7. On new Coleoptera from South Africa collected by Dr. H. Brauns and others—Serricornia, Endomychida, Erotylida. By H. S. Gorham, F.Z.S.

[Received May 19, 1905.]

This paper is a sequel to those published by me in the 'Annals and Magazine of Natural History' for 1900-1901. The material dealt with is similar in character to that contained in the collections sent to me by Mr. G. A. K. Marshall, but is without Coccinellidæ or Languriidæ. The publication of the paper has unfortunately been much delayed, owing to domestic reasons.

The Cleridæ are particularly well represented and indicate a very rich fauna in this subfamily as well as in the Melyridæ. *Hedybius* represents the European *Malachius*, and is evidently

(with its allied genera) as rich in species.

TELEPHORIDÆ.

Telephorus viridescens Fab.

Telephorus viridescens Fab. Syst. Eleuth. i. p. 295 (Cantharis).

Hab. Willowmore, Uitenhage, Cape Colony (Brauns).

In the Munich Catalogue this species is given as a synonym of Cantharis smaragdulus Fab. Spec. Ins. p. 259, a Brazilian insect; but Fabr. loc. cit. gives "Cap bon. spei" as the locality of the Cantharis viridescens, with which my specimens agree very well.

TELEPHORUS INCISUS Wied. Zool. Mag. ii. p. 71.

Hab. Algoa Bay, Cape Colony (Brauns). 2 examples.

Smaller than *T. viridescens*, with a thoracic vitta from the front to the hind margin and without spots on the sides or at the base; elytra less green, of a dull grey-black.

TELEPHORUS ZONATUS Gemm. Cat. Col. p. 1674.

Telephorus vitticollis Bohem. Ins. Caffr. i. 2, p. 453, nec Ménétr. Cat. Rais. p. 162.

Hab. Algoa Bay, Cape Colony (Brauns). 1 example. Described by Bohem. loc. cit. from "Limpopo" R., Caffraria.

Telephorus bivittatus Fab.

Nec T. bivittatus Mars.

Hab. Algoa Bay, Cape Colony (Brauns). 1 example.

Telephorus nigrinus Bohem. Ins. Caffr. i. 2, p. 457 (Cantharis)?

Hab. Algoa Bay, Cape Colony (Brauns). 2 examples.

In one of the two examples sent the thorax is nearly twice as wide as long, in the other example (which, from the length of its antennæ, appears to be a male) it is quadrate. This seems to me to agree with the insect described by me (Ann. & Mag. N. H. 1901,

vii. p. 351) as *T. teter* from Natal. From so few examples it is impossible to say whether these two pertain to one or two species; or what is the sex of the specimen with transverse thorax, which is also more shining and has shorter antennæ. I incline to the belief that they represent two species, the latter being referable to *C. nigrina* Bohem.

CLERIDÆ.

EUCYMATODERA Schenkling.

Eucymatodera Schenkling, Ann. Mus. Civ. Genova, 1899, p. 333; Genera Ins. fasc. xiii. p. 19 (1903).

EUCYMATODERA CINGULATA Klug, Cler. p. 273 (Tillus cingulatus). Hab. Algoa Bay.

EUCYMATODERA HOTTENTOTA Knw. Ann. Soc. Ent. Belg. p. 463 (1893); Schenk. $l.\ c.$ p. 20.

Hab. Willowmore, Cape Colony (Brauns).

CYLIDRUS Lat.

Cylidrus Schenk. Genera Ins. fasc. xiii. p. 5.

CYLIDRUS BALTEATUS Klug, Cler. p. 263.

Hab. Bothaville, Orange R. State (Brauns). I had not seen this from S. Africa before.

GYPONYX Gorham.

Gyponyx Gorham, Ann. Mus. Civ. Gen. 1883, p. 604; Schenk. l. c. p. 45.

GYPONYX CHINENSIS Fab.

Gyponyx marmoratus Klug, Cler. p. 308 (Clerus), notâ p. 379. Hab. Bothaville, Orange R. State (Brauns).

GYPONYX RETROCINCTUS Chevr. Rev. Mag. Zool. p. 283 (1874). Hab. Sunday River, Cape Colony (Brauns).

