TRANSACTIONS

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I. *A Contribution to the Classification of the Coleopterous family* Endomychidae.

By GILBERT J. ARROW, F.Z.S.

[Read November 5th, 1919.]

PLATE I.

THE British Museum collection of this beautiful group of fungus-feeding beetles is a peculiarly rich one, and contains a very large proportion of all the known species, now about 750 in number. The Gorham collection, bought in 1891, contained, in addition to Mr. Gorham's own types, many of those of Gerstaecker and Guérin, whilst many more Gorham types were afterwards acquired with the important Godman-Salvin and Fry collections. In amalgamating these valuable collections very numerous errors contained in the recent catalogue of Cziki (for a large proportion of which Mr. Gorham is responsible) have come under my notice, and in putting on record the notes thus accumulated I have taken the opportunity of describing some of the more interesting of the hitherto unknown genera and species contained in the National Collection, a large part of these due to the successful collecting of Mr. Gilbert Bryant and the late W. Doherty. To the former I am indebted for the accompanying plate drawn by Miss O. F. Tassart.

It is probable, from their generally conspicuous and frequently remarkable coloration, that the group as a whole is

unpalatable in a high degree, like the nearest related family, the Coccinellidae, and that an offensive fluid is exuded by many, as is the case with the largest species, *Eumorphus marginatus*, which Mr. Bryant informs me is remarkable for its extraordinarily strong and offensive odour. I suspect it will be found that the characteristic grooves upon the pronotum are the channels into which this secretion is discharged (as Dr. G. A. K. Marshall has found to be the case in the Histeridae), and that the basal foveae when fully developed conceal the orifices of the secretory glands. These depressions, which form one of the best-marked and most constant features of the group, are more or less funnel-shaped and are always deepest just within the basal margin. At the deepest part the appearance of a pore is sometimes visible under the microscope.

Dr. C. J. Gahan, in his account of the stridulating organs of the Coleoptera, has indicated an important group character of this family in the presence or absence of a stridulatory apparatus between the head and pronotum (Trans. Ent. Soc. Lond., 1900, p. 436). He has mentioned that the existence of the organ distinguishes the Eumorphites, Corynomalites and Lycoperdinites of Chapuis, but various genera of the 3rd division must be excluded from this statement, such as *Dapsa*, *Phalantha*, *Saula*, and *Danae*. This 3rd division, however, is quite an unnatural one, and a more satisfactory arrangement is obtained by adopting Gerstaecker's three Tribes, Eumorphini, Dapsini and Endomychini, and treating the presence of the stridulating organ as the primary distinctive character of the first, instead of the shape of the antennal club, which is a very inconstant and unreliable feature. *Indalmus*, *Ancylopus*, *Lycoperdina*, *Hylaia* (*Ceramis*), *Acinaces*, and *Mycetina*, as well as *Phaeomychus* and other genera of recent date, will then join the Eumorphini. In the more typical genera of that group, with which *Indalmus* and *Ancylopus* should be associated, the 3rd joint of the antenna is much longer than those immediately preceding and succeeding it, whilst in the remainder this great disproportion vanishes. The relative length of these joints is much more reliable than that of the club-joints and serves for the further division of the Eumorphini.

In the ordinary position of the head the microscopically fine stridulatory file, in the genera possessing it, lies beneath the margin of the pronotum and is not visible,

but its presence is invariably indicated by a small membranous lobe placed at the middle of that margin and connected with the scraping edge beneath.

I have followed in the main the order of genera adopted in the most important work upon the family, the admirable monograph by Gerstaecker. The reversed order of Cziki's catalogue has no discoverable advantage.

Four genera introduced into this family by Blackburn may be eliminated altogether, two of them belonging to long-established genera of other families, and the others, although correctly referred to the Endomychidae, being redundant. Of the two former, *Dyscerasphorus laticeps* Blackb., is the cosmopolitan *Coluocera maderae* Woll., and *Eleothreptus punctulatus* Blackb., is a species (the second now known from Australia) of the genus *Aphanocephalus*. *Cranterophorus clavicornis* Blackb., is an *Encymon* exceedingly near the common *E. immaculatus*, but with red femora. Finally *Idiophyes* is a synonym of the genus *Exysma*.

It may be noted here that the Ceylonese "*Lycoperdina*" *glabrata*, of Walker, is a species of the Heteromerous genus *Leiochrodes*.

Genera Haploscelis and Hybopterus.

The name *Cymones* is used in Cziki's catalogue for five Madagascar species which do not include *C. sharpi* Gorh., the insect to which alone the characters assigned to *Cymones* apply and which is a synonym of *Hybopterus plagiicollis* Fairm. *Cymones* is therefore a superfluous name and the five species should be referred to *Haploscelis*, a genus of strangely protean form, distinguished by the prosternum being rather wide between the coxae but not produced beyond them. *Haploscelis helopioides* Gorh., seems to have been based upon two specimens of different species, the female probably belonging to *H. scutatus* Fairm. Fairmaire says of the latter "fémurs antérieurs inermes," evidently meaning the tibiae. These are armed as usual in the male.

There is a peculiar feature in the male of *Hybopterus* which has not been noticed, viz. a delicate hooked filament at the extremity of the hind tibia on the inner side. This is evidently the homologue of the tuft of hairs found in the same position in *Haploscelis atratus* Klug, and other species, and indeed may be composed of long hairs in very close contact.

Genus Trycherus.

Since Gerstaecker's excellent monograph of the Endomychidae, in which five species of *Trycherus* were described, the various additions made have been so inadequately characterised as to introduce ever-increasing confusion which nothing but the comparison of the types can now resolve. The British Museum happily possesses most of these by its acquisition of Mr. Gorham's Endomychidae and those of the great Fry bequest, the former containing types of four of the five species of Gerstaecker and a co-type of *T. longanimis* Thoms. I have therefore been in the fortunate position of having under my eyes the types of all the species of the genus hitherto described, except *T. bifasciatus* Gerst., *raffrayi* Gorh., *josephus* Duv., *elegans* Cziki, and *recticollis* Har. The last species I do not know; *elegans* Cziki, as already noted by Fairmaire, appears to agree in all respects with *longanimis* Thoms., and the other three species I have determined from the descriptions.

There is an excessive external similarity between many of the species of the genus, and the most important distinctive features are the secondary sexual characters. The importance of these was emphasised by Gerstaecker, but all subsequent describers have persistently neglected them.

The distribution of the genus is very interesting. The Catalogue of Cziki, published in 1910, enumerates thirteen species (excluding an Oriental form which certainly belongs elsewhere), all but one (*T. raffrayi*) described from W. Africa. That species also occurs in Angola, as shown by a specimen in the British Museum. One other species (*T. fryanus*) occurs in E. Africa (Rhodesia and Zanzibar), and it is remarkable that that also was described from Angola. Since the allied genera are those of Madagascar and the Malayan region this marked preference for the western side of Africa is striking. Of the thirteen species four have been recently received from Uganda, and no less than seven others are here described from the same region. These may be expected to occur also in W. Africa. Thus, although the species existing are evidently numerous and by no means narrowly localised, the genus seems to have no truly E. African species. The eastern specimens of *T. fryanus* and *T. raffrayi* must be supposed to have straggled there in comparatively recent times. It is certainly curious that in spite of a bold effort to extend eastward, resulting in their

reaching Uganda in such force, the genus should have found there an almost absolute barrier to its further advance. It is also a striking illustration of the fact, confirmed by all my study of Uganda Coleoptera, that the beetle-fauna of that region is almost entirely West African and shows remarkably little connection with that of any other part of Eastern Africa.

All the species of *Trycherus* so far known are included in the following Table—

A. Base of the pronotum not margined.
  B. Elytra elongate.
    C. Extremities of the elytra slightly produced . . . . . *rex*, sp. n.
    c. Extremities of the elytra not produced.
      D. Abdomen tuberculate (♂) or grooved (♀) . . . . . *angolensis* Gorh.
      d. Abdomen without tubercles or groove . . . . . *M-flavus*, sp. n.
  b. Elytra short and ovate.
      E. Extremities of the elytra pale . *ovatus*, sp. n.
      e. „ „ „ dark . *frater*, sp. n.
a. Base of the pronotum margined.
  F. Antennae slender, thoracic margins narrow.
    G. Elytra very convex, short and ovate.
      H. Black, with a pale median bar . *latus*, sp. n.
      h. Pale markings not confined to median bar.
        J. Shoulders dark . . . . . *erotyloides* Gerst.
        j. „ not dark . . . . *bifasciatus* Gerst.
    g. Elytra elongate.
      K. Elytra with pale longitudinal lines.
        L. Pale markings uniting to form a posterior ring . . . . *josephus* Duv.
        l. Pale markings not uniting . . *hydroporoides* Gorh.
      k. Elytra without longitudinal lines.
        M. Elytra with pale apices.
          N. Elytra elongate, not very shining.
            O. Pronotum not pale at the sides . . . . . *appendiculatus* Gerst.
            o. Pronotum pale at the sides.

P. Median bar produced forwards externally . . *longanimis* Thoms.
p. Median bar not produced forwards . . . . *attenuatus*, sp. n.
n. Elytra shining, less elongate.
Q. Small, with bifid apical patch . . . . . *flavipes*, sp. n.
q. Large, with rounded apical patch . . . *nitidus*, sp. n.
m. Elytra with the apices dark.
R. Sides of the pronotum rather straight, elytra shining . *senegalensis* Gerst.
r. Sides of the pronotum not straight, elytra closely punctured.
S. Lower surface dark, with a row of pale spots (♂) *fryanus* Gorh.
s. Lower surface lighter, without pale spots in the ♂ . . . . . *spinipes*, sp. n.
f. Antennae very short, thoracic margins broad.
T. Prothorax broadest at the base . *raffrayi* Gorh.
t. „ not broadest at the base *tricolor* Gerst.

Trycherus rex, sp. n.

Niger, elytrorum apicibus ferrugineis, singulique linea transversa mediana pallide flava, intus et extus retrorsum ducta et saepe cum macula apicali juncta; elongatus, parum nitidus, vix punctatus, pronoto plano, lateribus laevissime bisinuatis, anguste marginatis, angulis posticis acutis, parum productis, basi haud lato, immarginato, utrinque leviter impresso; elytris convexis, postice paulo nitidioribus lateribus anguste marginatis, antice fere parallelis, humeris prominentibus:

♂, clava antennali lata, apice latiori, tibia antica intus leviter, media profunde, ante apicem excisa, hac supra excisionem acute spinosa, tibia postica valde sinuosa, segmento penultimo ventrali postice bituberculato:

♀, segmento ultimo ventrali medio anguste sulcato.

Long. 12–15 mm.; lat. max. 6–7 mm.

Hab. UGANDA: Mabira Forest, Chagwe, 3,500–3,800 ft. (*S. A. Neave*, July), Budongo Forest, Unyoro, 3,400 ft.

(*Neave*, Dec.), Buamba Forest, Semliki Valley, 2,300–2,800 ft. (*Neave*, Nov.).

This large species has a deceptive resemblance to *T. josephus* Duv., which is found in the same localities and of which the pattern is almost the same, although in the new form the recurrent ends of the yellow elytral loop do not always coalesce with the orange apical patch. The best-marked difference is found in the absence of the basal stria of the pronotum, but the elytra are more narrowly margined, parallel-sided and convex, and the antennae in both sexes are broadly truncate at the end, whereas in *T. josephus* they are a little narrowed. The emargination of the front and middle tibiae and the strong spine of the middle tibia, in the male, as well as the median groove upon the last ventral segment of the female are features not found in *T. josephus* and the two tubercles at the posterior margin of the penultimate ventral segment are less widely separated than in that species. In a specimen from S. Nigeria which I regard as the male of *T. angolensis* Gorh., these tubercles are three in number.

Trycherus M-flavus, sp. n.

Niger, tarsis, antennarum extremitatibus segmentoque abdominis ultimo ferrugineis, elytro singulo linea flava ante medium nata et apicem versus utrinque ducta ornato; modice elongatus, postice paulo nitidus, pronoto plano, lateribus anguste marginatis, angulis posticis vix productis, basi haud lato, immarginato, utrinque laevissime impresso; elytris convexis, ovatis, humeris parum prominentibus, apicibus haud productis; clava antennali triangulari, extremitate truncata:

♂, clava antennali paulo latiori, tibiis anticis et intermediis intus anguste excisis, ante et post excisionem minute spinosis.

Long. 12·5 mm.; lat. max. 6 mm.

Hab. UGANDA: Entebbe (*C. C. Gowdey*, Feb., April), Mabira Forest (*Gowdey*, July, Sept.).

Two specimens of each sex have been found.

The species has a very close affinity to *T. angolensis* and *T. rex*, but, in addition to the absence of the reddish apical patch upon the elytra, the male is without tubercles at the hinder margin of the penultimate ventral segment and the female has no longitudinal groove upon the terminal segment. The elytra are rather more rounded at the

shoulders than in the other two species and their apices are not produced as in *T. rex*. The club of the antenna is triangular in shape, as in the latter, but much less dilated in the male, and the excision of the front and middle tibiae in the same sex is also different.

Trycherus ovatus, sp. n.

Niger, elytrorum apicibus, abdomine, tarsis antennarumque articulo ultimo ferrugineis, elytrorum fascia mediana transversa pallide flava undulata, ad suturam late interrupta, intus et extus breviter retrorsum ducta; sat brevis, parum nitidus, subtiliter punctatus, pronoto plano, lateribus leviter bisinuatis, anguste marginatis, angulis posticis parum productis, acutis, basi haud lato, immarginato, utrinque leviter impresso; elytris convexis, ovatis, humeris parum prominentibus, lateribus anguste marginatis; clava antennali anguste triangulari, truncata:

♂, clava antennali paulo latiori, tibiis anticis et mediis ante apicem excisis, his supra excisionem acute spinosis.

♀, segmento ventrali ultimo apice minute bifido.

Long. 10–11 mm.; lat. max. 6 mm.

Hab. UGANDA: Mabira Forest, Chagwe, 3,500–3,800 ft. (*S. A. Neave, C. C. Gowdey*, July).

It is rather short in form, with the elytra broadly oval and very convex, without prominent shoulders, their apices entirely reddish and a rather narrow zigzag yellow bar crossing each just before the middle. The pronotum is without a basal stria.

The front and middle tibiae of the male are excised before the extremity, the latter more deeply than the former, and the emargination is succeeded by a minute tooth, and in the middle tibia preceded by a strong tooth.

In the female the extremity of the last ventral segment is narrowly notched to a depth of about a quarter of the length.

Trycherus frater, sp. n.

Niger, elytrorum fascia mediana transversa pallide flava aliaque anteapicali antice bilobata, abdomine, tarsis et antennarum articulo ultimo ferrugineis; sat brevis, parum nitidus, subtiliter punctatus, antennarum clava utriusque sexus angustissima, apice truncato: *T. ovato* valde affinis, sed elytrorum apicibus fuscis et feminae segmento ultimo ventrali profundius bifido.

Long. 10–11 mm.; lat. max. 6 mm.

Hab. UGANDA: Buamba Forest, Semliki Valley, 2,300–2,800 ft. (*S. A. Neave*, Nov.), Budongo Forest, Unyoro, 3,400 ft. (*Neave*, Dec.), Mabira Forest, Chagwe, 3,500–3,800 ft. (*Neave*, July).

This species entirely resembles *T. ovatus*, but the extremities of the elytra are dark instead of pale and contain a small bilobed reddish spot. The club of the antenna is very narrow and not perceptibly broader in the male than in the female, and the latter has a notch at the apex of the abdomen extending to about the middle of the last segment.

Trycherus latus, sp. n.

Niger, elytrorum ante medium fascia pallide flava undulata, ad suturam late interrupta, abdomine, tarsis antennarumque articulo ultimo ferrugineis; breviter ovatus, convexus, nitidus, distincte punctatus; pronoti lateribus anguste marginatis, basi subtiliter marginato, utrinque leviter impresso; elytris brevibus, lateribus fortiter arcuatis, post humeros sat late marginatis, his prominentibus; antennis gracilibus, clava angusta:

♀, segmento ultimo ventrali integro.

Long. 7–8 mm.; lat. max. 4–4·5 mm.

Hab. UGANDA: Semliki Valley, Buamba Forest, 2,300–2,800 ft. (*S. A. Neave*, Nov.).

I have seen only two female specimens.

It is a shining black species, with a transverse pale yellow zigzag bar crossing each elytron before the middle, and the abdomen, tarsi and last joint of the antennae reddish. It is easily recognisable by its broadly oval and convex elytra, much wider than the pronotum, with prominent shoulders and wide reflexed external margins, which are widest just behind the shoulders. The pronotum is broadest at the base, where the angles are slightly produced. Its lateral margins are narrow and the base has a fine and rather inconspicuous marginal stria.

This is the only known species of the genus in which the pattern consists of a single transverse bar only.

Trycherus attenuatus, sp. n.

Niger, corpore subtus, pronoti lateribus, elytrorumque apicibus rufis, fascia posthumerali undulata ad suturam interrupta maculaque utrinque anteapicali flavis; angustus, parum nitidus, subtiliter punctatus; pronoto parvo, lateribus fere parallelis, anguste margin-

atis, angulis anticis acutis, posticis rectis, basi marginato; elytris longe ovatis, distincte marginatis, humeris prominentibus:

♂, clava antennali dilatata, tibiis 4 posterioribus apice incurvatis, abdominis segmento ventrali primo medio tuberculato, quarto tuberculis duobus haud approximatis postice armato.

Long. 11 mm.; lat. max. 5·5 mm.

Hab. UGANDA: Entebbe (*C. C. Gowdey*, Oct.), Masaka (*Gowdey*, NOV.); ANGOLA (*Dr. Welwitsch*).

This has the closest resemblance to *T. longanimis* and *appendiculatus*, the pale markings being almost identical, except that the antemedian bar is less distinctly produced forwards externally. As in *T. longanimis*, the sides of the pronotum are red. The pronotum is relatively small, with its sides parallel, the front angles sharp and the hind angles right angles, and the base strongly margined. The elytra are not very convex nor very shining, the shoulders are prominent and the lateral margins a little wider than in *T. appendiculatus*. The male has a rather broad club to the antenna, the first ventral segment has a small but sharp tubercle at the middle of its hind margin and the fourth is impressed in the middle and bears two rather widely separated tubercles at the hinder edge.

Trycherus flavipes, sp. n.

Niger, sat nitidus, pronoto, antennarum articulo ultimo, tarsis corporeque subtus laete fulvis, elytrorum fascia posthumerali undulata, ad suturam interrupta, maculaque apicali antice bifida pallide flavis; modice elongatus, pronoto subtiliter punctato, lateribus fere parallelis, anguste marginatis, postice paulo contractis, angulis anticis prominentibus, posticis vix acuminatis, basi marginato; elytris modice convexis, distincte et crebre punctatis, humeris prominentibus:

♂, tibia intermedia apice paulo uncinata, segmento ventrali ultimo haud elongato:

♀, segmento ventrali ultimo elongato, longitudinaliter canaliculato, penultimo late impresso.

Long. 7–8 mm.; lat. max. 4 mm.

Hab. S. NIGERIA: Agege.

Several specimens were bred by the late Mr. C. O. Farquharson, in October 1917, from larvae found feeding upon a peculiar filmy lichen on trees inhabited by ants of the genus *Cremastogaster*.

The species is a rather small one, closely resembling *T. erotyloides* Gerst., but smaller, with less ovate and convex elytra. The prothorax, the last joint of the antenna and the tarsi are bright yellow, the median bar and apices of the elytra paler, and the apical patch distinctly bilobed anteriorly.

The male has the middle tibiae slightly incurved at the ends and the last ventral segment rounded behind. In the female the tibiae are nearly straight, the last ventral segment is elongate and rather deeply grooved, and the one preceding it is broadly impressed.

The larva is flattened, with very long hairy processes fringing the body all round and with rather long antennae.

Trycherus nitidus, sp. n.

Niger, elytrorum apicibus laete rufis fasciaque antemediana undulata, ad suturam interrupta, pallide flava; modice elongatus, nitidus, subtiliter sat crebre punctatus, pronoti lateribus bisinuatis, anguste marginatis, angulis posticis acutis, paulo productis, basi leviter marginato, utrinque minute foveato; elytris paulo convexis, elongatis, humeris prominentibus, lateribus leviter arcuatis, haud late marginatis, apicibus haud productis; antennis gracilibus, clava angusta:

♂, tibia antica ante apicem intus paulo dentata.

Long. 10·5 mm.; lat. max. 5·5 mm.

Hab. UGANDA: Entebbe (*C. C. Gowdey*, April), Damba I., Victoria Nyanza (*G. D. H. Carpenter*, Oct.); GOLD COAST: Tamsoo, near Tarkwa (*G. A. Higlett*).

There are four specimens in the Museum.

The elytra are a little more convex and shining than those of *T. appendiculatus* and *T. attenuatus*, which this species closely resembles in pattern, and their apices are of a uniform bright yellow colour, with the anterior edge of the patch rounded and not excised as in the species mentioned. The anterior pale mark is exactly as in *T. attenuatus*.

