ♀ only), with rather fine punctures irregularly crowded, and here and there almost obliterated, with no traces of lines or foveated impressions; body beneath and legs glabrous and glossy, the tibiæ thickly punctured and strongly dilated at the tips. Length 10 lines.

Radically distinct from its only congener (*L. sulcicollis*, Hope) in its colour, sculpture, absence of pubescence, and form of prothorax. My specimen appears to be a female.

ALTES.

Subfamily *CYPHALEINÆ*.

Corpus longe pilosum.

Antennæ breves, art. duobus penultimis transversis.

Tibiæ lineares, ant. et interm. haud calcaratæ.

Tarsi postici art. basali breviusculo.

These characters separate this genus from *Chartopteryx*, Westw., to which I had doubtfully referred the species (*C. binodosa*) constituting its type. It is perhaps the most remarkable of all the *Cyphaleinæ*, on account of the large hump at the base of each elytron, precisely as in the Brazilian genera

* Westwood, Arcan. Ent. i. 44.

Dicyrtus and *Thecacerus*. *Altes binodosus*, represented on Plate XII. fig. 2, is an ovate, convex, dark copper-brown insect, sparsely furnished with long flying hairs on the body and legs. *Chartopteryx* has erect scale-like hairs, rather thickly clustering at the base of the elytra, very different in their character and distribution from those on *Altes*.

DECIALMA.

Subfamily CYPHALEINÆ.

Antennæ art. penultimis breviter obconicis.

Tibiæ obsolete calcaratæ.

Tarsi lineares, art. ult. elongato.

Head exserted; clypeus broad, separated from the front by a straight groove. Eyes not contiguous to the prothorax, prominent, broad, nearly entire. Antennæ short, slender, the last six joints thicker than the rest, third shorter than the two next together, all, except the last, more or less obconic, the last ovate. Mentum trapezoidal, narrow at the base. Prothorax transverse, broadly emarginate at the apex, slightly foliaceous at the sides. Elytra oblong, slightly depressed; epipleuræ obliquely descending, nearly obsolete towards the apex. Legs short; femora thickened; tibiæ linear, very shortly spurred; tarsi slender, the claw-joint elongate. Prosternum produced behind. Mesosternum with a V-shaped notch.

It is with some hesitation that I propose this as a genus distinct from *Olisthena*, Er.*, which is unknown to me, but with which it agrees, so far as he has characterized it, with the exception of the antennæ: these he describes as having the penultimate joints longer than they are broad, by which character he differentiates it from *Pachycælia* (= *Lepispilus*). On the contrary, in *Decialma* the penultimate joints are broader than they are long; and in a subfamily like the Cyphaleinæ, remarkable for a difference of habit without a correlative difference of structure, a character like the above becomes of importance.

Decialma tenuitarsis.

D. oblonga, modice convexa, nitida; capite prothoraceque nigris; elytris fuscis, vage punctatis.

Hab. Victoria.

Oblong, moderately convex, shining; head black, very closely and rather finely punctured, but with few punctures on the clypeus; prothorax black, minutely and sparsely punc-

* Wiegmann, Arch. 1842, Bd. i. p. 177.

tured, very short, the sides nearly parallel, but a little rounded anteriorly, anterior angles slightly produced; scutellum brown, curvilinearly triangular; elytra a little broader than the prothorax, parallel at the sides, irregularly covered with small approximate punctures; body beneath and legs glossy chestnut-brown, with minute scattered punctures; antennæ not reaching to the base of the prothorax, and, with the tarsi, dull glossy ferruginous. Length 5 lines.

BARYTIPHA.

Subfamily CYPHALEINÆ.

Antennæ breviusculæ, art. 8^o, 9^o, 10^o transversis.

Epipleuræ elytrorum postice vix angustiores.

Tarsi subtus apice breviter pilosi.

Head deeply inserted in the prothorax, convex in front; clypeus strongly emarginate, its groove arched. Eyes narrow, transverse, constricted in the middle, distant above. Antennæ rather short, third joint twice as long as the second, fourth to seventh gradually shorter, eighth, ninth, and tenth transverse, the last rounded. Mentum broadly subcordiform, its face concave; lower lip rounded anteriorly. Maxillæ short, the inner lobe strongly hooked. Maxillary palpi securiform, labial subobconic. Prothorax transverse, apex broadly emarginate, anterior angles not produced. Elytra slightly broader than the prothorax at the base, their sides subparallel; epipleuræ, except at the base, nearly equal in width throughout. Legs rather short; tibiæ gradually broader below; tarsi shortly pilose at the apex, basal joint of the posterior not longer than the two next together. Metasternum rather short; inter-femoral process narrowly triangular.