GYPONYX ALGOENSIS, sp. n.

Oblongus, subparallelus, piceo-brunneus, nitidus; elytris basi dilutioribus, ultra medium fascia undulata et apice albis. Capite crebre prothorace parce punctatis, hoc pernitido, antice tenuiter constricto, postice courctato; antennis et palpis rufopiceis; elytris usque ad fasciam grosse seriatim punctatis, inde ad apicem fere lævibus; pedibus piceis, tarsis dilutioribus, metasterno punctato. Long. 11–14 millim.

Hab. Algoa Bay (H. Brauns).

The general colour of this species is dark pitchy brown, the antennæ, palpi, tarsi, and the base of the elytra nearly as far as the white fascia are rufo-piceous, the elytra are blackish in an

indefinite way just before the very definite white fascia; this is narrowly interrupted at the suture; the apex is white, but with a fine blackish margin; the space between the fascia and the apex is very obsoletely punctured, as is the fascia, almost smooth externally. The eyes, head, legs, and body generally are clothed with long but fine hairs.

One example of this insect received long ago from Dr. Baden is in my collection, but had, unfortunately, no precise locality. It

is the larger specimen.

Gyponyx braunsi, sp. n.

Elongatus, nigro-piceus; ore, antennis palpisque, thoracis margine antico, corpore subtus, pedibus (geniculis tibiisque exceptis) dilutioribus, rufo-piceis. Elytris basi indeterminate, fascia mediana (in marginem latissima postice bidentata) maculaque apicali obliqua testaceis. Thorace elongato, antice tenuiter, ad basin fortius constricto; elytris ad basin punctato-lineatis, seriebus vix ad medium vectis, externe deficientibus. Long. 13 millim.

Hab. Willowmore, Cape Colony (Brauns).

This species differs from any other known to me by its elongate thorax and its comparatively smooth and shining appearance, and also by the clear and distinct coloration and pattern of the elytra. The colour of the body, with the exception of the head and thorax, of the tips of the femora, and bases of the tibiæ, is a bright rusty The elytra have an oblique broad fascia, much indented, running backwards from below the callus to the suture, of a pitchy colour; a much broader patch before the apex of a lighter pitchy brown, deeply indented twice on its upper edge, and once on its lower edge, so that it is narrowest in the middle. The lines of punctures scarcely pass the first brown fascia, only four or five punctures being on the yellow median wide patch. The thorax is nearly twice as long as wide, its front margin is rufous, the sides very little widened, not deeply constricted in front, the base coarctate and margined, the punctuation close and fine, the disk a little flat. I have at present only seen the example described, which I have pleasure in naming after its captor, Dr. H. Brauns.

GRAPTOCLERUS Gorh.

Graptoclerus Gorh. Ann. & Mag. N. Hist. ser. 7, vii. p. 351 (1901); Schenk. l. c. p. 48, nota.

GRAPTOCLERUS QUADRIPUNCTATUS Gorh. l. c. p. 353.

Hab. Grahamstown, Cape Colony (Dunkerbosh, Dr. Penther). Described by me from Natal. 1 example.

TARSOSTENUS Spinola.

TARSOSTENUS UNIVITTATUS Rossi.

Hab. Willowmore (Brauns).

Proc. Zool. Soc.—1905, Vol. II. No. XVIII.

Dozocolletus Chevr.

Dozocolletus Schenk. l. c. p. 38. Pezoporus Klug, Clerii, p. 311.

Dozocolletus Brunneus Hintz, Deuts. ent. Zeit. 1902, p. 397?

Hab. Willowmore, Algoa Bay (Brauns). Bothaville, Orange R. Colony.

I have not seen Hintz's description, but I have little doubt that the insect taken in some numbers by Dr. Brauns is to be referred to it. This species has a large head, the thorax as wide in front as the head, the head and thorax deep pitchy brown, the elytra, legs, and body light brown, the punctuation and strike are obsolete.

Dozocolletus sordidus, sp. n.