In this species the sexual difference seems to be reduced to its minimum in the genus. The usually well-marked external male characters are absent, and that sex can only be recognised, without dissection, by a very slight tooth towards the end of the front tibia at its inner edge. The thick clothing of hair at that part increases the difficulty of detecting this tooth.

Trycherus spinipes, sp. n.

Niger, pronoto plerumque rufescenti, corporeque subtus, epipleuris, tarsis, antennarum apicibus et elytrorum fasciis duabus transversis undulatis rufis; oblongo-ovatus, parum convexus, supra sat fortiter et crebre punctatus, pronoti lateribus bisinuatis, anguste marginatis, angulis posticis acutis, basi fortiter marginato, utrinque fovea profunda impresso; elytrorum lateribus arcuatis, distincte marginatis, humeris modice prominentibus; antennarum clava utriusque sexus angusta, truncata:

♂, tibia intermedia intus post medium spina valida armata.

Long. 9–10 mm.; lat. max. 5 mm.

Hab. W. Africa: Assini, Lagos (*A. B. S. Powell*, March), Old Calabar (*Andrew Murray*), Bibianaha (*Dr. Spurrell*), Sherbro I.

This is almost identical in appearance with *T. fryanus* Gorh., an East African species of rather wide distribution. It is a little more strongly punctured above, the shoulders are rather less rounded, and the lower surface, with the epipleurae of the elytra, paler in colour. The male is easily distinguished by the absence of the three pale membranous areas at the hind margins of the 2nd, 3rd and 4th ventral segments, and by the very strong spine at the inner edge of the middle tibia.

Brachytrycherus, gen. nov.

Corpus breve, rotundatum. Prosternum modice latum, postice paulo productum, rotundatum. Mesosternum late transversum. Metasternum antice valde marginatum. Pronotum membrana stridulatoria antice instructum, lateribus late explanatum, basi marginatum. Elytra breves, anguste marginati, humeris rotundatis. Pedes graciles, femoribus haud valde clavatis. Antennae parum elongatae, articulo tertio quam secundo duplo longiori, clava angusta, laxe articulata. Palporum labialium articulus ultimus transversus, securiformis, maxillarium fusiformis. Mandibulae apice fissae.

Type, *B. perotteti*, sp. n.

This new genus is necessary for a nondescript Indian insect remarkable amongst the Eumorphini for its short rotund form. It is in some respects a link between the Oriental genera and the Ethiopian *Trycherus* and *Haploscelis*, but its very short, compact shape, and especially the

great breadth of the mesosternum, distinguish it from them all. The prosternum is moderately wide and a little produced behind, where it is very slightly dilated and forms a rounded knob, bearing two small tubercles where it meets the narrowed anterior part of the mesosternum. The latter is very short and broad and the metasternum is margined in front by a deep groove.

I have found no secondary sexual characters in the three specimens known to me. These specimens belong to two species, and one is a badly damaged individual from Guérin's collection, whose name (*perotteti*) I have adopted. This name occurs at the end of the table of genera on p. 581 of the Rev. et Mag. de Zool., in association with that of (*Eucteanus*) *hardwickii* Hope, although the species bears neither resemblance nor relationship to that insect. In describing *Amphisternus verrucosus* and *rudepunctatus*, Gorham has remarked that those species belong to a section of *Amphisternus* "which I believe forms the genus *Haplomorphus* Guérin." That name was clearly intended for a large part of the genus *Eumorphus* as at present constituted, and Gorham's remark is meaningless. I have not seen the former species, but *rudepunctatus* may be regarded as a rather aberrant member of the new genus *Brachytrycherus*. It is possible that instead of *Haplomorphus* Gorham intended to write *Homalosternus*, the genus to which Guérin tentatively and quite erroneously referred his (undescribed) specimen of *B. perotteti*, which was formerly in Gorham's collection with that name in Guérin's handwriting.

Brachytrycherus perotteti, sp. n.

Niger, nitidus, utroque elytro plagis duabus rubris undulatis transverse notato; late ovatus, convexus, pronoto irregulariter sat fortiter punctato, medio convexo, lateribus late explanatis, anguste marginatis, marginibus antice valde arcuatis, angulis prominentibus, postice fere parallelis, rectis, angulis paulo productis, acutis, basi stria profunda marginato, foveis basalibus profundis, cum angulis posticis connexis; elytris undique punctatis, lateribus fortiter arcuatis, anguste marginatis; antennis parum gracilibus, articulo tertio quam quarto dimidio longiori, tribus ultimis laxe articulatis, angustis.

Long. 6–7 mm.; lat. max. 4–4·5 mm.

Hab. S. India: Nilgiri Hills (*Perottet, A. K. Weld Downing*).

Smooth and shining above, the elytra each ornamented with two deep blood-red marks of very irregular shape, the first behind the shoulder and remote from the suture, the second before the apex, approaching both the inner and outer margins and having its widest part parallel to the suture. The convex median part of the pronotum has a well-marked longitudinal groove posteriorly and the hind angles are acutely produced, the apices fitting, in the position of rest, into minute sockets in the shoulders of the elytra.

Brachytrycherus madurensis, sp. n.

Niger, vix nitidus, elytris nigroaeneis, utroque fascia posthumerali angusta undulata, intus ad basin producta, aliaque postmediana pluriangulata, rubris signato; late ovatus, convexus, supra undique sat crebre et fortiter punctatus; pronoto lato, plano, medio leviter convexo, marginibus antice valde arcuatis, angulis prominentibus, obtusis, postice rectis, fere parallelis, angulis vix productis, fere rectis.

Long. 7 mm.; lat. max. 4·5 mm.

Hab. S. India: Madura, Shembaganur.

A single specimen received from the late M. Antoine Grouvelle, has been presented by Mr. H. E. Andrewes to the British Museum.

This species closely resembles *B. perotteti*, but is less smooth and shining, on account of the strong and rather close puncturation of the upper surface. The pronotum is less convex in the middle, the longitudinal groove upon its posterior part is inconspicuous, and the hind angles are scarcely produced or acute. The elytra have a very faint coppery tinge and the red markings are narrow and zigzagged, the anterior one produced forwards close to the suture as a loop which almost touches the basal margin, the posterior one approaching but not reaching the inner and outer margins.

Genus Amphisternus.

Gorham mentions nothing by which his *Amphisternus papulatus* can be distinguished from *A. bellicosus* Gerst., also from Sumatra, which he appears to have overlooked. I believe this to be a wide-ranging species with many local races.

The following is an exceedingly well-marked species.

Amphisternus phyllocerus, sp. n.

Niger, nitidus, elytris purpureis, singulo maculis duabus magnis transversis elevatis pallide flavis ornato; modice elongatus, postice haud attenuatus, pronoto transverso, quam elytris multo angustiori, angulis anticis productis incrassatis, posticis rectangulis, lateribus fere rectis et parallelis, dorso medio profunde biimpresso; elytris leviter punctatis, plagis duabus pallide flavis elevatis laevibus, humeris modice prominentibus, lateribus paulo deplanatis, fere parallelis; antennis tenuissimis, clava latissima, femoribus valde clavatis:

♂, tibiis anticis usque ad medium fere rectis, deinde arcuatis.

Long. 7·5 mm.; lat. max. 4·5 mm.

Hab. ASSAM: Patkai Hills (*W. Doherty*).

I have seen only a single male specimen.

This is an entirely peculiar species, resembling *Eucteanus marseuli* more than any known *Amphisternus*, of which genus it is nevertheless only a curiously modified representative. The antennae are very slender, with a very broad and flat club, of which the first joint is almost an equilateral triangle and the other two conjointly about as broad as long. The pronotum is as usual rather small, with very prominent but blunt front angles. The elytra are almost parallel-sided and not long, with a transversely oval pale yellow patch behind the shoulders, forming an abrupt rounded swelling, and another similar one before the apex. The legs are slender, the tibiae clothed with short golden hairs, and the front tibiae of the male regularly curved in the anterior half.

Genus ENGONIUS.

Engonius tetrasphaera, sp. n.

Niger, elytris plerumque coeruleo-nigris, singulo bimaculato, maculis magnis, rotundatis; convexus, parum elongatus, pronoto valde transverso, ante medium paulo dilatato, angulis anticis productis, posticis acutis; elytris cordiformibus, sat fortiter punctatis, lateribus valde arcuatis, ante medium sat latis:

♂, tibiis 4 anterioribus intus similiter acute spinosis, abdominis apice subtus excavato.

Long. 7 mm.; lat. max. 4 mm.

Hab. BORNEO: Sandakan (*C. F. Baker*), Pengaron

(*Doherty*), Banjermassin; MALAY PENINSULA: Perak (*Doherty*).

The British Museum contains two specimens of each sex, all of them found in different localities.

The species is nearly allied to *E. klugi* Gerst., and is found in the same localities. It is smaller, shorter and more convex. The pronotum is more transverse, broader before the middle, with more prominent front angles, and the elytra are more cordiform, *i. e.* they are shorter, relatively broader before the middle and more rapidly narrowed behind. The coloration is similar but the four elytral spots are almost exactly round in outline and of equal size.

The male has an acute spine on each of the four anterior tibiae, all equally developed, whereas in *E. klugi* that of the fore-leg is much stronger than that of the middle one. The apex of the abdomen is hollowed beneath and not broadly emarginate as in *E. klugi*.

Genus EUMORPHUS.

All the known species of this genus, except *E. insignis* and *opalinus* of Gorham and *E. quadripustulatus* Friv., are represented in the Museum. It is essentially Malayan, the limits of its range being apparently Celebes and Assam, and the occurrence of *E. pulchripes* in Ceylon is a remarkable fact not at present to be explained. Many more Malayan forms might be described.

With the single exception of *E. bipunctatus* Perty, every known species of this large genus is decorated with four yellow spots upon the elytra.

The type of *Pedanus laevis* Gorh., is a small specimen of the very common *E.* 4-*guttatus* Illig.

E. 4-*verrucosus* Guér., according to the type in the British Museum, is *E. coloratus* Gerst., and not *E. carinatus* as stated in Cziki's recent catalogue.

E. dehaani Guér., is not synonymous with *E. tetraspilotus* Hope.

E. assamensis Gerst., appears to be a variety of *E. subguttatus* with larger spots.

E. sanguinipes Guér. The original type of this, now in the British Museum, was re-described in error by Gorham, who supposed it to have come from Java, a mis-reading of "Tan" in Hope's writing on the label, which is actually an abbreviation of "Tanasserim." The specimens from

Burma which Gorham attributed to *E. murrayi* no doubt belong to *E. sanguinipes*. His type of the former is a more slenderly-built insect, with clavate femora and distinctly curved hind tibiae in the male. There is no reason to doubt its Philippine origin. Another form described by Gorham with an unknown habitat, *E. expatriatus*, is also from the Philippine Is., and is merely the female of *E. thomsoni* Guér., a much less smooth and shining species than *E. cyanescens* Gerst., of which it stands as a synonym in Cziki's catalogue, while *E. thomsoni* Gorh., although described from the same specimen, is treated as a different species.

The following is yet another Philippine species.

Eumorphus productus, sp. n.

Coeruleo-niger, nitidus, singulo elytro maculis duabus pallide flavis fere rotundis ornato: anguste ovalis, elytris prope scutellum minute tuberculatis, extus late marginatis, margine postice latissimo, apicibus divergentibus, rotundatis:

♂, tibia antica intus medio valde spinoso, posterioribus 4 intus subtiliter ciliatis, media leviter arcuata.

Long. 15 mm.; lat. max. 8 mm.

Hab. PHILIPPINE IS.

Two male specimens were taken by H. Cuming.

This is closely related to *E. cyanescens*, of which it has the size, pattern and glossy surface. The anterior elytral spot is a little farther from the shoulder and the lateral flange of the elytron, although of the same width at the side, is considerably more produced behind, with the extremities rounded and divergent. There is a tubercle at the base of each elytron near the scutellum, in place of the carina which in *E. cyanescens* runs parallel to the suture for about a quarter of the length of the latter. The posterior angles of the pronotum are also a little more produced and curved.

Eumorphus felix, sp. n.

Niger, elytris nigro-violaceis, singulo maculis magnis duabus flavis subrotundatis ornato, macula antica paulo pone humerem posita; elytris ovatis, margine externa antice modice, postice valde dilatata; antennarum clava lata:

♂, dorso nitido, prothoracis angulis posticis extus valde productis et acuminatis, elytris convexis; tibia antica intus medio dente valido fere erecto armata, intermedia valde arcuata, postica arcuata et intus dense ciliata:

♀, dorso opaco, prothoracis angulis posticis vix productis, elytris haud convexis, costa discoidali, alia basali brevi margineque suturali elevatis.

Long. 15 mm.; lat. max. 9 mm.

Hab. BRIT. N. BORNEO: Kina Balu (*Whitehead*), Kiou (*R. Hanitsch*).

The Museum possesses one specimen of each sex.

This is closely related to *E. quadrinotatus* Gerst. and *E. insignis* Gorh., but differs from both in having the anterior yellow patch of the elytron placed at a distance from the front margin and not including the humeral callus. The flattened margins are a little less wide in the anterior part than in the former, the hind angles of the thorax are much more produced and acute in the male, and the front tibia in that sex has the tooth stouter, placed nearer the middle and less oblique. The club of the antenna is rather shorter and broader in both sexes.

In the female the short discoidal carina at the base of each elytron is very distinctive.

Eumorphus macrospilotus, sp. n.

Niger, nitidus, elytris nigroviolaceis, singulo maculis duabus magnis flavis approximatis ornato; regulariter sat longe ovalis, prothoracis angulis posticis ad elytrorum humeros exacte coadaptatis, acuminatis, foveis basalibus brevissimis et vagis; elytrorum marginibus externis deplanatis sed haud latis, dorso leviter convexo:

♂, tibia antica intus dente valido medio posito, extus lamina curvata armata, tibiis intermediis et posticis regulariter arcuatis, prothoracis angulis posticis longe productis et curvatis.

Long. 11·5 mm.; lat. max. 6 mm.

Hab. BRIT. N. BORNEO: Kina Balu (*Whitehead*), Kiou (*R. Hanitsch*).

There are four specimens, all males, in the British Museum collection and a female in the Cambridge University Museum.

It is a species related to *E. guerini* and *E. fryanus*, but of a rather narrow and regularly oval shape, with the

elytral margins well-marked but not wide and the curvature of the sides of the prothorax and elytra continuous. The yellow dorsal patches are very large, as in *E. felix*, the anterior and posterior ones separated by an interval less than the diameter of either, and also less than the interval separating the former from the basal margin. The front tibia of the male has a carina upon its outer edge, as in *E. fryanus* (but rather less angulated than in that species), and the internal tooth is very strong and arises in the middle. The curvature of the middle and hind tibiae in the same sex is regular and not abrupt. The posterior angles of the prothorax are acute in both sexes and very long in the male, and the extremities of the elytra are produced in the female.

Eumorphus festivus, sp. n.

Niger, nitidus, elytris nigroviolaceis, singulo maculis magnis duabus ornato, maculis subrotundatis flavis, antica paulo pone humerem posita; ovalis, elytrorum dimidio externo opaco, margine sat late explanato, postice haud producto:

♂, prothoracis angulis posticis extus valde productis et curvatis, tibia antica extus medio valde angulata, intus fortiter spinosa, intermedia post medium geniculata, postica arcuata et intus dense ciliata, segmento ventrali ultimo postice exciso, medio minute dentato.

Long. 12–13 mm.; lat. max. 7–8 mm.

Hab. Borneo: Sarawak (*R. Shelford*).

This is another species closely related to, and intermediate between, *E. fryanus* and *E. macrospilotus*. It is of the same size as the former, and has the margins of the elytra similarly dilated in the corresponding sex. The elytra are a little shorter relatively, with their margins not wider at the tips than at the sides. The yellow spots are a little larger than those of *E. fryanus*, and larger absolutely than those of *E. macrospilotus*, but the latter being a rather smaller insect, the intervals between them are greater. The anterior spots are also placed nearer the base than in the latter insect. The hind angles of the prothorax and the tibiae of the male are as in *E. fryanus*, but the last dorsal segment in that sex is less conspicuously bifid at the extremity.

Eumorphus helaeus, sp. n.

Brunneo-niger, nitidus, singulo elytro bimaculato, maculis sat parvis, flavis, rotundatis, anteriori ad humeros haud attingenti; prothorace lato, lateribus valde bisinuatis, angulis posticis acutis; elytris convexis, laevibus, haud costatis aut perspicue punctatis, marginibus latissimis, apicibus acutis, haud productis; tibiis 4 posterioribus arcuatis:

♂, prothorace basi latissimo, angulis posticis acute productis et curvatis; elytris conjunctim circularibus; tibia antica ante apicem fortiter spinosa et emarginata, posterioribus 4 valde arcuatis et intus dense hirsutis.

Long. 16 mm.; lat. max. 11·5 mm.

Hab. SUMATRA: Merang (*Doherty*).

This very distinct species is related to *E. turritus* Gerst., to which it is similar in size and coloration, but the ground-colour is rather darker and scarcely at all metallic. The elytral margins are even wider than in that species and a little more curved upwards, the discoidal part is regularly convex, without median elevation or lateral costae, and the yellow spots are less raised. In the male the tibiae are stouter and their inner edge (in the front tibiae as well as the rest) is closely fringed with rather long hairs. The spine upon the front tibia is stout, clothed with hair, placed nearer the extremity than in *E. turritus*, and followed by a deep abrupt excision.

Two males and three females were taken by Doherty.

Eumorphus fraternus, sp. n.

E. helaeo valde affinis sed paulo magis attenuatus, elytrorum marginibus postice productis, apicibus acuminatis, contiguis:

♂, elytris conjunctim ovalibus, lateraliter paulo minus latis, tibiis omnibus ciliatis, antica torta atque fortiter spinosa.

Long. 13–14·5 mm.; lat. max. 7–9 mm.

Hab. MALAY PENINSULA: Perak (*Doherty*).

Six specimens were contained, like those of the three preceding species, in the Fry Collection.

E. fraternus closely resembles *E. helaeus*, but the elytral margin is a little narrower at the side and a little wider at the apex, with the extreme angles acutely produced and convergent. The front tibia of the male is a little less pubescent at the inner edge and the apical excision

rather less narrow and deep. There is also a close affinity with *E. politus* Gerst., but *E. fraternus* is a larger species with wider margins to the elytra, of which the apical angles are very sharp and convergent. The hind angles of the prothorax are less produced in the male, the front tibiae are not deeply grooved externally, as in that species, and the last ventral segment is not acutely notched in the middle.

Genus Stictomela.

This genus seems to be peculiar to Ceylon and its species have hitherto been found only by Mr. George Lewis. A third representative is "*Spathomeles*" *inflatus* Gorh., which has the characteristic heavy build, narrow loosely-jointed antennal club and tumid shoulders of the other two.

Genus Amphix.

The types of Bates' monograph of this genus are in the British Museum. *A. gerstaeckeri* is not, as supposed by Cziki, a form of *A. vestitus* Panz., nor are *circumcinctus* and *robustus* of Bates varieties of *A. discoideus* F.

Genus Indalmus.

The distribution of species between the two genera *Ancylopus* and *Indalmus* is quite unnatural. It seems to have been decided entirely by the appearance presented by the front coxae, which are said to be contiguous in *Ancylopus* and separated in *Indalmus*. In reality there is always a thin lamina between the coxae and this differs to a slight extent in its breadth, but the variation is so small that, in the absence of any other and sharper distinctive character there seems no reason to make an arbitrary break in the series of stages which connect the two extremes. The mesosternum exhibits a variety of forms which are much more marked than those of the prosternum, but have no relation at all to the present grouping of the species. The typical species of *Ancylopus* (*A. melanocephalus* Oliv., of which *A. bisignatus* Gerst., is probably a colour-variety) quite obviously stands apart from the rest, which cannot at present be easily separated, although it may perhaps be found desirable in the future to devise additional genera. I therefore transfer to

Indalmus the other forms at present placed in *Ancylopus*. *A. melanocephalus* has in the female a very remarkable transverse sulcus upon the pronotum and an oblique impression upon each elytron of which no trace is found in any other described species. In the male a small but important distinctive character which seems not to have been noticed exists in the antennae, the eighth joint of which is narrower than either of those adjoining it.

Indalmus bivittatus Perch. (or the species to which it is agreed to apply that name) appears to inhabit a very large part of Africa. It is very variable in coloration and has been many times described, the names *unicolor* Gerst., *fuscipennis* Gahan, and *nigrofuscus* Gorh., being synonyms of it.

Fairmaire has described (Ann. Soc. Ent. Belg. 1897, p. 203) as *Indalmus bivittatus* a species from Madagascar which is evidently distinct and which is omitted from the Catalogue. To avoid confusion this may be re-named

Indalmus hova, nom. nov.

Indalmus clavipes, sp. n.