The peculiar vestiture of the tarsi (composed of short stiff hairs confined to the apices of the joints) is exceptional, and at once differentiates this genus. Dr. Howitt tells me that the species described below is gregarious in old deserted swallows' nests in hollow and decaying trees.

Barytipha socialis. Pl. XII. fig. 5.

B. fusca (aliquando brunnea), subnitida; elytris fere opacis, subtiliter substriato-punctatis.

Hab. Victoria.

Dark brown, sometimes reddish brown; head and prothorax subnitid, very minutely punctured, the latter regularly but not very convex above; scutellum rather broadly triangular; elytra somewhat opaque, lightly striate-punctate, the punctures

minute, approximate, the intervals of the striæ slightly convex, the alternate ones rather more raised; body beneath brownish, the abdomen marked with delicate longitudinal lines; antennæ and tarsi ferruginous, shining. Length 7 lines.

MITHIPPIA.

Subfamily CYPHALEINÆ.

Oculi prothorace haud liberi.

Antennæ art. haud transversis, tribus ult. gradatim crassioribus.

Mesosternum amplum, declive, haud excisum.

Head deeply inserted, rounded anteriorly; clypeus separated from the front by a shallow groove. Eyes partly covered by the prothorax, transverse, broad, remote. Antennæ slender, none of the joints transverse, the last three a little stouter than the rest. Mentum trapezoidal, narrowed at the base. Prothorax subquadrate, flattish, broadly emarginate at the apex, with the anterior angles produced, the sides forming a narrow carina. Elytra oblong, slightly depressed; epipleuræ obliquely descending, entire. Legs rather short; femora slightly thickened; tibiæ linear; tarsi with the basal joint of the intermediate and posterior elongate, the last joint of all short. Prosternum rather broad, depressed, not produced behind. Mesosternum large, declivous, not notched.

A degraded form of the Cyphaleinæ, differing from the rest in its simple mesosternum, not notched for the reception of the prosternal process; the mesosternum, notwithstanding, preserves the peculiar hollowed surface which forms one of the characteristics of the subfamily.

Mithippia aurita. Pl. XII. fig. 3.

M. oblonga, depressa, brunnea, subnitida.

Hab. Adelaide.

Oblong, depressed, clear reddish brown, somewhat nitid; head and prothorax very closely covered with oblong, rather small but deep punctures; the latter subquadrate, slightly rounded at the sides anteriorly, but a little incurved behind the middle, a shallow transverse impression towards the base; scutellum semicircular; elytra very closely striate-punctate, the punctures large, square, and placed nearly at equal distances both transversely and longitudinally, and each giving rise to a single recurved hair; body beneath brownish testaceous, shining, with rather crowded piliferous punctures; femora and tibiæ darker, closely punctured; tarsi and antennæ yellowish ferruginous. Length $4\frac{3}{4}$ lines.

Achthosus laticornis.*

A. fusco-castaneus, nitidus; clypeo haud cornuto; prothorace (σ) in medio apicis leviter excavato; antennis art. 6 penultimis valde transversis.

Hab. Clarence River.

Dark chestnut-brown, glossy, slightly convex; head small, a broad triangular excavation between the eyes; clypeus very convex, not horned; antennæ reddish, gradually broader to the seventh joint, the six penultimate very transverse; prothorax broader than long, moderately convex, slightly rounded at the sides, finely punctured, the middle of the apex with an irregular excavation; scutellum small, triangular; elytra deeply striate-punctate, the punctures rather small and not approximate; body beneath reddish brown, glossy; legs paler; anterior tibiæ dilated, serrated externally, and emarginate internally near the base; middle tibiæ rather spined than serrated. Length $5\frac{1}{2}$ lines.

The female differs in the prothorax being without any excavation, the anterior tibiæ without the internal emargination, and the somewhat smaller size. The type of the genus is a much larger and almost cylindrical insect, with a deep excavation occupying nearly the whole anterior portion of the prothorax, and with a short broad horn on the clypeus. I have another species, from New Zealand †, closely resembling the above, but, from its simple prothorax, a lowering of the type. This genus is represented in South America by *Antimachus*, which also includes similarly degraded forms.

TYNDARISUS.

Subfamily *STRONGYLINÆ*.

Antennæ breviusculæ, ad apicem sensim crassiores, art. ultimo præcedente duplo longiore.

Prothorax transversus, lateribus marginato-productus.

Tarsi longissimi, lineares, omnes æquales.

Head small, subvertical, narrower anteriorly; clypeus truncate at the apex; labrum prominent. Eyes broad, vertical, not approximate. Antennæ rather short, a little thicker outwards, the third joint longer than the fourth, the last oval, twice the length of the preceding. Mentum trapeziform; lower lip as large as the mentum, rounded in front, slightly emarginate at the apex; its palpi stout, with the last joint large and subsecuriform. Maxillæ small, outer lobe transverse,

* Pascoe, Journ. of Entom. ii. p. 42. It belongs to the Ulominæ.