Saturate brunneus; antennis palpisque rufo-brunneis, illis quam caput et thorax brevioribus, articulis quarto ad octavum quadratis, tribus ultimis transversis, apice compresso; capite prothoraceque creberrime confluenter, elytris fortiter striatopunctatis, femoribus clavatis. Long. 5 millim.

Hab. Algoa Bay (Brauns).

Smaller than the species which I have assumed to be D. brunneus Hintz, and especially to be distinguished from it by the shorter antennæ, which have much shorter joints; the second and third joints are a little longer than wide; the fourth to the eighth are about as long as wide, while the last three joints form a compact club and are transverse. The eyes are more prominent than in D. brunneus, the femora are strongly clavate. The thorax is as wide as the head in front, much narrowed to its base, obconic; the elytra small in proportion, elongate-ovate.

THRIOCERA Gorham.

Thriocera Gorham, Trans. Ent. Soc. Lond. 1878, p. 156; Schenk. l.c. p. 117.

Thriocera pectoralis Klug, Clerii, p. 348.

a. Elytris unicoloribus fascia mediana plicata. Hab. Algoa Bay, Port Elizabeth (Brauns).

β. Elytris basi rufis.

Hab. Algoa Bay, Port Elizabeth (Brauns).

THRIOCERA BICINCTELLA, sp. n.

Nigra, nitida, tenuiter pubescens; antennis, palpis pedibusque rufo-brunneis, illis basi dilutioribus; prothorace brevi, antice tenuiter constricto, postice coarctato, lateribus rotundatis, disco inæquali impresso; elytris sublævibus, fasciis duabus elevatis, eburatis, ad suturam interruptis, anteriore (juxta callum) intus abbreviatis. Long. 5 millim.

Hab. Algoa Bay (Brauns).

Var., capite, antennis, palpis, elytris usque ad fasciam posteriorem, corpore subtus cum pedibus rufo-ferrugineis.

Hab. Port Elizabeth, Cape Colony (Brauns).

Antennæ as in *T. pectoralis*, but less robust, the two basal joints stout, the intermediate joints longer than wide, the three apical forming a lax club. The thorax is notably shorter than in *T. pectoralis* and of a different form, being much more narrowed towards the base; its disk is also roughly punctured and uneven, finely pubescent with long hairs, but neither it nor the elytra are so thickly pubescent as in *T. pectoralis*. The elytra are black, or, as in the variety, red to the second fascia. The fasciæ are raised and ivory-white, not clothed with silky-white hairs (as they are in *T. pectoralis*), but clear shining white; the anterior one is shortened, so as to leave a space at the suture equal to its own length, nor does it reach the margin.

There are two examples of the type form and two of the variety.

NOTOSTENUS Spinola.

Notostenus Schenk. l. c. p. 114.

Notostenus viridis Thun. Nov. Ins. vol. i. p. 9 (1784). Hab. Algoa Bay (Brauns).

MELYRIDÆ.

ANTHOCOMUS Erichs.

Anthocomus coriaceus, sp. n.

Breviter oblongus, niger, obscure subviridescens, longe pubescens; capite prothoraceque nitidis, hoc profunde parce punctatus; elytris coriaceis; antennis (apice exceptis), tibiis tarsisque ferrugineis. Long. 4 millim.

Hab. Bothaville, Orange R. Colony (Brauns).

Black, densely clothed with long black pubescence. Head and thorax shining, the former very closely and finely, the latter very sparsely punctured. Clothed all over with long fine hairs. The mouth, palpi, antennæ (excepting the extreme tip), the tibiæ, and tarsi are ferruginous red. The elytra are little shining, coriaceous, tubercles obscurely in rows and but little elevated, being rather uniform all over their surface. There is a slight greenish, but hardly perceptible, tint over the whole upper surface; the body beneath is quite black. As there are only two specimens, and I cannot distinguish the sexes, it is impossible to say if this is a true Anthocomus. The lamellæ of the tarsi are about as long as the claws.

HEDYBIUS Erichson.

HEDYBIUS SCULPTICEPS, sp. n.