Fusco-castaneus, nitidus, elytris purpureo- vel cupreo-fuscis, singulo flavo-bimaculato, maculis transversis, paulo irregularibus, haud magnis; pronoto haud valde transverso, glabro, convexo, lateribus antice fortiter arcuatis, angulis prominentibus, postice fere rectis, angulis acutis, haud productis, sulcis basalibus profundis, fere ad medium attingentibus; elytris ovatis, sat brevibus, subtiliter punctulatis, lateribus undique aequaliter arcuatis, distincte marginatis; antennis gracilibus, articulis omnibus elongatis, tribus ultimis clavam angustam laxam, intus serratam formantibus, ultimo recte truncato:

♂, tibia antica intus apicem versus gradatim dilatata, clavata, apice paulo emarginato, intermedia apice intus incurvata, minute uncinata, posticae dimidio postico intus sat longe fulvo-hirto.

Long. 6 mm.; lat. max. 3 mm.

Hab. S. India: Nilgiri Hills, Karkur Ghat, 2,000 ft. (*H. E. Andrewes*, July).

A good series of this isolated species was taken by Mr. Andrewes. It is easily recognisable by its glossy surface, short, ovate and rather metallic elytra with distinctly flattened margins, long slender antennae, terminating in a narrow loosely-jointed club of three sharply triangular joints, and by the peculiar structure of the tibiae in the

males. The front tibia is without the usual sharp spine, which is replaced by a gradual thickening towards, but not quite extending to, the extremity, the middle tibia is incurved at the end, where it bears a minute hooked process internally, and the hind tibia is sinuous and furnished with a conspicuous fringe of yellow hair upon the posterior half of its inner edge.

LYCOPERDINELLA, gen. nov.

Corpus modice elongatum, convexum, toto sericeum. Pronotum transversum, postice paulo contractum, antice membrana stridulatoria instructum. Prosternum et mesosternum haud producti aut elevati. Coxae anticae contiguae. Femora omnia clavati. Antennarum articulus 2 nonnihil elongatus, 4 paulo brevior, 3 quam 4 duplo longior, 5 ad 9 similes, moniliformes, 10 et 11 transversi, connati. Palpi omnes acuminati. Oculi magni, grosse granulati.

♂, femoris postici margo posterior medio prominens, spinis 4 vel 5 minutis equidistantibus armata tibiaque postica arcuata, intus ante apicem spina acuta instructa.

Lycoperdinella morosa, sp. n.

Fusco-rufa, undique griseo-pubescens, tarsis clavaque antennali flavidis; convexa, supra crebre et fortiter aequaliter punctata, pronoto brevi, medio convexo, subtiliter longitudinaliter sulcato, lateribus subparallelis, leviter bisinuatis, angulis anticis prominentibus, haud acutis, posticis brevissime acuminatis, foveis basalibus profundis, post medium productis, sulco basali recto, ad marginem valde approximato; elytris sat elongatis, fortiter haud seriatim punctatis, valde convexis, humeris prominentibus, lateribus deinde dilatatibus, pedibus modice robustis.

Long. 4 mm.; lat. max. 2 mm.

Hab. RHODESIA: Salisbury (*G. A. K. Marshall*, April), Namaila (*H. Dollman*, September).

The Museum Collection contains a pair from each of the localities above named.

It is an interesting form, intermediate between *Indalmus* and *Lycoperdina*, different as the typical forms of those genera are. In outline it is transitional between the oblong shape of the former and the short tapering *Lycoperdina* type. The pronotum is strongly transverse but distinctly narrows behind. The antennal club is two-jointed, the last two joints being connate and slightly

transverse and the 9th joint not distinctly larger than the 8th. The 2nd joint is slightly elongate, the 4th a little shorter than the 2nd (as in *Lycoperdina*) and the 3rd about twice as long as the 4th.

In size, colour and general appearance there is a strong resemblance to *Lycoperdina sericea*, but the colour is generally more uniformly reddish (in one specimen the median dorsal part is nearly black). The tarsi and the club of the antenna alone are pale. The pronotum is shorter and the elytra are longer than in *Lycoperdina*, and the latter are rather parallel-sided, not perceptibly dilating behind the shoulders. The entire upper surface is closely and rather strongly punctured and clothed with decumbent grey hairs.

The curved hind tibia of the male bears a minute spine just before the extremity, and the hind femur in that sex is provided with a comb-like series of still more minute teeth unlike anything else known in the family.

Genus Dryadites.

Mycetina erubescens Gorh., is a species of *Dryadites*, a genus very different from *Mycetina*. There is nothing in the description by which the insect can be distinguished from *D. borneensis* Friv.

The following species also belong to the genus.

Dryadites latipennis, sp. n.

Niger, nitidus, pronoto rubro, linea mediana nigra, elytrisque rufis, nigrocinctis, margine nigro antice et postice paulo latiori; late ovatus, prothorace lato, lateribus regulariter arcuatis, angulis anticis sat remotis; elytris brevibus, conjunctim vix longioribus quam latioribus, fere circularibus, lateribus late explanatis, fortiter arcuatis; antennis sat gracilibus, clava minuta, articulo 9° triangulari, haud lato, 10° et 11° brevissimis, connatis, 11° quam 10° multo angustiori.

Long. 5 mm.; lat. max. 4 mm.

Hab. W. Sarawak: Mt. Matang, 2,000 ft. (*G. E. Bryant*, Jan., Feb.).

This is closely similar to *D. borneensis* Friv., which Mr. Bryant also rediscovered in its original habitat, Mt. Matang, but the red patches cover the greater part of the surface of the elytra, whose outline they follow instead of being

pointed behind as in *D. borneensis*. The insect is much broader and more hemispherical, and the elytra have rather wide flattened margins. The club of the antenna is much smaller, its first and last joints being much narrower than the middle one, the first triangular and the other two very short and closely articulated.

Dryadites purpureus, sp. n.

Niger, elytris purpureis, pronoti lateribus elytrorumque macula subrotunda post medium posita sanguineis; ovalis, convexus, nitidus, pronoto parum lato, lateribus haud regulariter arcuatis, marginibus haud excavatis, angulis anticis vix productis aut acutis; elytris sat latis, lateribus modice explanatis; antennis haud longis, clava oblonga, sat angusta, articulis connatis.

Long. 5 mm.; lat. max. 3·5 mm.

Hab. W. Sarawak, Borneo: Quop (*G. E. Bryant*, March).

Only a single specimen was found.

The elytra are of a deep purple colour, and each has a deep blood-red patch behind the middle. The pronotum is relatively narrower than in *D. borneensis* and *D. latipennis*, its sides are not hollowed as in those species nor its lateral margins evenly rounded, and the front angles are blunter. The antennae are rather shorter, the club narrow, closely articulated and parallel-sided and the third joint relatively less elongate.

Genus Mycetina.

Mycetina candens Gorh., is obviously synonymous with *M. castanea* Gerst. Although he has omitted to mention the fact, Gorham's type is a male, of which sex Gerstaecker carefully detailed the well-marked characteristics, making the former's error more surprising.

There appears to be a tendency in this genus, contrary to that generally observed in beetles, for the male to be of slightly larger size than the female.

It is difficult to understand why *Lycoperdina testacea* Ziegl., was placed by Leconte and Gerstaecker in this genus, from which it differs widely, as its very loosely-jointed antennal club indicates. The absence of a stridulatory flange to the pronotum excludes it from the present group, and I refer it to the genus *Danae*.

Mycetina tetrasticta, sp. n.

Nigra, nitida, corpore subtus fusco-rufo, elytris utrinque macula pallide flava paulo pone humerum vix ad marginem lateralem attingenti aliaque minori transversa ante apicem ornatis; oblongo-ovata, sat lata, parum convexa; prothoracis disco subtiliter parce punctato, lateribus sat grosse et crebre punctatis et minute setosis, marginibus antice rotundatis, postice rectis et parallelis, basi profunde sulcato; elytris brevibus, distincte punctatis, marginibus externis paulo deplanatis, apicibus rotundatis; antennis haud longis, articulis 1, 3, 4 et 5 paulo elongatis, tribus ultimis transversis, clavam bene definitam formantibus, articulo ultimo brevissimo.

Long. 4 mm.; lat. max. 2·5 mm.

Hab. ASSAM: Patkai Hills (*W. Doherty*).

There are two specimens, probably females, in the British Museum.

The species shows a nearer relationship to the European and North American forms than to any other yet known from the Oriental region. It has the characteristic four spots upon the elytra, but these are of a very pale yellow colour and the whole remaining upper surface is black, slightly tinged with red upon the head and the front angles of the pronotum. It is rather broad in form, with the sides of the pronotum roughly punctured, the margins straight and parallel behind, the elytra rather strongly punctured, their outer edges a little flattened, their apices rounded and not angulate and the antennae compact, with a well-defined, rather oblong club.

Mycetina corallina, sp. n. (Plate I, fig. 8.)

Laete rufa, antennis nigris, articulo basali flavo excepto, valde nitida, dorso minutissime et parcissime, capite, pronoti lateribus, pedibus corporeque subtus densius albo-setosis; elongata, convexa, pronoto haud lato, lateribus antice leviter arcuatis, postice rectis, paulo contractis, basi profunde sulcato, foveis lateralibus fere ad medium attingentibus, elytris basi sat angustis, post medium ampliatis, minute sed distincte punctatis; antennis longis sed haud laxe articulatis, articulo tertio elongato, deinde ad apicem gradatim dilatatis, clava indefinita, articulo ultimo rhomboidali, vix elongato.

Long. 4 mm.; lat. max. 2·5 mm.

Hab. MALAY PENINSULA: Penang (*G. E. Bryant,* Oct.

and Nov.), Singapore, Bukit Timah (*Bryant*, May); BORNEO, SARAWAK: Lundu (*Bryant*, Jan.).

A considerable series was found by Mr. Bryant at Penang, where the species was also taken by Lamb many years ago.

The shape is peculiar. Excluding *M. testacea*, which does not belong to the genus, it is the most elongate species known to me. Its widest part is considerably behind the middle of the elytra and the pronotum at its widest part is narrower than the elytra at the shoulders. It is very smooth and shining above, except at the sides of the pronotum, which are rugulose and thinly clothed with very minute grey setae, the entire upper surface bearing similar but scattered and extremely minute setae, and the head, legs and lower surface rather closely clothed with very short hair. The antennae are rather long but closely articulated and widening gradually from the third joint, the three joints forming the club being little differentiated from the rest.

The female is almost similar to the male, but the antennae are a little shorter and all the tibiae rather more slender.

Mycetina lurida, sp. n. (Plate I, fig. 7.)

Castanea, elytris leviter rufescentibus, pronoti lateribus elytrorumque humeris pallidioribus, antennis nigris, articulis tribus basalibus et ultimo rufis; convexa, parum elongata, pronoto haud lato, lateribus valde bisinuatis, angulis posticis divergentibus, foveis basalibus profundis, ad pronoti medium attingentibus; elytris late ovalibus, lateribus explanatis, recurvatis; antennis gracilibus, clava 3-articulata, haud lata:

♂, pedibus longis et validis, antennisque gracilioribus, abdominis subtus segmento 5° valde transversim cristato.

Long. 3·5–4 mm.; lat. max. 2·5–3 mm.

Hab. BORNEO, W. SARAWAK: Mt. Matang (*G. E. Bryant*, Dec., Feb.).

Mr. Bryant found one specimen of each sex.

This species is very similar to *M. brevicollis* Gorh., and identical in coloration, except that three, instead of only two, basal joints of the antenna are red. Those organs, however, are not stout and compact, but slender and loosely-jointed, with a club composed of three joints only. The sides of the prothorax are strongly rounded in front and

gently sinuated behind, with the hind angles a little divergent. The lateral foveae are deep and fully half as long as the prothorax. The elytra have broad recurved lateral margins.

M. lurida is chiefly notable for its strongly-marked male features. The legs in that sex are very long and stout, the middle and hind femora thickened and a little curved, the antennae loosely-jointed and slender, and the fifth ventral segment bears a strongly elevated transverse crest or carina, produced at each end and curved inwards and backwards.

Mycetina globosa, sp. n. (Plate I, fig. 9.)

Testacea, corpore supra lacte purpurascenti, pronoti lateribus elytrorumque humeris pallidioribus, antennis nigris, articulis tribus basalibus et ultimo rufis; brevis, globosa, pronoti lateribus antice arcuatis, postice rectis, parallelis, foveis lateralibus brevibus, ad medium haud attingentibus; elytris convexissimis, bene punctatis, humeris prominentibus, lateribus anguste marginatis; antennis haud gracilibus, clava triarticulata, compacta, sat lata.

Long. 3·5 mm.; lat. max. 2·5 mm.

Hab. W. Sarawak, Borneo: Mt. Matang (*G. E. Bryant*, Dec., Jan.).

This little species is easily recognisable by its very short, globular shape and the beautiful metallic purple colour of the upper surface. The coloration is similar to that of *M. lurida*, but the purple hue is much more intense, and the antennae, although coloured in the same way, with the terminal joint pale, are much shorter and more compact.

Mycetina soror, sp. n.

Flavo-rufa, nitida, elytris saturate cyaneis, metallicis, sat fortiter et crebre punctatis, singulo pustula flava rotundata ante medium ornato; *M. doriae* similissima, sed elytris cyaneis, profunde sat crebre punctatis, antennisque paulo latioribus.

Long. 3·5–4·5 mm.; lat. max. 2·5–3 mm.

Hab. Malay Peninsula: Penang.

A female specimen in the British Museum was taken by Lamb many years ago, and a second was found by Mr. Bryant in October 1913.

The species is exceedingly like *M. doriae* Gorh., from which it differs by its deep blue elytra, which are also more strongly and closely punctured, and its rather broader antennae.

The male of *M. doriae*, of which both sexes were also found by Mr. Bryant at Mt. Matang, Sarawak, has an excision of the inner edge of the middle tibia just before the end, as well as that of the front tibia mentioned by Gorham.

Mycetina pulchella, sp. n.

Flavo-rufa, pedibus antennarumque articulis duobus basalibus inclusis, harum reliquis nigris, elytris violaceis; lata, nitida, pronoto brevi, lateribus antice fortiter arcuatis, postice rectis, fere parallelis; elytris parum elongatis, valde convexis, minute sat fortiter punctatis; tibiis paulo clavatis, basaliter leviter arcuatis, antennis sat robustis, articulis 3°–5° paulo elongatis, 10° et 11° latis, transversis:

♂, antennis gracilioribus, tibiis posticis longioribus, intus a medio subito dilatatis, elytris extus paulo explanatis.

Long. 3·5–4·5 mm.; lat. max. 2·5–3 mm.

Hab. MALAY PENINSULA: Penang (*Lamb*), Perak (*Doherty*).

Bright orange-red, with the elytra violet (sometimes vaguely orange-tinged at the extreme apex) and the antennae black, except the two basal joints. It is broadly oval in shape, with the pronotum shorter than in *M. doriae* and *M. soror* and not perceptibly contracted behind, and the elytra short but not hemispherical as in *M. cyanipennis*. The antennae are rather less compact than in those species. In the male the antennae are less robust, the hind tibiae are distorted, and the elytra are more distinctly margined laterally.

Mycetina luzonica, sp. n.

Fusco-castanea, humeris pronotique lateribus vix pallidioribus, antennis nigris, articulis tribus basalibus apiceque extremo rufescentibus; late ovata, compacta, convexa, nitida, pronoto brevi, lato, vix perspicue punctato, lateribus antice leviter arcuatis, angulis haud acutis, postice rectis, parallelis, angulis quadratis, sulco basali ad marginem posticam valde approximato, foveis basalibus haud ad medium attingentibus; elytris brevibus, minute punctatis,

humeris prominentibus, lateribus paulo explanatis; antennis compactis, articulis tribus ultimis latis, transversis, apice truncato.

Long. 3·5–4 mm.; lat. max. 2·5 mm.

Hab. PHILIPPINE IS., LUZON: Mt. Makiling (*C. F. Baker*).

This is a very rotund and compactly-formed species of a nearly uniform reddish-brown colour, but with the last 8 joints of the antennae black, except the extreme apex. The antennae are very broad and closely jointed, with the last three joints strongly transverse. It is rather more rotund than *M. brevicollis* Gorh., and almost as much so as *M. globosa* Arr., to which it has perhaps the closest resemblance. The puncturation is finer than in either of those, and the colour is almost uniformly brown, with no trace of metallic lustre (in the dead specimens at least). The joints of the antennae also are rather shorter and closer and the terminal one is only pale at its extremity.

Mycetina felix, sp. n.

Laete flavo-rufa, pedibus antennarumque articulis duobus basalibus inclusis, harum reliquis nigris, elytris violaceis, apicibus flavis; breviter ovata, nitida, pronoto brevi, lateribus antice fortiter arcuatis, postice rectis, parallelis; elytris minute sat fortiter punctatis, brevibus, valde convexis; pedibus antennisque sat longis.

Long. 3·5–4·5 mm.; lat. max. 2·5–3 mm.

Hab. JAVA.

Three specimens in the British Museum originally formed part of the Bowring Collection.

The species closely resembles *M. pulchella*, the size, shape and coloration being the same, except that the apices of the elytra have a sharply-limited yellow patch. The male has the legs quite simple but stouter than those of the female. As in *Mycetina pulchella*, it is larger than the female, relatively a little more elongate, with wider margins to the elytra and more dilated antennae, of which all three club-joints, as well as the two joints preceding them, are distinctly transverse. In the female only the last two are distinctly transverse, the fifth to the ninth being about as long as they are broad.

Mycetina cyanipennis, sp. n.

Laete flavo-rufa, pedibus antennarumque articulis duobus basalibus inclusis, illarum reliquis nigris, elytris cyaneis, metallicis;

nitida, brevis, pronoto lato, lateribus antice leviter arcuatis, postice rectis, fere parallelis; elytris subglobosis, valde convexis, minute sed fortiter punctatis; tibiis omnibus paulo clavatis, basaliter leviter arcuatis; antennis robustis, articulis 3°–5° paulo elongatis, duobus ultimis latis, transversis.

Long. 3–4 mm.; lat. max. 2·5–2·75 mm.

Hab. MALAY PENINSULA: Perak (*Doherty*), Penang (Oct. and Nov., *G. E. Bryant*).

This little insect is shorter and more globular than any other species of the genus known to me. It closely resembles *M. pulchella*, but the elytra are more hemispherical in shape and blue instead of violet in colour, with narrowly reflexed margins. The legs are moderately slender and the tibiae narrow and a little curved in the anterior half, broader towards the end. The antennae are stout and compact, gradually dilating towards the club, which is broad, with the last two joints transverse.

I have examined a series of thirteen specimens, which are practically identical, except that one, which I believe to be the male, is rather larger, with stouter legs and more dilated antennae.

Mycetina pusilla, sp. n.

Rufo-testacea, pedibus flavis, pronoti lateribus et elytrorum apicibus vage pallidioribus, antennisque nigris, articulis duobus basalibus exceptis; minor, ovata, convexa, nitida, pronoti lateribus antice valde arcuatis, postice fere rectis, paulo contractis; elytris sat brevibus, ovatis, convexis, parce leviter punctatis; pedibus antennisque sat gracilibus, harum articulo ultimo ad duos precedentes magnitudine fere aequali.

Long. 2·5 mm.; lat. max. 1·5 mm.

Hab. TENASSERIM: Tavoy (*Doherty*).

This closely resembles *M. pallida* and is exactly the same in colour, but it is a little smaller and more gracefully shaped, the pronotum being relatively a little longer, the sides more strongly rounded in front and more contracted behind, the elytra shorter, more convex and more oval in outline and a little less strongly punctured. The antennae are more slender, with the joints not closely articulated, the club not much dilated, but the terminal joint considerably larger than the rest.

Mycetina pallida, sp. n.

Rufo-testacea, pedibus flavis, pronoti lateribus elytrorumque apicibus vage pallidioribus, antennis, articulis duobus basalibus exceptis, nigris; late ovata, nitida, modice convexa, pronoto brevi, lato, lateribus antice arcuatis, postice rectis, parallelis, basi recto, sulco basali ad marginem valde approximato; elytris parum elongatis, minute sat distincte punctatis, lateraliter explanatis; antennis compactis, clava sat lata, haud definita.

Long. 3 mm.; lat. max. 2 mm.

Hab. TENASSERIM: Tavoy (*Doherty*).

M. pallida closely resembles *M. montivaga* Cziki, but is rather shorter and broader in shape, with the legs entirely pale and the antennae less slender and more compact. The joints of the latter increase so gradually that there is no perceptible division between the club and footstalk, but four or five joints are dilated. The species is also exceedingly like *M. nebulosa*, but the antennae are rather less wide, only two, instead of three, basal joints are red and the basal groove of the pronotum is closer to the hind margin.

Mycetina cinctipennis, sp. n.

Laete flava, pronoti medio rufescenti elytrorumque medio toto nigro, antennis nigris, articulis duobus vel tribus basalibus rufis; late ovata, nitida, modice convexa, pronoto brevi, lato, lateribus antice arcuatis, postice fere rectis, paulo divergentibus, basi recto, sulco basali ad marginem valde approximato; elytris paulo elongatis, minute sed distincte punctatis, lateraliter leviter explanatis, antennis compactis, clava sat lata, haud definita.

Long. 3 mm.; lat. max. 2 mm.

