Institut royal des Sciences naturelles de Belgique

BULLETIN

Tome XXX, n° 24
Bruxelles, août 1954.

Koninklijk Belgisch Instituut voor Natuurwetenschappen

MEDEDELINGEN

Deel XXX, nr 24
Brussel, Augustus 1954.

NOTES ON A COLLECTION OF PRIONINÆ (COLEOPTERA, CERAMBYCIDÆ) FROM THE INSTITUT ROYAL DES SCIENCES NATURELLES DE BELGIQUE,

by E. Forrest Gilmour (Doncaster).

(With nine Plates.)

This paper presents the results of examination of a collection of nearly 560 specimens of *Prioninæ* submitted for determination by the Institut royal des Sciences Naturelles de Belgique. Certain of these specimens come from the E. Le Moult collection, having been the object of a gift from M. le Baron A. Lheureux. (I. G. : no. 10712.)

Note is made of all specimens examined giving at least their localities and dimensions, extended in some cases with fuller notes or descriptions where I have considered that this would be of value in the light of the present knowledge of a species. The opportunity is also taken of photographically figuring a number of species which have never previously been figured, or where a further figure is desirable, or would be made more easily accessible to other workers.

As a large number of specimens sent were from the Aethiopian region, this paper also to some extent forms a supplement to my « Revision of the *Prioninæ* of Tropical and South Africa » (1954?, *Longicornia*, **3**, *in the press*, figs. 1-108). A number of species have been examined and figured, which were not available at the time that the above paper was written, and full descriptions of these are given.

Nine plates of 65 specimens illustrating 41 species or lower categories are given. These photographic plates were taken and prepared under my direction by Mr. J. R. LIDSTER, Technical Assistant at the Museum of Natural History, Scarborough, whom I would like to thank for the painstaking care taken to ensure satisfactory results.

The following new sub-tribal name in the Tribe *Callipogonini* is proposed :

Sub-tribe **Platygnathina** nom. nov.

Full keys to species are given for the following genera :

Aulocopus SERVILLE.
Macrotoma SERVILLE, subgenus *Navosomopsis* THOMSON.

The following species are described as new :

Aulocopus rivalus sp. nov.
Macrotoma (Navosomopsis) kafakumbæ sp. nov.
Macrotoma (Navosomopsis) abscisa sp. nov.

The following *nomen novum* is proposed :

Cantharocnemis (Cantharoplatys) schoutedenianus nom nov., for *C. (C.) schoutedeni* GILMOUR, *in the press* (nec. *schoutedeni* BASILEWSKY, 1950).

The following species are redescribed in full :

Cnemoplites (s. str.) *blackburni* LAMEERE.
Cnemoplites (Hermerius) howei THOMSON.
Aulocopus colmanti LAMEERE.
Macrotoma (Navosomopsis) lesnei LAMEERE.
Paroplites australis ERICHSON.

Supplementary taxonomic or descriptive notes of varying length are given on the following species :

Parandra (s. str.) *gabonica* THOMSON.
Aplagiognathus spinosus NEWMAN.
Stenodontes (Mallodon) downesi HOPE.
» » *spinibarbis* LINNÉ.
» *(Nothopleurus) lobigenis* BATES.
Olethrius scabripennis THOMSON.
Macrotoma (Bandar) fisheri WATERHOUSE.
Rhaphipodus (s. str.) *subopacus* GAHAN.
Stictosomus reticulatus DALMAN.
Megopis (s. str.) *modesta* WHITE.
Jamwonus subcostatus HAROLD.
Callipogon barbatus FABRICIUS.

Pyrodes (s. str.) *nitidus* FABRICIUS.
» » *angustus* TASCHENBERG.
» » *pulcherrimus* PERTY, var. *formosus* BATES.
» » *(Mallaspis) leucaspis* GUÉRIN.
» » *(») longiceps* WHITE.
Notophysis lævis JORDAN.
» *lucanoides* SERVILLE.
Cacosceles (s. str.) *œdipus* NEWMAN.
Acanthophorus (Tithoes) maculatus FABRICIUS.
» *(»)* » subsp. *orientalis* LAMEERE.
Priotyrranus mordax THOMSON.
Prionomma (Ancyloprotus) javanum LANSBERGE.
Osphryon forbesi GAHAN.
Psalidognathus (s. str.) *friendi* GRAY.
Dorysthenes (Lophosternus) zivetta THOMSON.
» *(Cyrtognathus) paradoxus* FALDERMANN.
Cantharocnemis (Cantharoplatys) schoutedenianus GILMOUR.
» *(Cantharoctenus) hincksi* GILMOUR.
Delocheilus prionoides THOMSON.

PARANDRINI.

PARANDRINA.

Parandra (Neandra) brunnea FABRICIUS, 1798.

4 specimens have been examined.

Length: 15-19 mm. Breadth: 4.75-6 mm.

Locality. — United States of America : Cornwallis (Pennsylvania).

Parandra (Archandra) glabra DEGEER, 1774.

10 specimens, mostly females, have been examined.

The Peruvian specimen is the smallest, and is I believe, certainly this species.

Length: 18.5-36 mm. Breadth: 4.25-10.6 mm.

Locality. — Brazil: Piracora (Est. Sao-Paulo) (J. WITHOFS) (1 ♀); Cte de Villeneuve, Albuquerque (1 ♀). — Columbia: (coll. A. GUILLIAUME) (2 ♀); Ibague (Fr. CLAUER); (1♂, 2 ♀). — Peru: Oxapampa (1.800 m) (Coll. LE MOULT: don Baron A. LHEUREUX) (1 ♂). — Mexico (1 ♀). — ?: Cuenca (DE WAVRIN) (1 ♀).

Parandra (s. str.) punctata WHITE, 1853.

A single male has been examined of this rather distinct species. It compares almost exactly with LAMEERE's description.

Length: 16 mm. Breadth: 5 mm.

Locality. — Peru: Oxapampa (1.800 m) (Coll. LE MOULT: don Baron A. LHEUREUX).

Parandra (s. str.) gabonica THOMSON, 1857.

Four males have been examined.

Regarding the separation of this species from *Parandra* (s. str.) *thunbergi* THOMSON, care should be taken regarding the character of lack of a lateral carina on each side of the submentum in *Parandra* (s. str.) *gabonica* THOMSON, and its presence in *Parandra* (s. str.) *thunbergi* THOMSON. A faint trace of this may be seen in this species and I believe that stronger separative reliance should be placed on other characters as given in my Revision.

Length: 13-19 mm. Breadth: 4-5.8 mm.

Locality. — Belgian Congo: Sawasawa (Buhunde) (15-IX-29, A. COLLART) (3 ♂); Lubutu: Masua (27-IX-29, A. COLLART) (1 ♂).

MACROTOMINI.

ARCHETYPINA.

Olethrius scabripennis THOMSON, 1865.

(Plate 8, fig. 2, ♂).

A short series of three males and one female has been examined in the collection submitted.

L. S. DILLON and E. S. DILLON have described (1952, Bull. Bishop Museum, Honolulu, **206**, 6, fig. 1 a) a new species. *Olethrius villosus,* which is closely allied to *O. scabripennis* THOMSON. Whilst I understand that the two are quite distinct, I believe that one character given tends to be misleading. This point concerns the antennæ.

The four specimens examined are certainly *O. scabripennis* THOMSON, yet in one male the apex of the fourth segment reaches the humerus and in another almost reaches it (except by about a third or so of the fifth segment). In the female the apex of the fifth segment slightly overreaches the humerus.

The legs are also definitely quite black in two, and almost so in three of the specimens.

In all other respects they agree with DILLON and DILLON's diagnosis of *O. scabripennis* THOMSON.

Length: 54-79 mm. Breadth: 17.5-23.5 mm.

Locality. — Fiji Islands: Viti Levu (2 ♂); (Don P. HASTERT) (1 ♂, 1 ♀).

Eurynassa australis BOISDUVAL, 1835.

(Plate 1, fig. 9, ♀).

Length: 34 mm. Breadth: 12.2 mm.
Locality. — Australia (1 ♀).

Aplagiognathus spinosus NEWMAN, 1840.

(Plate 6, fig. 1, ♀).

A female of this apparently scarce species has been examined. The lateral pronotal spines are united at the basal quarter to form a trifid thick spine. There are seven spines on the left side, counting the trifid spine as one, of which one small one is between the basal quarter and base; on the right-hand side there are six main spines, of which the anterior two have obviously fused together to form a bifid spine, there is one spine less than an the left between the latter and the trifid spine, and a still smaller extra spine between the trifid spine at the basal quarter, and the base.

Length : 42 mm. Breadth : 13 mm.
Locality. — Mexico (GÉNIN) (1 ♀).

BASITOXINA.

Mecosarthron buphagus BUQUET, 1840.

(Plate 8, fig. 1, ♀).

A fine female specimen of this species has been examined.
Length: 74 mm. Breadth: 20 mm.
Locality. — Brazil : Estado Sàó Paulo, Pirapora (J. WITHOFS).

STENODONTINA.

Stenodontes (Mallodon) downesi HOPE, 1843.

A very long series of 117 specimens of this species has been examined. These show a very wide variation in sculpture and form, which led earlier authors to give several names to these forms, all of which are now considered to be synonymous.

The most variable character appears to be in the pronotal sculpture which varies, on a broad discal area, from almost completely impunctuate and very smooth and shining, to being almost completely finely punctured in a variable complicated, somewhat fleur-de-lis shaped design.

Length: 31-62 mm. Breadth: 11-19 mm.

Locality. — Belgian Congo: Kafakumba (IV-1936) (2 ♂), (XI-37) (1 ♀), (XII-30) (1 ♀), (II-31) (1 ♂, 1 ♀), (X/XI-30) (2 ♂, 2 ♀) (F. G. Overlaet); Barumbu (VIII-25, J. Ghesquière) (2 ♂, 1 ♀); Wenga Ifomi (E. Quineaux) (4 ♂, 2 ♀); Bassin de la Luki, Kiobo (II-40, C. Donis) (2 ♂, 2 ♀); Mayumbe (Distr. Bas-Congo) (2 ♂, 1 ♀); Lupweshi (III-39) (1 ♀); Sandoa (X-31) (2 ♂); Léopoldville (7-III-30) (1 ♂); Stanleyville (V-24, J. Ghesquière) (1 ♂); Mongombo (29-XII-47, R. Cremer-M. Neuman) (1 ♀); Libenge (12/14/16/17-X-47, R. Cremer-M. Neuman) (4 ♂); (11-XI-47) (1 ♀); R. Pongo, (15-X-43) (1 ♂); Kaleha (XI-37) (1♂); Motenge Boma (30-IX-47, R. Cremer-M. Neuman) (1 ♂, 1 ♀); Gemena (9/12-IX-47, R. Cremer-M. Neuman) (9 ♂, 4 ♀); (Libenge), Yumbi (22-X-47, R. Cremer-M. Neuman) (1 ♂); (9-X-47, R. Cremer-M. Neuman) (5 ♂); (18-IX-47, R. Cremer-M. Neuman) (4 ♀. 1 ♀); Abimva (12-III-25) (1 ♀); Uluku (Buhunde), (24-IX-29, A. Collart) (2 ♂); Bambesa (1/2-VI-37, J. Vrydagh) (1 ♂); Lolo-Damvu (20-IV-26, A. Collart) (1 ♀); (Wessels) (3 ♂, 1 ♀); (Delawel) (1 ♀); (Coll. F. Hanoez) (1 ♀); Distr. Bangala, Kutu (20-VI-35, G. Settembrino) (1 ♀); Libenge, Mission Mawuya (13-X-47, R. Cremer-M. Neuman) (4 ♂); Musindji (Lomami) (12-IV-41, H. J. Brédo) (1 ♀); Kabambare (Lieut. Delhaise) (1 ♂). — Cameroons : Mukonje Farm (R. Rohde) (6 ♂, 2 ♀). — Guinea: Adente Akena (?) (1 ♂). — Gaboon: Bas-Ogoué (1 ♂). — Abyssinia (1 ♂). — Ivory Coast: Sanwit (Richard) (3 ♂). — N. Rhodesia: Abercorn (15-XII-43, H. J. Brédo) (1 ♂), Mataka (H. J. Brédo (1 ♀) (« Sur buffles »). — « *Sine locus* » (3 ♂, 3 ♀).

Stenodontes (Mallodon) spinibarbis Linné, 3758.

A good series of 57 specimens of this species has been examined from widely separated localities in the Neotropical region, all of which appear to be quite reasonably typical. The same remarks regarding pronotal variation apply here as to *Stenodontes (Mallodon) downesi* Hope.

Length: 29.5-61 mm. Breadth: 9.5-19 mm.

Locality. — Brazil: Nova Teutonia (27° 11' S, 52° 29' W) (26-I-36, Fritz Plaumann) (2 ♂, 1 ♀); Chutes de Samtia (1 ♀); Estado Sào Paulo, Pirapora (J. Wrthofs) (2 ♂, 7 ♀). — Paraguay: Puerta Elisa (XI-36 (1 ♂); Rio He-Hong (XII-36) (1 ♂, 17 ♀). — Uruguay: Juan Jackson (Mme Petit) (1 ♂, 1 ♀); Conceptiondel (1930, Dr C. Van Grafschappen) (1 ♀). — Bolivia (16 ♀). — « S. America » — ? —: Rio Santiago (1929, Marquis de Wavrin) (1 ♀). « *Sine locus* » (2 ♀, 2 ♂).

Stenodontes (Mallodon) dasystomus Say, s. str., 1823.

A single small male of this species has been examined.

Length: 26 mm. Breadth: 8 mm.

Locality. — U. S. A.: California (1♂).

Stenodontes (Nothopleurus) lobigenis Bates, 1884.

(Plate 6, fig. 9, ♀).

I have examined a single female which I take to be this species.

The pronotum converges laterally slightly anteriorly. It is distinctly crenelate laterally, with the pre-basal angle distinctly larger and projecting. The submentum is extremely broadly and coarsely rugose, somewhat longitudinally.

Length: 34.5 mm. Breadth: 10 mm.

Locality. — U. S. A. : California (1 ♀).

CNEMOPLITINA.

Cnemoplites (s. str.) blackburni Lameere, 1903.

(Plate 1, figs. 5 ♂, 6 ♀).

An excellent pair of this Australian species has been examined, and the species is figured herein for the first time. I have also re-described the species, a full description not having previously been given. I believe that this species, which is liable to be confused with *Cnemoplites* (s. str.) *princeps* Gahan in collections, is rather more common than the latter species.

Dark blackish brown, the elytra sometimes a little lighter towards the apex. The abdomen of the male a little lighter in colour and with abdominal sternites one to four almost covered with a transverse band of dense tawny pubescence.

Male. — Elongate, robust.

The antennæ almost reaching the middle of the elytra; the scape moderately elongate, extending very slightly past the posterior border of the eye; a little, but distinctly swollen towards the apex, a little depressed above and below, strongly and coarsely rugosely punctured, particularly basally; the third segment almost three-quarters as long as the following two united, one and a half times as long as the fourth, equal in length to the scape, very coarsely, not very closely punctured; the fourth to tenth segments extremely gradually decreasing in length, almost equal; the eleventh, apical, segment a little elongate, about one and a quarter times as long

as the preapical segment; the outer apex of segments six to ten slightly angular; the segments from the third with a double finely striated apical fossette, but very vaguely on the basal segments, the apical segment a little matt, very finely, somewhat obsoletely a little irregularly striate, with some small punctures basally, narrowed suddenly post-medially giving a simulation of another segment; segments four to ten with large, distinct, not very close, scattered punctures.

The head with a number of extremely large irregular punctures anteriorly, becoming confluent and somewhat rugosely punctured towards the middle, posteriorly closely and finely granulate; bearing a fine median longitudinal groove; the eyes moderately approaching above, very slightly emarginate; a distinct, though not large, median depression between the upper lobes of the eyes and between the antennal tubercles, which are a little raised and a little obtusely angular. The mandibles about half as long as the head, suddenly angled towards the apex which is moderately pointed; strongly and coarsely punctured, except a smooth apical and internal band.