Nigro-subcæruleus; capite (basi excepta), antennis (articulis extus et apicem versus nigro notatis), prothoracis margine, pedibus 18* anticis et intermediis (externe nigris) testaceis; elytris cæruleis, purpureo vel violaceo micantibus. Long. 5·5−6·5 millim. ♂♀. Mas, capitis basi profunde excavato-eroso, erosione ima tota nigra; fronte elevata, in medio profunde sulcata. Antennis acute serratis, articulo quinto triangulari apice nigro.

Femina, antennis brevioribus, leviter serratis.

Hab. Willowmore, Cape Colony (Brauns).

The head in the male is deeply excavated; the surrounding parts are yellow and elevated, but very differently from either of the Hedybii described by me in the 'Annals and Mag.' for Jan. 1900*. The deep notch in the front part of this elevated edge of the crater is of itself sufficient to prevent its being confused with them. The base of the crater in the male and the base of the head in the female are black. The antennæ are more acutely serrate than in any other species I have seen. They vary in the degree to which they are marked with black. Their second joint is very short, the third as long as the basal, the fourth and fifth triangular, the last in the male always black in its apical half and more acutely produced inwards; the following joints are longer, acutely serrate, and more or less dark, in the females I have seen always dark.

The thorax is of the same shape as in *H. amænus*, *H. anæps*, &c., but the disk is nearly all suffused with blue-black, two dark points project on the base, and it is sometimes indented on each side in front.

The scutellum is black; the elytra are blue and often have a beautiful metallic-violet reflection, they are finely coriaceous. The legs are yellow but tinged with black, and the hind pair are altogether dark, in which respect this insect also differs from any of the *Hedybii* of this group described.

Three males and two females of this species were sent me by Dr. H. Brauns.

HEDYBIUS QUADRICORNIS, sp. n.

Oblongus, nigro-cæruleus; capite, prothorace pedibusque sanguineis; scutello et elytris viridibus, sericeo-pubescentibus; antennis rufis, articulis singulis (maris) nigro-notatis, feminæ articulis basi tribus rufis usque ad apicem infuscatis. Long. 4-4·5 millim. & Q.

Mas, capite excavato-eroso, erosionis margine basali in cornu duplici quasi elevato, cornu anteriore apice ciliato, posteriore hamato apice nigro, supra oculos tuberculato.

Femina, fronte deplanata, basin versus nigrescente.

Hab. Willowmore, Cape Colony (Brauns).

Head, thorax, base of the antennæ, margins and apex of the abdomen yellow; the scutellum and elytra are bluish green. The upper side is finely clothed with a pruinose silky pubescence, long hairs are absent.

The head in the female and the front of the thorax in the male

^{*} Ann. & Mag. N. H. ser. 7, v. p. 81 (1900).

are sometimes faintly suffused, and the hind tarsi are blackish. The body beneath is bluish. The extraordinary structure of the head in the male is alone sufficient to distinguish this insect from any species described; it resembles in colour and size an insect sent by Mr. G. A. K. Marshall from Salisbury, and which I doubtfully referred to *H. variicornis* Bohem., but as the latter specimen was a male I am certain that it does not belong to the species I now describe.

Obs.—Boheman does not in describing *H. superciliosus* give the diagnosis of the male head, but I have no doubt from his remarks it is a male he describes. His express assertion, repeated, that the scutellum is yellow precludes any of the specimens I have yet received from being referred to this species. A considerable series of this insect has been obtained by Dr. Brauns; four males and four females are before me.

HEDYBIUS AMŒNUS Gorh. Distant's Nat. in Transvaal, p. 197; Ann. & Mag. N. H. ser. 7, v. p. 80 (1900).

Hab. Bothaville, Orange R. Colony (Brauns).

One male and three females, in all respects agreeing with the types. They are interesting as corroborating the differences pointed out before and as being found in quite a new locality.

PHILHEDONUS Gorham.

Philhedonus Gorham, Ann. & Mag. N. H. ser. 7, v. p. 82 (1900).

PHILHEDONUS SERICEUS, Sp. n.

Nigro-caruleus, pube brevi sericea vestitus; prothorace rufo, fere glabro, macula nigra in margine antico haud bene discreta; elytris creberrime subtiliter punctatis, pube brevi pruinosis; scutello, pedibus et corpore infra nigro-caruleis. Long. 5 millim. Q ?