Hab. MALAY PENINSULA: Perak (*W. Doherty*), Penang (*G. E. Bryant*, Oct.), Singapore (*C. F. Baker*); SUMATRA: Merang (*Doherty*).

I have seen a single specimen from each of the above localities.

The sharply contrasted red and black colouring of this little species is very distinctive. In other respects it is very closely related to *M. pallida*, but a little shorter and broader in shape, with the elytra rather more convex.

Mycetina nebulosa, sp. n.

Rufo-testacea, pedibus, pronoti lateribus elytrorumque humeris et apicibus vage pallidioribus, pronoti basi elytrorumque disco plus minusve infuscatis, antennis nigris, articulis 3 basalibus rufis; late ovata, nitida, modice convexa, pronoto brevi, lato, subtilissime punctato, foveis basalibus profundis, rectis, ad medium attingentibus, lateribus antice arcuatis, postice fere rectis et parallelis, basi leviter arcuato, sulco basali ad marginem posticam haud valde approximato; elytris sat brevibus, minute sed distincte punctatis, lateraliter paulo explanatis; antennis compactis, clava lata.

Long. 2·5 mm.; lat. max. 1·75 mm.

Hab. SIAM: Renong (*W. Doherty*); TENASSERIM: Tavoy (*Doherty*).

There is a close resemblance to *Mycetina cinctipennis* and *M. pallida*, but the elytra are only vaguely clouded instead of having the whole central part black as in the former. The pronotum is rather narrower relatively than in either of those species, especially at the shoulders, and is a little produced backwards at the base, so that the basal sulcus is a little farther from the hind margin, which has a more rounded outline. The elytra are rather shorter and more broadly rounded behind, and the antennae are shorter, broader and more compact, with the three basal joints red.

Genus PSEUDINDALMUS.

Pseudindalmus andamanicus, sp. n.

Rufo-ferrugineus, pronoto postice infuscato elytrisque nigris, singulo pallide bimaculato, maculis magnis subquadratis, anteriora ad margines basalem et exteriorem attingenti; oblongus, parum convexus, nitidus, pronoto subtiliter punctato, lateribus anguste marginatis, antice leviter arcuatis, angulis subacutis, postice parallelis, angulis rectis, basi sat late marginato; elytris undique fortiter punctatis, lateribus leviter arcuatis, anguste reflexis:

♂, antennarum articulo 9° valde inflato, tibia antica paulo pone basin obtuse dentata.

Long. 6 mm.; lat. max. 3 mm.

Hab. ANDAMAN IS. (*Roepstorff*).

A series of specimens was collected by the late Consul Roepstorff. The colour of the elytral spots varies from bright yellow to blood-red, but some of the specimens are

immature. The four spots are large and irregularly quadrate, the anterior one reaching the front and outer margins at the shoulder, the posterior one equidistant from inner and outer margin. The antennae, legs, the front and sides of the pronotum and the lower surface of the body are also pale. The surface is entirely smooth and shining, the pronotum minutely and the elytra strongly punctured. It is of oblong shape and not very convex. The sides of the pronotum are nearly straight and parallel behind, the margins rather thickened, the elytra gently dilating from the shoulders and their lateral margins narrowly reflexed. The antennae are stout and compact and in the male the ninth joint is much larger than the two last joints combined. The front tibia in the same sex has a slight tooth near the base.

Pseudindalmus borneensis, sp. n.

Niger, capite, prothorace pedibusque fusco-rufis, utroque elytro bimaculato, maculis sanguineis, subrotundatis; oblongus, nitidus, supra subtilissime punctatus, oculis magnis; pronoti lateribus antice fortiter arcuatis, angulis obtusis, postice laevissime sinuatis, angulis acutiusculis, marginibus lateralibus paulo incrassatis, antice decrescentibus, basi late marginato; elytris quam pronoto parum latioribus, marginibus externis anguste reflexis:

♂, antennarum articulo 9° quam 10° paulo majori.

Long. 5 mm.; lat. max. 2·5 mm.

Hab. Brit. N. Borneo: Sandakan.

A single specimen of this species, taken by Prof. C. F. Baker, has been kindly presented by him to the British Museum Collection.

It is rather smaller than either of the species already described and more glossy, the elytra especially being much more finely punctured. The four red elytral spots are moderately large and of rather rounded form and the anterior ones do not reach the shoulders. The head and legs are deep red in the type specimen, and the pronotum is bright red in front, but becomes gradually darker towards the base. The eyes are large and the interval between them is distinctly less than their combined diameters. The front angles of the pronotum are blunt, the lateral margins are moderately thickened but gradually diminish towards the front angles, and the basal margin is broad. The elytra are less broadly rounded at the sides than in

P. tonkinensis Arrow (recently described in Ann. Mag. Nat. Hist.), with less conspicuously flattened margins.

In the male the 9th joint of the antenna is larger than the 10th, but scarcely as large as the 11th.

Genus DANAE.

The genera *Danae* and *Saula* consist of very numerous and extremely similar minute species, which have so far received no careful study. In his monograph Gerstaecker described two species belonging to the first genus under the name of *Oediarthrus*, and stated that the enlargement of the 9th joint of the antenna was common to both sexes. This is a mistake which has led astray those who have followed him and has not been corrected in the recent catalogue. Weise has recognised the sexual character of the remarkable antennal structure, but has added to the existing difficulties by giving new names to female specimens. The 9th antennal joint is found in all degrees of development in the males of different species and is of normal form in the females, so that it is useless as a generic character, and the many species I have been able to bring together show that nothing remains by which it is possible to separate generically *Danae*, *Oediarthrus*, *Rhabduchus* and *Coniopoda*. All these are distinguished from *Saula* by the broadly margined prothorax and transversely elliptical scutellum. The genus *Heliobletus*, which Cziki has amalgamated with *Saula*, is intermediate between the latter and *Danae*, being (like *Saula*) without a wide prothoracic margin but, like *Danae*, having the scutellum transverse and rounded, while the antennae have also the 9th joint enlarged in the male, which has not hitherto been known.

In addition to this curious feature of the male antenna in these two genera, striking differences may also be found in the legs in the same sex and these afford the best means of distinguishing the species. The females, on the other hand, are so much alike that unless they can be associated without doubt with the other sex they are best left alone.

As already mentioned, I refer to *Danae* the North American "*Mycetina*" *testacea* Ziegl., which is not very remote from the Japanese *D. orientalis* Gorh. In these species external sexual differences are practically absent.

Danae rufula Reiche, *venustula* Gestro, *abdominalis* and

similis Weise and *Heliobletus servilis* Gorham, have all unfortunately been described from female types, and it may never be possible to establish with certainty the essential diagnostic characters of their species. The types of the first and last are in the British Museum.

Besides the curious differences in the antennae and legs, the males of *Danae* are generally more elongated than the females, owing to the enlargement of the metasternum and 1st abdominal segment and the consequent lengthening of the elytra. The hind legs are generally longer, placed farther back and frequently toothed at the inner edge of the femur or tibia.

Dr. Marshall found these insects at the roots of grass in damp places.

In a male specimen which I believe to agree with the female type in our collection of *Danae rufula* Reiche, the middle and hind tibiae are curved as in *Danae natalensis* Gerst., and the club of the antenna alone is black, but it is a rather larger species and more shining, the punctures upon the pronotum especially being fairly close but less coarse. The pronotum is also relatively wider, with more dilated margins. The supposed difference between *Danae rufula* Reiche and *D. bulbifera* Weise, described by Weise (viz. the marginal sulcus not diverging to the hind angle in the former) has no real existence but, from the size, *Danae bulbifera* is perhaps more likely to be *Danae natalensis*. Gerstaecker's figure of the latter, upon which Weise relied, is worthless and does not correspond with the description.

No species known to me has the 9th joint of the antenna shaped quite as represented in *Danae pulchella* Gestro, and *Danae senegalensis* Gerstaecker, is probably also different from any species in our collection.

Danae armata, sp. n.

Rufo-ferruginea, antennis (articulis basalibus exceptis) nigris; modice elongata, nitida, ubique flavo-pubescens; pronoto modice lato, subtilissime parce punctulato, lateribus laevissime bisinuatis, angulis posticis subacutis, marginibus parum latis, postice leviter arcuatim haud angulariter angustatis; elytris paulo fortius punctatis:

♂, antennis haud longis, articulis 4°–8° moniliformibus, subaequalibus, 9° inflato, ovato, apice truncato, subtus basi profunde excavato, 10° transverso, intus acute producto, 11° breviter ovali; femoribus

posticis fortiter curvatis, postice excavatis, medio leviter laminatis, tibiis omnibus apice paulo dilatatis, rectis, postica intus pone basin fortiter retrorsum dentata.

Long. 4 mm.

Hab. NYASALAND: Mlanje (*S. A. Neave*, Nov.); N. NIGERIA: Zungeru (*J. W. Scott-Macfie*, Nov.).

A single male from Nigeria appears to agree in all respects with a male and three females from Nyasaland.

The male of this species is easily recognised by the very peculiar structure of the hind legs (see page 41, fig. 3). The tibia bears a large and very prominent tooth placed a little beyond the base at the inner edge, in the form of a flattened plate, a little hollowed on its upper side, bluntly pointed and directed obliquely backwards, and the femur is curved, hollowed out behind, and has a broad rounded lobe or lamina at the middle of the upper edge of the excavation. All the tibiae are slender at the base and slightly thickened towards the extremity.

The inflated 9th joint of the antenna is very deeply scooped out beneath just beyond the base. The upper surface is shining, the pronotum rather flat and very lightly punctured, the sides very feebly excised behind, the hind angles scarcely produced and the elevated lateral margins not angularly narrowed behind but the inner edge very slightly curved towards the hind angle.

Danae tibialis, sp. n.

Rufo-ferruginea, antennis pedibusque (tarsis exceptis) nigris, nitida, ubique fulvo-pubescens, pronoto lato, parum convexo, lateribus postice fere rectis, angulis posticis vix acutis, marginibus elevatis, postice haud angulatim angustatis:

♂, corpore elongato, antennis robustis, articulis 2–8 moniliformibus, 9° valde inflato, pyriformi, longitudine ad latitudinem fere aequali, subtus leviter excavato, 10° transverso, 11° breviter ovali; pedibus gracilibus, tibiis rectis, tibiis posticis pone basin obtuse dentato, femoribusque posticis tenuis et curvatis.

Long. 4 mm.

Hab. NYASALAND; Mlanje (*S. A. Neave*, 11–12 Nov., 1912).

A single male specimen.

This has a very close resemblance to *D. femoralis* in which also the antennae, femora and tibiae are black, but the

hind femora of the male are much more slender and not toothed and the tibia instead bears an obtuse tooth beyond the base (see page 41, fig. 5). The 9th joint of the antenna in that sex is still more dilated, its diameter at the distal end, where it is widest, being about equal to its length. The shape of the thorax is practically the same, but it is a little more strongly punctured.

Danae dentipes, sp. n.

Rufo-testacea, antennis rufis, clava nigra, corpore elongato supra modice punctato, nitido, breviter pallide-pubescente, pronoto lato, lateribus postice fere rectis, angulis posticis vix acutis, marginibus elevatis haud latis, postice vix perspicue angustatis:

♂, antennarum articulis 2°–8° moniliformibus, 9° inflato, pyriformi, 10° brevi, intus producto, 11° breviter ovali, tibiis fere rectis, anterioribus 4 apices versus paulo latioribus, posticis gracilioribus, ante medium minute sed acute dentatis.

Long. 3·5 mm.

Hab. RHODESIA: Salisbury (*G. A. K. Marshall,* May). One specimen of each sex.

It is a rather pale species, with the antennae red and the last three joints only black. It is rather shining and very finely pubescent, but with well-marked puncturation above.

The sides of the prothorax are not at all sinuated behind and the hind angles are almost right angles. In the male the tibiae are straight, but the hind legs are elongate, the femora a little arched and the tibiae slender, with a small but sharp tooth before the middle of the inner edge, pointing backward (see page 41, fig. 2).

Danae femoralis, sp. n.

Rufo-ferruginea, antennis (sed articulis 2 basalibus fuscis) pedibusque intermediis et posticis (tarsis exceptis) nigris, minute punctata, nitida, ubique breviter fulvo-pubescens; pronoto lato, parum convexo, lateribus postice fere rectis, angulis posticis acute productis, marginibus elevatis, modice latis, postice leviter arcuatim, haud angulariter, angustatis:

♂, corpore elongato, antennis compactis, articulis 2–8 moniliformibus, 9 inflato, pyriformi, subtus paulo excavato, 10 brevi, 11 breviter ovali; pedibus sat tenuibus, tibiis intermediis et posticis femoribusque intermediis leviter arcuatis, femoribus posticis medio

fortiter sed obtuse dentatis, basi valde attenuatis; segmento ventrali primo medio laminato-producto.

Long. 3·3–4·3 mm.

Hab. NYASALAND: Mlanje (*S. A. Neave*, Nov.); UGANDA: Kakindu 3,400 ft., Mpanga Forest, 4,800 ft. (*S. A. Neave*, Aug. and Nov.).

This differs from all other species known to me by the black colour of the legs as well as the antennae. The pronotum is rather short, with the sides nearly straight behind and the marginal groove greatly curved and not abruptly bent towards the hind angle. The male has the elytra elongate, the 9th joint of the antenna swollen, pear-shaped and a little hollowed beneath, the middle and hind femora and tibiae gently curved, the hind femur bearing a strong but broad tooth behind (see page 41, fig. 4) and the first ventral segment very long and produced backwards in the middle.

Danae curvipes, sp. n.

Rufo-ferruginea, antennis nigris, articulis 2 basalibus exceptis; elongata, nitida, subtiliter parce punctulata, parum breviter pallide pubescens; pronoto lato, lateribus postice fere rectis, angulis vix acutis, marginibus haud latis, postice vix angustatis:

♂, antennarum articulis 2°–8° moniliformibus, subaequalibus, 9° inflato, breviter globoso, transverso, 10° brevi, intus producto, 11° ovali, acuminato; pedibus 4 anterioribus sat brevibus, tibiis versus apices paulo latioribus, mediis leviter curvatis, pedibus posticis longis, femoribus curvatis, tibiis postice valde curvatis, pone basin fortiter haud acute dentatis.

Long. 4 mm.

Hab. NYASALAND: Mlanje (*S. A. Neave*, Dec.).

Only a single specimen of this has been found. It is of very elongate form, but with a short transverse prothorax, whose sides are nearly straight behind and the hind angles nearly right angles. The puncturation is very minute and scanty but the pubescence fairly thick. The male characters are again very distinctive. The swollen 9th joint of the antenna is very short and transversely globular and the hind legs are long, with the femur slightly arched and the tibia slender throughout, strongly curved in its posterior half and armed internally a little behind the base with a conspicuous blunt tooth (see page 41, fig. 6).

Danae cavicollis, sp. n.

Rufo-ferruginea, antennarum articulis ultimis 6 vel 8 fuscis (apice extremo autem rufo); sat late ovali, nitida, ubique haud dense pallide pubescens; pronoto lato, profunde haud dense aut grosse punctato, angulis posticis fere rectis, marginibus sat latis, postice paulo angustatis, sulco basali profundo, utrinque fortiter contracto et excavato:

♂, pedibus haud longis, muticis, antennis robustis, articulo 9° inflato, truncato, 10° brevissimo, lato, 11° ovali.

Long. 3–3·5 mm.

Hab. NATAL: Malvern (June); RHODESIA: Salisbury (Oct., Nov.). Series representing both sexes were taken and presented by Dr. G. A. K. Marshall.

It is a rather broadly oval species, uniformly coloured except for the last 6 or 8 joints of the antenna, which are dark (but not black) with the extreme tip reddish. It is very convex and shining, with fine but deep and distinct punctures. The sides of the pronotum are rounded and not distinctly bisinuated, the margins rather broad and only slightly narrowed behind. The base is very deeply sulcate and the borders of the sulcus both in front and behind become sharp and overhanging on each side, forming narrow-mouthed but very deep cavities, which extend into the angles formed by the base and the lateral margins of the pronotum. The elytra in both sexes are rather short, very convex and strongly rounded at the sides.

Danae longicornis, sp. n.

Rufo-ferruginea, antennarum articulis tribus ultimis nigris; elongata, pedibus antennisque gracilibus, nitida, ubique flavo-pubescens, pronoto modice lato, subtilissime sat crebre punctulato, lateribus laevissime bisinuatis, marginibus parum latis, postice vix angustatis; elytris paulo fortius punctulatis:

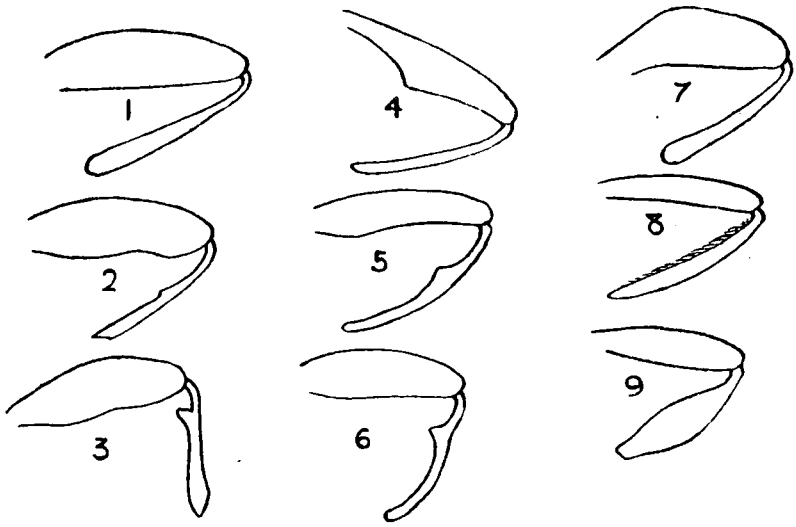
♂, antennis longis, articulis 1°–8° elongatis, 9° leviter inflato, 10° paulo minore, transverso, 11° ovali, pedibus longis, muticis, tibiis rectis.

Long. 3·5–4 mm.

Hab. NATAL: Durban.

It is an elongate species, with straight slender legs (see page 41, fig. 1) and long antennae in both sexes and

distinguished from all others by the very fine close puncturation of the pronotum. The elevated margin of the latter is parallel-sided and not very broad, and the hind angles are very slightly acute. The legs and antennae (except the last 3 joints of the latter) are ferrugineous in colour like the rest of the insect. *Danae similis* Weise (also from Natal) has the same colouring, but the joints comprising the footstalk of the antenna are described as transverse. From this and the enlarged 9th joint it appears probable that the specimen described is a male, and not a female as stated.



Hind femur and tibia of—

FIG. 1. *Danae longicornis*, sp. n.
,, 2. *D. dentipes*, sp. n.
,, 3. *D. armata*, sp. n.
,, 4. *D. femoralis*, sp. n.
FIG. 5. *D. tibialis*, sp. n.
,, 6. *D. curvipes*, sp. n.
,, 7. *D. natalensis*, Gerst.
,, 8. *D. ciliatipes*, sp. n.
FIG. 9. *Heliobletus latipes*, sp. n.

Danae ciliatipes, sp. n.

Ferruginea, haud brevissime fulvo-pubescens, pedibus fuscis, antennis totis nigris, perspicue nigro-pubescentibus; robusta, nitida, supra subtiliter et sparsim punctulata, pronota lato, parum convexo, lateribus haud late marginatis, margine ad angulos posticos vix angustato, leviter bisinuatis, angulis posticis acutis; elytris convexis, elongatis, ad humeros latis:

♂, antennis longis, articulo 1° ovali, 2° brevi, 3° paulo elongato, 4°–8° fere globulis, 9°–11° elongatis, 9° quam aliis paulo latiori, 10° paulo breviori; pedibus gracilibus, femore intermedio postice

medio obtuse dentato, postico leviter arcuato et clavato, tibiis rectis, angustis, postica subtus sat longe fimbriata.

Long. 4 mm.

Hab. TENASSERIM: Tavoy (*Doherty*).

The type is unique. In the antennae and legs the species is quite different from any other. The former are long, entirely black and clothed with rather long and close dark hairs. The last 3 joints are much larger than the rest, but do not greatly differ among themselves. They are all elongate, the 9th being the broadest, the 10th the shortest and the 11th the longest. The legs are slender, the middle femur bearing a blunt tooth beneath, the hind femur curved and slightly clubbed and the hind tibia closely fringed with rather long and stiff yellow hairs (see page 41, fig. 8). The 1st ventral segment bears a conical tubercle near the middle of the hind margin.

The upper surface is shining and very finely and lightly punctured. The pronotum is short and broad, with the elevated lateral margin not wide and not distinctly narrowed behind, the sides feebly sinuated behind and the hind angles acute.

Genus HELIOBLETUS.

On the strength of an injudicious remark by Gorham, Cziki has sunk this genus as a synonym of *Saula*, and treated its Bornean type, *H. servilis* Gorh., as identical with the Ceylonese *S. ferruginea* Gerst. The two faunas are entirely distinct and the insects are generically different. Although only the unique female type of *H. servilis* is known, I believe the male will be found to have the 9th joint of the antenna swollen, as in *Danae*, whereas the sexes of *Saula* are practically identical externally. The antennae in the latter genus are extremely delicate, with slender, loosely-articulated joints. In *Heliobletus* they are thicker, with more compact and closely-articulated joints, the terminal one not very elongate and the penultimate (10th) strongly transverse. The 9th joint is generally perceptibly larger than the 10th, even in the female.

