

LIX.—*A few new African Cetoniine Beetles.*

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[Plate VIII.]

A FEW of the most noteworthy of the unnamed African species belonging to the subfamily Cetoniinæ in the British Museum Collection are described in the following pages.

Genus ANAGNATHOCERA, nov.

Corpus nitidum, supra parcissime setosum, subtus cum capite sat dense villosum. Caput parvum. Clypeus antrorsum angustatus, apice acute bifidus, paulo reflexus. Pronoti basis utrinque leviter obliquatus, medio profunde excisus. Scutellum postice acute productum. Elytra post humeros vix sinuati, apice paulo producti, haud spinosi. Processus sternalis latissimus, planus, sutura meso-metasternali distinctissima.

♂. Tibia antica apice acuta, dente superiori obtusissimo, vix perspicuo. Abdomen subtus sulcatum.

♀. Tibia antica lata, tridentata. Elytra postice acute producti. Pygidium breve, valde obliquum. Abdomen convexum.

Anagnathocera dispar, sp. n. (Pl. VIII. figs. 1 & 2.)

Viridis, pronoti margine, elytris, vittis exiguis exceptis, pedibusque partim fulvis, abdominis subtus atque pygidii lateribus albo-maculatis; capite rugoso, erecte setoso, clypeo antice paulo attenuato, margine leviter reflexo, antice bidentato; pronoto medio parcissime, lateribus fortiter sat crebre, punctato, vix perspicue setoso, lateribus medio obtuse angulatis, ab hinc antice convergentibus, postice leviter divergentibus, lævissime sinuatis, basi haud lato, angulis obtusis, rotundatis; scutello modice elongato, postice acuminato; elytris seriato-punctatis, margine suturali costisque duabus discoidalibus leviter elevatis, lateribus post humeros lævissime sinuatis, apicibus paulo deplanatis, fortiter punctatis, setosis.

Long. 17–20 mm.; lat. 9 mm.

RHODESIA, Gazaland: Chirinda Forest (*G. A. K. Marshall*, October).

The insect here described, although discovered by Dr. Marshall as long ago as 1905, has remained undescribed owing to the difficulty of deciding its true systematic position. It exhibits a peculiar combination of features which separates it from every group of genera yet formulated in a subfamily the classification of which is exceptionally difficult and perplexing. Although its divergences from *Gnathocera* are considerable, it appears to me to have more in common

with that genus than with any other. The occurrence of a hairy clothing and of white chalky patches, the shape of the scutellum, acutely pointed but not concave at the sides, the more slender front tibia and grooved abdomen of the male, are features shared with that genus, and the sharply bidentate clypeus, although not of the form characteristic of *Gnathocera*, may be considered to be the more primitive type from which that of *Gnathocera* has been derived. The broad flat sternal process and the very feeble excision of the outer margins of the elytra suggest relationship to the *Ceratorrhina* group with horned males, but the form of the female, even more than that of the male, precludes that conclusion; while affinity with *Porphyronota* and allied genera is negated by the strongly accentuated sexual differences.

Perhaps the most distinctive of the many peculiar features of the new genus is the elongation and flattening of the extremities of the elytra, which entirely conceal the abdomen from above. The outer margins are minutely serrated on their posterior half and uniformly rounded to the sutural angle, which is sharp but not spiniform. In the angle there is a tuft of the pale-coloured setæ, which are extremely fine and scanty upon the remainder of the upper surface. The elongation of the elytra is more pronounced in the female than in the male. In addition to this the pygidium of the female is very oblique, the abdomen very convex, the tibiæ much stouter than those of the male, and the tarsi much shorter. The chalky-white patches are not present in the only female examined.

Gnathocera nigrolineata, sp. n. (Pl. VIII. fig. 3.)

Nigra, nitida, pedibus abdomineque rufis, albo-tomentosa, capitis medio, pronoti marginibus et lineis duabus longitudinalibus elevatis, scutello, linea mediana excepta, elytrorum marginibus et lineis duabus elevatis postice conjunctis, pygidii apice et linea mediana, corporis subtus linea mediana, femoribus partim, tibiis tarsisque totis nudis, capite pronotoque setis nonnullis minutissimis instructis, thorace subtus femoribusque sat parce fulvo-vestitis, abdomine nudo, processu sternali gracili, curvato.

Long. 16 mm. ; lat. max. 8.5 mm.

FRENCH GUINEA: Kondia.

A single female specimen of this species was taken upon a termites' nest by Prof. F. Silvestri, by whom it has been presented to the British Museum.

It is a very distinct species, resembling no other at present known in the black and white striping of the elytra.