The pronotum moderately shining on the rugosities; transverse, almost twice as broad as long; the lateral border complete, a little spinously crenelate, the lateral posterior angle distinctly projecting and more elongate; distinctly narrowing anteriorly, the sides almost straight; a little uneven above, more or less completely strongly rugosely punctured, but showing slight smoother, punctured areas on each side of the anterior half, and a narrow band medially along the posterior border. The scutellum glabrous, not very shining; strongly coarsely rugosely punctured, except a smooth apical and postero-lateral border; about as long as broad, subtriangular and moderately narrowly rounded apically, distinctly obtusely angled medially on each side.

The elytra shining, bearing traces of two longitudinal discal carinæ; broadening a little posthumerally to about the apical third, then broadly rounded to the apex; the sutural angle bearing a small, though distinct, sharp spine; completely rather finely and closely rugose, somewhat coarser basally, with small punctures scattered here and there.

The submentum shining, glabrous; rugose anteriorly, quite smooth posteriorly. The prosternum glabrous, very shining; strongly rugosely punctured; the prothoracic episterna narrow; the prothoracic protuberance moderately curved, rather narrow, distinctly though broadly constricted between the coxæ,

the apex moderately narrowly rounded. The metasternum fairly closely covered with recumbent tawny pubescence, except on the median triangle; moderately finely and closely punctured; the metathoracic episterna of moderate breadth, their inner border slightly convex, very óbsoletely and finely rugose in part, with small close punctures between.

Abdominal sternites one to four with a distinct, very densely tawny pubescent, transverse band posteriorly, not quite covering the whole segment, having a narrow anterior band free, and a fairly broad glabrous and very shining posterior border; the anterior, not densely pubescent area, rather matt, and rather finely rugosely punctured; the apical ventrite more or less semi-circular, moderately strongly and broadly emarginate apically, fairly sparsely fringed and irregularly punctured, in parts close, in others smooth.

The legs rather robust and moderately elongate; the femora distinctly flattened and moderately broadened, the anterior rather strongly scabrous beneath and internally, with a few distinct spines beneath in two rows, particularly distally, the intermediate and posterior femora less strongly scabrose, very coarsely punctured but more sparsely above, and spinous beneath distally; the anterior and intermediate tibiæ are spinous infra-externally, all coarsely rugosely-punctured, particularly the anterior, and a little fringed with tawny pubescence, on about the distal half, internally. The tarsi robust and broadened, particularly the anterior; the first segment of the anterior almost equal in length to the following two united, the apical segment less than half the rest united; the first segment of the posterior tarsi about three-quarters as long as the following two united, the apical segment about three-fifths as long as the rest united.

Female. — More robust than the male.

The antennæ shorter, extending to about the basal third of the elytra; the scape distinctly more slender, not rugose, but coarsely and fairly closely punctured. The head proportionately about the same size as that of the male: the mandibles only very little shorter.

The pronotum very similar in shape to that of the male, its proportions similar, but a little narrower compared to the breadth of the elytra basally; similarly sculptured to that of the male but the smoother areas on the anterior half scarcely noticeable, rugose.

The elytra similarly sculptured to those of the male.

The suture of the prothoracic episterna much less distinct; the prosternum a little less strongly rugose than the male.

The metasternum similar to that of the male.

The abdomen glabrous and very shining; the apical ventrite elongately conical, broadly rounded apically with a very slight median angular emargination; the segments very finely and sparsely punctured, a little more closely towards their posterior borders, the apical segment more coarsely and more closely punctured towards the apex.

The legs less robust and more slender; distinctly less scabrous and spinous, in general coarsely punctured. The tarsi distinctly less broadened.

Length: 55-60 mm. Breadth: 16-18.5 mm.

Locality. — S. Australia : Murray River (S. COPE) (1♂, 1 ♀).

Cnemoplites (Hermerius) howei THOMSON, 1864.

(Plate 1, figs. 7, 8 ♂♂).

No description of this species, originally described from Lord Howe Island, has appeared since the original one and LACORDAIRE's subsequent notes. LAMEERE (1903, Mém. Soc. Ent. Belg., **11**, 46) in his Revision states that he had not seen the species.

Although the specimens which I have seen are only labelled « Australia », I feel certain that they belong to this elusive species of THOMSON's. They fully conform to the descriptions given by THOMSON, LACORDAIRE and LAMEERE, although that of the latter is in the main culled from LACORDAIRE and THOMSON.

Cnemoplites (Hermerius) howei THOMSON is at once immediately distinguishabe from the only other species at present known in the subgenus, viz. *Cnemoplites (Hermerius) impar* NEWMAN, 1844, by its less elongate form and completely finely pubescent upperside. Unfortunately no female is present, and still remains unknown.

Male. — Elongate, robust.

Dark brown in colour, the elytra a very little lighter towards the apex. Covered with short, fine, fairly sparse, but distinct, tawny pubescence above and below; the abdominal segments one to four each with a very dense, conspicuous, slightly curved, transverse median patch of tawny-yellow pubescence, placed in a depression.

The antennæ fairly slender, extending to about the apical third of the elytra; the scape elongate, fairly slender, a little swollen towards the apex, extending well past the posterior border of the eye, almost on to the anterior border of the pronotum; the third segment a little elongate, very slightly shorter than the scape, about one and two-third times as long as the fourth segment; the fifth segment about equal in length to the fourth, but a little more slender; the sixth slightly shorter than the fifth; the seventh slightly longer than the sixth, equal in length to the fifth; the eighth and ninth segments equal in length, slightly shorter than the seventh, equal in length to the sixth; the tenth segment slightly shorter than the preceding; the apical segment more elongate, about one two-thirds as long as the penultimate, about three-quarters the length of the third segment, a little flattened and slightly curved, with a slight post-median swelling; the external apex of segments four to ten gradually becoming more angular towards the apical segments, scarcely noticeable on the fourth, a little produced on the sixth, distinctly angular on the eighth to tenth, on the ninth and particularly the tenth quite sharply angularly produced; segments three and four with a rather obscure small single oval fossette towards the external apex, this fossette becomes double and more distinct on the following segments; the apical segment completely, and the outer part of the length segment, finely irregularly striate and matt ; the scape very strongly, closely and coarsely punctured; the third segment somewhat less strongly and less closely punctured, the punctures gradually becoming smaller, but still distinct, and more sparse on the segments gradually towards the apex.

The head very coarsely, closely and somewhat rugosely punctured anteriorly, becoming somewhat finer posteriorly, the posterior part of the head closely, fairly finely punctured and finely granulate; with a fine, but distinct median longitudinal groove, and a broad, slight depression between the upper lobes of the eyes. The antennal tubercles scarcely raised, obtuse. The mandibles rather robust, about half as long as the head; strongly, coarsely and closely punctured externally, smooth apically and internally; distinctly and rather suddenly curved pre-apically; finely and sparsely pubescent externally; the apex very pointed, thence strongly and rather broadly emarginate to a strong median internal tooth.

The pronotum moderately shining; more or less regularly convex, slightly, but distinctly depressed on the middle of the disc and obtusely, but again noticeably, longitudinally depressed (canaliculate) medially, (not reaching the anterior border in one specimen examined, but obscurely reaching it in the other) ; a little less than two-thirds as long as broad; the lateral borders more or less regularly rounded, broadest at about the basal third, complete, distinctly bisinuate, a little angularly concave medially; the lateral borders more or less regularly rounded, broadest at about the basal third, completely distinctly crenelate, less strongly medially; the disc strongly and coarsely punctured, closely except on a small area on each side of the middle, becoming rugose laterally and much finer towards the extreme border; covered with sparse fine pubescence, most noticeably laterally. The scutellum finely and sparsely pubescent; about as broad as long or very slightly transverse; more or less rounded and broadly rounded apically; with fairly large close punctures, except for a smooth narrow marginal border and median line.

The elytra moderately shining; very little more than twice as long as broad, slightly broadening post-humerally to a little post-medially, thence broadly rounded to the apex; the sutural angle bearing a small, sharp spine; moderately strongly rugosely punctured basally, becoming finer posteriorly to the apex; [Thomson (and Lameere copying Thomson) states that the elytra are strongly granulose. I can discern no trace of granules and believe that he has used the term « granulose » loosely here to mean « rugose » or « rugosely punctured »]; each elytra bearing exceeding faint almost obsolete traces of two or three discal longitudinal carinæ.

The submentum fairly densely pubescent; somewhat rugosely punctured. The prosternum strongly punctured, moderately rugosely; the prothoracic episterna very narrow; the prosternal protuberance only slightly curved, fairly narrow, very elongate and posteriorly projecting over the metasternal protuberance, slightly constricted medially between the coxæ, rather narrowly rounded apically, and densely clothed with long pubescence towards the apex. The metasternum densely pubescent; very finely and closely punctured, and very finely and closely granular, particularly the episterna, which are fairly broad, with their inner border slightly convex; the mesosternal protuberance not very broad, densely pubescent. The abdominal

sternites finely and fairly closely punctured, except on the extremely densely pubescent, slightly arced, transverse median areas towards the posterior borders of the first to fourth ventrites; these pubescent « brushes » do not cover the anterior or transverse third of the segments, that on the first segments occupying about the median third of the width, the second and third a little more transversely elongate, that on the fourth about equal in length to the first; the apical segment moderately pubescent, broadly but not very deeply emarginate apically, and more or less semi-circular, not at all elongate.

The legs rather robust and moderately elongate; the femora flattened and a little broadened; the anterior femora are strongly scabrose, particularly laterally and beneath, and spinous beneath; the intermediate slightly scabrose and spinous beneath, particularly towards the distal end, the posterior scarcely scabrous towards the distal end inferiorly, and rather minutely spinous beneath, the rest very finely and closely punctured, with an occasional slightly larger puncture scattered here and there; the anterior and intermediate tibia strongly scabrous and spinous beneath, particularly the anterior, the posterior scarcely scabrous, and not noticeably spinous beneath, somewhat coarsely punctured, a little confluent towards the apex.

The tarsi broadened, particularly the anterior, the posterior scarcely so; the first segment of the anterior tarsi slightly shorter than the following two united, the spical segment about equal in length to the first, and almost twice as long as the third; the first segment of the posterior about two-thirds as long as the following two united, the apical segment equal in length to the second and third united and a little more than twice as long as the third.

Length: 44.5-46 mm. Breadth: 14 mm.

Locality. — Australia (no further details) (2 ♂♂).

The head is rather deflexed in both specimens examined, and the length dimensions that I have given above are taken from the apex of the mandibles. A horizontal measurement from above (i. e. from about the vertex to elytral apices) gives 39 mm in both specimens, which compares well with THOMSON's stated measurement of 37 mm.

MACROTOMINA.

Genus Aulocopus Serville.

I have now had the opportunity of examining a species, *A. colmanti* Lameere, which I had not seen when preparing my « Revision of the *Prioninæ* of Tropical and South Africa », and also a new species. Consequently I give a redescription of the former and describe the latter as *Aulocopus rivalus* sp. nov. I also give a key to the species of this genus as at present known.

Key to Species of *Aulocopus* Serville.

1. Metathoracic episterna narrow or moderately narrow; 3rd antennal segment usually shorter than the 4th and 5th united; body more convex ... ... 2.
— Metathoracic episterna broad; 3rd antennal segment longer than the 4th and 5th united; body more depressed ... ... 6.
2. Metathoracic episterna not narrowed posteriorly, their inner border convex; (pronotal punctation of males large and very widely spaced) ... ... 3.
— Metathoracic episterna narrowed posteriorly, their inner border concave; (pronotal punctation of males fine, closer and almost completely covering the pronotum ... ... 5.
3. Elytra chagrined; of a general dull black colour; prosternal protuberance with two grooves and distinctly declivous posteriorly; (elytra not spined at the sutural angle) ... ... *A. lameeri* Burgeon.
— Elytra with large, sparse punctures, not chagrined; very shining; prosternal protuberance not grooved and more or less horizontal ... ... 4.
4. Elytra with a distinct fine spine at the sutural angle and distinct intermediate carinæ between the main ones ... ... *A. foveiceps* Harold.
— Elytra not spined at the sutural angle and almost smooth between the main carinæ ... ... *A. rivalus* sp. nov.
5. Elytra with large, close punctation; metathoracic episterna not linear ... ... *A. colmanti* Lameere.
— Elytra rugose; metathoracic episterna linear ... ... *A. schenklingi* Lameere.
6. Pronotal disc with faint punctures; a feeble depression between the antennal tubercles... *A. reticulatus* Serville.

— Pronotal disc with more or less extensive punctation; a deep groove between the antennal tubercles ... ... *A. reticulatus* SERVILLE, var. *natalensis* WHITE.

Aulocopus rivalus sp. nov.

(Plate 5, fig. 7, ♂).

Male. — Colour pitchy-black, the base of the femora and posterior border of the abdominal sternites a little lighter.

Elongate, moderately robust, moderately broad, more or less convex.

The antennæ reaching the middle of the elytra; slender, at least apically; the third segment very slightly longer than the fourth and fifth segments united (about one and one-tenth times), about one and a half times as long as the scape and about twice as long as the fourth segment; the fifth to tenth segments more or less equal, the apical segment a little elongate, about equal in length to the fourth segment; the scape swollen, flattened above, covered with very large punctures, closest basally; the following segments to the ninth with rather sparse large punctures; the two apical segments longitudinally carinate. The head with a broad, fairly strong depression between the eyes, continued as a narrow groove to the posterior border of the head; the frons with a very deep, strong transverse depression above; between the antennal tubercles; the vertex rather strongly convex; the head covered with large scattered punctures, which become closer and a little rugose very laterally.

The pronotum a little broader than long, narrowing a little anteriorly; slightly curved laterally, in part a little irregular, minutely crenelate in part; the anterior angles more or less rounded, a comparatively large, but still small, obtusely spinous angle at the posterior quarter, thence distinctly narrowed to the base; the disc covered with only moderately large, sparse punctures, which gradually become larger and closer laterally, and eventually almost confluent at the margin; the disc more or less plane, but with a faint posterior median depression and an anterior one on each side, smooth and shining. The scutellum slightly transverse, somewhat subtriangular, the apex rounded; with a number of moderately large scattered punctures, the interstices micropunctured.

The elytra elongate, moderately convex, rounded humerally, slightly widening to about the apical third, thence broadly

rounded to the apex, which has the sutural angle more or less rectangular; each elytron with four longitudinal carinæ, of which the lateral, subhumeral one, is indistinct, the sutural unites with its neighbour towards the apex, the latter continuing a little, the two lateral also unite; the interstices smooth, scarcely noticeable raised, with moderately large scattered punctures.

The submentum obtusely transversely rugose. The prosternum strongly, coarsely, closely and somewhat confluently punctured; the prosternal protuberance more or less horizontal, not very broad, almost parallel-sided, the apex rather narrowly rounded; the prothoracic episterna moderately narrow. The metasternum finely tawny pubescent; completely finely and moderately narrow, the inner border slightly convex, not contracted apically or anteriorly, with a few fine granules. The mesosternal protuberance moderately broad, broadly emarginate apically. The abdominal sternites very shining, with scattered, well-spaced, moderately large punctures on the apical ventrite, the interstices finely micropunctured; the apical segment about equal in length to the pre-apical, the apex broadly emarginate and moderately densely covered with rather long pubescence.

The legs robust; the femora swollen, the anterior rather finely rugosely-scabrous internally, and rather densely fringed; the remainder of all the legs with moderately large, variably scattered punctures, sparse in part and almost confluent in others, the interstices somewhat sparsely and finely micropunctured.

Length: 28.6 mm. Breadth: 8.5 mm (at humerus); 10 mm widest).

Locality. — Belgian Congo: Kafakumba (XII-1937). Holotype (♂) in the Institut royal des Sciences naturelles de Belgique. Unique.