Heliobletus punctulatus, sp. n.

Ferrugineus, antennarum articulis 3 ultimis infuscatis; modice angustus, supra minute et crebre punctulatus, griseo-pubescens;

pronoto sat lato, lateribus antice leviter arcuatis, postice fere rectis, angulis posticis haud productis:

♂, antennis modice longis, articulis 2°–8° moniliformibus, 9° magno, inflato, subtus paulo excavato, pedibus gracilibus, tibiis anticis et mediis ad apices paulo latioribus.

Long. 3 mm.

Hab. S. E. Borneo: Martapura (*Doherty*).

This is a small insect, with the upper surface strongly punctured, as in *H. servilis*, but more finely and closely. The sides of the pronotum are much less strongly curved than in that species or *H. latipes*, being very gently rounded in front and nearly straight behind, with the hind angles right angles. The antennae are like those of *H. latipes*, but a little more slender, with joints 2 and 3 elongate, 4 to 8 beadlike and about as long as they are wide. The legs are slender and the tibiae nearly straight, but those of the front and middle pairs a little dilated towards the extremities.

I have seen only a single male specimen.

Heliobletus acuticollis.

Totus ferrugineus, antennis (basi excepto) nigris; sat robustus, minutissime punctulatus, nitidus, ubique griseo-pubescens, pronoto lato, subtilissime haud crebre punctulato, lateribus bisinuatis, angulis posticis productis, acutis; elytris paulo minus minute sed leviter punctatis:

♂, antennis crassis, articulis 3°–8° transversis, compactis, 9° magno, ovali, subtus leviter planato, pedibus gracilibus, tibiis simplicibus, fere rectis.

Long. 3·5 mm.

Hab. S. E. Borneo: Martapura (*Doherty*).

The general shape and colouring are exactly as in the other species, but the legs (of the ♂) are quite simple and the upper surface is shining and very finely and lightly punctured, especially upon the pronotum, the sides of which are distinctly bisinuated and the hind angles acutely produced. The antennae are massive, joints 3 to 8 very short and compact, 9 very large, almost regularly oviform and not excavated, 10 transverse, very slightly produced inwardly, and 11 shortly oval. The legs are slender, the tibiae almost straight and not at all dilated.

Heliobletus latipes, sp. n.

Totus ferrugineus, antennarum articulis 5°–6° ultimis nigris; modice angustus, griseo-pubescens, supra minute, sat crebre, punctatus, prothorace quam longitudinem paulo latiore, lateribus bisinuatis, angulis posticis vix acutis, basi haud lato, elytris fortiter convexis:

♂, antennis haud gracilibus, articulis 3°–8° transversis, compactis, 9° magno, inflato, subtus leviter concavo; pedibus crassis, pallidis, tibia postica pone basin dilatata, medio quam femorem haud angustiori.

Long. 3·3 mm.

Hab. S. E. Borneo: Martapura (*Doherty*).

This is rather smaller and more graceful and tapering in shape than *H. servilis*, as well as more finely punctured. The antennae and legs are rather stout, the 3rd to 8th joints of the former being short and compact, the 9th large, shortly oval and slightly excavated beneath, the 10th small, transversely triangular, and the 11th shortly oval. The middle and hind tibiae are dilated beyond the base, the latter about as wide as the femora (see page 41, fig. 9). The entire surface, including the antennae and legs, is clothed with a fine yellowish-grey pubescence.

A second male specimen from Perak appears to belong to the same species.

Genus Aphorista.

A. humeralis Gorh., is synonymous with *A. morosa* Lec.

Genus Epipocus.

The Central American species of *Epipocus* have been greatly confused by Gorham, partly owing to his having failed to correctly distinguish the sexes, and his grouping of them according to the shape of the tips of the elytra is misleading. This feature varies to a greater or less extent according to the sex. Thus, although *E. bivittatus* is grouped by him as a species with the apex of the elytra rounded and the male is said to differ from the female only in having a minute tooth near the apex of the front tibia, he has figured a male showing no tibial tooth (which is very distinct but at a distance from the apex), but correctly representing the extremities of the elytra as truncated and sharply pointed. The sexes can be distinguished with

the greatest ease in this genus by the great difference in the terminal part of the abdomen, the males having a rather long and more or less asymmetrical sixth segment, often exposing on the left side a slender chitinous ramus of the aedeagus.

The description and figure of *E. sallaei* Gorh., are of the male and not the female as supposed, and the dilated elytra may be a male characteristic. There is no tooth to the front tibia in this sex, but all the tibiae are curved and rather clavate.

The two specimens supposed by Gorham to be male and female of *E. subcostatus* Gorh., are both males, and that described as the female of *E. brunneus* Gorh., may be that of *E. subcostatus*, but the type specimen of *E. brunneus* is identical with the earlier-described *E. mollicomus* Gorh., the original specimens of which are very immature.

The specimens referred by him to *E. rufitarsis* Chevr., include *E. fuliginosus* Guér., and, judging by the considerable differences in the aedeagi of the males, several other species as well, but more adequate series are necessary to enable these to be satisfactorily described.

The Mexican specimens referred to *E. unicolor* Horn, belong to a new species, which may be called

Epipocus parvus, sp. n.

Flavus, antennarum articulis 6°–10° brunnescentibus, paulo nitidus, haud dense punctatus, sat sparse haud minute pubescens; pronoto valde transverso, lateribus antice fortiter curvatis et contractis, foveis basalibus profundis et angustis, antice sat late fossulatis; elytris convexis, longe cordiformibus:

♂, elytris apice oblique truncatis, tibia antica intus dentata:

♀, elytris haud truncatis.

Long. 5·5 mm.

Hab. Mexico: N. Sonora (*Morrison*).

This differs from the N. American *E. unicolor* in being rather smaller, lighter coloured, more shining and clothed with longer hair. The pronotum is much more narrowed in front and the antennae are much more slender.

Genus Anidrytus.

I can find no difference between specimens in the British Museum labelled as types of *Anidrytus bisignatus* and

angustulus, of Gerstaecker, except in size and a rather greater elongation in the latter, and I am not convinced of the separateness of the two species.

The specimen from San Joachin, Guatemala, referred to *A. liquefactus* by Gorham (Biol. Centr.-Amer. vii, p. 126), figures again two pages later in the same work as *Anidrytus* ? sp. It is very obviously different from *A. liquefactus*, and Gorham is quite wrong in saying that it is without an internal tooth to the front tibia, for there is a very strong one produced by the abrupt dilatation of the apical part, which is much less flattened and bent than in the other male specimen described by him. This species may be called

Anidrytus guatemalae, sp. n.

Gorham has given a description of the unique specimen, but besides the features mentioned by him it is considerably longer and narrower than *A. liquefactus*, more densely punctured and pubescent, scarcely shining and with much more slender legs and antennae.

Length 8 mm.; breadth 5 mm.

Ephebus depressus Gorh., has all the characters of *Anidrytus*, to which it must be referred. As Gorham later used the same specific name for a Guatemalan member of this genus, the latter must be renamed and I propose to call it

Anidrytus decoratus, nom. nov.

Anidrytus fallaciosus Gorh., appears to be *A. ephippium* Gerst., from which, although described from the same region, Gorham did not attempt to distinguish it. The pronotum is not, as he states, more deeply punctured in the middle than at the sides. This error, as well as the general inadequacy of the description, was no doubt due to the extremely dirty state of his specimen.

The following new species is closely related to the last. It appears to resemble none of the Peruvian species described by Kirsch.

Anidrytus humeralis, sp. n.

Ferrugineus, antennarum articulis sex ultimis (sed apice rufescente) pronoto elytrisque nigris, illius lateribus (postice angustius) elytrorumque humeris et apicibus ferrugineis; oblongus, supra

crebre et minute punctatus, breviter fulvo-hirsutus, prothoracis lateribus postice fere parallelis:

♂, tibiis anticis ante apicem minute haud acute dentatis.

Long. 5·5–7 mm.; lat. max. 3–4 mm.

Hab. Ecuador: Macas (*Buckley*); Peru; Colombia.

It is a little less ovate than *A. ephippium*, the pronotum being rather broader in front and less gradually rounded. Its dark area is much narrower in front than behind, where it usually reaches the hind angles. Upon the elytra the dark patch extends almost to the outer edges, enclosing a conspicuous humeral spot, and its posterior margin is jagged near the suture. In the male the front tibia is curved, thickened at the end, with a minute sharp tooth, which is absent in *A. ephippium*. *A. plagiatus* Gerst., is evidently closely similar, but has the front tibia of the male differently formed.

Anidrytus fuscus, sp. n.

Nigro-piceus, pedibus, antennarum articulis 5 basalibus apiceque extremo, pronoto (disco nonnunquam excepto) elytrorumque humeris et apicibus obscure rufis; modice latus et depressus, ubique fortiter sat crebre punctato, haud dense fulvo-pubescens:

♂, tibiae anticae dimidio inferiore paulo latiori, intus multo ante apicem acute spinoso.

Long. 4·5–5 mm.

Hab. E. Brazil: Pernambuco.

A considerable series of this formerly in the collection of Alexander Fry vary in colour from light brown to nearly black, but in fully coloured specimens the five basal joints and the extreme tip of the antennae, the sides of the prothorax, the shoulders and extremities of the elytra, and the legs are reddish and the remaining parts very dark. It is a rather small, short and broad insect, not very convex and rather strongly and closely punctured.

It was taken in March by Mr. Fry and was also found by the late E. Gounelle.

Anidrytus pilosus, sp. n.

Omnino flavus, supra dense sat longe pallide flavo-pilosus, antennarum articulis sex ultimis plus minusve obscurioribus; breviter ovatus, convexus, pronoto lato, lateribus antice curvatis, postice

rectis, foveis basalibus profundis, fere ad medium attingentibus, antennarum articulo ultimo fere discoidali, duabus praecedentibus intus valde productis:

♂, tibia antica graciliori, subtus post medium dentata.

Long. 5·5 mm.

Hab. S. Brazil: Espirito Santo (*Schmidt*).

This is easily recognisable by its thick and rather long clothing of pale sulphurous-yellow hair. Two specimens (male and female) from the Fry Collection, although evidently of the same species, differ considerably in form. The male is very short and broad, with the sides of the prothorax gently curved in front and divergent behind and the hind angles acutely produced. The female is narrower, the sides of the thorax are strongly rounded in front and parallel behind, and the hind angles are right angles. The club of the antenna is longer and the 9th and 10th joints less transverse and less angulated anteriorly. The front tibia of the male is slender and curved in its anterior half and toothed beneath a little beyond the middle.

Genus Epopterus.

The South American *Epopterus ocellatus* Oliv., must be removed from the list of Central American species. The common insect so named by Gorham, which, in spite of its different aspect, appeared to him impossible to separate satisfactorily, is not likely to cause similar difficulty to others. It is a larger, broader and less closely punctured and hairy insect, with a pattern composed of only two, instead of three, colours as in *E. ocellatus*. I consider it to belong to *E. partitus* Gerst., but with the black markings rather more reduced than in the typical form.

Genus Stenotarsus.

Cziki has introduced a new name, *Stenotarsoides*, for the Asiatic species of *Stenotarsus*. This he describes as a genus, although without indicating a single distinctive character. While separating, according to his notions of propriety, the Asiatic species, he associates still the American and African, whether from geographical or zoological reasons is immaterial, since his so-called genus, in the absence of any diagnostic character, cannot reasonably be held to have any substantial existence. It is true that the International Rules of Nomenclature recognise

the "indication" of species as sufficient to validate a new generic name, but the fact that this would permit any cataloguer to introduce genera upon fantastic grounds which, as in the present case, may not even pretend to be morphological, seems to preclude the possibility of its ever being generally adopted.

Gerstaecker pointed out more than half a century ago that (as would be expected) the African species of *Stenotarsus* are, in certain respects, more nearly related to the Oriental species than to the American, and Gorham, in describing the Japanese *S. internexus*, has noticed that it forms the connecting link between the New World and Old World forms. The genus is in fact a worldwide one, passing with scarcely perceptible change of form from Tropical Asia through Japan to North and Tropical America, like the Mongolian race of men, and through the Eastern Tropics to Australia and Madagascar (*S. internexus*, just mentioned, has an obvious relationship to the N. American *S. hispidus*).

S. guineensis Gerst., ranges from Sierra Leone to Uganda, and *S. aequatus* Gorh., is a synonym for it. Gorham notes that his type is much less pubescent than *S. guineensis*. This is true, the clothing having been rubbed off so that scarcely a trace remains. *S. mombonensis* Weise, is exceedingly similar, but the raised margin of the thorax is narrower and the footstalk of the antenna only pale at the base. It is common in Nyasaland and Gazaland.

Stenotarsus ursinus and *S. leoninus* have been described as unicolorous species, but examples of both occur in which the elytra are marked with black spots in the same position as in *S. pantherinus* Gorh., the basal one, however, more broadly adjacent to the anterior margin. In *S. ursinus* the spotted form seems peculiar to North Borneo, while Sarawak specimens never show more than a slight indication of spots.

Gorham appears to have been wrong in attributing Central American specimens to *S. claviger* Gerst., the form of the antennal club in these agreeing rather with that of *S. validicornis*. The specimen from St. Catherina referred to by Gerstaecker as belonging to *S. claviger* was in Gorham's collection (now in the British Museum), but this specimen does not agree with the description and must have been too hastily examined by Gerstaecker. I believe it to be a rather large specimen of *S. minutus*.

The specimen from Guatemala attributed to, and figured as, *S. maculicollis* Gerst., in Biol. Centr.-Amer. vol. vii, although extremely similar, must be separated from it, the antennae being considerably shorter and more compact and the club distinctly larger proportionately to the footstalk. The sides of the pronotum are more strongly curved and nearly parallel behind, and the raised margins broader. In both species the basal foveae form very deep and strongly oblique channels.

The Central American species may be called

Stenotarsus marginalis, sp. n.

S. maculicollis Gerst., really belongs to the section with elongate joints to the footstalk of the antenna.

The genus evidently forms exceedingly numerous local races in Tropical America, some of them having slight structural differences, while some, like *S. tarsalis* Gorh., seem to me no more than colour varieties (the latter of *S. circumdatus* Gerst.). Gorham has pointed out nothing to distinguish his *S. cordatus* from *S. globosus* Guér., and I have found nothing. The difference in the size of the thorax shown in his figures is quite imaginary. He evidently did not compare his specimens or he would have found the length of the legs to be distinctive of the males of *S. globosus*.

The specimens from Guatemala referred by him to *S. orbicularis* Gerst., do not agree in the least with the description of that species. They have no resemblance to *S. rubicundus* and are not at all orbicular. As Gorham has described the form it is sufficient to give it a name and I propose to call it

Stenotarsus ovalis, sp. n.

It is almost regularly oval in shape, with the shoulders less prominent and the elytra less convex than in *S. globosus*. There are two specimens, male and female, the male having the legs and antennae elongated, as in *S. globosus*.

The specimen from Panama is not conspecific with the last. Its pronotum is more closely punctured, the sides less strongly rounded, the front angles less prominent, and the lateral margins much narrower. It may be called

Stenotarsus chiriquinus, sp. n.

The sexual features mentioned above (*i. e.* the elongation of the legs and antennae of the males), although recognised by Gerstaecker, were ignored by Gorham. The latter's *S. macroceras* is the male of *S. purpuratus* Gerst. Still more remarkable than the great elongation of the antennae and legs in that form is the sharpening of the hind angles of the prothorax.

There is no valid reason for the inclusion of *S. adumbratus* Gorh., in the Central American fauna, the specimen from Tactic so identified being quite different from the Colombian type with short antennae to which alone the description applies. The Guatemalan species may be called

Stenotarsus guatemalae, sp. n.

Deep chestnut-red, with the last four joints of the antenna black. Oval, convex and very shining, with a moderately coarse clothing of tawny hair. The pronotum is very minutely punctured, with its sides little curved, divergent from front to hind angles, the lateral margins narrow and the hind angles acute. The antennae (of the male) are slender, fully two-thirds as long as the body, with the joints elongate, except the 8th, 9th, and 10th, of which the 8th is beadlike, the 9th about as long as it is wide, and the 10th transverse, the last three joints not greatly dilated but very loosely articulated. The elytra are finely but distinctly and not closely punctured, the punctures being larger behind the shoulders.

Length 3 mm.

Hab. GUATEMALA, VERA PAZ: Tactic, Purula (*G. C. Champion*).

Another closely allied Guatemalan species was confused by Gorham with *S. sallaei*, which is apparently peculiar to Mexico. I propose to name this

Stenotarsus distinguendus, sp. n.

Deep mahogany-red, with the last four or five joints of the antennae black.

Elongate-oval, shining, with a moderately coarse clothing of tawny hair. The pronotum is minutely and densely punctured, with the sides little curved, divergent from front to base, the raised margins narrow, not widened in front, the basal foveae very deep and the hind angles acute. The elytra are rather closely and

not very finely punctured, with larger and more scattered punctures at the sides. The antennae are slender, with the 1st to the 7th joints elongate, the 8th slightly elongate in the male and transverse in the female, the 9th to the 11th strongly dilated, the 10th distinctly transverse and the 11th twice as long. The legs, as well as the antennae, are more slender in the male.

Length 4 mm.

Hab. GUATEMALA, VERA PAZ: Sabo, Tactic, Sinanja (*G. C. Champion*).

This is larger, more punctured and less shining than *S. guatemalae*, but less finely and closely punctured than *S. sallaei*, and the thoracic margins are narrower than in that species and less rounded.

Stenotarsus latipes, sp. n.

Pallide flavus, minute fulvo-pubescens, antennarum articulis 3 et 4 rufescentibus, 5–11 nigris; elongato-ovalis, pronoto subtiliter crebre punctato, lateribus parum arcuatis, antrorsum valde approximatis, angulis posticis acutis, marginibus angustissimis; elytris crebre et confuse punctatis; antennis gracilibus, articulo penultimo transverso, 8° globoso, ceteris omnibus elongatis:

♂, antennis gracilioribus, tibiisque latis, valde curvatis.

Long. 5·5 mm.

Hab. MEXICO: Jalapa (Hoege), Juquila; GUATEMALA: St. Geronimo, 3,000 ft. (*G. C. Champion*).

This has only a superficial resemblance to the S. Brazilian *S. angustulus* Gerst., to which Gorham referred the specimens here described. It is much more finely and closely punctured, with finer and less pale pubescence. The sides of the pronotum are less rounded, the margins narrower, and the antennae have only two entirely pale joints. The broad, flat, strongly curved tibiae of the male are very peculiar.

Stenotarsus rotundus, sp. n.

Fulvus, antennarum articulis sex ultimis infuscatis; late ovatus, pedibus antennisque paulo elongatis, harum articulo secundo globoso, 10° transverso, ceteris elongatis, corpore supra parum dense fulvo-vestito, pronoto lato, cum capite fere semicirculari, margine laterali lato, foveis basalibus profunde impressis; elytris sat fortiter et aequaliter haud parce punctatis.

Long. 5 mm.; lat. max. 3·5 mm.

Hab. PANAMA: Volcan de Chiriqui, 2,000–3,000 ft. (*G. C. Champion*).

The single specimen of this species was not distinguished by Gorham from *S. pilatei*, of which it has the colour and size, although otherwise entirely different. It has a very regular broadly oval outline, the pronotum being almost exactly semicircular in shape, allowing for the emargination which receives the head. The raised margins are very broad and only a very little narrower behind than in front. The elytra are rather strongly, evenly and closely punctured. The legs and antennae are slender, the last six joints of the latter dark and the club loosely articulated and not much dilated.

Stenotarsus subtilis, sp. n.

Fulvus, antennarum articulis 6 ultimis fuscis: ovalis, prothorace brevi, anguste marginato, lateribus parum arcuatis; elytris crebre minute punctatis, dense fulvo-vestitis; antennarum articulo 2 globoso, ceteris elongatis.

Long. 6 mm.; lat. max. 4 mm.

Hab. PANAMA: David, Volcan de Chiriqui (*G. C. Champion*).

This rather closely resembles *S. pilatei* Gorh., with which it was confused by Gorham, but it is more broadly oval and less attenuated behind, and the elytra are very finely and closely punctured, without large scattered punctures. The antennae have six, instead of four, joints dark and all but the second joint are elongate. The legs are longer in the male than in the female.

The two insects associated by Gorham as forming his genus *Systaechea* are very obviously not nearly related. The figure of the second species, *S. championi*, does not accurately represent the antennal club, which is compact and rather abrupt—indeed, exactly as in *Anidrytus*—and entirely different from that of the first species, *Systaechea cyanoptera*. If compared with *Anidrytus dolosus* Gorh. (from the same locality) it will at once be seen that it is really a closely-allied species of the same genus. *S. cyanoptera*, which must be regarded as the type of *Systaechea*, has no tangible character by which it can be distinguished from *Stenotarsus*, although a rather isolated species. The raised margin of the pronotum is very

narrow, but not more so than in *S. latipes* (included in *Stenotarsus* by Gorham).