It has the size and general form of *G. trivittata* and the pattern of the head, pronotum, and scutellum is similar, but with the yellow lateral patches of the pronotum broader, leaving two rather irregular shining black stripes, which are finely and not closely punctured. The scutellum is moderately long, but not acute at the apex. The elytra are covered with whitish tomentum, except for a narrow shining marginal line and two narrow discoidal stripes, the first running from the base parallel to the sutural margin and the other from the humeral angle, meeting the first just before the apex. The pygidium is thinly pubescent, not shining, and has a rounded patch of yellow tomentum on each side. The body is covered with similar tomentum beneath, except for a quite smooth median line. The mesosternal process is slender and curved.

Heterorrhina (Ptychodesthes) pygmæa, sp. n.

Læte viridis, vel aureo-rufa, vel purpurea, tarsis nigro-piceis antennisque rufescentibus; modice elongata, nitidissima, capite longe flavo-hirto, clypeo plano, quadrato, margine antico vix sinuato, pronoto brevi, parce et distincte punctato, punctis lateralibus vix fortioribus, scutello lævissime punctulato, elytris sat regulariter striato-punctatis, striis geminatis, intervallis alternis fortiter elevatis, lævissimis, apicibus haud dense punctatis, pygidio lævi, convexo, minute et parce sat æqualiter punctato, processu sternali angusto, compresso, metasterno longe flavo-hirto, medio nudo, minute punctato, abdomine subtus parce punctato:

♂, tibia antica mutica; abdomine subtus anguste sulcato.
Long. 15-18 mm.; lat. max. 7.5-9 mm.

GAZALAND: Chirinda Forest, 3800 ft. (*G. A. K. Marshall*, March, August).

This is the smallest so far known in the group of species to which it belongs, and is much more variable in colouring than the rest, which seem to adhere with great constancy to a particular shade of vivid green, softened by pinkish reflections in a certain light. The same colour is found in the present species, but a cobalt-blue changing to a rich purple is equally frequent, and our series includes one specimen of a fiery red. The borders of the pronotum are usually of a paler colour than the disc.

H. pygmæa most resembles *H. alternata*, Kl., but, in addition to its smaller size, is much more hairy, the head and the metasternum (except a small area in the middle of the latter, which is quite smooth) being clothed with long tawny hairs, that upon the head standing erect. The pygidium, on the other hand, is smooth and shining, and

has only a few scattered striolæ, the apical part not (as in *H. alternata*) more closely sculptured than the rest. The sternal process is very narrow, not at all flattened or dilated.

The description of Klug's species is quite inadequate, but the size and locality render my identification of it fairly certain and the former evidently excludes the new species, which is the one to which Klug's name is applied by Dr. Péringuey in his 'Catalogue of the Coleoptera of South Africa.'

Charadronota eximia, sp. n. (Pl. VIII. figs. 6 & 7.)

Nigra, clypei medio, pronoti marginibus lateralibus, singuli elytri maculis duabus parvis vel una magna, pygidii utrinque plaga magna, epimeris mesosternalibus, metasterno (medio excepto) abdominisque basi, lateribus et segmento penultimo, flavibus; paulo elongata, supra plana, lævigata, nitida, capite fere lævi sed fronte utrinque punctata, clypei margine antico fere recto, angulis acuminatis, pronoto sat angusto basi perpaulo dilatato, lævi, lateribus parce punctatis et strigosis, dimidio postico fortiter triangulariter excavato, marginibus lateralibus ante medium obtuse angulatis, antice et postice fere rectis; scutello lævi, angustissimo; elytris minutissime haud regulariter seriato-punctatis; pygidio leviter transverse strigoso, corpore subtus fere lævi, processu sternali brevissimo, rotundato.

Long. 19-21 mm.; lat. max. 10.5-11.5 mm.

UGANDA: Entebbe (Feb.), Tero (April).

Although similar in coloration to *C. quadrisignata*, G. & P., this is more nearly related to *C. pectoralis*, Bainb., but it is much larger and smoother than either. The pygidium and sides of the elytra are not opaque as in the allied species, the punctures of the pronotum are confined to its front and sides, and the depression upon the posterior half is much deeper and more sharply defined, and the angulation of the lateral margin is distinct but not sharp. The scutellum is very long and narrow, and the adjacent part of the elytra is only very slightly and narrowly depressed. The elytra are almost flat and smooth, with a very feeble puncturation. The pygidium is rather shining, rather feebly striolated, and the entire lower surface is very smooth and shining, with only a very few minute punctures at the sides.