Hab. Bothaville, Orange R. Colony (Brauns).

This *Philhedonus* differs from the insect described by me as *P. coronatus* by its smaller size, by the wholly black antenne, and by the labrum not being red; the thorax is also differently marked, the single black spot is placed upon the front margin, and is wedge-shaped, pointing backwards. The head is blue-black and shining, not punctured, very sparingly golden pubescent; antenne, mouth, and palpi black, the former short and feebly serrate. The thorax is wider than long, the sides and base finely margined, the anterior margin raised, but only very finely so.

The elytra are wide, and are widest a little before the apex, deep blue with a silky and shining pubescence; the punctuation is fine, close, and confluent. They do not cover the apex of the abdomen. The body and legs are entirely blue-black; the vesicles, which can be protruded from the sides (and are so in the specimens sent), are blood-red. The pygidial segments beyond the elytra show a green tinge. The examples, two in number, are both, I think, females.

PHILHEDONUS RUGULOSUS, Sp. n.

Niger, nitidus, pube erecta nigra vestitus; prothorace rufo, plaga magna discoidali marginem basalem haud attingente nigra, parcius irregulariter punctato; elytris saturate cæruleis, ruguloso-coriaceis; scutello nigro; corpore infra cum pedibus nigris; antennis nigris, acute serratis. Long. 5·5 millim. Q. Mas, antennis longioribus, acute serratis, capite intra oculos inæqualiter impresso.

Femina, antennis brevioribus, minus acute serratis, fronte plana.

Hab. Willowmore, Cape Colony (Brauns).

Rather like P. sericeus. Head, mouth, antennæ, palpi, legs, and body beneath black. The head is uneven and impressed between the eyes, the base is nearly smooth and shining; the antennæ have the first three joints testaceous beneath, from the fourth to the tenth the joints are longer than wide, acutely produced at their inner apices. The thorax has a large black and square patch on the disk and front margin; this is somewhat produced behind, but does not reach the hind margin; the disk is smooth in front, but punctured and rugose at the sides. The form is like that of P. sericeus, transverse, rounded at the sides and base, without angles; finely margined, and a little elevated in front. The disk and the elytra are clothed with long upright black hairs. The elytra are of a deep violaceous or indigo-blue, uniformly rugulose; the rugosities are tuberculous. They are widest a little before their apices, the apex broadly rounded. In addition to the black erect hairs there is a white, shining, pruinose pubescence, arranged in fasciæ (but not very evidently so).

The legs and underside are wholly jet-black.

The male has the head unevenly impressed between the eyes, the antennæ more acutely serrate, and of course the front tarsi four-jointed. The elytra cover the abdomen in all of the four specimens before me; in the female the segments of the abdomen when distended appear narrowly margined with red.

HEDONISTES, gen. nov.

Labrum corneum.

Tarsi antici quinque-articulati; caput maris eroso-excisum, feminæ fronte plana; antennæ maris articulo basali quinto et sexto ampliatis, septimo ad undecimum simplicibus; feminæ articulis omnibus simplicibus.

Hab. Africam meridionalem.

A genus recalling by the curious sexual characters of the antennæ in the male the genera Laius from Australia and Collops from the New World, and by its excavated and cornuted head in the male the genus Hedybius, with which it might have been associated; but I think although the enlarged fifth and sixth joints of the antennæ are only a sexual character, it is one so similar to what is found in Laius and Collops that it will be well to keep insects of this family possessing it in a separate

genus. M. Fairmaire has described some species as to be attributed to Laius, from Madagascar, Nossi Bé. I have not seen them, but I suspect it will be found that there are such radical differences as to preclude such an association; and he does not mention enlarged joints. Laius, it may be observed, was founded upon a female example from Australia, and ought strictly to be suppressed for Westwood's name Megadeuterus, which at least expresses the fact that the second joint of the antennæ is enlarged in the male sex. That he included other insects in his genus is no reason for suppressing the name, but only for confining it to the type, and to such as can be associated with it.

Hedonistes lætus, sp. n.