Stenotarsus malayensis, sp. n. (Plate I, fig. 2.)

Fusco-castaneus, pedibus antennisque rufis, harum clava autem nigra; late oblongus, subnitidus, sat longe fulvo-pubescens, pronoto parce et minute punctulato, marginibus lateralibus antice latis, postice paulo angustatis; elytris fortius et crebrius punctatis, lineis punctorum majorum lateralibus vagis; antennis modice longis, clava laxe articulata, longitudine ad articulos 2°–8° conjunctos fere aequali, articulo ultimo ad duos praecedentes aequali.

Long. 4 mm.; lat. max. 2·5 mm.

Hab. BORNEO: Pengaron (*Doherty*); MALAY PENINSULA: Perak (*Doherty*), Penang (*G. E. Bryant*).

This evidently rather closely resembles *S. birmanicus* Gorh., but the regular striation of the elytra is replaced by irregular vague lines of rather larger punctures traceable only upon the outer part of the elytra. It is broadly oblong in shape, tawny-red in colour, except the last 3 or 4 joints of the antenna, and clothed with rather coarse tawny pubescence. The upper surface is moderately shining, especially the pronotum, which is rather thinly punctured and pubescent. The lateral margins are broad in front and a little narrowed behind. The antennae are moderately long, joints 2 to 8 short and compact and together about as long as the three last, which form a loosely-jointed club, the terminal joint of which is about twice as long as it is wide and the other two rather transverse.

Stenotarsus musculus, sp. n.

Totus fulvus, antennarum clava nigra; late ovalis, supra undique dense subtiliter punctatus et breviter fulvo-pubescens, prothoracis margine laterali antice lato, postice paulo attenuato; elytris regulariter punctato-striatis, striis exterioribus paulo fortioribus, duabus lateralibus antice conjunctis, abbreviatis; antennarum clava longa, ad articulos reliquos conjunctim longitudine aequali, articulo 9° quam 11° vix breviori.

Long. 4 mm.; lat. max. 2·75 mm.

Hab. BORNEO: Pengaron (*Doherty*).

There are three specimens in the British Museum.

This also is evidently very similar to *S. birmanicus* Gorh., but with a longer antennal club. It is rather paler in colour than *S. malayensis*, larger and more oval in shape and very finely and densely punctured above, with a clothing of very short, close and regular pubescence. The elytra bear regular lines of fine but larger punctures, which become progressively stronger from the suture to the outer margin, the two outermost lines uniting behind the shoulders and abbreviated behind, and the 3rd and 5th intervals wider than the rest. The black club of the antenna is long, about as long as the entire footstalk, of which joints 2 to 8 are short and close. The terminal joint is little longer than the 9th joint.

Stenotarsus nigripes, sp. n.

Fusco-rufus, pedibus, antennis corporeque subtus nigris; pronoti disco nitido, subtilissime punctato et parce setoso, lateribus fortiter arcuatis, marginibus sat angustis at valde elevatis, basi sulco profundo anguste marginato; elytris fortiter punctatis, absque lineis distinctis, breviter sat dense griseo-pubescentibus; pedibus antennisque gracilibus, harum articulis omnibus elongatis, 3°–9° duplo circiter longioribus quam latioribus, ultimo haud longe ovali.

Long. 4. mm.; lat. max. 3 mm.

Hab. ASSAM: Manipur (*Doherty*).

A single specimen.

The species is easily recognisable by its entirely black and rather slender legs and antennae. The upper surface is deep red in colour, a little paler at the sides of the pronotum, and not very densely clothed with fairly coarse greyish pubescence, scanty upon the middle of the pronotum, which is smooth and shining. The lateral margins of the latter are strongly elevated, but not wide, and there is a deep basal sulcus or stria close to the margin. The elytra are strongly and irregularly punctured, without distinct lines, moderately broad behind the shoulders and tapering at the apices. The joints of the antennae are all elongate, except the 2nd and 10th, the club not strongly marked and the last joint less than twice as long as wide.

Stenotarsus globulus, sp. n.

Fusco-castaneus, pedibus antennisque rufis, harum articulis 2 vel 3 penultimis ultimique parte basali fuscis; globosus, subnitidus,

undique fulvo-pubescens, pronoto aequaliter minute et crebre punctulato, marginibus lateralibus sat latis, obliquis; elytris convexis, minus subtiliter punctatis, punctis inaequalibus, sublineare ordinatis; antennis haud longis, articulo 9° globoso, 10° transverso, 11° ovali.

Long. 2·5 mm.; lat. max. 2 mm.

Hab. SARAWAK: Mt. Matang.

Several specimens were found in January and February by Mr. G. E. Bryant.

It is a small globular species of dark chestnut colour, with the legs and antennae pale, except the 9th, 10th and the basal half of the last joint of the latter, which are dark. It is entirely clothed above with a yellowish pubescence, which is rather less fine than in the two following species, especially upon the elytra. The pronotum is finely, closely and evenly punctured, with wide lateral margins and without a basal stria. The elytra are rather more coarsely punctured, with an indication of alternating longitudinal bands of larger and smaller punctures at the sides. The antennae are a little stouter than in *S. basalis*, with the 9th joint nearly globular, the 10th rather transverse and the last elongate-oval.

S. contractus Gorh., from Burma, is evidently very like this, but the lateral margins of the pronotum are there very narrow.

Stenotarsus basalis, sp. n. (Plate I, fig. 3.)

Fusco-castaneus, prothoracis lateribus, humeris antennisque flavescentibus, sed harum articulis 9° et 10° nigris; subglobosus, modice nitidus, ubique subtiliter flavo-sericeus, pronoti marginibus latissimis, subtiliter rugosis, opacis, densius sericeis, extus regulariter arcuatis, angulis anticis prominentibus, disco aequaliter minute et crebre punctato, postice late lobato, stria basali recta profunde incisa; elytris similiter punctatis, absque lineis, lateribus arcuatis, anguste reflexis; antennis sat gracilibus, clava laxe articulata.

Long. 3 mm.; lat. max. 2 mm.

Hab. SARAWAK: Mt. Matang.

Two specimens were found by Mr. Bryant in December.

This is another very short and globose species of nearly the same size, shape and colour as the preceding, but a little larger and more elongate. The lateral margins of the pronotum are still broader, flatter, more opaque and

more densely pubescent, and the base has a deeply incised stria, which is rather distant from the margin in the middle but almost touches it at the lateral foveae. The elytra are finely and uniformly punctured, without longitudinal lines, and their lateral margins are narrowly reflexed. The antennae are rather more slender than those of *S. globulus*, with their terminal joint pale and the two preceding ones black.

Stenotarsus tristis, sp. n.

Fusco-brunneus, antennis pedibusque rufis, illorum articulis 9° et 10° nigris; globosus, haud nitidus, corpore supra ubique aequaliter minute et dense punctulato et breviter pubescenti; pronoto semicirculari, marginibus lateralibus sat latis, obliquis, intus alte elevatis; elytris convexissimis, marginibus paulo reflexis; antennis brevibus, articulo ultimo breviter ovali, penultimo brevissimo, lato.

Long. 2·5 mm.; lat. max. 2 mm.

Hab. BORNEO, SARAWAK: Mt. Matang.

Two specimens were found by Mr. G. E. Bryant in January 1914.

S. tristis is a very small species of very globular form and dark brown in colour. The legs and antennae are red, but the two penultimate joints of the latter nearly black. The antennae are short, the last joint shorter than in *S. basalis* and *globulus* and the preceding one very short and broad. The puncturation of the upper surface is very fine and close and the pubescence correspondingly finer than in the two allied species. There is a rather indefinite transverse impression, but no sharply incised line (as in *S. basalis*) before the base of the pronotum, and the lateral margins are a little less broad than in that species and less horizontal, their inner edge being more strongly elevated.

Stenotarsus femoralis, sp. n.

Laete rufus, prothoracis medio usque ad basin (sed haud antice) utriusque elytri medio antennarumque clava nigris, hujus apice pallido; rotundatus, convexus, crebre et minute punctatus, subtiliter pubescens; pronoto brevi, fere semicirculari, angulis omnibus subrectis, marginibus latissimis, basi late lobato, stria fere recta profunde inciso; elytris haud seriato-punctatis; antennis gracilibus,

articulis tribus ultimis laxe connexis, apicali longe ovali; femore postico subtus post medium acute dentato.

Long. 2·5–3 mm.; lat. max. 2–2·5 mm.

Hab. JAVA; MALAY PENINSULA: Perak (*W. Doherty*).

Although the tooth behind the middle of the hind femora is probably a feature of the male, it is present in all the four specimens I have seen.

The species is very short and globose in form, with a large black patch in the middle of the pronotum and of each elytron. It is closely and finely punctured, pubescent and not very shining and the elytra have no distinct rows of punctures. The lateral margins of the pronotum are very broad and little contracted behind and the base is lobed, the lobe cut off by a nearly straight impressed stria. The antennae are long and slender and the club loosely jointed, with a very long terminal joint.

S. lituratus Gerst., the only other known species of the genus from Java, is a larger insect, with striate elytra and reduced black marking.

Genus CHONDRIA.

Gorham was quite wrong in describing this genus as more closely allied to *Symbiotes* than to *Stenotarsus*. The tarsi are not, as he says, quite simple, but are entirely unlike those of *Symbiotes*, of which the first three joints are short and of nearly equal size. In *Chondria*, the first is elongate, the second produced, much less than in *Stenotarsus* but beyond the third joint, which is very small and inconspicuous. Everything else is as in *Stenotarsus*, of which it is therefore only a rather simplified, perhaps degenerate, form. The production of the second joint is more apparent in the hind feet than in the anterior ones. Cziki, in Ann. Mus. Nat. Hung. iii, 1905, p. 573, has actually described the second joint as long and bilobed, from which it is evident that he does not know the genus. Only a single species has been known hitherto, but several more are described here, each represented only by a single specimen.

Chondria seriesetosa, sp. n. (Plate I, fig. 6.)

Omnino fulva, longe fulvo-hirta, late ovata, alte convexa, nitida; pronoti lateribus antice rotundatis, postice rectis, parallelis, angulis

anticis obtuse rotundatis, stria basali recta profunda; elytris brevibus, grosse haud crebre lineato-punctatis, longe sat sparsim aureo-pilosis, pilis lineare ordinatis, lineis alternis erectis et retrorsum inclinatis.

Long. 2·5 mm.; lat. max. 1·5 mm.

Hab. BORNEO, SARAWAK : Mt. Matang.

A single specimen of this beautiful species was found by Mr. G. E. Bryant in December 1913. It is a little larger than *C. lutea* Gorh., and more stout and globular in shape. The sides of the prothorax are a little more rounded in front and not serrated, the angles are less prominent and the basal stria is nearly straight and farther from the hind margin. The elytra are much shorter and more convex, the punctures larger, more regular and less close together, and the clothing of stiff hairs not close and irregular but arranged in quite regular rows. The large serial punctures each give rise to a stiff golden hair which is pointed obliquely backwards, and between each two of the longitudinal rows so formed there is another row of similar but longer and erect hairs. As in *C. lutea*, the head, the broad thoracic margins and the antennae are clothed with similar long hairs, the club of the antenna is very loosely articulated, the first and second joints composing it transverse and nearly twice as long as those preceding, and the terminal joint broadly oval. The footstalk is much longer than the club.

Chondria indica, sp. n.

Laete fulva, antennis (basi excepto) nigris, sat dense erecte fulvo-hirta; late ovalis, convexa, pronoto pone basin haud marginato, utrinque profunde fossulato, lateribus leviter arcuatis, postice divergentibus, marginibus antice latis, postice attenuatis; elytris regulariter seriato-punctatis, interstitiis sat dense pilosis; antennis gracilibus, articulis 1°–8° paulo elongatis, 9° et 10° longitudine ad latitudinem aequalibus, 11° breviter ovali.

Long. 3 mm.; lat. max. 2 mm.

Hab. S. INDIA : Nilgiri Hills (*H. L. Andrewes*).

This is larger, more hemispherical and much more closely hairy than *C. seriesetosa*. It is clothed with erect yellow hair, longitudinally arranged upon the elytra as in that species, but in rather dense bands separated by narrow lines which coincide with the lines of punctures.

The pronotum is without a basal stria and the antennae are more slender than in any other known species.

Chondria ovalis, sp. n.

Fulva, antennarum clava nigra (apice extremo excepto); ovalis, dense breviter luteo-pilosa, pronoto haud nitido, minute punctato, lateribus regulariter arcuatis, marginibus haud latis, postice paulo attenuatis, stria basali subtili arcuata, ad marginem valde approximata; elytris regulariter seriato-punctatis, intervallis minute punctulatis; antennis haud longis, articulis 2°–8° globosis, compactis, 9° et 10° brevibus, 11° ovali, ad duos praecedentes longitudine aequali.

Long. 3·5 mm.; lat. max. 2 mm.

Hab. Malay Peninsula: Penang (*G. E. Bryant*, Nov. 1913).

This is rather larger, more closely and finely pubescent and more regularly oval in outline, than any other known species. The sides of the prothorax are not serrated, rather more evenly rounded and the margins not quite so broad as in *C. lutea* and *seriesetosa*, and the basal stria is very fine and close to the basal margin, the curvature of which it follows. The elytra are longer than in the other species and finely punctured, with regular rows of larger punctures. The antennae are not long, joints 2 to 8 are very compact and together about as long as the club, of which the first two joints are transverse and together about as long as the last. The club is black, but with the extremity of the last joint red.

Chondria triplex, sp. n. (Plate I, fig. 1.)

Rufa, prothoracis medio usque ad basin (sed haud antice) utriusque elytri medio antennarumque clava nigris, hujus apice pallido; breviter ovata, convexa, modice nitida, undique fulvo-pubescens, pronoto brevi, fere semicirculari, angulis omnibus fere rectis, marginibus latis, basi stria subtili ad marginem valde approximata impresso; elytris fortiter punctato-striatis; antennis modice longis, articulis tribus ultimis laxe connexis, fere ad reliquos longitudine aequalibus, articulo apicali longissimo.

Long. 3 mm.; lat. max. 2 mm.

Hab. Java: Selabintanah (*G. E. Bryant*, April).

This has the coloration and pattern of *Stenotarsus femoralis*, which also occurs in Java. It is of similar size and shape, being more rounded in outline and more convex than any of the species of *Chondria* just described. It is easily distinguishable from *S. femoralis* by the well-marked striae upon the elytra. The pubescence upon the upper surface is similar. The antennae are a little less slender, the club equally long, but the joints preceding it more short and compact. The base of the pronotum has a fine stria very close to the margin.

Chondria globulosa, sp. n.

Tota fusco-rufa, sat dense griseo-pubescens; breviter ovalis, fere globulosa, pronoti medio convexo, nitido, subtiliter parce punctulato et hirsuto, lateribus regulariter arcuatis, serratis, marginibus sat latis, basi fortiter sulcato, sulco a margine modice distanti; elytris regulariter seriato-punctatis, interstitiis subtilissime punctulatis; pedibus antennisque haud gracilibus, harum articulis 2°–8° globosis, compactis, 9° et 10° brevibus, 11° ad duos praecedentes longitudine aequali.

Long. 2·5 mm.; lat. max. 1·5 mm.

Hab. BORNEO, SARAWAK: Mt. Matang (*G. E. Bryant*, Feb.).

This little species is about the size of *C. lutea*, but much shorter and more globular in shape, dark-coloured and clothed with shorter pubescence, which however is less fine than in *C. ovalis*. The sides of the prothorax are regularly rounded and slightly serrated and the lateral margins broad and parallel. The discoidal part of the pronotum is strongly convex and deeply excavated at the sides and the basal stria is deep and not very close to the basal margin. The elytra are regularly punctured in rows. The legs and antennae are rather stout, the club of the latter nearly as long as the footstalk.

Chondria nitida, sp. n. (Plate I, fig. 5.)

Omnino castanea, nitida, postice breviter fulvo-setosa, modice elongata, fere oblonga; pronoti lateribus antice fortiter arcuatis, postice rectis, parallelis, marginibus antice latissimis, postice valde attenuatis, basi profunde sulcato; elytris leviter seriato-punctatis; antennis gracilibus, longitudine ad elytrorum longitudinem fere

aequalibus, articulis 2°–8° moniliformibus, similibus, 9°–11° ad hos conjunctos longitudine aequalibus, ultimo longe ovali.

Long. 2·5 mm.; lat. max. 1·5 mm.

Hab. BORNEO, SARAWAK: Quop (*G. E. Bryant*, March).

It is rather dark red in colour and very shining, with the pubescence short and scarcely traceable except upon the head and towards the extremities of the elytra. It is rather oblong in shape and the pronotum is broad in front and parallel-sided behind, with a deep basal groove not very close to the margin, and the elevated lateral margins very broad in front but considerably narrowed behind. The elytra are finely but distinctly seriate-punctate. The antennae are slender, with the 2nd to the 10th joints spherical, the last three large and the terminal one elongate-oval.

Probably in the quite fresh state the body is rather more hairy than in the unique type specimen, but this latter is otherwise in perfect condition.

Genus ECTOMYCHUS

Ectomychus monticola, sp. n.

Testaceus, clava antennali nigra, articulisque 7° et 8° infuscatis; oblongus, paulo depressus, setis pallidis erectis ubique vestitus; pronoto grosse haud crebre punctato, linea mediana fere laevi, lateribus abrupte sat late elevatis, marginibus horum interioribus carinatis, foveis basalibus profunde incisis, fere parallelis, vix ad medium attingentibus, marginibus exterioribus antice leviter arcuatis, postice rectis, angulis anticis paulo prominentibus, posticis rectis; elytris conjunctim latitudine ad prothoracem aequalibus, subtiliter sat crebre punctatis.

Long. 2–3 mm.; lat. max. 1 mm.

Hab. S. INDIA: Nilgiri Hills (*H. E. Andrewes*).

This is the second described species of a peculiar genus, of which the elevated sides of the pronotum, as well as the hairy surface, indicate a relationship to *Stenotarsus*, but the antennae are markedly different from those of all other genera of the family hitherto described. There is no transition from footstalk to club, but the latter is very abrupt, and pectinate in form, its three joints being loosely connected at their outer sides, the two basal ones strongly

transverse and the terminal one almost circular. The prosternum is moderately broad between the front coxae and produced beyond them, truncate behind and overlapping the front part of the mesosternum, except when the body is fully extended. The exposed part of the mesosternum is strongly transverse and the metasternum is slightly emarginate at its junction with the mesosternum. There is a rather deep depression on each side of the metasternum behind the middle coxae and also a circular depression on each side of the first ventral segment behind the hind coxae. This segment is as long as the remaining four together and is very strongly punctured at the sides.

The pronotum is very coarsely and deeply punctured, of the breadth of the elytra at the base and not very strongly narrowed in front. The lateral margins are moderately broad and rather declivous, with their inner edges very sharply carinate. The elytra are much more finely and closely punctured than the pronotum, and have the shoulders slightly prominent. From the Japanese species (*E. basalis* Gorh.), previously described, *E. monticola* differs by its coloration, coarser puncturation and wider margins to the pronotum.

MIMOLITHOPHILUS, gen. nov.

Corpus oblongum, toto subiliter sat dense sericeum. Pedes modice robusti, femoribus haud clavatis, tarsisque haud brevibus, horum articulo primo sat longo, secundo anguste lobato, tertio parvo, ultimo gracili. Antennae breves, articulo secundo brevi, tertio fere ad duos sequentes aequali, tribus ultimis clavam angustam formantibus, ultimo oblique acuminato. Pronotum vix convexum, lateribus late elevatis, postice contractis. Elytrorum apices haud connati, separatim rotundati, abdominis extremitatem detegentes. Labium transversum, emarginatum; palpi labiales minuti, simplices: palpi maxillares robusti, articulo ultimo magno securiformi. Mandibulae apice bifidae, intus acute unidentatae. Oculi haud magni, grosse granulati.

Type, *M. brevicornis.*

This is a very peculiar and isolated genus. It is apparently a wingless form and the elytra, although long, are separately rounded at the end and leave exposed the extremity of the abdomen. The whole surface of the body, including the legs, is covered with fine silky hair.

The antennae are much shorter than usual in the Endomychidae, with the three-jointed club not much dilated, but the last joint strongly asymmetrical and pointed. The hind legs are stouter than the rest and all the tarsi are rather long, but the second joint is strongly lobed. The general appearance rather suggests that of *Lithophilus*, although the antennae are longer, the tarsi more lobed and the penultimate (third) joint more conspicuous. The pronotum has very broad raised margins, as in *Stenotarsus*.

Mimolithophilus brevicornis, sp. n.

Fusco-brunneus, antennis, pedibus, pronoti et elytrorum lateribusque rufescentibus, ubique dense punctulatus et sericeus; oblongus, depressus, capite sat longe fulvo-pubescenti; pronoto dimidio latiori quam longiori, marginibus fortiter elevatis, lateribus antice arcuatis, postice contractis, angulis anticis prominentibus, haud acutis, posticis obtusis; elytris longis, fere parallelis; antennis longitudine fere ad pronotum aequalibus.