There is one specimen of each sex. The male has the abdomen very slightly hollowed beneath and each elytron is decorated with a rather ill-defined transverse yellow bar, placed at the level of the apex of the scutellum and not

extending beyond the inner half, and a smaller comma-shaped mark towards the extremity. The female is a little more elongate in shape and each elytron bears a single large well-defined yellow patch upon its inner half, leaving only a fine black line at the suture, a rather narrow anterior border, and a broader posterior one. It is probable that the pattern is not distinctive of the sex, but that, as in the allied species, the coloration is very inconstant.

Charadronota acutangula, sp. n.

Nigra, nitida, epimeris metasternalibus maculisque utrinque abdominalibus læte fulvis; *C. pectorali* similis, sed metasterno nigro, lateribus grossius punctato pronotique lateribus ante medium acute angulatis.

Long. 16–18 mm.; lat. max. 8·5–10 mm.

KAMERUN: Dengdeng (April). UGANDA: Mabira Forest, Chagwe, 3500–3800 ft. (July, *S. A. Neave*), Budongo Forest, Unyoro, 3400 ft. (December, *S. A. Neave*).

This is a form representing *C. pectoralis*, Bainb., to the east of the region inhabited by that species, which is found from Sierra Leone to Lagos. It has a close resemblance to *C. pectoralis*, but is without the orange sides to the metasternum indicated by the name, the lateral angles of the pronotum are much more sharply produced, and the metasternum is more strongly punctured at the sides.

Trichius sobrinus, sp. n.

Griseo-tomentosus, corpore supra infuscato, pronoti lateribus, elytrorum humeris, et interdum macula parva transversa mediana, pygidii apice pallidis, macula apicali antice tridentata, prothoracis lateribus medio fusco-maculatis; sat compactus, ubique dense brevissime setosus, capite lato, oculis parvis, clypeo fortiter bilobato, quam longitudinem latiori; pronoto brevi, utrinque acute spinoso, antice fortiter contracto, angulis anticis acutis, posticis obtusis, basi leviter rotundato; scutello magno, fere semicirculari; elytris deplanatis, conjunctim subquadratis, lateribus fere parallelis, humeris rectangulatis; pygidio lato, modice convexo, haud valde porrecto; pedibus haud longissimis, tibia antica robusta, inæqualiter tridentata:

♂, elytris medio immaculatis.

Long. 9–11 mm.; lat. 4·5–6 mm.

UGANDA, 3000–4500 ft.: Mabira Forest, Daro Forest (*S. A. Neave*), Ripon Falls.

There is evidently a marked similarity between this

and the West African *Trichius podicalis* and *tristiculus* of Kraatz, the only members of the genus hitherto known from Africa. It is larger than those species, the colour of the upper surface is not black, but a greenish-brown, and the pattern is different. The pronotum has no median stripe, the pale lateral border has a dark spot in the centre, and the elytra, instead of six scattered pale spots, as in *T. podicalis*, have only the humeral margin and (in the female) a small transverse median spot pale. The propygidium is pale and the pygidium is of the dark colour of the elytra, with the apex pale, the pale area ending above in three narrow finger-like rays.

The male is rather smaller, shorter, and more compact than the female, the thoracic border is more sharply defined, and the elytra are without the median spot. The latter difference is probably a constant one, five female specimens showing the pale mark, while two females are without it, and Mr. F. R. Mason informs me that this is so with another male in his collection. The three teeth of the front tibia are sharp in the male, the hind tarsi are slightly longer than those of the female, and the abdomen is a little less exposed beyond the elytra. The club of the antenna scarcely differs in length in the two sexes.

This insect (and probably also the allied species, *T. podicalis* and *tristiculus*, which are unknown to me) differs considerably from the other members of the genus in general appearance. It is more solidly built, the legs are shorter, the front tibiæ being very short and broad, with a strong third tooth placed at the middle of the outer edge or a little behind it. The hair of other *Trichii* is replaced by very short stiff setæ, which become broad scales upon the lower surface.

Calometopus transparens, sp. n. (Pl. VIII. fig. 5.)

Niger, elytris translucentibus, flavescenti-hyalinis, nigro-marginatis, corpore setis et squamis albidis supra et subtus ornato, pronoto utrinque maculis tribus discoidalibus duabusque marginalibus, abdominis dorso transverse fasciato, pygidioque vitta alba mediana, medio anguste bisecta; angustus, pedibus gracilibus, capite magno, clypeo subquadrato, antice valde bilobato, pronoto quam longitudinem paulo latiori, angulis obtusis; scutello longo, acuto; elytris deplanatis, setis longitudinaliter ordinatis instructis costaque humerali valida integra, postice attenuatis, apice rotundatis; pygidio ruguloso; pedibus gracilibus:

♂, clava antennali longiori; tibia antica angusta, acuminata, postica apice unispinosa; pygidio angusto, convexo:

♀, pronoto latiori; tibia antica acute tridentata, postica apice tridigitata, processibus intus longe ciliatis; pygidio longitudinaliter leviter sulcato.