† Probably *Uloa levicostata*, Blanch.

strongly fringed, inner lobe narrow, elongate, and unarmed; the palpi with the last joint narrowly securiform. Prothorax small, transverse, a little expanded at the sides, the pronotum separated from the flanks by a well-marked carina. Elytra very ample, oblong, convex, slightly incurved at the sides; epipleuræ entire and channelled nearly throughout. Legs slender; femora rather short, fusiform; tibiæ thicker below, manifestly spurred, the posterior longest; tarsi slender, as long as or longer than their tibiæ, the anterior as long as the intermediate and posterior, thickly pilose beneath. Prosternum elevated, a little produced behind; mesosternum V-shaped. Intercoxal process triangular.

The state of the subfamily to which this genus belongs is at present one of the most unsatisfactory of all the Heteromera. The typical genus *Strongylium**, which has been recently elaborately monographed by M. Mäklin †, contains 266 species, exclusive of those in English collections; and, as may be supposed, there is no more definite generic idea to be obtained from such a number than there would be from the same number in any one of the so-called genera of the Linnean epoch. Putting, therefore, *Strongylium* aside as merely a designation for a collective number of discrepant forms, the genus before us may be at once distinguished from all others of the subfamily by the great length of the anterior tarsi, which if anything rather exceed the rest in that respect. The prothorax is also very different from anything that obtains in the other genera of this group, except *Dicyrtus* and *Psydrus*. I am unable to give the sex of my specimen, or to say if there are any sexual differences. Dr. Howitt has not given me its exact habitat.

Tyndarismus longitarsis. Pl. XII. fig. 1.

T. cupreo-brunneus, nitidus; elytris substriato-punctatis.

Hab. Australia.

Copper-brown, glossy; head distinctly and closely punctured; clypeus imperfectly separated from the front; antennæ extending a little beyond the prothorax, joints five to ten gradually thicker and shorter, of a paler colour, and pubescent; prothorax finely punctured, almost twice as broad as long, rounded at the sides anteriorly, a little incurved behind the middle, with the posterior angles acuminate, the apex slightly emarginate, the base with a broad middle lobe; scutellum curvilinearly triangular, the middle pilose; elytra much broader than the prothorax, and about five times its length, oblong, a

* Established by Kirby, in 1818, in the Trans. Linn. Soc. xii. p. 417.

† Acta Soc. Sci. Fennicæ, viii. p. 117 (1866).

little narrower in the middle, nearly obsoletely striate-punctate, punctures minute, intervals of the striæ feebly raised; body beneath and legs dark brown, glossy, with a thin greyish pubescence. Length 9 lines.

EXPLANATION OF PLATE XII.

- Fig. 1. *Tyndarisis longitarsus*.
 Fig. 2. *Attes binodosus*: 2 a, the same in profile.
 Fig. 3. *Mithippia aurita*: 3 a, meso- and metasterna.
 Fig. 4. *Heleaus squamosus*.
 Fig. 5. *Barytipha socialis*.
 Fig. 6. *Hectus anthracinus*.

[To be continued.]

XXXVIII.—Notes on a few Hebridean Sponges, and on a new Desmacidon from Jersey. By the Rev. A. M. NORMAN, M.A.

AT the time when my report on Hebridean Dredging was published* the few sponges which had been obtained were still unexamined. So little is yet known of the distribution of the Porifera that any contribution towards a knowledge of their geographical range, however slight, has its value; and for this reason I publish the following brief notes of the species observed in the expedition referred to, not without the hope that the extreme imperfection of this record may induce naturalists who may hereafter visit the Hebrides to pay some attention to this much neglected branch of marine zoology.

Class Porifera.

Order CALCAREA.

Grantia compressa (Fabr.).

G. ciliata (Fabr.). This and the foregoing common between tidemarks, Tobermory and Oban.

G. ensata, Bow. A rare species, only previously observed in the Channel Islands. A specimen found between tidemarks at Tobermory identified by Dr. Bowerbank.

Leucosolenia coriacea (Montagu). This species seems to vary marvellously in colour. In other localities I have found it white and of a bright lemon-colour; but as found at Tobermory it was violet; and yet further in the 'British

* "Report of the Committee appointed for the purpose of Exploring the Coasts of the Hebrides by means of the Dredge.—Part II. On the Crustacea, Echinodermata, Polyzoa, Actinozoa, and Hydrozoa," Report of the British Association, 1866 (1867), pp. 193–206.