Long. 6 mm.; lat. max. 2·5 mm.

Hab. NATAL: Estcourt, Malvern (*G. A. K. Marshall*, Sept. and Oct.).

This is the largest of the three species known to me. It is more elongate and parallel-sided than the other two, with the discoidal part of the pronotum smoother and the sides less contracted behind. The antennae are extremely short in relation to the size of the insect.

Several specimens were taken by Dr. Marshall.

Mimolithophilus capensis, sp. n.

Obscure rufus, dorsi medio obscuriori, corpore ubique coriaceo et dense subtiliter sericeo; oblongus, haud convexus, capite fulvo-pubescenti, pronoto antice dilatato, postice valde contracto, lateribus medio obtuse angulatis, angulis anticis prominentibus, haud acutis, posticis obtusis, marginibus lateralibus valde elevatis, disco intra margines excavato; elytris sat longis, lateraliter leviter arcuatis, humeris prominentibus; antennis quam pronoto paulo longioribus.

Long. 4·5 mm.; lat. max. 2·3 mm.

Hab. CAPE COLONY: Cape Peninsula (*K. H. Barnard*, July), Cape Town (*F. C. Purcell*).

This is smaller and more elongate than *M. brevicornis*,

with the upper surface a little more opaque but rather less sombre in colour. The antennae are relatively a little longer and the legs a little more slender. The pronotum is very strongly dilated a little in front of the middle and much narrowed behind, and the elytra are well rounded at the sides.

Of a third species I await further specimens for description on a later occasion.

Genus Periptyctus.

Periptyctus eximius, sp. n. (Plate I, fig. 4.)

Ferrugineus, pronoti macula utrinque antica, elytrorum humeris, tibiarum dimidio inferiori tarsisque pallide flavis, pronoti medio et parte postica, utriusque elytri medio clavaque antennali infuscatis (sed hujus apice pallido); breviter ovalis, convexus, glaber; pronoto parce sat profunde punctato, utrinque late excavato, marginibus lateralibus haud latis, leviter arcuatis, angulis posticis acutis; elytris brevibus, striato-punctatis, punctis numerosis, distinctis, parum regularibus, humeris bene elevatis; antennis gracilibus, clava laxe articulata, articulo ultimo longe ovali.

Long. 3 mm.; lat. max. 2 mm.

Hab. New S. Wales: Illawarra (*G. E. Bryant*, Oct.).

Two specimens without apparent sexual difference.

Although much larger than the typical species, *P. russulus*, and differing from it considerably in shape, this species has all the peculiar structural features of the genus. It is a much shorter and more convex insect, very shining but with well-marked punctures upon the elytra, forming rather broad irregular longitudinal lines.

The sides of the pronotum are more broadly concave than in *P. russulus*, the elevated lateral margins a little narrower in proportion and the sides more gently and uniformly curved. The elytra are relatively very short, with the shoulders very prominent and the curvature of the sides continuous with that of the sides of the prothorax. They are also much more convex and more pointed behind than those of *P. russulus*. The antennae are long and slender, with a loosely jointed club. Although a broader insect the prosternum is rather narrower than in *P. russulus*. The latter species was taken at Hobart by J. J. Walker.

Genus Endomychus

As Gorham has himself admitted (Proc. Zool. Soc., 1887, p. 650), the difference in the maxillary palpi upon which he based the genus *Cyanauges* (*Coenomychus* Lewis) is not a substantial one and that genus is insufficiently distinguished from *Endomychus*. He has rightly referred here *Mycetina limbata* Horn (which Cziki's catalogue has for no apparent reason placed in *Aphorista*), but is entirely wrong in uniting with it the insect he himself very cursorily described (Endomycici Recitati, 1873, p. 64) as *Endomychus 4-punctatus*. That species, omitted from the catalogue, is very like *E. coccineus* L., but of shorter form. The actual habitat of the species, the unique specimen of which is now in the British Museum, is uncertain.

Genus Eucteanus.

The British Museum is fortunate in possessing types of all the known species of this genus. The remarkable uniformity which exists in the colour and pattern has caused the number of species to be overlooked. Not only have *E. hardwickei* Hope and *E. coelestinus* Gerst., been wrongly united, but the specimens described by Gorham as *E. cruciger* and *E. dohertyi* consist in each case of two species. As Mr. Gorham has not confined himself to the selection of a single type of the species described by him, I have selected in these cases the specimens from which the figures accompanying his descriptions have been drawn. *E. hardwickei* Hope differs from *E. coelestinus* Gerst. (the type of which has been acquired with the Gorham collection) by its longer antennae, narrower club, more transverse pronotum and the markedly oblique position of the anterior elytral patches.

The genus consists of two very well-marked divisions, the first and typical one composed of species of elongate shape, in which the sexes are strongly differentiated, the males having the abdomen hollowed out beneath and the sides of the cavity elevated into very strong sharp-edged crests. The remaining species are short and broad in shape and the sexes are alike. The shape of the antennal club is as remarkable for its variation according to the species as is the elytral pattern for its constancy.

The following table gives the differential characters of all the species in a concise form.

A. Form elongate: abdomen of ♂ hollowed beneath.
  B. Elytra opaque.
    C. Club of the antenna narrow . . . *hardwickei* Hope.
    c. „ „ „ broader . . . *coelestinus* Gerst.
  b. Elytra shining.
    D. Humeral crests angularly prominent . *humeralis*, sp. n.
    d. „ „ not angularly prominent.
      F. Pronotum transverse . . . *cruciger* Gorh.
      f. „ not transverse . . . *vicinus*, sp. n.

a. Form rather short: abdomen of ♂ not hollowed.
  G. Club of the antenna short, broad and compact.
    H. Elytra widest before the middle . . *dohertyi* Gorh.
    h. „ „ behind „ . . *eucerus*, sp. n.
  g. Club of the antenna long and loose . . *marseuli* Gorh.

Eucteanus humeralis, sp. n.

Violaceus, elytris nitidis flavo-maculatis, maculis magnis, subrotundatis, prima humerali, paulo obliqua, secundaque subapicali ad margines intus et extus fere attingenti; elongatus, convexus, pronoto opaco, dense punctato, lateribus sinuatis, angulis omnibus acutis, productis; elytris sat fortiter et crebre punctatis, humeris angulatim prominentibus, apicibus opacis; antennarum clava laxe articulata, articulo ultimo paulo longiori quam latiori:

♂, pedibus omnibus quam in femina longioribus, tibiis leviter arcuatis, abdomine subtus fortiter bicarinato.

Long. 11–12 mm.; lat. max. 6 mm.

Hab. BURMA: Haka, Chin Hills (*F. Venning*).

This has the form of *E. hardwickei* and *E. coelestinus*, as well as the angularly prominent crests at the shoulders, but it is rather smaller, the elytra are quite shining, except at their hinder extremities, and the club of the antenna is less dilated, more loosely articulated and more asymmetrical. The hind angles of the pronotum are a little more sharply produced. The coloration is practically the same as in *E. coelestinus*.

The male has the abdomen excavated in the same way, but with the lateral ridges more sharply elevated, and the tibiae are more regularly curved.

Eucteanus vicinus, sp. n.

Violaceus, elytris nitidis, utroque bimaculato, maculis magnis, pallide flavis, subrotundatis, ad margines internam et externam

fere attingentibus; elongatus, convexus, pronoto opaco, dense punctato, angusto, lateribus sinuatis, angulis omnibus acute productis; elytris sat fortiter et crebre punctatis, lateribus et apicibus opacis, humeris prominentibus, haud dilatatis; antennarum clava laxe articulata, articulo ultimo paulo longiori quam latiori:

♂, abdomine subtus fortiter excavato et bicarinato.

Long. 10–11 mm.; lat. max. 5 mm.

Hab. ASSAM: Manipur (*Doherty*).

The Museum collection contains one specimen of each sex, referred by Mr. Gorham to *E. cruciger*, but considerably smaller than the type (the specimen figured) of that species, from which it differs also in the narrower prothorax, with more sharply produced front and hind angles. The shoulders of the elytra are a little less prominent than in that species. The club of the antenna in both *E. vicinus* and *E. cruciger* is more abruptly dilated than in *E. hardwickei* and *E. coelestinus*, but much less so than in the *dohertyi* group. The ventral carinae of the male are very sharp and prominent.

The true male of *E. cruciger* is still unknown.

Eucteanus eucerus, sp. n.

Saturate coeruleus, elytris nitidis, utroque maculis duabus magnis subrotundatis ornato; parum elongatus, pronoti lateribus leviter bisinuatis, angulis omnibus acutis, vix productis, elytrorum humeris prominentibus, deinde ad post medium leviter ampliatis, apicibus paulo productis, haud acuminatis, separatim rotundatis; antennarum clava brevi, latissimo, articulo 9° vix dilatato, duobus ultimis late connatis.

Long. 8–9 mm.; lat. max. 5–5·5 mm.

Hab. ASSAM: Manipur (*Doherty*).

This is a member of the second group—of smaller and shorter-bodied forms. The elytra are smooth and shining, with the shoulders rather square (not broadly rounded, as in *E. dohertyi* Gorh.), the widest part beyond the middle, and the pattern consisting of four large rounded pale yellow patches, exactly as in *E. dohertyi* and *E. cruciger*. The antennal club is short, but larger and broader than in any other known species of the genus, the last two joints being very closely fitted together in the form of a triangle with almost uninterrupted sides, the preceding one only

very slightly dilated at the end. The club of *E. dohertyi* is of similar form but less dilated.

The two sexes are almost alike, but specimens with the abdomen more shining (that is, less closely punctured and hairy) and the 6th segment distinctly exserted are apparently the males.

Of the eight specimens mentioned by Gorham under the name of *E. dohertyi* six belong to the new species, the two from the Ruby Mines district alone agreeing with his figure.

Genus Bolbomorphus.

The new species of this genus described below is very interesting as a connecting link between *Bolbomorphus* and *Eucteanus*, indicating forcibly the non-significant character of the degree of dilatation of the antennal club, which has been treated as of primary importance in the grouping of the genera. In *Eucteanus* occurs the extreme degree of dilatation known in the Endomychidae (*E. eucerus* Arr.), while in the type-species of *Bolbomorphus* (*B. gibbosus* Gorh.) this feature is reduced almost to its minimum. In the second described species (*B. theryi* Gorh.) there is, according to the figure, a distinct widening, and in this (the third species) the antennae are in practically the same condition as in *Eucteanus hardwickei* Hope, the type-species of that genus, in which they exhibit their least developed phase in *Eucteanus*. In its general form *B. sex-punctatus* shows a close approximation to the smaller species of *Eucteanus* in which external sexual differences are absent, and indeed there is no important feature by which to distinguish them, so that we have a series of closely-related forms showing a complete transition in the shape of the antenna from one extreme to the other.

Bolbomorphus sex-punctatus, sp. n.

Brunneus, antennis nigris elytrisque punctis sex parvis flavis ornatis, duobus anterioribus transversim approximatis, externo post-humerali, fere ad marginem, tertioque subapicali remoto; ovalis, parum elongatus, pronoto sat parvo, fortiter punctato (lateribus subrugose), marginibus lateralibus bisinuatis, angulis omnibus acutis, basi haud marginato, medio laevigato, foveis basalibus brevibus; elytris valde convexis, nitidis, fortiter punctatis, humeris prominentibus; pedibus gracilibus, tibiis omnibus rectis, versus

apices paulo clavatis; antennarum articulis tribus ultimis valde compressis, primo elongato, ceteris latitudine fere ad longitudinem aequalibus.

Long. 8·5 mm.; lat. max. 5 mm.

Hab. E. China: Shanghai.

A single specimen collected by Fortune has been in the British Museum Collection since 1854. It appears to be a female.

The elytra are broader at the shoulders and rather less pointed behind than in *B. gibbosus* Gorh., and their convexity is less than in that species. The puncturation of the upper surface is stronger and closer, especially at the sides of the pronotum, which are densely punctured and opaque. The yellow spots are small and round, one placed just behind the shoulder and almost touching the lateral margin of the elytron, another near the last but just within and at the base of the shoulder prominence, and the third remote from these and considerably behind the middle of the elytron. The club of the antenna is very loosely articulated and dilates rapidly from base to extremity, where it is about twice as wide as in *B. gibbosus*.

Genus Milichius.

Thelgetrum of Gorham is synonymous with *Milichius*, *T. ampliatum* Gorh., being merely a little more elongate in shape than the other species so far known, and *Gibbiger* of Cziki, which has been separated solely on account of its thicker antennae, cannot be retained, for the proportions of those organs vary with every species. The genus accordingly contains at present six described species, to which several are added here. The genus appears to be Malayan in its distribution and is very well characterised by its hemispherical shape, long and narrow antennal club, widely separated coxae and broadly dilated basal joints of the feet. No sexual differences are known.

Milichius fuscipes, sp. n.

Laete flavo-rufus, laevissime aureo-micans, pedibus et corpore subtus infuscatis, tarsis rufis, antennis nigris, articulo ultimo pallide flavo; globosus, capite crebre inaequaliter punctato; pronoto minus crebre sed distincte punctato, lateribus leviter curvatis, antrorsum contractis, angulis anticis productis, rotundatis, posticis rectis, acutis, foveis basalibus brevissimis; elytris minute sat parce punc-

tatis, callis humeralibus prominentibus; antennis gracilibus, quam corporis longitudine parum brevioribus, articulis 2° et 8° latitudine ad longitudinem aequalibus, reliquis elongatis, tribus ultimis fere aequalibus.

Long. 4 mm.

Hab. SUMATRA: Padang, Sidempoean (*Ericson*).

The type is unique.

The species is very closely related to the typical *M. nigricollis*, Gerst. It is bright ferrugineous red in colour, with the pronotum a little darker, the legs and lower surface very dark brown, with the exception of the sides and extremity of the body beneath, and the antennae black, except three or four basal joints, which are very dark brown, and the terminal joint, which is bright yellow. It might be regarded as a colour variety of *M. nigricollis*, but for the antennae, which are much more than half the length of the body, with joints 3 to 8 distinctly diminishing in length, the 8th about as wide as long. The puncturation above and beneath is as described for *M. nigricollis* Gerst. (which is unknown to me), but the basal foveae of the pronotum, although extremely short, are deep and broad.

Milichius politus, sp. n.

Laete fulvus, antennis nigris (articulis 4 basalibus exceptis); globosus, glaber, nitidissimus, capite et pronoto minute sed distincte punctatis, hoc antrorsum valde contracto, angulis productis, haud acutis, lateribus arcuatis, foveis basalibus brevissimis, profunde impressis, elytris parce subtilissime punctatis, callis humeralibus prominentibus; antennis gracilibus, articulo 8° transverso, reliquis paulo elongatis, tribus ultimis longioribus.

Long. 4·5 mm.

Hab. NIAS I.

A single specimen of this species, like many of the foregoing, formed part of the great collection made by the late Alexander Fry. It is bright orange-yellow in colour, with a very faint metallic golden lustre upon the elytra in a certain light. The antennae are black, except the four basal joints, and the last four ventral segments of the abdomen are paler than the rest of the lower surface, which, with the legs, is uniformly chestnut-red. There is a close resemblance to *M. fuscipes* but, besides the differ-

ently coloured antennae and legs, the puncturation of the upper surface is finer and more scattered, the front angles of the pronotum are rather less blunt and the antennae a little shorter.

Milichius apicicornis, sp. n. (Plate I, fig. 12.)

Ferrugineus, prothoracis lateribus callisque humeralibus paulo dilutioribus, antennarum articulis 5° vel 6° ad 10° infuscatis; subglobosus, nitidus, capite et pronoto modice punctatis, hoc antrorsum valde contracto, angulis productis, elytris fortiter modice crebre punctatis, callis humeralibus prominentibus; antennis sat gracilibus, articulis 2° et 8° longitudine ad latitudinem aequalibus, reliquis elongatis, tribus ultimis paulo longioribus.

Long. 3·5–4 mm.

Hab. BORNEO: Sarawak (*G. E. Bryant*), Banjermassin.

A series of specimens were taken by Mr. Bryant in December and February upon Mt. Matang in Sarawak. It is an almost uniformly brown species, with the antennae black, except the basal four (sometimes five) joints and the terminal one. The sides of the pronotum and the shoulders of the elytra are rather vaguely paler. The upper surface is rather strongly punctured, especially upon the elytra. The pronotum is strongly narrowed in front and deeply emarginate to receive the head, with the front angles well produced. The humeral calli are very prominent. The antennae are rather less slender than those of *M. nigricollis*, but less compact than in *M. ferrugineus*. All the joints are elongate except the small 2nd joint and the 8th, which is about as broad as it is long. The last three form a scarcely perceptible club, the terminal one a little longer than the others.

Milichius brevicollis, sp. n.

Ferrugineo-rufus, pronoti medio elytrorum sutura et lateribus antennisque, apice extremo atque articulis tribus basalibus exceptis, infuscatis; subglobosus, nitidus, capite parce et subtilissime punctato; pronoto brevi, parce subtiliter punctato, lateribus leviter arcuatis, angulis anticis haud fortiter productis, late distantibus; elytris nitidis, sat fortiter, parum dense, punctatis, callis humeralibus modice prominentibus; antennis gracilibus, articulis omnibus elongatis, tribus ultimis longissimis, aequalibus.

Long. 4 mm.

Hab. BORNEO: Pengaron (*W. Doherty*).

The type specimen is unique.

This species is closely similar to *M. apicicornis* and *biplagiatus*, but in addition to the slight difference in coloration it is rather more shining than the former, the punctures upon the elytra being a little finer and less close, the elytra are a little less broad at the shoulders, with the calli less prominent, and the prothorax is a little shorter, less deeply emarginate for the reception of the head, with the front angles less produced and farther apart. The antennae are slender, all the joints being distinctly elongate, the last three of equal length.

Milichius biplagiatus, sp. n.

Ferrugineus, nitidus, supra subtiliter metallicus, singulo elytro plaga obliqua parum distincta violacea ante medium ornato; subglobosus, capite crebre punctato, antennis vix elytrorum longitudine aequalibus, ferrugineis, articulis paulo elongatis, 3° quam 4° paulo longiori, 9°–11° majoribus, subaequalibus, pronoto irregulariter minute punctato, marginibus lateralibus sat late reflexis, postice fere rectis, angulis acutis; elytris sat fortiter punctatis, callis humeralibus prominentibus, minute punctatis, marginibusque distincte reflexis.

Long 4·5 mm.

Hab. BORNEO: Pengaron (*W. Doherty*).

This also is described from a single specimen. It appears to resemble rather closely *M. expetitus* Gorh., from Sumatra, although differing in its feebly metallic rusty-red colour, paler at the front angles of the thorax and upon the humeral calli and with an ill-defined oblique blue patch behind each shoulder, as well as by its uniformly reddish antennae, composed of slightly elongate joints, the last three forming a narrow club and the terminal one only a little longer than either of the two preceding. The reflexed margins of the elytra are rather more prominent than in *M. apicicornis*, but less so than in *M. ornatus* Arrow, described elsewhere.

Genus BECCARIA.

Beccaria sex-maculata, sp. n.

Nigra, nitida, pronoti angulis anticis late rufis elytrorumque maculis utrinque tribus discoideis, prima basali prope scutellum,

secunda ante medium prope marginem externam, tertiaque subapicali; hemispherica, capite subtiliter sat crebre punctato, pronoto ubique distincte punctato, lateribus densius, marginibus lateralibus leviter arcuatis, angulis anticis obtusis, posticis acutis, basi trisinuato, subtiliter marginato, foveis basalibus minutissimis; elytris ubique aequaliter sat fortiter punctatis; antennis modice gracilibus.

Long. 4·5 mm.; lat. max. 4 mm.

Hab. MALAY PENINSULA: Perak (*W. Doherty*); BORNEO: Sarawak, Mt. Merinjak, 600 ft. (*G. E. Bryant*, May).

This species resembles *B. wallacei* Gorh., in which the elytra have each an additional red spot, but the puncturation is quite different in the present case, that of the pronotum much stronger and closer and that of the elytra very regularly and evenly distributed, without trace of linear arrangement. The basal foveae of the pronotum are much shorter and there is a fine marginal stria at the base which is absent in *B. wallacei*. The last joint of the antenna is a little longer than wide, and the two preceding joints are distinctly transverse.

Beccaria coccinella, sp. n. (Plate I, fig. 10.)

Nigra, nitida, prothoracis dimidio antico elytrorumque plagis magnis utrinque duabus rufis, anteriori lunulata, humerem includenti, posteriori subapicali, transversim rotundato, pedibus antennarumque articulis 2 vel 3 basalibus etiam obscure rufis; hemisphaerica, capite subtiliter sat dense punctato; pronoto ubique minute punctato, lateribus laevissime arcuatis, angulis anticis obtusis, basi trisinuato, foveis basalibus minutissimis; elytris ubique aequaliter distincte punctatis.