Brevis, niger, pube brevi cinerea erecta vestitus, valde punctatus; elytris subquadratis, grosse et confluenter punctatis, fascia lata, ad marginem latissima, apiceque læte sanguineis; epistomate, labro ad apicem et antennarum basi rufis. Long. 4·5–5 millim. 3 9.

Mas, capite eroso-excavato, ad antennarum basin utrinque carinato elevato, basi triangulariter elevato, elevatione in medio sulcata, antice ciliata, bicirrosa; antennarum articulis basali quinto et sexto ampliatis.

Femina, fronte plana, antennis simplicibus. Hab. Willowmore, Cape Colony (Brauns).

Head and thorax black, thickly and the latter rather coarsely punctured; the antennæ have four joints at the base red, the rest black, the apical joint is elongate, the intermediate joints in the male are longer than wide, in the female about as long as wide, not serrate but rather triangular. The thorax is shining, not wider than the head, and much narrower than the elytra at the base, somewhat cordate, with the margins a little reflexed. The elytra are blue-black, with a fascia which is interrupted at the suture, but very broad on the margin, of a fine blood-red, and their apex is rather broadly margined with the same colour; the basal side of the fascia is produced along the margin so as to surround the shoulder; their surface is uniformly, coarsely, and in places confluently punctured, honeycombed. The legs are black.

Eight examples, consisting equally of each sex, were sent me by Dr. H. Brauns, by whom they were obtained at Willowmore in Cape Colony.

EROTYLIDÆ.

Amblyscelis Hæmorrhous Gorh. Ann. Soc. Ent. Belg. 1885, p. 326; Ann. & Mag. N. H. ser. 7, v. p. 90 (1900).

Hab. Bothaville, Orange R. Colony.

Excepting that the brownish-yellow colour is more diffused in two examples from Bothaville, so that one is wholly brown with darker striæ, and the other has a not very well-defined yellow vitta, formed by the humeral spot extending to meet the apical yellow, there is no difference in these examples and those from Natal.

ENDOMYCHIDÆ.

EDIARTHRUS Gerst.

Œdiarthrus Gerst. Mon. Endom. p. 344.

ŒDIARTHRUS ALGOENSIS, sp. n.

Œ. natalensi similis et affinis. Ferrugineus, antennis, palpis pedibusque nigris, tibiis rectis. Long. 4.5 millim. 3.

Mas, antennarum articulo nono ampliato. Hab. Algoa Bay (Brauns). 1 example.

Rather larger than *Œ. natalensis*, and differing from it in having the antennæ wholly black, with all the joints rather longer and more stoutly built; the ninth joint is triangularly enlarged, as in other species of this genus, in the males; the two terminal joints are formed quite as in *Œ. natalensis*, but are larger.

The legs are black and have their tibiæ straight, which alone is sufficient to distinguish this species from *Œ. natalensis*. For some general remarks on the genus I must refer to Ann. & Mag.

N. H. ser. 7, vii. p. 402 (1901).

Lycoperdina sericea Gerst. Mon. Endom. p. 218?

Hab. Algoa Bay, Cape Colony (Brauns).

There is a single specimen of a very small *Lycoperdina* in Dr. Brauns' collection which I refer to this species with some little doubt.

8. On the Fœtus and Placenta of the Spiny Mouse (Acomys cahirinus). By RICHARD ASSHETON, M.A., F.Z.S., Lecturer in Biology in the Medical School of Guy's Hospital, University of London.

[Received May 23, 1905.]

(Text-figures 41-45.)

I received from Mr. F. E. Beddard, F.R.S., Prosector to the Zoological Gardens, London, a bottle containing the fœtus and uterus from an individual of the Spiny Mouse (*Acomys cahirinus*). The exact age of the fœtus was not known, but the figure (text-fig. 41) given here shows that it was well advanced.

In the bottle were three objects—namely, the feetus and placenta (as shown in text-fig. 41), the uterus with Fallopian tubes and ovaries, and a third object which was a partially

absorbed fœtus and placenta.

The uterus is bicornuate; each horn measures about 18-20 mm., and passes gradually into the Fallopian tube, a short, coiled tube lying alongside the ovary $(4 \text{ mm.} \times 2 \text{ mm.})$.