This distinct new species appears to form a connecting link between the forms with narrow metathoracic episterna and those with broad metathoracic episterna (*Aulocopus reticulatus* SERVILLE 1832, and *Aulocopus reticulatus* SERVILLE var. *natalensis* WHITE, 1853). It is probably most closely allied to *Aulocopus lameeri* BURGEON, 1928, from which it differs in the third segment being slightly longer than the fourth and fifth united; lacking the two grooves on the prosternal protuberance, etc. From this and all the other species it differs at first glance by its smooth inter-carinal elytral appearance, due to lacking the, at least broken, usually present, intermediate secondary carinæ.

Aulocopus colmanti LAMEERE, 1912.

(Plate 5, figs. 8 ♂, 9 ♀).

I have examined a pair of specimens which I take to be this species, up to now only the male having been mentioned in the literature. I feel quite sure that the female *is* the female of this species although it shows some distinct differences to the male. Both specimens are larger than the male on which the original description was based, although this is often not necessarily an important point in this family.

LAMEERE's description being short and comparative, I give below a full description of these specimens.

Colour pitchy-black in general to a little ferrugineous-black beneath.

Male. — Very elongate, moderately robust, somewhat subcylindrical, but widening a little posteriorly.

The antennæ almost reaching the apical third of the elytra; the third segment very slightly shorter than the fourth and fifth united, about one and a half times as long as the scape and about twice as long as the fourth segment, the fifth to tenth segments almost equal, but very slightly decreasing, the apical segment a very little more elongate; the scape strongly, broadly flattened, strongly swollen towards the apex, with large, moderately spaced punctures; the following segments with large, more widely spaced punctures, which are rather variable in size, the third segment with a few extremely large ones; the two apical segments and apex of the ninth segment with fine longitudinal carinæ. The head with a broad, moderately strong depression between the upper borders of the eyes, with a fine but distinct groove running through it to the posterior border of the head; the frons with a moderately marked transverse depression between the antennal tubercles; the vertex quite strongly convex; the head completely strongly and fairly closely punctured, these become closer, almost contiguous, laterally.

The pronotum slightly broader than long, slightly curved laterally, most noticeably anteriorly, less so posteriorly where the posterior angle turns out again and is slightly more acute than right-angled and slightly posteriorly projecting; the lateral border strongly depressed medially, rising anteriorly and more so posteriorly, very slightly crenelate; the disc somewhat flattened, with a slight post-median longitudinal depression, a slight depression on each side anteriorly, and a slight posterior

depression just inside the lateral angle; completely finely and fairly closely punctured, except in the middle of the three discal depressions, becoming much closer and a little more coarsely, slightly rugosely, punctured laterally. The scutellum very slightly elongate, somewhat subtriangular, slightly sinuate laterally, the apex moderately narrowly rounded; finely and moderately closely punctured.

The elytra very elongate, somewhat subcylindrical, convex, a little flattened discally, slightly widening to about the apical third, thence broadly rounded to the apex, the sutural angle very slightly, shortly, obtusely projecting, scarcely more than rectangular; each elytron with four strong longitudinal carinæ, each pair uniting towards the apex, thence the ensuing pair shortly uniting again; also four less strong intermediate carinæ, which become much more feeble towards the apex; the rest completely covered with large punctures which become somewhat closer and rather rugose laterally.

The submentum more or less matt, completely granular, slightly rugosely. The prosternum broadly, granularly rugose and matt laterally, becoming punctured and shining towards the protuberance; the prosternal protuberance more or less horizontal anteriorly, slightly but distinctly declivous posteriorly; rather narrow, slightly constricted medially between the coxæ. The metasternum finely granular, changing gradually to close punctures medially; somewhat matt laterally, somewhat finely and sparsely pubescent; the metathoracic episterna very narrow, distinctly narrowing posteriorly; the inner border slightly concave. The abdominal sternites very shining, with scattered, widely spaced moderately large punctures, the interstices finely micropunctured; sparsely pubescent; the apical ventrite fairly strongly emarginate apically and densely pubescent apically.

The legs robust; the femora swollen, the anterior slightly scabrous beneath; the tibiæ strongly and coarsely punctured, particularly the anterior, which are also very strongly and densely fringed internally; the remainder of all the legs with sparse, not very large, scattered punctures, the interstices very finely micropunctured.

Female. — Differs from the male as follows :

The antennæ reaching to about the basal two-fifths of the elytra; the proportions similar to those of the male, the tenth segment less strongly carinate.

The pronotum more transverse, almost one and a half times as broad as long, a little more strongly narrowing anteriorly;

otherwise similar laterally, except the lateral border slightly more strongly crenelate; the posterior discal depression larger; the punctuation larger and more spaced the interstices very finely micropunctured. The scutellum and elytra similar to the male.

The underside similarly granular and punctured as the male, except the metasternum less strongly. The mesosternal episterna distincly broader than in the male — moderately broad — narrowing posteriorly and the border concave. The abdomen less pubescent; the apical ventrite much less strongly emarginate apically, and much less densely pubescent apically.

The legs less robust. The anterior femora smooth; the anterior tibiæ not nearly so densely fringed internally.

Length: 24-25 mm. Breadth: 6.5 mm.

Locality. — Congo (Don de Contreras) (1 ♂, 1 ♀).

Aulocopus reticulatus Serville, var. natalensis White, 1853.

Length: 30-35 mm. Breadth: 9-10 mm (*at humeri*).

Locality. — Belgian Congo: Kafakumba (X/XI-1930) (2 ♂).

Genus Macrotoma Serville.

Subgenus Navosomopsis Thomson.

Three species of this subgenus have been examined, two of which are new to science. In view of this therefore, I give a fresh key to the species of this subgenus.

Key to Species of *Navosomopsis* Thomson.

1. Pronotal concavities deep; the abdomen without sexual punctation like that of the pronotum in males, but, if present, then the pronotal concavities shallow ... ... 2.
— Pronotal concavities superficial, sexual punctation never present on the abdomen ... ... 11.
2. Body silky pubescent; posterior border of the pronotum of females scarcely curved behind, the three depressions deep; elytra granulose; tarsi elongate, the anterior enlarged; sexual punctation covering the metathoracic episterna ... ... *N. holosericea* Lameere.
— Body not silky pubescent; sexual punctation covering the pronotum and sides of the metasternum in males ... ... 3.
3. The lateral border of the pronotum completely effaced in males; no sexually dimorphic punctation on the abdomen;

pronotum of females generally bearing erect hairs, the posterior border generally strongly curved posteriorly. 4.

— The lateral border of the pronotum present, at least in part, in males, abdomen and metathoracic episterna of males with sexual punctation; eyes not closely approaching below; elytra very rugose, with the carinæ distinct; tarsi moderately elongate, the anterior not dilated, but more elongate in the males; antennæ of males long and smooth; the female pronotum without erect hairs (so far as known) ... ... 9.

4. Pubescence covering head, pronotum, antennæ, legs, abdomen and elytra, the latter at least marginally ... ... 5.

— Pubescence at most only covering the head and pronotum ... ... 6.

5. Head, pronotum and scutellum covered with small patches of yellow hairs, giving a scale-like effect ... ... *N. squamosa* LAMEERE.

— Head, pronotum and scutellum unicolorous greyish, without patches of yellow hair ... ... *N. goetzi* LAMEERE.

6. Without pubescence on head and pronotum; the posterior border of the female pronotum not strongly curved posteriorly; (eyes closely approaching above; prosternum with a large median tumescence anteriorly; metathoracic episterna exceptionally broad) ... ... *N. gestroi* LAMEERE.

— Head and pronotum pubescent; the posterior border of the female pronotum strongly curved posteriorly ... ... 7.

7. Eyes not closely approaching below; elytra with close punctation, the carinæ invisible; metathoracic episterna of males devoid of sexual punctation; the three pronotal depressions deep in both sexes; tarsi short, the anterior dilated in the males; antennæ pitted and short in both sexes, only reaching a little past the middle of the elytra... ... ... *N. dohertyi* LAMEERE.

— Eyes fairly closely approaching below; elytra very rugose, the carinæ distinct; metathoracic episterna of males with sexual punctation; the anterior depressions of the female pronotum rather shallow; tarsi a little elongate, the anterior not dilated, but elongated in the males; antennæ of males long and fairly swollen ... ... 8.

8. Antennæ of both sexes with striæ on the apical two (male) or three (female) segments; the prosternal protuberance vertical anteriorly; metathoracic episterna of males extre-

mely narrowed and contracted to a point posteriorly, the inner border rather strongly concave (male) ; the pronotum rather shining ... ... *N. foveolata* KOLBE.

— Antennæ with the apical segments matt, without striæ, except for one or two on the apical segment; the prosternal protuberance rounded anteriorly; metathoracic episterna rather broad, truncate posteriorly, the inner border slightly convex (male) ; the pronotum matt; (female unknown) ... ... *N. katangaensis* GILMOUR.

9. The elytra distinctly toothed at the sutural angle, the juxtascutellar tumescence very strongly marked, the carinæ completely missing; the punctures of the head well separated ... ... *N. trageramus* GILMOUR.

— The elytra toothed at the sutural angle, the juxtascutellar tumescence very feeble or almost absent, the carinæ visible; the punctures of head reticulate or rugose ... ... 10.

10. The first tarsal segment longer than the following two united; the elytral carinæ rather projecting; the antennæ reaching the elytral apex (male) ; (female unknown) ... ... *N. erlangeri* LAMEERE.

— The first tarsal segment slightly shorter than the following two united; the elytral carinæ not projecting (though visible) ; the antennæ only reaching the apical third of the elytra (male), female unknown ... *N. abscisa* sp. nov.

11. Elytra rugose; the first tarsal segment not elongate, antennæ and legs short ... ... 12.

— Elytra not rugose, covered with fine granules, or, rarely, finely punctured, the granules much larger basally; first tarsal segment elongate; antennæ and legs elongate; (a rather deep V-shaped groove between the antennal tubercles) ... ... 17.

12. Eyes closely approaching above; (a deep groove between the antennal tubercles; antennæ a little longer; sides of the pronotum more declivous)... ... *N. gregaria* THOMSON.

— Eyes widely separated above ... ... 13.

13. A slight depression between the antennal tubercles... 14.

— A deep groove between the antennal tubercles ... ... 15.

14. The lateral border of the pronotum almost effaced, only indicated by some denticules; the suture of the prothoracic episterna and prosternum indistinct; the third antennal segment scabrous beneath ... ... *N. jordani* LAMEERE.

— The lateral border of the pronotum strongly marked and completely denticulate; the suture of the prothoracic episterna and prosternum very distinct; the third antennal segment smooth ... ... *N. kafakumbæ* sp. nov.

15. Antennæ short, not reaching beyond the middle of the elytra ... ... *N. angustata* LAMEERE.

— Antennæ longer, reaching at least to the apical third of the elytra ... ... 16.

16. The third antennal segment equal to the 4th and 5th united; the pronotal depressions shining; lateral border of the pronotum only indicated by a number of small spines anteriorly and posteriorly ... ... *N. bohndorffi* LAMEERE.

— The third antennal segment conspicuously longer than the 4th and 6th united; the pronotal depressions matt; lateral border of the pronotum only indicated posteriorly, or crenelate, with a slightly posteriorly directed spine at the postero-lateral angles... ... ... *N. schillingsi* LAMEERE.

17. Posterior angles of the pronotum directed laterally; 3rd antennal segment not concave above; metathoracic episterna not contracted (or only slightly), not concave on their inner border; 9 carinæ on each elytron ... ... 18.

— Posterior angles of the pronotum directed obliquely posteriorly; 3rd antennal segment concave above; metathoracic episterna narrowed, concave on their inner border (sometimes only slightly); 4 carinæ (which may not be very strongly projecting) on each elytron ... ... 21.

18. Sutural angle spinous; elytral carinæ less pronounced ... ... *N. quedenfeldti* LAMEERE.

— Sutural angle not spinous; elytral carinæ more or less well-marked ... ... 19.

19. Metallic bluish-green in colour, elytra red (male) or violaceous black (female); 3rd antennal segment no more than equal to the fourth and fifth united ... ... *N. mossambica* DISTANT.

— Not similarly coloured, not darker than pitchy anteriorly, the elytra usually lighter (no sexually dimoprhic colouraration); the 3rd antennal segment at least slightly longer than the fourth and fifth united ... ... 20.

20 The legs scabrous; 3rd antennal segment only slightly longer than the fourth and fifth united; head strongly punctured anteriorly, granular posteriorly ... ... *N. boppei* LAMEERE.

— Legs finely granulated; 3rd antennal segment distinctly longer than the fourth and fifth united; head chagrined, granular only behind the eyes ... *N. feisthameli* BUQUET.

21. Metathoracic episterna only moderately contracted... 22.

— Metathoracic episterna almost linear in males, a little less strongly narrowed in females ... ... 23.

22. Elytra with a metallic green tint; tarsi strongly elongate ... ... *N. viridescens* JORDAN.

— Elytra not metallic, brownish-red in colour; tarsi not strongly elongate ... ... *N. lesnei* LAMEERE.

23. The elytra completely very finely punctured, very strongly basally: the carinæ strongly marked; the antennæ extending beyond the elytral apex in males, reaching the apical third in females ... ... *N. octocostata* QUEDENFELDT.

— The elytra completely covered with fine granules; the carinæ scarcely marked, the antennæ only reaching to about the apical sixth of the elytra in males and a little past the middle in females ... ... *N. neja* GILMOUR.

Macrotoma (Navosomopsis) kafakumbae sp. nov.

(Plate 2, fig. 6, ♂.)

Male. — Dark brown, with the elytra, metathoracic episterna, abdomen and apical antennal segments distinctly lighter brown. Elongate, very robust.

The antennæ not quite reaching the middle of the elytra; moderately swollen on the first three segments, the segments from the fourth however, distinctly more slender; the scape very swollen, and coarsely rugose; the third segment almost completely smooth, very slightly scabrous infra-externally, flattened above and below, equal to the fourth and fifth segments united, about twice as long as the fourth segment, the following segments extremely slightly decreasing, but almost equal, the apical almost not longer than the penultimate; the two apical segments completely finely reticulately carinate, the outer apical third of the ninth segment with a few fine striæ; the rest of the segments with a number of sparse, scattered, moderately large punctures. The head matt, rugose, covered with fine granules; with a rather shallow, broad depression between the upper lobes of the eyes, and a shallow one between the antennal tubercles; the frons with a very deep, narrow transverse depression; the eyes widely separated above.

The pronotum matt; transverse, about one and two-third times as broad as long; almost as broad as the elytra basally; the sides slightly rounded, narrower anteriorly than posteriorly; the lateral border strongly marked and distinctly spinously crenelate throughout its length; strongly convex and strongly declivous laterally; completely finely rugose and covered with fine close granules; with two distinct well-marked depressions, one on each side of the anterior half, which are somewhat coarsely rugose, shining, each with a small glabrous tumescence; with a very narrow, deep longitudinal furrow-like depression medially from about the basal third to posterior border, and an antero-lateral, fairly deep, elongate, oblique depression on each lateral declivity. The scutellum about as long as broad, more or less subtriangular, slightly sinuate laterally, the apex rather narrowly rounded; bordered with a slightly shining micropunctured band, the rest rather finely, granularly, rugosely, punctured, with a fairly fine, but distinct, median longitudinal groove from the base to a little past the middle.

The elytra elongate, with scarcely any noticeable juxtascutellar tumescence, each elytron with four not very strong longitudinal carinæ which anastomose irregularly towards the apex; the apices broadly rounded, the sutural angle very broadly rounded, not at all angular or spinous.

The submentum bordered laterally by a very strong carina; strongly, rather sparsely granular. The prothoracic episterna well marked, moderately broad; the prosternum completely granularly rugose, like the pronotum; the anterior tumescence broad and distinct; the prosternal protuberance broad basally, narrowing to the apex which is truncate and a little declivous, with a very distinct groove laterally and apically.