Long. 4–4·5 mm.; lat. max. 3·5 mm.

Hab. BORNEO: Quop, W. Sarawak (*G. E. Bryant*, Feb. to May); MALAY PENINSULA: Perak (*W. Doherty*).

B. coccinella has a close resemblance to *B. sex-maculata*, but the whole anterior half of the pronotum is red and the two anterior elytral spots are fused into one. The puncturation of the pronotum and elytra is regular and distinct, without trace of lines of punctures upon the latter, but it is a little less strong and close upon the former, and the fine marginal stria at the base in *B. sex-maculata* is here absent.

The difference between the sexes appears very slight, the (presumed) male having the club of the antenna a very little broader and more compact and all the tibiae a trifle wider and more curved.

Beccaria laeta, sp. n.

Rufo-flava, capite, pronoti medio, elytris clavaque antennali nigris, utroque elytro aurantiaco-bimaculato, macula anteriori antemediana transversa, intus et extus ad margines haud attingenti, macula posteriori anteapicali, fere circulari; hemisphaerica, valde convexa, nitida, corpore supra ubique crebre punctato; pronoto modice brevi, subtiliter punctato, lateribus fere rectis, antice leviter arcuatis, angulis haud acutis, postice fortiter divergentibus, angulis productis, acutis, basi subtilissime marginato, trisinuato, foveis basalibus minutissimis; scutello subtilissime punctulato; elytris crebre sed fortius punctatis.

Long. 4·5 mm.; lat. max. 4 mm.

Hab. BORNEO, W. SARAWAK: Quop (*G. E. Bryant*, March).

Mr. Bryant found only a single specimen of this species, which is nearly related to *B. coccinella*, but a little larger, with the pronotum more finely, and the elytra more closely, punctured. The sides of the pronotum are much straighter, diverging strongly to the base, where the angles are sharply produced. The coloration is similar to that of *B. coccinella*, but the pronotum is dark in the median part and broadly yellow at the sides, and the anterior orange patch of the elytra is not produced towards the base, but forms a short transverse bar, broader at its inner end and gradually narrowing towards the side, which it does not reach. The posterior patch is rather more regularly rounded than in the other species.

Beccaria philippinica, sp. n.

Flava, capite, antennarum articulis tribus ultimis elytrisque fuscis, horum marginibus externis maculisque utrinque tribus magnis rotundatis flavis, macula mediana etiam communi rufa; late hemisphaerica parum nitida; capite breviter flavo-hirto, pronoto lato, fortiter sat crebre punctato, lateribus laevissime arcuatis, angulis anticis obtusis, posticis fere acutis, basi subtiliter marginato, foveis basalibus fere obsoletis; elytris aequaliter sat fortiter punctatis,

lateraliter bene marginatis; antennis gracilibus, articulo ultimo elongato.

Long. 5 mm.; lat. max. 4·5 mm.

Hab. PHILIPPINE IS. (*H. Cuming*).

The single type specimen has for more than three-quarters of a century passed unnoticed amongst Coccinellidae in the British Museum.

It is a prettily marked insect of a light chestnut colour, with the club of the antennae, the scutellum and the elytra dark brown, the latter having a large oval area upon the middle of the suture mahogany red and a narrow outer marginal border and six large round spots encircling the sutural patch deep yellow. These spots are placed exactly as in *B. sex-maculata*, from which the present species differs, in addition to the pale legs, antennae, thorax and margins of the elytra, by its more circular outline and wider pronotum. The 9th and last joints of the antennae are distinctly elongate and the 10th distinctly transverse.

DADOCERUS, gen. nov.

Corpus angustum, convexum, glabrum, nitidum, pedibus longis, tarsisque simplicibus, 4-articulatis. Caput magnum, oculis prominentissimis. Antennae breves, cylindricae, 4-articulatae, clava fusiformi, articulis duobus elongatis quorum ultimo paulo longiori exstructa. Labrum latum, antice emarginatum. Pronotum transverse hexagonum, angulis anticis et posticis prominentissimis, dorso medio profunde sulcato. Elytra longi, singulum basi fortiter bicarinatum, humeris prominentibus. Mesosternum longitudinaliter carinatum.

Dadocerus nitidus, sp. n. (Plate I, fig. 11.)

Purpureo-castaneus, laevis, politus, pronoto transverso, antice lato, postice valde angustatò, medio longitudinaliter sulcato, sulco bistriato, angulis omnibus lobatis, haud acutis; elytris valde elongatis, regulariter attenuatis, apicibus separatim rotundatis, humeris prominentibus, carinatis, carina retrorsum producta ad elytri partem tertiam, carina secunda interiori breviori striaque juxtasuturali fortiter impressa.

Long. 4·5 mm.; lat. max. 1·5 mm.

Hab. BORNEO, SARAWAK: Kuching (April), Quop (March).

Two specimens of this remarkable insect were found by

Mr. G. E. Bryant. Although very different in appearance from the genus *Trochoideus* it agrees with it in all the main details of its structure. The peculiar modification of the mouth-appendages is the same, as is also the conformation of the legs and lower surface. The most important difference is in the two-jointed club of the antenna, which is not consolidated but freely jointed, with the terminal joint only a little longer than the other. The whole surface is very smooth and shining and entirely devoid of hair above. The pronotum is about as long as it is wide at the base and deeply sulcate along the middle, with two fine parallel striae in the groove. The sides are nearly parallel in front, strongly retracted behind, the lateral margins depressed and a little thickened at the edges, and all the angles are produced into blunt lobes. The basal margin is also flattened and the basal foveae are close to the hind angles. The elytra are very narrow and taper from base to apex, with an entire lateral carina, giving rise at the shoulder to a short humeral carina. There is also a still shorter dorsal carina arising just behind the scutellum and a strongly impressed stria close to the suture. All the legs are long and slender, the hind tibia a little produced internally at the extremity.

The two specimens are probably males.

The common *Trochoideus desjardinsi* Guér., has been recently redescribed under the name *Pseudopaussus monstrosus* (Schulze, Phil. Journ. Sci. xi, 1916, p. 292).

Genus Exysma.

This genus is closely related to the European *Clemmus*, from which it differs chiefly in having only ten joints to the antenna. Two Japanese insects referred by Gorham to *Symbiotes* (*niponensis* and *orbicularis*) are entirely misplaced and are much more naturally placed in *Exysma*, as Gorham himself suggested. This entails renaming the Central American *Exysma orbicularis* Gorh., which may be called

E. spherica, nom. nov.

Idiophyes brevis Blackb., is another species of the same genus very similar to *E. niponensis* Gorh., but rather less strongly punctured, and with the elytra a little more produced behind.

Genus Clemmus.

For *Exysma parvula* Gorh., which has eleven-jointed antennae, Cziki has made another genus, *Parexysma*. Cziki, who evidently did not know the insect, his description being merely taken from that of Gorham, has separated it widely from *Clemmus*, with which in my opinion it should be united. The genus *Clemmus* is distinguished by the possession of three-jointed tarsi, but when carefully mounted and examined it becomes evident that the apparent basal joint consists really of two joints closely united, and it is very difficult to maintain any dividing line between this and closely allied forms in which the tarsi are distinctly four-jointed. There can be no doubt as to the very close relationship of Gorham's species to the typical *Clemmus troglodytes*, and another insect widely removed by Cziki, although also congeneric, is *Alexia ulkei* Crotch. Cziki's "Conspectus" of the Mycetaeinae contributes nothing to the elucidation of its subject. *Parexysma*, for example, having first been referred to the section characterised by the absence of a sutural stria is then particularly distinguished by the existence of such a stria.

Trichopsephus, gen. nov.

Corpus globosum, ubique setosum, pedibus tenuibus, tarsis filiformibus, quasi-triarticulatis. Prosternum productum, truncatum. Pronoti basis lobatus, marginatus, margo lateralis anguste incrassatus, medium linea incisa tenui transversa, retrorsum ad basin producta, proditum. Antennae tenuissimae, piliferae, 9-articulatae (♀) vel 10-articulatae (♂), articulo 1° longo, curvato, 2° minus elongato, tribus ultimis ovalibus, laxissime connexis, reliquis minutis, plus minusve elongatis.

This very remarkable genus was strangely overlooked by Gorham, who ascribed two species of it to different genera. The first, *Exysma tenuicornis* Gorh., may be regarded as the type of the genus. The other, from the island of Grenada, was called by him *Dialexia punctipennis*. The genus approaches *Micropsephus*, but has very strongly-marked peculiarities. The antennae are extremely slender, with a long curved basal joint, and the last three joints oval, almost alike, not large, but strongly differentiated from the rest in size and shape, clothed with bristling hairs and remarkably loosely connected with each other. The

pronotum has the lateral margins thickened and the base strongly lobed in the middle, with a marginal stria following its outline. This stria terminates at the basal impressions on each side, which have undergone a very curious modification, the two sulci meeting in the middle and forming a continuous fine stria more or less semicircular in shape. This, with the structure of the antennae, will lead to the easy identification of the genus.

T. ("*Exysma*") *tenuicornis* Gorh., was described from a single specimen from Guatemala. The British Museum collection contains also two specimens from Panama and one from Nicaragua (collected by Janson at Chontales) which I believe to be the female—indicating that both Gorham's species are based on characters of the male sex only. In the female the antennae are considerably less attenuated than in the male. The latter has joints 3 to 7 of extreme fineness, and the last three each drawn out at the base into a delicate footstalk by which it is attached, while in the female there are only nine joints, the first two as in the male, the 3rd and 4th short and minute, the 5th and 6th slender and the last three oval.

The species following is described from a female specimen agreeing in all essentials with that of *T. tenuicornis*, but with rather less slender antennae.

Trichopsephus niger, sp. n.

Niger, nitidus, totus parce griseo-setosus, capite, antennis pedibusque rufis, antennarum (♀) articulis 3° ad 6° fere aequalibus elongatis, tribus ultimis breviter ovalibus.

Long. 1 mm.

Hab. British Honduras: Rio Hondo (*Blancaneau*).

The two previously described species are red in colour, but the present one is shining black, except the head, legs and antennae. It is smaller than *T. tenuicornis*, but a little larger than *T. punctipennis*, and the antennae are rather shorter than in the same sex of that species, joints 3 to 6 being of almost equal length and the last three shortly oval.

Micropsephellus, gen. nov.

Corpus globosum, glabrum. Pedes graciles; tarsi filiformes, 4-articulati. Antennae 8- vel 9-articulatae, breves, articulis tribus

basalibus elongatis, 2 vel 3 sequentibus minutis, tribus ultimis magnis, haud laxe connexis. Pronotum absque lineis incisis, postice lobatum, margine laterali haud distincte elevata.

This genus is made for *Micropsephus hemisphoericus* Champ., and a new species, which differ from *Micropsephus* by their very short antennae and the absence of the impressed arched stria upon the pronotum, in the occurrence of which *Micropsephus* resembles *Trichopsephus*. The claws of the older genus are cleft, a condition which I believe has not hitherto been found in any other Endomychid genus, and the antennal footstalk consists of eight very stout and well-marked joints, but in the new genus these joints are very much reduced in size and development and number only five (in *hemisphoericus*) or six (in the new species).

Micropsephellus nigripennis, sp. n.

Laete rufus, nitidus, elytris nigris; globosus, supra irregulariter haud crebre aut fortiter punctatus, pronoti lateribus antice incrassatis et excavatis; antennis 9-articulatis, tribus ultimis modice compactis, ultimo quam praecedentibus parum majori.

Long. 1 mm.

Hab. ANTILLES: St. Vincent, Leeward side, Kingstown; GRENADA: Balthasar, Windward side.

Nine specimens were found by Mr. H. H. Smith.

In size and general appearance the species is exactly similar to *M. hemisphoericus* Champ., from which it is easily distinguished by its red head and thorax. It differs also in the peculiar thickening of the sides of the pronotum in front and in the smaller relative size of the terminal joint of the antenna, besides possessing an additional minute joint in the exiguous footstalk.

PARASYMBIUS, gen. nov.

Corpus breve, latum, hirsutum. Pedes graciles; tarsi filiformes, 3-articulati. Antennae 10-articulatae, articulis tribus ultimis magnis, elongatis, laxe connexis. Pronoti latera aequaliter arcuati, antice et postice contracti, marginibus anguste incrassatis; foveae basales longae, basis fere rectus, sulco profundo, arcuato impressus.

This genus forms an interesting link between the New World *Bystus*, in which the antennae are 9-jointed, and

Asymbius, in which they are 11-jointed and of a highly peculiar development. *Parasymbius* has ten joints, forming a long and stoutly-made organ of which the three terminal joints are large, elongate and very loosely connected, but together not quite as long as the seven preceding joints, which are also elongate in gradually decreasing degrees, except the 6th and 7th, which are stout and quadrate. The legs are slender, the tarsi very long, filiform and quasi-3-jointed. The body is broad and convex, but not rotund, the pronotum being strongly contracted at the base, where the angles are rather obtuse and flattened at the sides. The lateral margins are very narrow, the basal impressions extend a little beyond the middle and are very broad at the base, where they are joined by a deep, curved basal stria. The whole upper surface is clothed with not very close soft yellow hair; the pronotum is smooth and shining and the elytra are rather strongly punctured, some of the punctures, which are a little larger than the rest, forming irregular and inconspicuous lines.

The only known species is the following, described from a single specimen in the British Museum.

Parasymbius philippinensis, sp. n.

Testaceus, antennarum articulis 7–9 paulo infuscatis; brevis, late convexus, pilis flavis haud longis aut densis vestitus; pronoto lato, lateribus aequaliter rotundatis, antice et postice contractis, basi fere recto, sulco posticali profundo, valde arcuato; scutello transverso; elytris convexis, latis, fortiter punctatis, punctis paulo majoribus nonnullis longitudinaliter ordinatis, lateribus undique fortiter et aequaliter arcuatis.

Long. 2·5 mm.; lat. max. 1·5 mm.

Hab. PHILIPPINE IS.: Isabela (*Semper*).

Genus MONOCORYNA.

This enigmatical genus, described by Gorham in 1885, has, perhaps wisely, not been included in the recent catalogue of Endomychidae. It has affinities with both the Endomychidae and Coccinellidae, and its most singular feature, the antenna, has a remarkable similarity to that of the Erotylid genus *Euxestus*, but it is an isolated genus in which the characters of neither family distinctly

predominate. The broad raised margin of the pronotum indicates its relationship to the present family, and there is also a peculiar structure, not hitherto noticed, on each side of the base of the pronotum, which may be homologous with the basal fovea so characteristic of the Endomychidae. Only a single specimen, now in the Genoa Museum, has been previously known, but a second species, of which there are two specimens in the British Museum, is now described.

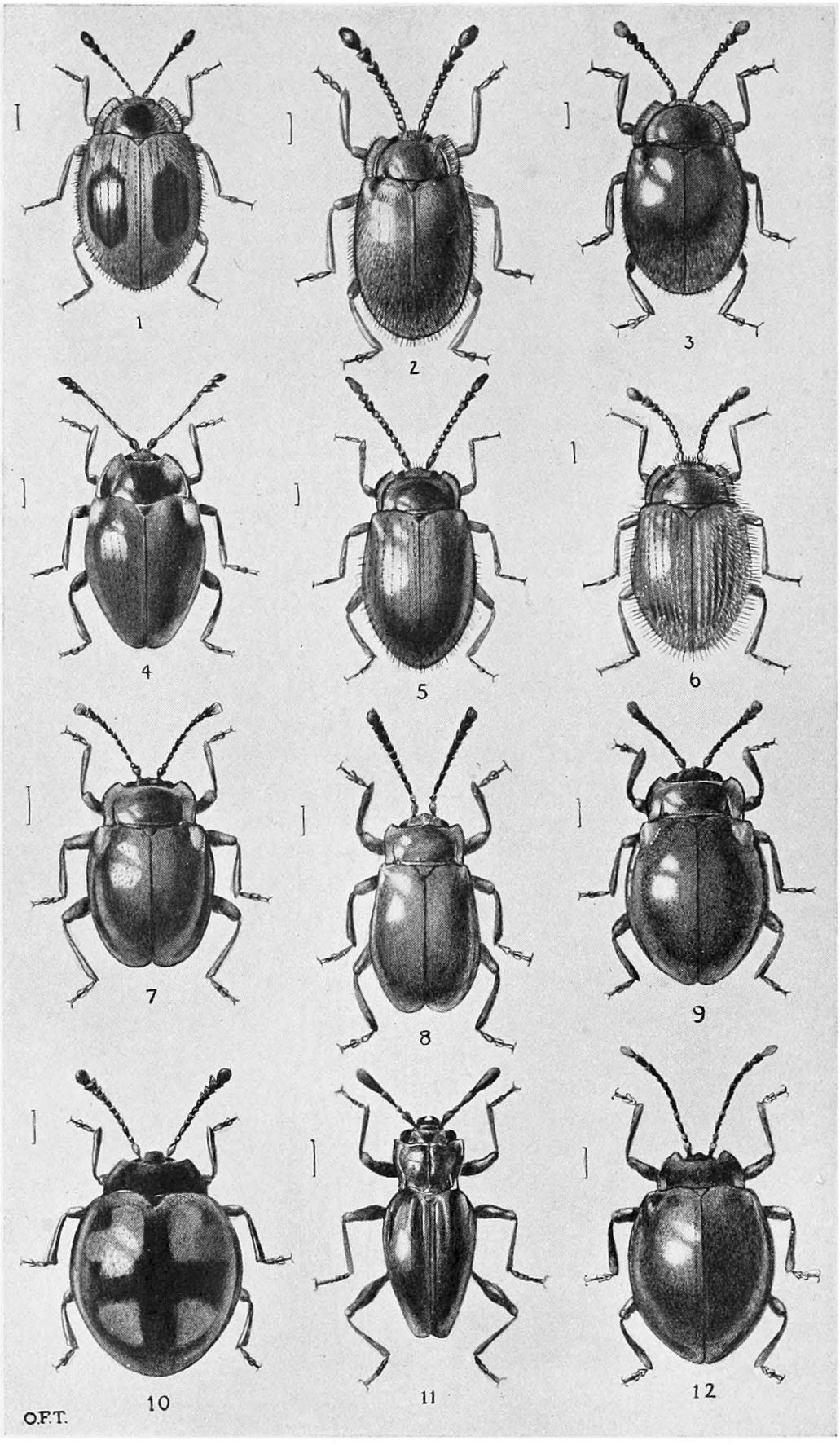
Monocoryna fasciata, sp. n.

Rufa, pronoto elytrisque nigris, illius plaga mediana et lateribus, horum fasciis undulatis tribus transversis, nonnunquam ad suturam interruptis, rufis; late ovalis, convexa, undique pube erecto brevi griseo vestita, supra irregulariter haud profunde punctata; capite utrinque longitudinaliter impresso; pronoto brevi, lateribus parum arcuatis, angulis anticis vix acutis, posticis late rotundatis, marginibus lateralibus late elevatis, his postice paulo intus productis e convergentibus, basi utrinque signa angulata parva inciso.

Long. 5–6 mm.; lat. max. 4–4·5 mm.

Hab. Malay Peninsula: Selangore (*H. N. Ridley*), Perak (*W. Doherty*).

I know the typical species of the genus (*M. decempunctata*) only from the published figure and description, but, although evidently related closely, it is very different in pattern and apparently more elongate in shape and more sparsely clothed with hair. *M. fasciata* is very broadly oval and highly convex and is entirely clothed with short erect grey pubescence. The head, lower surface, antennae and legs are red, with the large round club-joint of the antenna and the sides of the head darker. The pronotum and elytra are black, with the sides of the former red (except the extreme edges and sometimes the hind angles) and an arrowhead-shaped median stripe not quite reaching the base, an undulating transverse band upon the elytra just beyond the base, sometimes with an anterior offshoot cutting off the humeral callus, a similar band a little beyond the middle, sometimes interrupted at the suture, and an oblique mark on each side between the last and the apices, reaching the outer margins but not the suture, are also red. The upper surface is shallowly and irregularly, but rather



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NEW SPECIES OF ENDOMYCHIDAE

coarsely, pitted. The head has a longitudinal curved stria on each side near the eye. The pronotum is short, with the sides feebly curved, except towards the hind angles, which are broadly rounded off. They have wide elevated margins, which are continued a little way round the base, tapering at the ends. On each side of the base at a short distance from the extremity of the lateral margin (*i. e.* in the position normally occupied by the basal fovea) is a very small but sharply defined triangular area.

Explanation of Plate I.

Fig. 1. *Chondria triplex*, sp. n., page 60.
2. *Stenotarsus malayensis*, sp. n., page 54.
3. *S. basalis*, sp. n., page 56.
4. *Periptyctus eximius*, sp. n., page 65.
5. *Chondria nitida*, sp. n., page 61.
6. *C. seriesetosa*, sp. n., page 58.
7. *Mycetina lurida*, sp. n., page 27.
8. *M. corallina*, sp. n., page 26.
9. *M. globosa*, sp. n., page 28.
10. *Beccaria coccinella*, sp. n., page 74.
11. *Dadocerus nitidus*, sp. n., page 76.
12. *Milichius apicicornis*, sp. n., page 72.