Long. 10–12 mm.; lat. 5 mm.

NYASALAND: Mlange (S. A. Neave, Nov.–Feb.).

This species, although closely related to *C. hollisi*, Wat., has a peculiar aspect, due to the transparent hyaline elytra producing a mimetic resemblance to the wings of a small bee. The black margins and lines of black dots, upon which fine setæ are placed, simulate the venation, and, in conjunction with the white spots and bars upon the pronotum and abdomen, seemed designed to imitate the bees of the genus *Melecta* or some allied genus. Various species of these bees inhabit the same region and probably frequent the same flowers.

The head is like that of *C. nyassæ* and *hollisi*, deeply bilobed and clothed with rather scattered setæ. The prothorax is scarcely wider than the head across the eyes and a little shorter than it is long, with the front angles obsolete and the hind angles very obtuse, and the sides bluntly angulated before the middle. The upper surface bears irregularly scattered setæ, which broaden into scales arranged in five clusters on each side, one placed at each angle and the other three forming a triangle upon the disc. The scutellum is long and clothed with similar setæ. The transparent elytra have a yellow tinge, but the inner and outer margins, as well as the lateral costa and longitudinal lines of irregular dots, are black. The hyaline effect is due to the wings beneath being visible through the elytra, and the appearance of a bright yellow spot is produced on each side of the apex of the scutellum by a brush of long white hairs upon the metanotum showing through at that point. The pygidium is rugulose and bears two longitudinal bands of white scales narrowly separated.

The sexual differences of the genus *Calometopus* have never been described, most of the species having been hitherto represented by female specimens only, although the type of *C. hollisi*, Wat. (which I have not seen), is evidently a male. The remarkable trilobed hind tibia, regarded as a generic character by Blanchard in the original description, and since by Péringuey and Bourgoïn, is a feature peculiar to the females.

Calometopus luridus, sp. n. (Pl. VIII. fig. 4.)

Niger, elytris luride brunneis, lateribus, apicibus lunulaque antemediana nigris, maculaque utrinque juxta-scutellari læte flava, capite et pronoto albo-setosis, hujus setis utrinque in maculis 3 vel 4 aggregatis, pygidio longitudinaliter albo-fasciato; parum elongatus, oculis prominentissimis, clypeo subquadrato, antice haud fortiter bilobato; pronoto quam longitudinem vix latiori, angulis anticis obsoletis, posticis valde obtusis, lateribus antice convergentibus, postice parallelis; scutello longo acuto; elytris brevibus, deplanatis, sat fortiter haud regulariter punctatis, costa humerali valida integra, postice angustatis, rotundatis; pygidio sat lato, ruguloso; pedibus gracilibus:

♂, clava antennali longa, tibia antica breviter bidentata, postica apice unispinosa.

Long. 12.5 mm.; lat. 6 mm.

NYASALAND: Mlange (S. A. Neave, October).

A single male specimen.

C. luridus is nearly related to *C. transparens*, but is larger and less elongate in shape, and the elytra, although slightly shining and translucent, have not the complete transparency so remarkable in the last species. The clypeus is rather less deeply cleft than in that insect, the pronotum has a row of four white spots placed in a transverse line across the middle, and two behind these, forming a pattern rather different and a little less sharply defined than in *C. transparens* or *C. hollisi*. The elytra are brown with a slight lustre and coarsely punctured, the whole reflexed part being black, as well as an antemedian bar crossing the suture and produced forwards, forming an irregular crescent. Immediately in front of this bar is a bright yellow patch on each side, as in *C. transparens*, but only slightly transparent. The pygidium bears a median stripe of white setæ, broad at the base and tapering to the extremity, and the sides of the abdominal segments are decorated with white bars, as in all the allied species. In the bidentate front tibiæ of the male *C. luridus* differs conspicuously from both the allied forms.

EXPLANATION OF PLATE VIII.

Fig. 1. *Anagnathocera dispar*, sp. n., male.

Fig. 2. Ditto, female.

Fig. 3. *Gnathocera nigrolineata*, sp. n., female.

Fig. 4. *Calometopus luridus*, sp. n., male.

Fig. 5. — *transparens*, sp. n., male.

Fig. 6. *Charadronota eximia*, sp. n., male.

Fig. 7. Ditto, female.



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