The metathoracic episterna of moderate breadth, the inner border slightly concave; completely finely and closely punctured, and finely pubescent. The mestasternum more or less glabrous and similarly matt and punctured, though a little more finely than the prosternum, except the median triangle which is somewhat shining, finely pubescent, and finely and closely punctured, like the episterna, though a little more coarsely. The abdominal sternites shining, almost glabrous except laterally and the apex of the apical ventrite, which is densely pubescent; with a rugose, less shining area on each side of each segment, the rest moderately coarsely and sparsely punctured, the punctures closer basally, the interstices closely micropunctured; the apex of the apical ventrite broadly and rather strongly emarginate, strongly and closely punctured.

The legs robust, not very elongate; the femora spinous beneath; the tibiæ spinous internally and externally, most strongly on the anterior. The tibiæ scabrous, particularly the anterior; the rest with a few scattered, not very large punctures, the interstices closely and finely micropunctured. The anterior tarsi not dilated; the first tarsal segment shorter than the following two united, the fifth a little shorter than the others united.

Length: 60 mm. Breadth: 17 mm.

Locality. — Belgian Congo: Kafakumba (XI-1937).

Holotype (♂) in the Institut royal des Sciences naturelles de Belgique. Unique.

This new species appears to be most closely allied to *Macrotoma (Navosomopsis) jordani* LAMEERE, 1903, of which I at first took it to be the male until close examination revealed several important differences, as follows : the antennæ slightly shorter, and less swollen, the third segment smooth, not strongly scabrous beneath; the lateral border of the pronotum complete and distinctly completely denticulate; the suture between the prosternum and prothoracic episterna very distinct.

Macrotoma (Navosomopsis) lesnei LAMEERE, 1903.

(Plate 5, fig. 4, ♀.)

I have seen a single female which I take to be this species. Not having previously been figured I do so herein and also redescribe it, not having seen a specimen whilst writing my « Revision of the *Prioninæ* of Tropical and South Africa ».

Female. — Very elongate, a slender species; not very robust.

The antennæ not quite reaching the apical third of the elytra, slender; the scape comparatively rather slender, somewhat broadened, distinctly depressed, moderately elongate, rugosely punctured; the third segment slightly longer than the following two united (about one and an eight), only slightly swollen, distinctly longitudinally concave above, flattened beneath, scarcely scabrous, the following segments extremely gradually decreasing, the apical segment scarcely longer than the penultimate; the two apical segments and the apical upper half of the ninth segment with fine carinæ; the rest of the segments with moderately close coarse punctures. The head matt, rugose anteriorly, covered closely with fine granules posteriorly and laterally; the upper lobes of the eyes fairly closely appro-

aching, with a depression between; the antennal tubercles separated by a moderately deep, fairly narrow, grooved depression.

The pronotum transverse, almost as broad as the elytra basally, distinctly narrowing anteriorly, the sides almost straight, the border slightly crenelated, the anterior angle not projecting, the posterior angle strongly projecting obliquely posteriorly, pointed; a little uneven above, showing, very indistinctly, two anterior slight depressions and an elongate posterior median one; completely covered with strong reticulate punctures. The scutellum slightly elongate, more or less parallel-sided to the apical third, thence rounded to the apex; rather coarsely, somewhat sparsely granular round the border, the rest suddenly very finely and closely granulate.

The elytra very elongate, with a small, slight, juxtascutellar tumescence; each elytron with four distinct, but not strong, longitudinal carinæ, some of which vaguely anastomose towards the apex; completely covered with very fine, fairly close, granules, which are very large, sharp and erect on the juxtascutellar tumescence; the apex broadly rounded, the sutural angle rounded, quite unarmed.

The submentum finely and closely granular, bordered by a fine carina on each side. The prosternum completely very finely and fairly closely granular; the prothoracic episterna very indistinctly marked; the prosternal protuberance a little swollen anteriorly, rather broadly and regularly rounded, and a little declivous posteriorly, rather narrow, the apex narrowly rounded. The metathoracic episterna moderately narrow, their inner border almost straight, very finely granular and pubescent; the metasternum similarly granular and pubescent. The abdomen shining medially and with sparse, not very large punctures, the interstices closely and finely micropunctured, laterally somewhat matt and closely and extremely finely granular (difficult to discern). Note: Lameere does not mention this character in his description.

The legs slender, moderately elongate; the femora smooth, the anterior extremely slightly scabrous beneath; the tibiæ smooth beneath; with a number of scattered moderately large punctures, the interstices very finely micropunctured. The tarsi a little elongate, the first segment of the posterior tarsi about one and a third times as long as the following two united, the apical segment not quite half as long as the rest united.

Length: 29 mm. Breadth: 7.5 mm.

Locality. — Belgian Congo: Bassin de la Luki, Kiobo (II-45/II-46, C. Donis).

Macrotoma (Navosomopsis) abscisa sp. nov.

(Plate 6, figs. 2, 12, ♂♂.)

Male. — Dark brown, the elytra a somewhat lighter ferruginous-brown, and the underside also sometimes lighter coloured.

Elongate, moderately robust.

The antennæ extending nearly to the apical third of the elytra; the scape moderately robust, a little depressed, completely very coarsely rugosely punctured; the third segment slightly shorter than the following two segments united, only very slightly swollen, moderately closely, coarsely punctured, otherwise smooth; the segments from the fifth more or less equal in length, with sparse only moderately large punctures, the apical two and about the apical half of the ninth segments with fine longitudinal striæ. The head a little rugosely punctured very anteriorly, the rest covered with fine close granules; the upper lobes of the eyes not very closely approaching, with a rather deep, fairly narrow depression in the middle between them, and a rather broad, fairly shallow depression between the antennal tubercles

The pronotum matt, transverse, almost one and a half times as broad as long, almost as broad as the elytra, basally straight-sided, almost parallel-sided, but very slightly narrowing anteriorly; the anterior angles rounded, not projecting; the posterior angles a little projecting and bearing a small slender, very pointed spine, projecting obliquely posteriorly; swollen above and strongly declivous laterally; the lateral border completely obsolete medially, but distinctly, though finely, present on a very short portion at the anterior angle and a longer portion from the posterior angle obliquely forward along the lateral declivity, these portions not crenelate; the disc with very distinct, but not very deep depressions as follows, which are shining and coarsely punctured : one on each side on the anterior half, a narrow median longitudinal one from the middle to the posterior border, and continued, similarly shining, but not depressed, as a narrow band along the posterior border to about the junction of body and prothorax on each side; and a slight, anteriorly oblique, matt depression posteriorly on the lateral declivity on each side. The scutellum slightly

broader than long, slightly swollen, with a fine median longitudinal groove, more or less rounded; the apex distinctly (type), or slightly (paratype), emarginate, completely very finely and closely granular.

The elytra elongate, with a very slight juxtascutellar tumescence; each elytron with four indistinct, almost obsolete, longitudinal carinæ (visible better in certain light angles owing to a difference in « texture ») ; broadly rounded apically, the sutural angle more or less rectangular, extremely slightly, scarcely, projecting; completely very finely rugosely punctured, becoming finer towards the apex.

The submentum a little shining, very broadly and obtusely, somewhat transversely, irregularly rugose. The prosternum matt, completely finely and closely granular, with a moderately strong, rounded, anterior tumescence; the prosternal protuberance slightly curved, somewhat subtriangular and moderately narrowly rounded apically; with a distinct, moderately broad, fairly deep or ot very deep, median longitudinal groove; the prothoracic episterna moderately broad, the suture distinct. The metathoracic episterna rather broad, their inner border rather strongly convex; completely covered with fine close granules and matt, similarly also the metasternum, except for the median posterior triangle which is somewhat shining, finely and moderately closely punctured; very shortly and almost indiscernibly sparsely tawny pubescent. The abdominal sternites completely matt and covered with fine, close granules, except for the posterior borders of segments one to four, which are glabrous and shining; the apical ventrite broadly and deeply emarginate apically, and very densely fringed apically with light tawny pubescence.

The legs moderately slender and not very elongate; the femora distinctly flattened and a little broadened; the anterior a little scabrous internally; the anterior tibiæ sparsely spinous beneath, and all the tibiæ a little scabrous; the rest with sparse scattered punctures, the interstices finely and closely micropunctured. The tarsi not very elongate, the first tarsal segment of the hind tarsi slightly shorter than the following two united; the apical segment only a little more than half as long as the rest united.

Length: 28-35 mm. Breadth: 9-11 mm.

Locality. — « *Sine locus* »: (R. Mus. Hist. Nat. Belg. I. G. 12.595). (But almost certainly African.)

Holotype (♂) and Paratype (♂) in the Institut royal des Sciences naturelles de Belgique.

This distinct new species appears to be most closely allied to *Macrotoma (Navosomopsis) trageramus* GILMOUR, *in the press,* but differs conspicuously in several ways, at first glance in not having the lateral border of the pronotum complete, and in having the abdomen completely covered with granules.

The holotype is the larger of the two specimens.

Macrotoma (Tersec) gracilipes KOLBE.

(Plate 2, fig. 3, ♀.)

Length: 60 mm. Breadth: 16 mm.

Locality. — Belgian Congo: Wenga Ifomi (E. QUINEAUX) (1 ♀).

Macrotoma (s. str.) palmata FABRICIUS, 1792.

Length: 31-58 mm. Breadth: 8.5-15 mm.

Locality. — Kenya: Nairobi, Ngang Forest (1.900 m) (1 ♂, 1 ♀). — Belgian Congo: Kafakumba (X/XI-30) (1 ♂); Lubundu, Albertville (V-39, Dr. POJER) (1 ♀); Lupweshi (X-36) (2 ♂); Mukunkoto (XI-37) (1 ♂); (Don DE CONTRERAS) (1 ♀); (DEPUSSCHE) (1 ♀). — Abyssinia: (1 ♂). « *Sine locus* » (1 ♀).

Macrotoma (s. str.) serripes FABRICIUS, 1781.

(Plate 2, fig. 8, ♂.)

The antennæ of the male may sometimes distinctly not reach the elytral apex.

Length: 37-67.5 mm. Breadth: 10-18 mm.

Locality. — Belgian Congo: Bassin de la Luki, Kiobo, (II-40 C. DONIS) (1 ♂); Kafakumba (III-39) (2 ♂); (XI-37) (1 ♂); Bas-Kasai (IV-30) (1 ♀). « *Sine locus* » (1 ♀).

Macrotoma (Bandar) fisheri WATERHOUSE, 1884.

(Plate 1, figs. 1, 2, ♀♀.)

The female of this species was originally described as *Macrotoma vidua* LAMEERE and has not been illustrated before. This defect I remedy herewith.

In general this species has quite conspicously light coloured elytra witih a very narrow dark border and darker basally. The two specimens examined however are much darker than appears normal. Although LAMEERE's *vidua* is described as « the colour of a blackish-brown », and GRESSITT has described *Macrotoma (Bandar) fisheri* subsp. *formosæ* which has red-

brown elytra, sometimes unicolorous, both specimens examined are reddish-brown in colour, and the elytra are not distinctly bordered. Perhaps this species forms another subspecies in Thibet, but until I examine further specimens and if possible the other sex from that locality I prefer to leave that question for the moment.

Length: 61.5-64.5 mm. Breadth: 15.5-17.5 mm.

Locality. — Thibet (2 ♀).

RHAPHIPODINA.

Rhaphipodus (s. str.) subopacus Gahan.

(Plate 2, figs. 1, 2, ♂♂.)

I have seen two males of this South Indian species, in which the antennæ only reach a little past the middle of the elytra as stated by Gahan, not to the apical third as stated by Lameere. In this respect it resembles *Rhaphipodus* (s. str.) *gahani* Lameere, 1903, but the tarsi are quite well developed, although slender, with the lobes of the third segment normal.

I have taken this opportunity of figuring the species, which has not previously been illustrated.

Length: 42.5-45 mm. Breadth: 13.5-14 mm.

Locality. — « *Sine locus* » (2 ♂).

Paroplites australis Erichson, 1842.

(Plate 1, fig. 10, ♂.)

I have seen a male specimen which I take to be this Australian species. Unfortunately it lacks any locality label to help confirm my diagnosis. This species has only had the female illustrated, by Lameere, 1919, « Gen. Insect, **72**, pl. 4, fig. 2) and has not been described since Lameere in his Revision (1903). Consequently there is a little doubt on the diagnosis as I have not previously seen an authentically named specimen. In view of this therefore I give a full description below.

Male. — Dark brownish black, the elytra becoming lighter coloured towards the apex. The abdomen and elytra towards the apex similarly becoming lighter brown, the posterior glabrous border of the abdominal sternites yellowish.

Elongate, robust.

The antennæ reaching to the apical quarter of the elytra; the scape moderately robust, a little elongate, extending slightly past the anterior border of the pronotum, somewhat depressed

above and below, very strongly and coarsely rugosely punctured; the third segment about one-sixth shorter than the following two segments united, slightly longer than the scape (about one-ninth), very coarsely, not very closely punctured; the fourth to seventh segments only extremely slightly decreasing, almost equal in length; the eighth and ninth about equal in length, about two-thirds as long as the preceding, the tenth slightly shorter than the ninth, the apical segment elongate, a little more than twice as long as the penultimate; the segments almost to the apex of the ninth shining, and with large scattered punctures; the two apical segments matt, these and the apical third and external part of the ninth, and external border of the seventh and eighth with fine longitudinal irregular striæ, the outer side of the third to sixth with a small, but distinct, pre-apical, usually double, fossette.

The head very strongly, coarsely, rugosely punctured, sprinkled with very fine granules posteriorly; the eyes moderately approaching above, very slightly emarginate, the lower lobe large and moderately swollen; with a distinct, though only moderately strong, median longitudinal groove; the antennal tubercles moderately raised and obtuse.

The pronotum matt, except for slightly shining rugosities on each side of the middle on the anterior half; transverse, almost twice as broad as long, almost as broad as the elytra basally; slightly rounded laterally, the lateral border complete, distinctly crenelate, but less strongly so medially, moderately lowered medially, the anterior angles distinct and moderately strongly anteriorly projecting; the posterior angles distinct, moderately strong, but not strongly projecting, the posterior border with a few small, distinct teeth laterally behind the posterior angle on each side; the anterior border distinctly fringed with yellowish pubescence; completely rather finely rugose, covered with moderate sized, not extremely close, punctures; somewhat irregular, with slight traces of discoidal triangular shining areas on each side of the anterior half, where the rugosities are stronger and not punctured. The scutellum matt, slightly transverse, more or less broadly rounded, but slightly angular medially on each side; completely covered with moderately fine, fairly close punctures like the pronotum.

The elytra elongate, about two and a quarter times as long as broad (humeral breadth); each elytron with three obtuse longitudinal grooves (these are probably the remaining interstices of four longitudinal carinæ, which are now so obtuse

and almost obsolete as to be scarcely distinguishable as such, apart from very obtuse, broad, longitudinal, very slightly raised areas); slightly but distinctly broadening from behind the humeri to about the apical third, thence very broadly rounded to the apices, where the sutural angles bear a very small, short, pointed tooth, which does not project as far as the most distal part (medially) of the apical curve; the elytra in the main matt, except for a basal, chiefly circum-scutellar area, continued, gradually narrowing, along the suture to about the apical third, which is shining; this latter shining area is strongly and coarsely rugose, particularly basally, becoming finer posteriorly and scarcely finely punctured and without granules; the rest of the elytra completely rather finely and obtusely rugose, but finely and closely punctured, (hence the matt appearance), and also intermingled are very small, fairly close, shining granules.

The submentum very obtusely and strongly irregularly rugose and punctured anteriorly, becoming much more finely and transversely rugose posteriorly; rather matt. The prosternum matt; finely, irregularly rugose, finely punctured and obscurely, very finely granular; slightly tumescent anteriorly; the prosternal protuberance moderately curved, fairly narrow, narrowing to the apex, which is narrowly rounded; the prothoracic episterna distinct, and of moderate, normal width, the suture distinct. The metathoracic episterna moderately broad, scarcely noticeably arrowed posteriorly, their inner border slightly convex anteriorly, slightly sinuate, becoming slightly concave posteriorly; the whole mesosternum and metasternum matt, very finely obsoletely rugose and punctured; the mesosternal protuberance broad, grooved medially, the apex broadened and obtusely emarginate (scarcely visible because of the prosternal protuberance). The abdominal sternites completely matt, except for the posterior borders of the first to fourth sternites which are very shining and glabrous, very broadened medially; the rest very finely punctured and very obsoletely granular, the apical ventrite more or less semicircular, the apex very slightly emarginate and fringed.

The legs moderately elongate and fairly slender; the femora distinctly flattened and not very broadened, the anterior rather strongly and coarsely scabrous; the rest with distinct, sparse, scattered punctures, distinctly, rather strongly, but not numerously spined beneath; the tibiæ coarsely punctured, the anterior and intermediate a little scabrous, the former most strongly,

with a few distinct strong spines externally, the anterior also with a number beneath towards the interior border, which in certain direct angles of viewing appear to be internal. The tarsi only moderately elongate, the anterior a little broadened, the posterior comparatively very slender; the first segment of the anterior tarsi about equal in length to the following two united, the apical segment about two-thirds as long as the rest united; the first segment of the posterior tarsi about four-fifths as long as the following two segments united.

Length: 40 mm. Breadth: 12 mm (humeri), 14 mm (widest).

Locality. — «*Sine locus* » (1 ♂).

Agrianome (s. str.) spinicollis M'Leay, 1827.

(Plate 1, figs. 3, ♀, 4, ♂.)

An excellent pair of this Australian species has been examined, which are figured herein.

Length: 47-55 mm. Breadth: 15.5-18 mm.

Locality. — « *Sine locus* » (1 ♂, 1 ♀).

XIXUTHRINA.

Xixuthrus microcerus White, 1853.

(Plate 4, fig. 4, ♀.)

Two quite typical females are contained in the collection from an island locality apparently not previously recorded, although this species has a wide distribution throughout the East Indian Archipelago.

Length: 64-72 mm. Breadth: 18-19.5 mm.

Locality. — Billiton Island (van Braeckel) (2 ♀).

Hastertia bougainvillea Lameere, 1912.

A single typical male has been examined.

Length : 87 mm. Breadth : 26 mm (at humeri) ; 30 mm (widest).

Locality. — Solomon Island: Bougainville Island (ex coll. P. Hastert, Luxembourg).

CALLIPOGONINI.

Sub-Tribe Platygnathina nom. nov.

= *Megopides* Lameere, 1912, Mém. Soc. Ent. Belg., **21**, 181 (Rev. 1045) (*ex parte*) ; 1919, in Wytsman, Gen. Insect., **72**, 67 Melzer, 1919, Rev. Mus. Paulista, **11**, 80-81.

The genus *Megopis* SERVILLE is now separated from the other genera in this sub-tribe, which now contains the genera *Platygnathus* SERVILLE, *Cacodacnus* THOMSON, *Toxeutes* NEWMAN, and *Stictosomus* SERVILLE.

Platygnathus octangularis OLIVIER, 1795.

Length: 30-31.5 mm. Breadth: 9 mm.

Locality. — « Afrique »: « Mauru Caru » (Mauritius ?).

Stictosomus reticulatus DALMAN, 1817.

Two quite typical specimens heve been seen, only differing in colour. One being quite black, the other dark ferruginous-brown.

Length: 42-44 mm. Breadth: 11-11.5 mm.

Locality. — Brazil: Estado Sao Paulo, Pirapora (J. WITHOFS).

JAMWONINA.

Jamwonus subcostatus HAROLD, 1879.

(Plate 2, figs. 4, ♂ *major;* 5, ♂ *medius;* 7, ♀.)

A good series of five specimens (4 ♂, 1 ♀) of this apparently scarce species has been examined.

LAMEERE's appears to have been wrong in his supposition that the male *major* (described as *J. sticheli* by KOLBE, 1900) only has the sub-mentum flat and glabrous. A male *major* (fig. 4) has been examined where the sub-mentum is distinctly grooved and pubescent. The two males *medius* and one male *minor* are typical. The female is a typical small specimen showing a simple sub-mentum.

Length: 41.5 mm (♂ *minor*), 51-56 mm (♂♂ *medius*), 77 mm (♂ *major*), 39 mm (♀).

Breadth : 12-17.5 mm (*at humeri*), 14-20.5 mm (widest) (♂♂), 12 mm (*at humeri*), 14 mm. (widest) (♀).

Locality. — Belgian Congo: Lupweshi (III-39) (♂ *major*) ; Eala (II-35, J. GHESQUIÈRE), (♂ *medius*) (ex *Hymenocardia ulmoides*) ; Mukonkoto (Distr. du Lualaba) (XI-37) (♂ *medius*) ; Ipauru (Kasai) (♂ *minor*).

CALLIPOGONINA.

Callipogon (s. str.) barbatus FABRICIUS, 1781.

(Plate 3, figs. 4, ♂ *maximus,* 5, ♀ ;
plate 4, figs. 1, ♂ *medius,* 2, ♂ *minor,* 3 ♀.)

A series of 28 specimens (9 males and 19 females) has been examined.

I am of the opinion that there are four types of male mandibles, not three, as previously believed, viz : 1) *maximus,* the mandibles much longer than the head, with median tooth about midway ; 2) *major,* the mandibles longer than the head, the median tooth about two-thirds towards the apex, the distance from the base being about proportionately equal to that in *maximus;* 3) *medius*, the mandibles slightly longer than the head, but still moderately curved leaving a space between, and 4) *minor,* mandibles about as long as the head and similar to those of the female.

I have figured, on plates 3 and 4, five specimens to show some of the variation wich can occur in this species. Figures 4 and 5 on Plate 3 show a typical pair where the elytra are distinctly lighter in colour than the head and pronotum. The former is a male *maximus*. Plate 4 : Figure 1 shows a male *medius* where the pronotal sexual punctation is coarser than usual, and the head rugose, not smooth. Figure 2 shows a male *minor,* with typical pronotal structure, and the elytra each bearing two distinct, though obtuse, longitudinal carinæ, and being dark coloured basally, becoming distinctly lighter towards the apex. Figure 3 shows a very dark female, which is more strongly rugose than normal, (compare with Plate 3, figure 5) ; the pronotum is distinctly rugose discally and laterally, and the elytra more strongly rugose, at least basally.

Length : 49-99 mm. Breadth : 13-25 mm.

Locality. — Mexico (GENIN) (6 ♂, 16 ♀) ; Etat Vera Cruz (A. GENIN) (1 ♂, 1 ♀). — Guatemala : (1913, J. RODRIGUEZ) (1 ♂, 1 ♀) ; (Don. P. HASTERT) (1 ♂) ; « *sine locus* » (1 ♀).

Callipogon (Orthomegas) cinnamoneus LINNÉ, 1758.

Length : 48-55 mm. Breadth : 13-14.5 mm.

Locality. — « *Sine locus* » (5 ♂).

Ergates (s. str.) faber LINNÉ, 1767.

Length : 35-42 mm. Breadth : 11.5-14.5 mm.

Locality. — Austria (1869, ERBER) (1 ♂) ; Styria (4 ♀). — Greece (K. J. LANGE) (1 ♀). — « *Sine locus* » (1 ♀).

CTENOSCELINA.

Ctenoscelis (s. str.) acanthopus GERMAR, 1824.

Length : 46 mm. Breadth : 12 mm (*at humeri*), 16 mm (widest).

Locality. — Brazil : Cte. de Villeneuve, Albuquerque (1 ♂).

Ctenoscelis (s. str.) coecus Perty, 1830.

Length : 88-90 mm. Breadth : 25-25.5 mm (*at humeri*), 32-33 mm (widest)

Locality. — « *Sine locus* » (2♂).

MEGOPINI.

Megopis (Aegosoma) scabricornis Scopoli, 1763.

Length : 37-47 mm. Breadth : 11-13 mm.

Locality. — Persia : Teheran (1902-03. Engels) (2 ♂, 1 ♀). « *Sine locus* » (1 ♂).

Megopis (Baralipton) marginalis Fabricius, 1775.

(Plate 5, fig. 6, ♂.)

Length : 38 mm. Breadth : 10 mm.

Locality. — Laos (1 ♂).

Megopis (s. str.) modesta White, 1853.

(Plate 5, figs. 1, 2, ♂♂, 3, ♀.)

Typical specimens from both South Africa and Madagascar have been examined. The colour varies from light testaceous to a fairly dark ferruginous-brown.

Length : 17.5-26 mm. Breadth : 4.8-7.5 mm.

Locality. — Madagascar : Diego Suarez (1893, Ch. Alluaud) (1 ♂) ; Baie d'Antongil (1898, A. Mocquerys) (2 ♂, 2 ♀) ; S. Africa (1 ♀). « *Sine locus* » (1 ♀).

ANCISTROTINI.

ANCISTROTINA.

Macrodontia flavipennis Chevrolat, 1833.

(Plate 7, fig. 5, ♂.)

Length : 74.5 mm. Breadth : 19 mm *(humeri)* ; 24 mm (widest).

Locality. — Brazil : Est. Sào Paulo, Pirapora (J. Withois) (1 ♂).

DERANCISTRINA.

Pyrodes (s. str.) nitidus Fabricius, 1787.

(Plate 5, figs. 10, ♀, 11 ♂.)

The three males examined were all of the most common form, being bronze-green above and copper-coloured below. The two

females were of the most brilliantly coloured, and perhaps least common form, having the elytra bright metallic purplish-red, with the head, pronotum and scutellum brilliant green-blue.

Length: 25.5-41 mm. Breadth: 9.5-15.5 mm.

Locality. — Brazil: Espirito Santo (coll. FRUHSTORFER) (2 ♂); Nova Teutonia, 27° 23' S., 52° 23' W., 24-II-36 (Fritz PLAUMANN) (1 ♂, 1 ♀); Est Sào Paulo, Pirapora (J. WITHOIS) (1 ♀).

Pyrodes (s. str.) angustus TASCHENBERG, 1870.

(Plate 5, figs. 16, ♂, 17, ♀.)

A long series of this species has been examined, males being greatly in the minority. All six males were more or less typically identically greenish-bronze with slight coppery reflections. The majority of the females were the most usual metallic greenish-bronze colour, ranging from lighter to darker green, but three specimens were of the less common beautiful metallic blue colour, which BATES mentions from the same locality (1879, « Biol. Central Amer : », Col. **5**, 238).

Length: 21-42 mm. Breadth: 7-13 mm.

Locality. — Panama: Chiriqui (6 ♂, 18 ♀).

Pyrodes (s. str.) pulcherrimus PERTY, 1830.

(Plate 5, fig. 12, ♂.)

Two typical males have been examined.

Length: 27-34 mm. Breadth: 10-13 mm.

Locality. — « *Sine locus* » (2 ♂).

Pyrodes (s. str.) pulcherrimus PERTY, var. formosus BATES, 1869.

(Plate 5, fig. 13, ♀.)

Three specimens of this variety were seen, which purely appertains to the female, lacking the normal transverse broad yellowish-white premedian band. One is of a metallic green, one metallic greenish-blue and the other dark metallic blackish-blue.

Length: 26-36 mm. Breadth: 10-14.5 mm.

Locality. — Brazil: Rio Madeira (1♀). — Peru: Rio Toro (1 ♀). « *Sine locus* » (1 ♀).

Pyrodes (Mallaspis) leucaspis Guérin, 1844.

(Plate 5, fig. 14, ♂.)

A male and two females of this species have been examined. The male is brownish and the females more shining brown with a distinct greenish-purple reflection. The male, figured, has the right seventh to ninth antennal segments deformed and irregularly fused together (symphysomely). Both females are smaller than the male.

Length: 28-35 mm. Breadth: 10.5-13 mm.

Locality. — Brazil: Est. Sào Paulo, Pirapora (J. Withois) (1 ♂, 1 ♀); coll. H. Fruhstorfer (1 ♀).

Pyrodes (Mallaspis) longiceps White, 1853.

(Plate 5, fig. 15, ♀.)

A single example of this species has been examined.

It is very striking at first glance by its comparatively very smooth appearance and the antennal segments becoming gradually lighter ferruginous to the apex. The general colour of the specimen seen was ferruginous, the elytra becoming a little lighter to the apex.

Length: 34 mm. Breadth: 12.5 mm.

Locality. — Mexico (Génin) (1 ♀).

PRIONINI.

NOTOPHYSINA.

Notophysis laevis Jordan, 1894.

(Plate 6, figs. 3, ♂, 8 ♀.)

A good series of seven males and three females has been examined of this species, which add one or two facts to my notes in my « Revision of the African *Prioninæ* » (*Longicornia,* **3**, *in the press*) which are of note.

In the male the antennæ are not always about one and a quarter times as long as the body, but may sometimes only exceed the elytral apex by about the apical segment. This places the species in determination much closer to *Notophysis lucanoides* Serville, 1832, in this respect. but it may be immediately distinguished by the comparatively much longer apical segment, which in this species is about twice as long as the third segment, whereas in *Notophysis lucanoides* Serville the

apical segment is only as long or very slightly longer than the third.

Difference in size between sexes is of no value in this species, as the largest specimen examined is a male, and the smallest a female, although in general, the male is on an average less robust than the female.

Length: 25.5-46 mm. Breadth: 7-15 mm.

Locality. — Belgian Congo: Kafakumba, XII-1930 (1 ♀); IX-1931 (1 ♂); XI-1937 (3 ♂, 1 ♀); III-1939 (1 ♂); IV-1939 (1 ♀); Bambesa, 7-IX-1937 (J. VRIJDAGH) (1 ♂). — Cameroons: Col. FORSTER (1 ♂).

Notophysis lucanoides SERVILLE, 1832.

(Plate 6, figs. 5, ♀, 7, ♂.)

One pair of this species has been seen.

Although closely allied to *Notophysis lævis* JORDAN, 1894, it is immediately distinguishable by the proportionate length of the apical antennal segments as noted above under the latter species, and by the external carinæ of the tibiæ bearing denticulations. When separating these species it is advisable to examine this character carefully for sometimes these denticules are very minute and on an odd tibia may be almost obsolete, perhaps most usually in females.

I have also noted in my Revision that the elytra are slightly matt. This is usually quite apparent when the two species *lucanoides* SERVILLE and *lævis* JORDAN are seen together, but in the two specimens examined herein, this is much less apparent and these specimens are almost as shining as the specimens of *lævis* JORDAN examined. The elytra are however distinctly rugose when examined against *N. lævis* JORDAN.

Length: 24 (♂) - 37 (♀) mm. Breadth: 7-11.8 mm.

Locality. — Belgian Congo: Libenge, 16-X-47 (R. CREMER-M. NEUMAN) (1 ♂, 1 ♀).

Cacosceles (s. str.) œdipus NEWMAN, 1838.

The humeral spine in the specimen examined is extremely small and only discernible from certain angles. The pronotum is comparatively smooth and not very strongly punctured.

Length: 36 mm. Breadth: 10.5 mm.

Locality. — S. Africa: Cape of Good Hope.

ACANTHOPHORINA.

Acanthophorus (s. str.) serraticornis Olivier, 1795.

A single male *major* of this Indian species has been examined. Length: 106 mm. Breadth: 26 mm (*at humeri*), 32 (widest). Locality. — « *Sine locus* » (1 ♂).

Acanthophorus (Tithoes) maculatus Fabricius, 1792, s. lat.

A large number of various subspecies of this species has been examined, of which by far the greater majority were males. The subspecific distribution still conforms with that as illustrated in my « Revision of the *Prioninæ* of Tropical and South Africa » (map, fig. 69), with two exceptions, (one of them quite reasonable, and the other perhaps a locality error), which are mentioned below in their appropriate places.

It should be noted that the characters « eyes less closely approaching »; and « eyes rather closely approaching »; which are used in my key to the subspecies (*Longicornia*, **3**), at No. 8 for separating subspecies *congolanus* Lameere and *haroldi* Lameere, are purely comparative. The eyes are closely approaching in both species and the relative proximity of the lobes can usually only be judged when specimens of both subspecies are seen together.

As individual dimensions appear to have no bearing on the subspecies, I give these here for all those examined as listed below.

Length: 42-79 mm. Breadth: 12.5-24 mm (*at humeri*).

A. (T.) maculatus Fabricius subsp. orientalis Lameere, 1903.

(Plate 7, fig. 1, ♂.)

I have now seen two specimens of this subspecies which I had not seen previously. These extend the range a little beyond the Tanga region (the type locality) to extend into S. E. Kenya, which appears quite reasonable.

The slight angle of the pronotum in the figure on the plate tends to make the recurving of the median lateral spine look a little less than it actually is.

Locality. — Kenya: Nairobi, Ngang Forest (1.900 m) (2 ♂).

A. (T.) maculatus Fabricius subsp. yolofus Dalman, 1817.

(Plate 7, fig. 2, ♂.)

I have seen two specimens of this subspecies, both of which are black in dermal colour. One of these bears a locality label far outside (so far as I am aware) its normal subspecific range. This may be an error, or the specimen may have been transported to the Congo by artificial means. The Congo specimen is the one illustrated.

Locality. — French Sudan: Tombouctou (Timbuctoo) (1 ♂). — Belgian Congo: Katanga, région de Kongola (1 ♂) (*locus dubius*).

A. (T.) maculatus Fabricius subsp. congolanus Lameere, 1903.

(Plate 7, fig. 3, ♂ type, 4, ♂ type).

Three of Lameere's type specimens have been sent to me for examination amongst a large number of other specimens of this subspecies. Two males and a female are all labelled « type », so that it appears that Lameere, at least at that time did not use the word « Paratype ». These have served to confirm the diagnosis given in my Revision.

Locality. — Belgian Congo (♂ type) (fig. 3) ; « Ht. Congo », 1893 (de Mense) (♀ type) (fig. 4) ; « Ht. Congo » (de Mense) (♂ type) ; Distr. Lualaba, Kafakumba, XI-1936 & 1937, (2 ♂, 1 ♀) ; I-1931 (1 ♂) ; I-1939 (1 ♂) ; I-1938 (1 ♂, 1 ♀) ; Lualaba, Kazenze (P. Lefébure) (2 ♂) ; Sandoa (IX-1930) (4 ♂) ; de Kituri à Kakolo (Lubutu) (2-X-29, A. Collart) (1 ♂) ; Kalehe (XI-37) (1 ♂) ; Kisantu (12-XI-40, J. Mertens) (2 ♂) ; Lupweshi (III-39) (1 ♂, 1 ♀), (X/XI-36) (2 ♂) ; Mukunkoto (XI-37) (1 ♀) ; Barumbu (VIII-25, J. Ghesquière) (1 ♂) ; Mpese (2-IV-37, R. P. J. Cooreman) (1 ♂) ; Yumbi (9-X-47, R. Cremer-M. Neuman) (1 ♀) ; (1925, J. Ghesquière) (2 ♂, 1 ♀) : (1 ♂) ; « *sine locus* » (5 ♂).

A. (T.) maculatus Fabricius subsp. frontalis Harold, 1879.

Locality. — N. Rhodesia: Abercorn (X and XII-43, H. J. Brédo) (2 ♂).

A. (T.) maculatus Fabricius subsp. haroldi Lameere, 1903.

Locality. — Belgian Congo: Ngowa (2-XI-39, J. Mertens) (1 ♀); « *sine locus* » (1 ♀).

Acanthophorus (Tithoes) longipennis Hope, 1843.

Length: 61.5 mm. Breadth: 17 mm.

Locality. — Belgian Congo : Wenga Ifomi (E. Quineaux) (1 ♂).

Acanthophorus (Ceratocentrus) spinicornis Fabricius, 1792.

Five specimens, all males, have been examined, thus further bearing out the statement in my « Revision of the African *Prioninæ* » (*Longicornia*, **3**, *in the press*) that the females are much more rarely found than the males.

Length: 38.5-00.5 mm. Breadth: 10-13 mm.

Locality. — Belgian Congo: Kafakumba (X/XI-1930) (1 ♂); Bassin de la Luki, Kiobo (II-45-II-46, C. Donis) (1 ♀); Zobia (1939, Van Woensel) (1 ♂); Stanleyville (27-V-28, A. Collart) (1 ♂); Libenge-Gemena (12-IX-47, R. Cremer-M. Neuman) (1 ♂).

DEROBRACHINA.

Prionotyrranus mordax White, 1853.

(Plate 3, figs. 1, ♂ *major*, 2, ♂ *minor*, 3, ♀.)

A series of three males and three females of this species has been examined.

The males show very distinctly the difference in mandibular structure between the males *major* (fig. 1) and the *minor* (fig. 2). The mandibles of the latter are very similar to those of the female (fig. 3), but the two sexes may be immediately distinguished by the structure of the apical ventrite, which in the males is not elongate and is deeply excavate and broadly emarginate apically, whereas in the females this ventrite is elongately conical, not excavate or emarginate, but broadly rounded apically.

Length: 36.5-47 mm. Breadth: 12-16 mm.

Locality. — India: Shembaganur (1929-30, R. P. Manuel) (1 ♀); Shembaganur (Madura) (1931, R. P. Manuel) (2 ♂, 2 ♀); Shembaganur (2.000 m) (Cooly Roai) (1929-30, R. P. Manuel) (1 ♂).

Prionomma (s. str.) atratum Gmelin, 1789.

Length: 45 mm. Breadth: 15 mm.

Locality. — Ceylon: Negombo (1899, W. Horn) (1 ♂).

Prionomma (Ancyloprotus) javanum Lansberge, 1884.

I have seen a single male of this species which is apparently quite typical except for one character. This is that the sutural apex of the elytra is scarcely at all noticeably spinous as in other specimens, and is almost rounded. It is probable that this is on individual aberration.

Length: 45 mm. Breadth: 14.5 mm.

Locality. — Sumatra: Aloer Poerba (Atjeh) (100 m) (X-1930) (1 ♂).

Osphryon forbesi Gahan, 1894.

(Plate 5, fig. 5, ♀.)

A female in good condition of this species has been examined, and is herein figured for the first time. This shows up important details very well, such as the lateral spines of the pronotum, the two-spined elytral apices, the matt elytra with the more shining rugose sutural band on the anterior half, etc.

Length: 52 mm. Breadth: 14.5 mm.

Locality. — « Afrique » (This locality is undoubtedly false and should be New Guinea).

Psalidognathus (s. str.) friendi Gray, 1832.

Two males have been examined. The Colombian specimen is completely brilliant metallic green, the other specimen is completely metallic moderately dark purple or violet.

Length: 73-83 mm (inc. mandibles). Breadth: 19.5-21 mm.

Locality. — Colombia (Coll. A. Guilliaume); « *sine locus* » (Don V. H. Vandenplas).

Psalidognathus (Prionocalus) cacicus White, 1845.

(Plate 8, fig. 3, ♀; plate 9, ♂.)

A series of seven specimens in excellent condition has been examined, of which six were males of very variable size and showing very distinctly mandibles of *major*, *medius* and *minor* types.

Length: 32-62 mm (♂♂); 58 mm (♀). Breadth: 11-18 mm (♂♂); 19 mm (*at humerus*), 22.5 mm (widest) (♀).

Locality. — S. Ecuador: Loja (2.500-3.000 m). (1-VIII-15-15-X-1905, D. F. CHAUS S.) (6 ♂, 1 ♀).

Derobrachus (Orthosoma) brunneus FORSTER, 1771.

Length: 25-29 mm. Breadth: 6.5-8 mm.

Locality. — U.S.A. : Maine, Eastport (2 ♂).

PRIONINA.

Dorysthenes (Lophosternus) indicus HOPE, 1831.

Length: 40-48 mm. Breadth: 12.5-16 mm.

Locality. — India: Kurseong (R. P. LEBAS) (♂); « *sine locus* » (4 ♂, 1 ♀).

Dorysthenes (Lophosternus) zivetta THOMSON, 1877.

The six female specimens which have been examined appertain, I believe, to this species. They agree in all major details with descriptions of the species, except in one point: *viz.* they have twelve antennal segments, the eleventh being so deeply incised as to form a small twelfth segment.

Their colour is black or very black-brown, except one which is lighter brown (probably due to immaturity).

Length: 34.5-47.5 mm. Breadth: 12-16 mm.

Locality. — India: St. Mary's Forest (5363-6144 ft.) (Kurseong) (R. P. WÉRY) (3 ♀). — Sikkim (III-IV, H. FRUHSTORFER) (1 ♀).

Dorysthenes (Cyrtognathus) paradoxus FALDERMANN, 1833.

A male and two females of this species have been examined.

The male has three distinct longitudinal elytral carinæ which appear to be rather stronger than normal. Its elytra are strongly rugose. Their colour pitch-brown anteriorly, becoming lighter brown towards the apex.

Length: 34.5-40 mm. (excl. mandibles). Breadth: 11-13 mm.

Locality. — China: Shanckow (Honan) (Dr. RENUARD) (1 ♂, 2 ♀).

Prionus (st. str.) coriarius LINNÉ, 1758.

Length: 30-35.5 mm. Breadth: 12-15 mm.

Locality. — « *Sine locus* » (1 ♂, 2 ♀).

Prionus (Neopolyarthron) imbricornis Linné, 1767.

Length: 32.5 mm. Breadth: 12.6 mm.

Locality. — United States of America: Volga (South Dakota) (1 ♂).

Prionus (Prionellus) laticollis Drury, 1773.

Length: 27-41 mm. Breadth: 11-16 mm.

Locality. — United States of America: Eastport (Maine) (1 ♂, 3 ♀); Brooklyn (Prospect Park) (15-VII-23, B. J. Beguaert) (1 ♀).

ANACOLINI.

CANTHAROCNEMIMA.

Cantharocnemis (s. str.) spondyloides Serville, 1832.

One male *major* and one male *minor* have been examined.

Length: 20-29 mm. Breadth: 7.5-9.8 mm.

Locality. — Abyssinia (2 ♂).

Cantharocnemis (Cantharoplatys) schoutedenianus Gilmour, Nom. nov.

= Cantharocnemis schoutedeni Gilmour, 1954? *(in the press).* (nec. Basilewsky, 1950.)

(Plate 6, fig. 6, ♀.)

Two females of this recently described species have been examined from localities lying approximately between the type localities of Lusaka (near Baudouinville) on Lake Tanganyika in the Belgian Congo, and the Kafue region in Northern Rhodesia.

Whilst I have not compared them individually with the types, they nevertheless agree with my description with the exception that the antennæ appear to be slightly less elongate. They are immediately distinguishable from *Cantharocnemis (Cantharocplatys) trageramis* Gilmour, 1954?, however, in having almost completely rugosely punctured elytra and in other characters.

Length: 35-42 mm. Breadth: 12-13.25 mm.

Locality. — Belgian Congo: Lupweshi (Distr. of Lualaba) (XII-36) (1 ♀); Kafakumba (XI-37) (1 ♀).

Cantharocnemis (Cantharoctenus) hincksi

GILMOUR, *(in the press)*.

(Plate 6, figs. 4, 11, ♂♂.)

Two further males of this species which I have recently described have been examined. The species is quite distinct from *C. (C.) insignis* GERSTAECKER, 1871, at first glance, in the elytra not being rugose and the carinæ almost obsolete.

One specimen shows that besides the males *major* and *minor* originally decribed, there is a male *medius*. This has the mandibles characterised as follows: male *medius* : as long as the head, not falciform, not very strongly emarginate apically, with two stout strong internal median teeth on each mandible, strongly and coarsely punctured externally, smooth internally.

In most other characters these two males agree with the types. Their antennæ have 18 (♂ *major*) and 20 (♂ *medius*) segments. In one specimen the posterior lateral pronotal angle is quite acute.

Length: 25-26.5 mm. Breadth: 9.2-9.5 mm.

Locality. — Kenya: Ikuta (2 ♂).

DELOCHEILINA.

Delocheilus prionoides THOMSON, 1860.

(Plate 6, fig. 10, ♂.)

One pair of this South African species has been examined, of which the female is considerably larger than any that I have previously seen or has been recorded. Both male and female are quite typical otherwise.

Length: 31-36 mm. Breadth: 9-10 mm.

Locality. — »« *Sine locus* » (1 ♂, 1 ♂).

ANOPLODERMINI.

HYPOCEPHALINA.

Hypocephalus armatus DESMAREST, 1832.

Length: 53 mm. Breadth: 14.5 mm (elytra-widest).

Locality. — Brazil (1 ♂).

The major portion of the work covered in this paper, viz. the taxonomic detail, was carried out by the writer whilst Curator of the Museum of Natural History, Scarborough, England.

ART GALLERY & MUSEUM, DONCASTER, ENGLAND.

EXPLANATION OF PLATES.

PLATE I.

Figs. 1, 2. — *Macrotoma (Bandar) fisheri* WATERHOUSE, 1884, ♀♀, (Thibet) (× .84).
Figs. 3, 4. — *Agrianome* (s. str.) *spinicollis* M'LEAY, 1827, 3, ♀, 4, ♂ (× .94).
Figs. 5, 6. — *Cnemoplites* (s. str.) *blackburni* LAMEERE, 1903, 5, ♂, 6, ♀ (× .9).
Figs. 7, 8. — *Cnemoplites (Hermerius) howei* THOMSON, 1864, ♂♂ (× .85).
Fig. 9. — *Eurynassa australis* BOISDUVAL, 1835, ♀ (× 1.2).
Fig. 10. — *Paroplites australis* ERICHSON, 1842, ♂ (× 1.2).

PLATE II.

Figs. 1, 2. — *Rhaphipodus* (s. str.) *subopacus* GAHAN, 1890, ♂♂ (× 1.2).
Fig. 3. — *Macrotoma (Tersec) gracilipes* KOLBE, 1894, ♀ (× .87).
Figs. 4, 5. — *Jamwonus subcostatus* HAROLD, 1879, 4, ♂ *medius;* 5, ♂ *major* (× 1.05).
Fig. 6. — *Macrotoma (Navosomopsis) kafakumbæ* sp. nov., ♂, Holotype (× .8).
Fig. 7. — *Jamwonus subcostatus* HAROLD, 1879, ♀ (× 1).
Fig. 8. — *Macrotoma* (s. str.) *serripes* FABRICIUS, 1781, ♂ (× 1).

PLATE III.

Figs. 1 to 3. — *Priotyrranus mordax* WHITE, 1853, 1, ♂ *major;* 2, ♂ *minor;* 3, ♀ (× 1.06).
Figs. 4, 5. — *Callipogon barbatus* FABRICIUS, 1781, 4, ♂ *maximus;* 5, ♀ (Mexico, Vera Cruz) (× 1.04).

PLATE IV.

Figs. 1 to 3. — *Callipogon barbatus* FABRICIUS, 1781, 1, ♂ *medius;* 2, ♂ *minor;* 3, ♀ (Guatemala) (× 1.04).
Fig. 4. — *Xixuthus microcerus* WHITE, 1853, ♀ (× 1).

PLATE V.

Figs. 1 to 3. — *Megopis* (s. str.) *modesta* WHITE, 1853, 1, 2, ♂♂; 3, ♀ (× 1).
Fig. 4. — *Macrotoma (Navosomopsis) lesnei* LAMEERE, 1903, ♀ (× 1).
Fig. 5. — *Osphryon forbesi* GAHAN, 1894, ♀ (× 1).
Fig. 6. — *Megopis (Baralipton) marginalis* FABRICIUS, 1775, ♂ (× 1).
Fig. 7. — *Aulocopus rivalus* sp. nov. ♂, Holotype (× 1).
Figs. 8, 9. — *Aulocopus colmanti* LAMEERE, 1912, 8, ♂; 9 ♀ (× 1).
Figs. 10, 11. — *Pyrodes* (s. str.) *nitidus* FABRICIUS, 1787, 10, ♀; 11, ♂ (× 1).

Fig. 12. — *Pyrodes* (s. str.) *pulcherrimus* PERTY, 1830, ♂ (× 1).
Fig. 13. — *Pyrodes* (s. str.) *pulcherrimus* PERTY, var. *formosus* BATES, 1869, ♀ (× 1).
Fig. 14. — *Pyrodes (Mallaspis) leucaspis* GUÉRIN, 1844, ♂ (× 1).
Fig. 15. — *Pyrodes (Mallaspis) longiceps* WHITE, 1853, ♀ (× 1).
Figs. 16, 17. — *Pyrodes* (s. str.) *angustus* TASCHENBERO, 1870, 16, ♂, 17, ♀ (× 1).

PLATE VI.

Fig. 1. — *Aplagiognathus spinosus* NEWMAN, 1840, ♀ (Mexico) (× 1.3).
Fig. 2. — *Macrotoma (Navosomopsis) abscisa* sp. nov., ♀, Paratype (Africa) (× 1.3).
Fig. 3. — *Notophysis lævis* JORDAN, 1894, ♂ (Belgian Congo) (× 1.3).
Fig. 4. — *Cantharocnemis (Cantharoctenus) hincksi* GILMOUR, 1954 ?, ♂ (Kenya) (× 1.32).
Fig. 5. — *Notophysis lucanoides* SERVILLE, 1832, ♀ (Belgian Congo) (× 1.3).
Fig. 6. — *Cantharocnemis (Cantharoplatys) schoutedenianus* GILMOUR, nom. nov., ♀ (Belgian Congo) (× 1).
Fig. 7. — *Notophysis lucanoides* SERVILLE, 1832, ♂ (Belgian Congo) (1.3).
Fig. 8. — *Notophysis lævis* JORDAN, 1894, ♀ (Belgian Congo) (1.3).
Fig. 9. — *Stenodontes (Nothopleurus) lobigenis* BATES, 1884, ♀ (1.3).
Fig. 10. — *Delocheilus prionoides* THOMSON, 1863, ♂ (× 1.1).
Fig. 11. — *Cantharocnemis (Cantharoctenus) hincksi* GILMOUR, 1954 ?, ♂ (Kenya) (× 1.28).
Fig. 12. — *Macrotoma (Navosomopsis) abscisa* sp. nov., ♂, Holotype (Africa) (× 1.23).

PLATE VII.

Figs. 1 to 4. — *Acanthophorus (Tithoes) maculatus* FABRICIUS, 1792 :
1, subsp. *orientalis* LAMEERE, 1903, (× 1).
2, subsp. *yolofus* DALMAN, 1817, ♂ (× 1).
3, 4, subsp. *congolanus* LAMEERE, 1903, 3, ♂, type; 4, ♀, type (× 1).
Fig. 5. — *Macrodontia flavipennis* CHEVROLAT, 1833, ♂ (× 1).

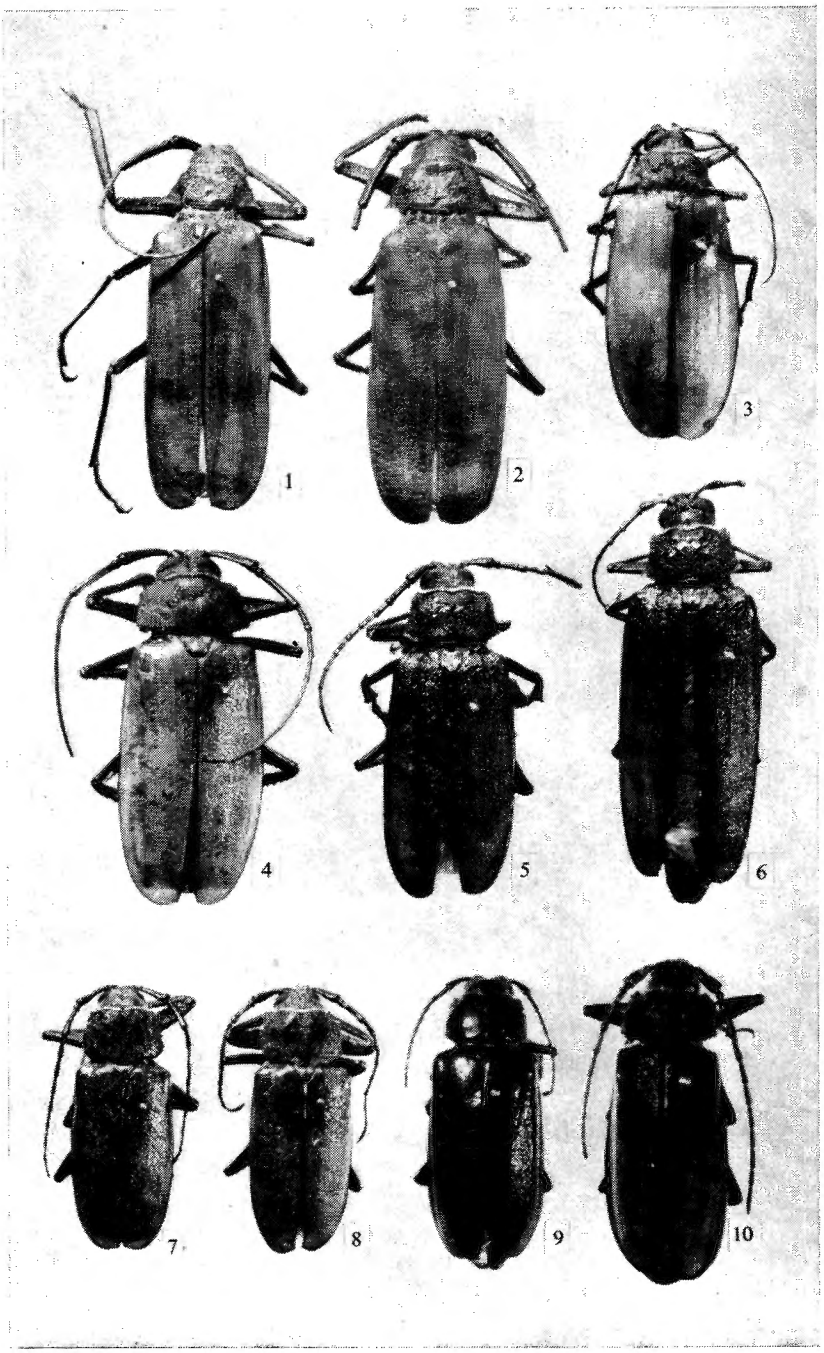
PLATE VIII.

Fig. 1. — *Mecosarthron buphagus* BUQUET, 1840, ♀ (× .88).
Fig. 2. — *Olethrius scabripennis* THOMSON, 1865, ♂ (× 1).
Fig. 3. — *Psalidognathus (Prionocalus) cacicus* WHITE, 1845, ♀ (× 1.24).

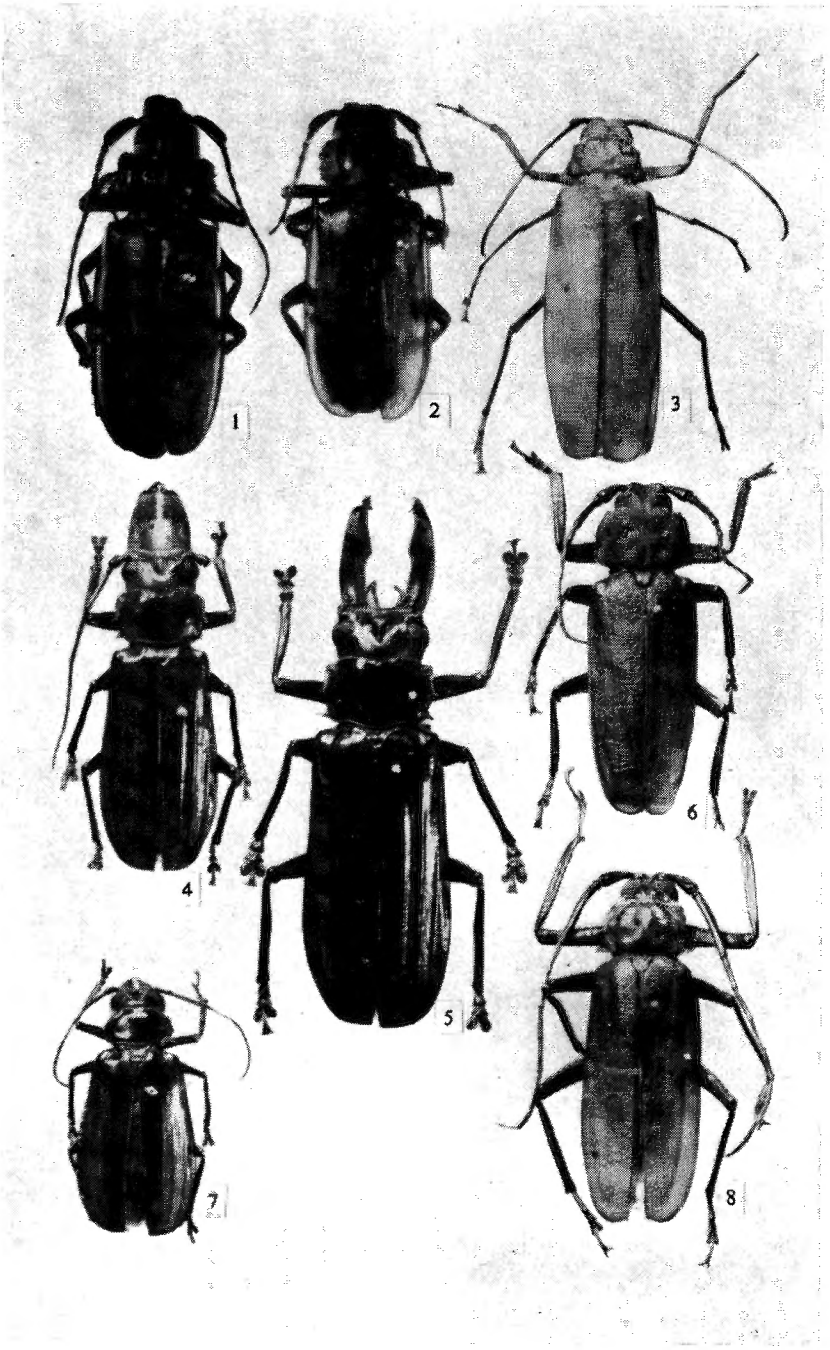
PLATE IX.

Psalidagnathus (Prionocalus) cacicus WHITE, 1845, ♂ (× 1.32).

AD. GOEMAERE, Imprimeur du Roi, 21, rue de la Limite, Bruxelles



E. FORREST GILMOUR. — Notes on a collection of *Prioninæ*.



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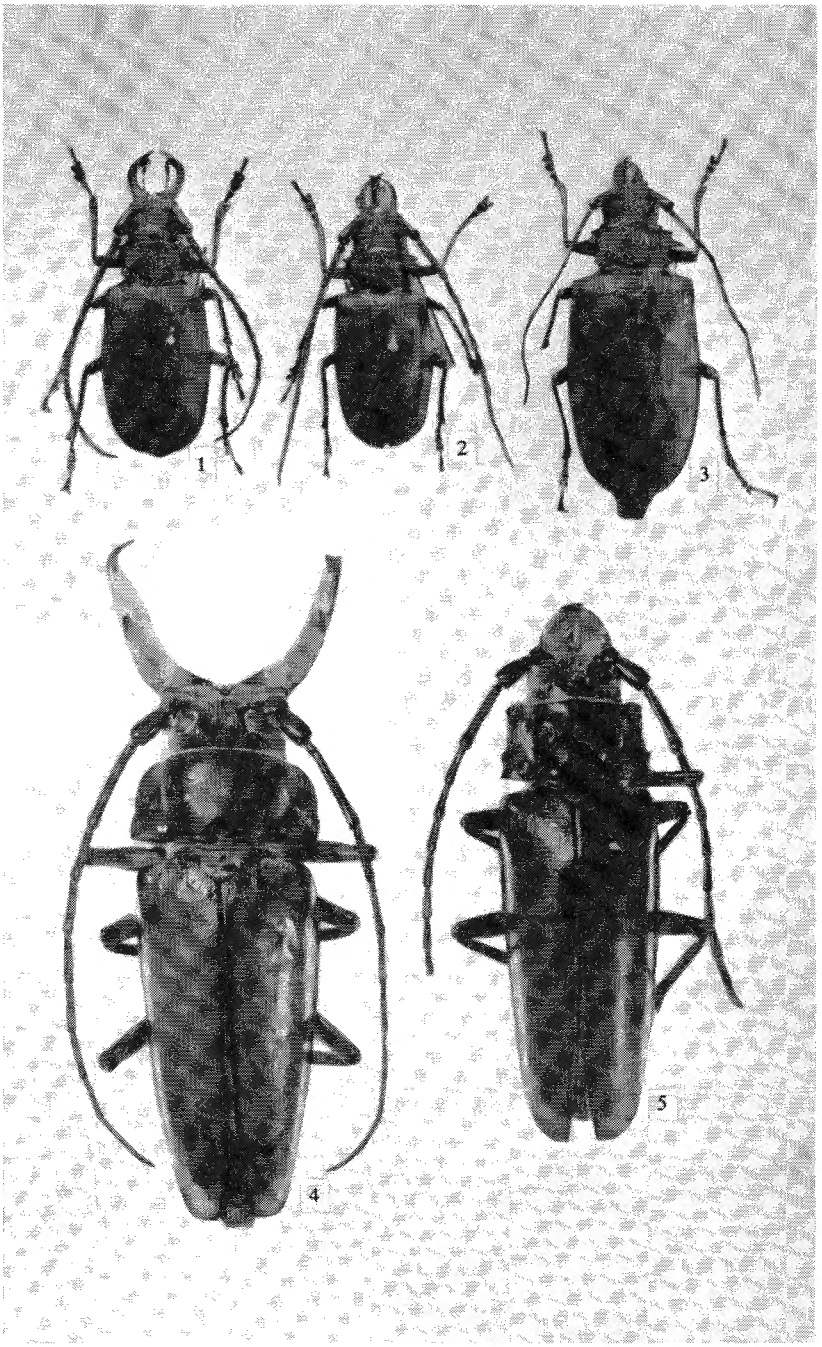

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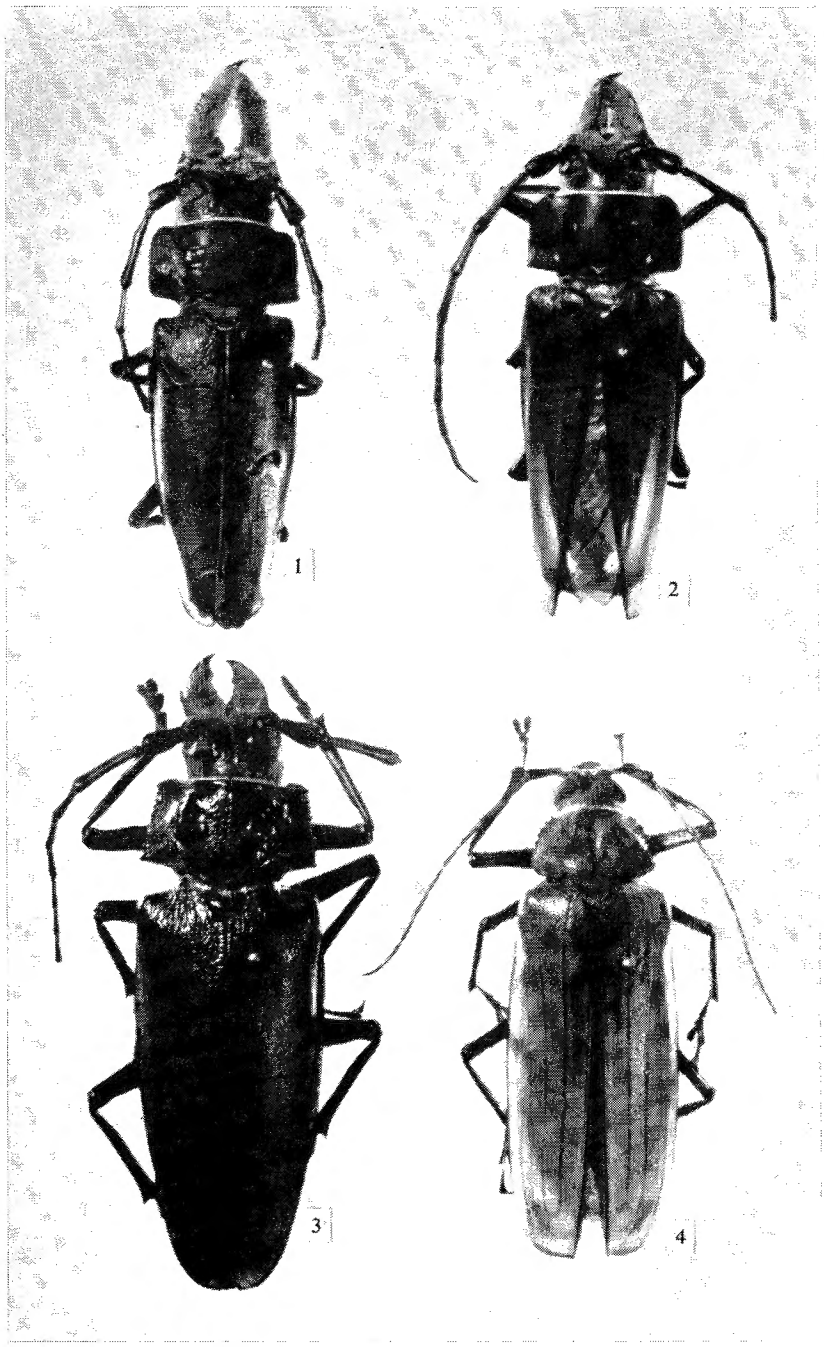

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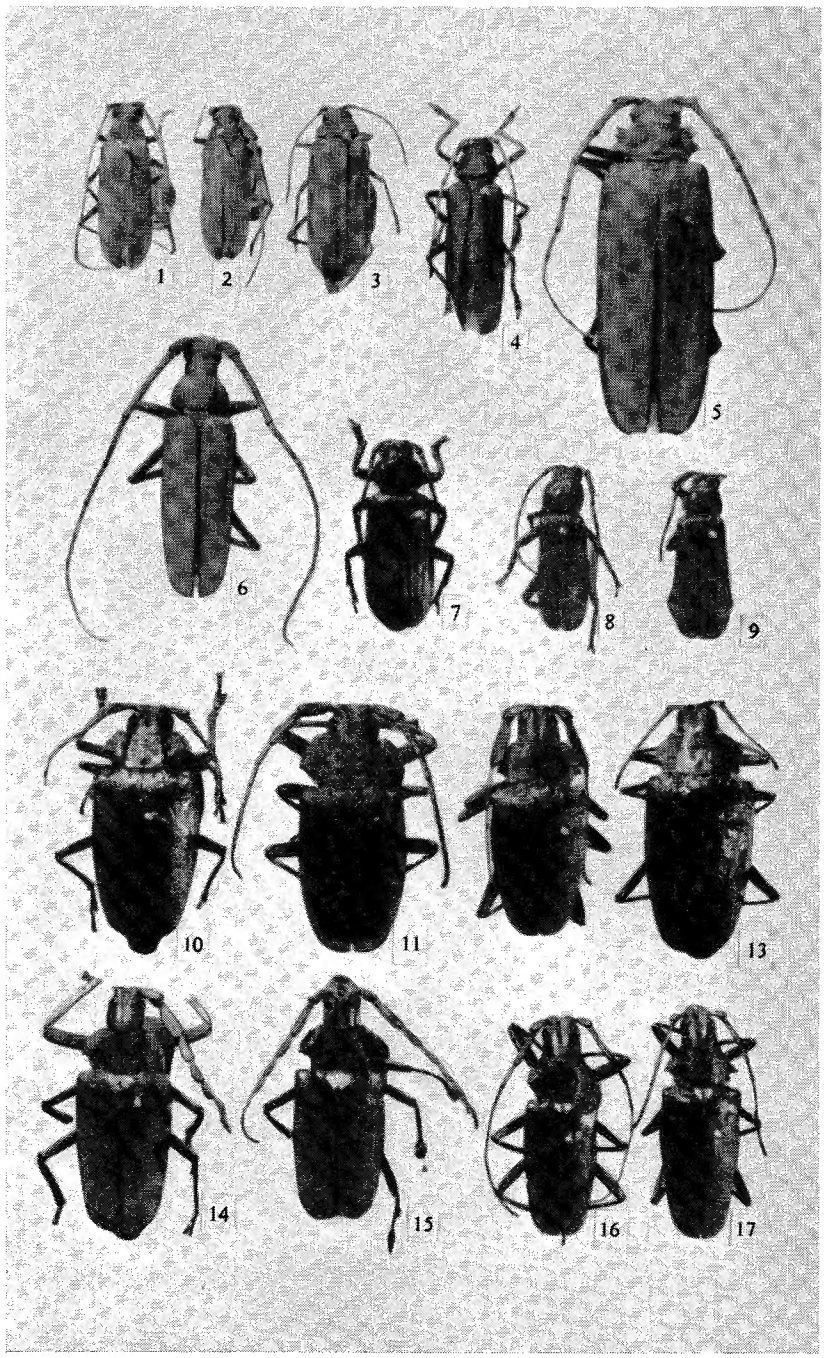

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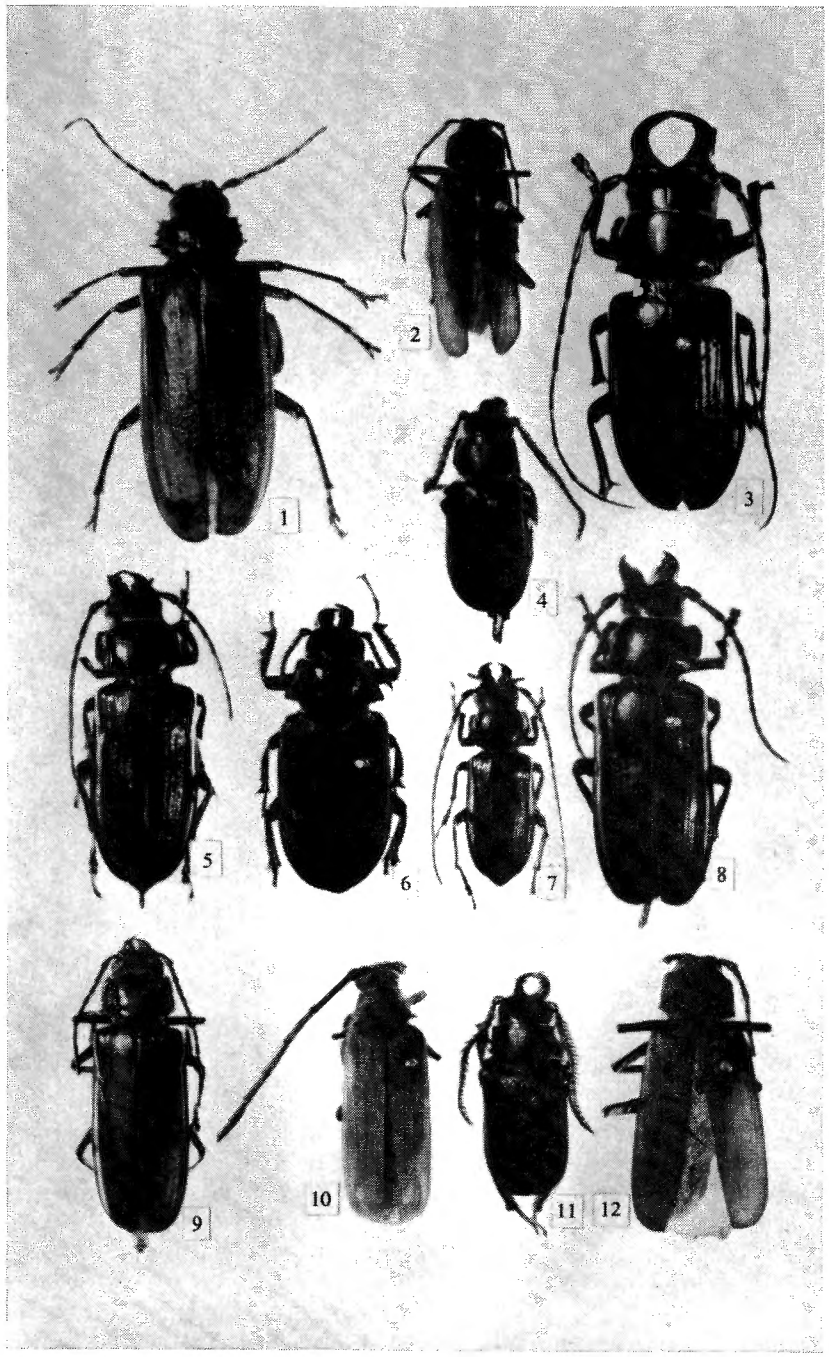

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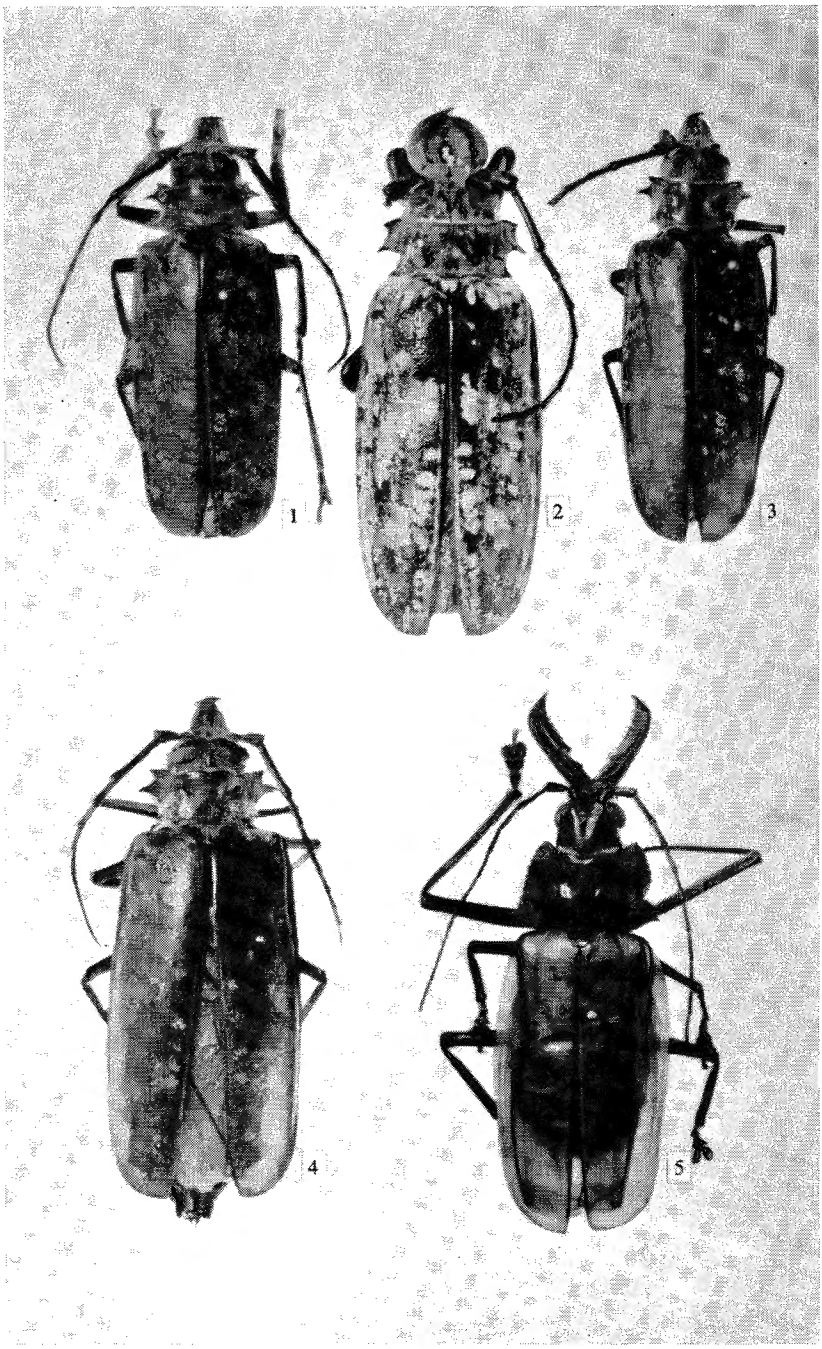

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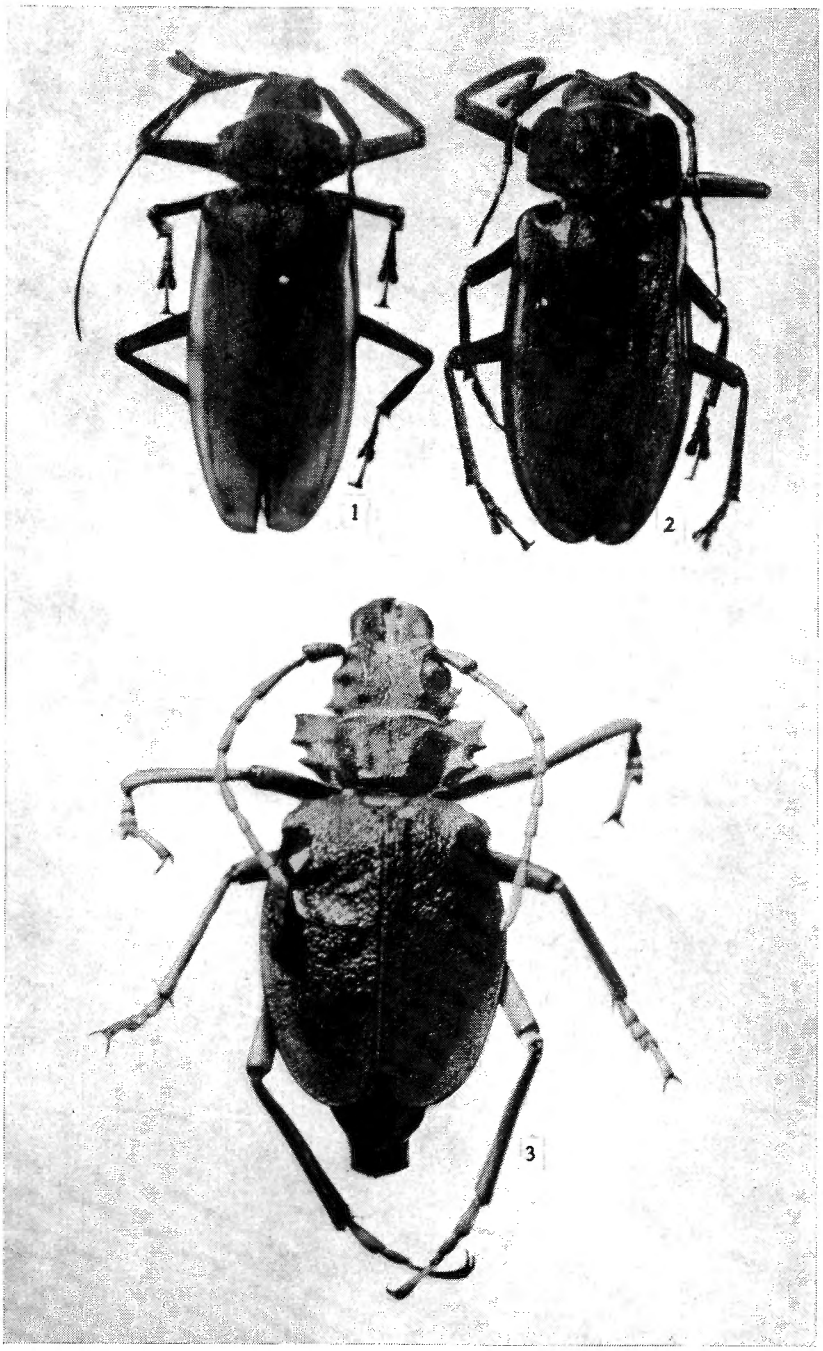

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